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The Role of Digital Transformation in Human Resources Flexibility: An Analytical Study at the Ministry of Communications - General Company for Telecommunications and Information Technology

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Abstract:

Purpose: The current research seeks to embody its primary objectives in diagnosing the relationship between the research variables (digital transformation, human resources flexibility), as well as defining the role of each of them in the General Company for Communications and Informatics.

Theoretical Framework: This study deals with the General Company for Communications and Informatics and presents the latest concepts that previous researchers have reached to contribute to its achievement and expand the company's awareness by adopting any of these models appropriate to its goals and future direction.

Design/Methodology/Approach: The study analyzes administrative data within the Ministry (2023-2024), using the dimensions of digital transformation and human resources flexibility to determine - the relationships between the variables and the factors affecting them.

Findings: The results highlight the direct impact of digital transformation on human resources flexibility, emphasizing the importance of identifying the strengths and weaknesses of digital transformation and human resources flexibility within the General Company for Communications and Informatics.

Research Implications: The results emphasize the increasing importance of integrating current research variables into formulating regulatory policies to address environmental changes and align them with the needs and aspirations of current and future beneficiaries.

Originality/Value: This study enhances awareness of the importance of combining digital transformation and human resources flexibility in one study and bridges the knowledge gap between them.

Keywords: Digital transformation, Human resource flexibility.

JEL Classification: M10, M12, M15, M19.

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1.0 Introduction:

Different organizations face a set of challenges due to various environmental changes, which affect how they reach the success they seek to achieve, as organizations in the digital age are forced to rethink their business strategies to compete in a highly competitive global business climate. Management organizations expect better HR assistance in creating the organizational skills and capabilities needed to develop and manage digital organizations, providing guidance and offering insights on managing talent acquisition. Today's public administration organizations have witnessed significant changes due to the spread of digital technology. Digital transformation has brought about rapid changes in management practices, and various organizations have had to change their working methods and, before that, change the mentalities of employees. Studies confirm the necessity of the human resource's involvement in change as an essential and influential part of digital transformation. The current research seeks to embody its primary objectives in diagnosing the relationship between the research variables (digital transformation, human resources flexibility), as well as the role of each of them in the General Company for Communications and Informatics to achieve Required performance. Quantitatively and qualitatively, the goals emerge from this relationship, which forms the basis of a reality that achieves the following: building a theoretical aspect that includes the primary variables (digital transformation, human resources flexibility) and the dimensions and models of each of them, by presenting the theoretical framework of the administrative literature specialized in strategic management and human resources, To enhance and update the researched company's knowledge of these variables. Diagnosing the extent of the General Company for Communications and Informatics' interest in transformation. Digital and its importance as a means and tool that contributes to achieving human resources flexibility, and thus achieving its goals at the level of operations, context, and content.

1.1 Search variables:

1.1.1 Digital transformation:

Digital transformation is multifaceted and can be considered a phenomenon resulting from a set of modern digital technologies working in conjunction. These technologies include artificial intelligence, cloud computing, blockchain, and others. Digital transformation generates large, new amounts of information that can contribute to decision-making and strategic planning (Lanzolla et al., 2000). Digital transformation is broad and has many dimensions and repercussions, including scientific and technological progress. It extends beyond business to the personal lives of individuals; this reflects people's interaction in all aspects of life, from work to education, knowledge, and information. It involves continuous development that depends on the technical side using ICT and the human side, including a shift in thinking and development through training and learning to keep pace with rapid progress and the increasing requirements of organizational growth (Fernández et al., 2023). According to (Costa Melo et al., 2023) digital transformation is described as initiating strategic action through data-driven insights and launching digital business models. That enables new ways of creating value, and the concept is associated with transforming traditional economic processes into digital ones using technology. The entire operational framework includes their products and services, how they deal with customers, and their working methods. The primary goal of any digital transformation initiative is to enhance various processes (Hasan, 2023).

As for the dimensions of digital transformation, including strategy (Rueckel et al., 2020), strategy is defined as a plan that supports companies in managing the transformations arising from the integration of digital technologies and in their operations after the transformation. The strategy involves decisions regarding the organization's relationship with the external environment, where decision-making often requires uncertainty. Management has the responsibility of ensuring that the organization adapts to environmental changes. Organizations seek to meet the needs and desires of beneficiaries and stakeholders, determine transformation priorities, coordinate steps, and choose tools based on a clear strategy developed by experts and specialists (Verhoef et al., 2021). The strategy takes a comprehensive role at the company level, guiding the organization toward digital transformation. This strategy goes beyond the traditional functional approach but focuses on managing the opportunities and risks associated with digital technologies, which contribute to enabling and facilitating the transformation process (Ubiparipović et al., 2020).

Strategy is the analysis of the competitive environment, the study of strategic resources and capabilities, the development of the business vision and mission, the development of strategic options and alternatives, strategic implementation and control, strategic analysis, and competitive performance (Chen,2022). The strategy helps the organization to form a comprehensive and complete vision of the course of current and future events at the internal and external levels of the organization. As for organizational culture (Wata et al., 2024). Culture means the ideas, habits, skills, arts, etc. of certain people in a certain period, and profitability is an organizational goal and one of the places to start improvements is with research into the organization's work culture and that the most vital element in the organizations. (Barinua ,2022) conducted that culture is the beliefs and attitudes of employees and that knowledge of attitudes and norms will make it possible to understand the organization's culture and its relationship to organizational performance and to promote shared values between culture and organizational performance. Culture constitutes shared patterns of cognitive concepts about the values or beliefs that surround an organization.

This enables members of the organization to think and act as expected. It also provides boundaries that create differences between one organization and another. These boundaries help define which members can exist in the organization. The organization and those outside it are the guarantors that all organization members are moving in the same direction the organization desires. Organizational cultures represent the prevailing conditions in societies that arose over successive periods until they became the behaviour practiced by individuals within those societies (Alsayed ,2023) . (Tuukkanen et al., 2021) highlighted organizational culture is one of the requirements for digital transformation, which represents deep-rooted beliefs that indicate how an organization's top management practices improve the organizational climate in its internal environment. It aims to accommodate digital transformations by encouraging creativity and innovation and promoting a culture of positive change, ultimately leading to continuous improvement of services. It defines organizational culture as a set of principles, values, and concepts shared between the organization's leaders and employees, which are transferred and taught to new individuals. It also consists of the prevailing and dominant values that help create integration within the organization. Leadership is considered one of the most crucial enabling factors for successful digital transformation (Imran et al., 2021). Leadership theory emphasizes that a leader is an individual who can influence others to act according to his will, and who possesses more excellent capabilities than those he leads. Likewise, business leaders have higher standards than their employees. Entrepreneurs have a clear vision, mission, and goals when running their companies. Leaders can do many things, such as setting goals, using the latest methods and new technologies, adapting to environmental needs, and defining strategies (Chaniago, 2022).

Leadership is defined as the leader's ability to convey the organization's message and future vision to his followers and motivate them by practicing highly ethical behaviors to build trust and respect among parties to achieve the organization's goals. Leadership remains the central point of change. Therefore, in times of complex and uncertain global economies, companies need leaders who can seize opportunities quickly, have flexible and innovative visions and strategies, are willing to change, and demonstrate flexibility in decision-making and innovation. Only organizations with a leadership culture built on trust, effective communication, and competent, empathetic leaders with advanced soft skills in human resource management can succeed in these difficult times characterized by digital transformation and constant change (Ziadlou, 2021). As for the information infrastructure (Tirlea et al., 2023), the organization has an interactive information and technology environment that meets the requirements of successful digital transformations and access to the information society. This includes providing specialized human resources, equipment and software while ensuring high-quality communications services.

1.1.2 Human Resources Flexibility:

As for the concept of human resources, flexibility has emerged as a modern idea that has received significant attention from researchers over the past two decades; this is due to the link between the flexibility of human resources and the availability of opportunities for advancement and career development for both employees and individual (Beltrán-Martín, 2008). HR flexibility is crucial in this era of unprecedented disruption. The issue of continuous change faces all organizations. Therefore, the ability of an organization to easily modify employees' skills and behaviors to align with the changing business environment is essential to enhance organizational performance (Stanislous, 2020) contend (Sabuhari et al., 2020) that skill flexibility is the competence through which individuals comprehend things in diverse ways. Developing employees' skills, particularly technical ones, occurs through practical experience and is further enhanced through training programs that significantly impact their performance. Additionally (Sumardjo, 2023), skill flexibility is linked to an employee's ability to acquire various skills in the future. For example, if job requirements necessitate a broader scope of services than currently available. The skill capabilities of human resources are considered one of the most important resources for identifying and building strategies. According to (Tweiqat, 2020) skill flexibility is related to employees' ability to acquire the skills and abilities necessary to carry out new tasks or duties through training. They take advantage of opportunities to gain new valuable knowledge to their future interests. Behavior flexibility refers to the ability to change and adapt individual work practices. This flexibility enables individuals to adjust their behavior in response to new situations and variables, utilizing their unique capabilities rather than adhering to a fixed pattern of behavior (Jaiswal, 2018). Behavioral flexibility is the ability to demonstrate a variety of behavioral roles in different situations. Employee behaviors are the actions they take in their roles. If employees consistently use the same approach in recurring work situations for a new problem, their behavior could be more flexible.

On the other hand, if employees find new arrangements for procedures and activities to perform daily tasks or adapt to new circumstances, their behaviour becomes more flexible. Behavioral flexibility occurs when employees easily accept and implement changes in their environment and work practices, even if they do not expect them. According to the theory of organizational behaviour, some behaviours that show flexibility have been mentioned, such as: citizenship behavior, extra-role behaviour, participation, learning, adaptability, etc. HR practice flexibility refers to the adaptability and utilization of human resource management practices in diverse situations. This includes implementing flexible salary systems and performance evaluation across different organizational units. The speed at which these adjustments are completed also illustrates the flexibility of HR practices (Saerang, 2024).

Abu-Nahel et al. (2000) describe flexibility in HR practices as a group of activities that develop human resource strategies and put them into practice and are directed towards improving performance and enhancing the merit, skill, and knowledge of human resources to achieve strategic goals, as well as adapting to the surrounding environmental requirements in proportion to the size of this ability. For the organization, it gives it priority and success, keeps pace with technological developments, and gives it a competitive advantage.

2. Literature Review And Hypothesis Development:

2.1 Previous studies of digital transformation:

Some studies explore transformational efforts undertaken by governments on all levels, while others highlight a need for empirical evidence that fundamental public sector transformation has occurred (Tangi et al., 2020). Alshehab et al. (2022) explored the extent of readiness of Kuwaiti organizations to implement digital transformation initiatives. Using elements from the global literature, they surveyed vital areas such as strategy, organizational culture, technology, budget, technical skills and innovation. The results emphasized the importance of strategic vision, digital leadership, and technical talent in all organizations, regardless of size or type. Many studies discussing digital transformation emphasize that digital transformation depends on the interactions between environmental uncertainty and resource coordination. Using a digital maturity assessment model, they conclude that ecological uncertainty and resource coordination alone do not provide the conditions for digital transformation. The study emphasized the significant impact of environmental uncertainty and highlighted the positive interaction between environmental uncertainty and resource coordination, which enhances digital transformation.

Kitsios et al. (2023) understand the expectations of public sector CEOs regarding digital transformation projects, analyzing digital transformation in a Greek government department as a case study. The case study included 14 managers from the Greek public sector involved in digital transformation projects, addressing technology, services, products, processes, business models and relationships in the context of digital transformation. (Alibakhshi, 2016) discussed the purpose of this study, which is to explore if human resource flexibility (HR flexibility) facilitates the development of organizational ambidexterity, which positively affects firm performance.

2.2 Previous studies of human resource flexibility:

Many studies discuss human resource flexibility (Sehhat et al., 2019). This study aims to develop a comprehensive theoretical framework to study the mutual relationship between human resources flexibility and organizational effectiveness. And an attempt to determine the potential role of organizational citizenship behavior and employee intention to stay in the relationship between human resources flexibility and organizational effectiveness. However, it is needed when applying the results to large organizations. (El et al., 2022) explained the impact of human resources flexibility on organizational learning in a cement factory, and the results indicated a positive effect of human resources flexibility, especially in skills flexibility, behavioral flexibility, and functional flexibility, on organizational learning. This study discussed the relationship between competence assessment and human resources flexibility. The study aimed to examine the roles played by technical, behavioral, and leadership competence assessment dimensions in the results of human resources flexibility. The study aimed to evaluate the rate of human resources flexibility and performance indicators for Tehran University of Medical Sciences hospitals and to determine the possible relationship between these variables. The results showed that human resources in Tehran University of Medical Sciences hospitals have high flexibility, so it is suggested that authorities and policymakers adopt human resource management policies to create flexibility. In human resources, improving hospital performance and the status of hospitals are essential.

2.3 Also some studies linked digital transformation and human resource flexibility:

Also, studies linking digital transformation and human resource flexibility (Hussein et al., 2023) explained that there is a direct positive impact of human resources flexibility and strategic transformation and recommended strengthening human resources flexibility and training, with a focus on lifelong learning, and enhancing flexibility in policy making and service delivery.

2.4 The research aims to validate the following hypotheses: the central hypothesis:

There is a statistically significant impact of the digital transformation variable and its four dimensions (strategy, organizational culture, information infrastructure, and leadership) on human resource flexibility.

H₁: the First Sub-Hypothesis: There is a statistically significant impact of the strategy dimension on human resource flexibility.

H₂: the Second Sub-Hypothesis: There is a statistically significant impact of the organizational culture dimension on human resource flexibility.

H₃: the Third Sub-Hypothesis: There is a statistically significant impact of the information infrastructure dimension on human resource flexibility.

H₄: the Fourth Sub-Hypothesis: There is a statistically significant impact of the leadership dimension on human resource flexibility.

3 Methodology:

Implementing the research requires adopting a specific methodology appropriate to the nature of the study and its subject, as the research methodology is chosen based on the main variables and objectives. In this context, the researcher relies on the descriptive and analytical method, characterized by a comprehensive vision linking the description of the issue and its analysis. This allows the collection of data and information in an integrated manner to understand the research problem and achieve the desired goals.

3.1 Research Tools:

In collecting data and information related to the practical aspect of this research, the researcher relied on a survey as the primary tool, as he relied on a five-point Likert scale. The five-point Likert scale is considered one of the most widely used scales and methods in management.

3.2 Data Analysis Tools:

The researchers used statistical programs such as SPSS and Excel. They followed the following statistical methods: mean, standard deviation, and variance to measure dispersion and central tendency, Cronbach's alpha to evaluate the stability of the questionnaire, the normal distribution to test the extent to which the data is usually distributed, and the Pearson correlation coefficient and the simple linear regression equation to test the research hypotheses.

3.3 Research problem:

The research problem was determined through continuous follow-ups and review of the level of adoption and practice of the company for the variables under research, their dimensions and models, in addition to which of the digital transformation strategies that the General Company for Communications and Informatics applies and prefers in terms of application, communication, and impact in achieving human resources flexibility. In light of the incentive programs that showed limited satisfaction with them, and with some systems, procedures, and roles that enhance their confidence in them and increase their belonging, and based on both theoretical and applied hypotheses, some questions were raised, which are embodied in the following:

1. To what extent are the leaders of the General Company for Communications and Informatics aware of the concept, its importance, dimensions, and models (digital transformation, human resources flexibility)?
2. What is the level of adoption and interest of the General Company for Communications and Informatics in digital transformation strategies and human resources flexibility, and what are the most prominent practices and dimensions that it applies and cares about?
3. What is the level of adoption and interest of the General Company for Communications and Informatics in digital transformation, and what are the most prominent dimensions of human resources flexibility in interest, adoption, and practice?

3.4 Research population and sample:

Every research has an original community and essential components clearly and precisely defined by the researcher. The current research community is the General Company for Communications and Informatics, which consists of (1015) people at various administrative levels. The community was identified through company records and rosters, which included community preparation through interviews. Head of the company's human resources department, directors of departments, administrative units, follow-up and planning departments, and reviewing its organizational structure. The sample size to be polled regarding the two research variables was (210) observations, and the number of retrieved questionnaires suitable for statistical analysis was (191).

3.4 The hypothetical scheme of the research:

As the essential guide, the hypothetical diagram aims to understand the relationships and influences between the main variables and their sub-dimensions. Therefore, the current scheme was designed, which consists of two main variables, as shown in Figure (1):

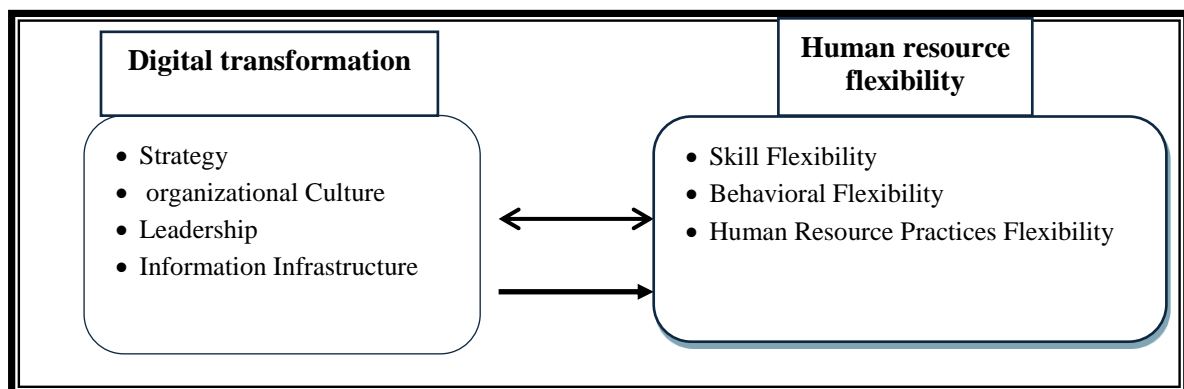


Figure 1: The Hypothetical design of the research

Source: Prepared by the researcher.

4. Measurement of variables:

4.1 Testing and analyzing research data:

The researcher examines the data from their study to verify its integrity, reliability, and distribution pattern. This ensures accurate and objective handling of the data, ultimately attaining the desired results.

The researchers conduct tests on the data about each variable to determine the distribution type. Consequently, they select appropriate statistical methods for the study. Two types of tests rely on normal distributions: parametric statistics and non-parametric statistics.

The "digital transformation" variable data were tested using the Kolmogorov-Smirnov test to assess the validity of the distribution of the data obtained from the study sample. The statistical value for the test was found to be 0.070 with degrees of freedom (191) and a significance level of 0.124, which is higher than the customary statistical significance (0.05).

This indicates that the data distribution for the "digital transformation" variable follows a normal distribution.

Similarly, the "human resource flexibility" variable data were tested using the Kolmogorov-Smirnov test to evaluate the validity of the distribution of the data extracted from the study sample. The statistical value for the test was 0.081, with degrees of freedom (191) and a significance level of 0.093, which is also higher than the customary statistical significance (0.05). This suggests that the data for the "human resource flexibility" variable follows a normal distribution, as illustrated in Table 1 below.

Table 1: Normal Distribution

Variables	Test Statistic Value	Degrees of Freedom	Sig.
digital transformation	0.070	191	0.124
human resource flexibility	0.081	191	0.093

4.1.1 Reliability Coefficient:

The reliability coefficient is considered a statistical method to ensure the consistency of study data. It enables researchers to avoid redistributing study questionnaires to the same sample. A value of 0.70 serves as a threshold for determining stability. As the reliability coefficients extracted from the SPSS program increase, the data is considered stable and suitable for analysis. Conversely, low values indicate instability. Table 2 presents the reliability coefficients (Cronbach's Alpha) for study variables as follows:

Table 2: Reliability Coefficients for Study Variables

Variable or Scale	Items	Stability Coefficient
digital transformation	Q1 – Q20	0.817
human resource flexibility	Q21 – Q41	0.895
Scale	Q1 – Q41	0.918

Similarly, the preceding table illustrates Cronbach's Alpha coefficients for the "digital transformation" variable at a rate of (0.817), for the "human resource flexibility" variable at a rate of (0.895), and for the overall scale items at a rate of (0.918). These values exceed the agreed-upon threshold (0.70), indicating the stability and reliability of the study data.

4.1.2 Research Concepts Analysis:

Currently, an analysis and description of survey elements, their dimensions, and study variables are underway to assess their diversity and availability within the jurisdiction of the Baghdad Al-Rusafa Health Department. The coefficient of variation among the statistical methods utilized in the current research will elucidate the homogeneity in the sample's opinions. The mean will indicate the elements, dimensions, or variables consistently applied more than others. The standard deviation will also reveal the dispersion of the views within the sample. Table 3 presents the availability as follows:

Table 3: Availability in Baghdad Al-Rusafa Health Department

Very Low Availability	Low Availability	Moderate Availability	High Availability	Very High Availability
1 – 1.8	1.81 – 2.6	2.61 – 3.4	3.41 – 4.2	4.21 – 5

4.1.3 Digital Transformation Dimensions Analysis:

An analysis and description of the dimensions of the digital transformation variable have been conducted. This variable comprises four dimensions, with the statistical methods, coefficient of variation, arithmetic mean, and standard deviation, outlined in the following Table 4:

Table 4: Analysis and Description of Digital Transformation Variable Dimensions

Sequencing	Dimensions	Mean	S.D.	Variation	Arrangement
1	Strategy	3.375	0.506	14.99%	3
2	Organizational Culture	3.503	0.487	13.90%	1
3	Information Infrastructure	3.366	0.599	17.81%	4
4	Leadership	3.472	0.529	15.23%	2
	Digital Transformation Variable	3.429	0.424	12.38%	

Following "Organizational Culture" means obtaining the highest value compared to the other dimensions. Additionally, the standard deviation indicated homogeneity in the sample opinions. "Leadership" came in the second position because its mean was the second highest among the dimensions, and the mean showed homogeneity in the sample opinions. "Strategy" followed in the third position because its mean ranked third highest, and the standard deviation demonstrated homogeneity in the sample opinions. "Information Infrastructure" came in the fourth position because its mean was the lowest among the means, and the standard deviation indicated convergence in the sample opinions. The dimensions exhibited diverse availability due to their respective means.

4.1.4 Analysis of Human Resource Flexibility Dimensions:

The dimensions of the human resource flexibility variable are analyzed and described using statistical methods such as the coefficient of variation, mean, and standard deviation. The human resource flexibility variable comprises three dimensions. Table 5 presents the statistical methods, including the coefficient of variation, mean, and standard deviation:

Table 5: Analysis and Description of Human Resource Flexibility Variable Dimensions

Sequencing	Dimensions	Mean	S.D.	Variation	Arrangement
1	Skill Flexibility	3.404	0.606	17.81%	2
2	Behavioral Flexibility	3.370	0.571	16.93%	3
3	Practices Flexibility	3.420	0.590	17.26%	1
	Human Resource Flexibility Variable	3.398	0.523	15.40%	

Following "Practices Flexibility" means obtained the highest value compared to the other dimensions. Additionally, the standard deviation indicated homogeneity in the sample opinions. "Skill Flexibility" was second because its mean was the second highest among the dimensions, and the mean showed homogeneity in the sample opinions. "Behavioural Flexibility" followed in the third position because its mean ranked third highest, and the standard deviation demonstrated homogeneity in the sample opinions. The dimensions exhibited diverse availability due to their respective means.

4.2 Hypothesis testing:

The current study aims to test the hypotheses formulated by the researchers in the research methodology to elucidate the nature of the cause-and-effect relationships. These hypotheses are tested using statistical methods such as simple linear regression to determine the acceptance or rejection of the hypotheses.

4.2.1 Impact Hypothesis Testing:

The impact hypothesis is tested through the simple linear regression method, which explains the variation in the independent variable on the dependent variable. It determines the direction of the impact (positive or negative) occurring between the research variables.

Testing the central hypothesis: "There is a statistically significant impact of the digital transformation variable and its four dimensions (strategy, organizational culture, information infrastructure, leadership) on human resource flexibility.

Table (6) shows that the alpha (α) value is 0.720, which is the lowest value for the human resource flexibility variable. The beta (β) value is 0.738, indicating a positive impact of the digital transformation variable on human resource flexibility. The coefficient of determination with a value of 0.432 suggests that 43% of the variation in human resource flexibility is explained by digital transformation. In comparison, the remaining 57% is attributed to other variables not included in the study. The F-test value is 106.277, with a significance of 0.000, which is less than the statistical significance level of 0.05, indicating the presence of an impact of the digital transformation variable on human resource flexibility.

Testing the First Sub-Hypothesis: The strategy dimension has a statistically significant impact on human resource flexibility.

The alpha (α) value is 0.720, the lowest value for the human resource flexibility variable. The beta (β) value is 0.738, indicating a positive impact of the strategy dimension on human resource flexibility. The coefficient of determination with a value of 0.432 suggests that the strategy explains 43% of the variation in human resource flexibility. The F-test value is 106.277, with a significance of 0.000, which is less than the statistical significance level of 0.05, indicating the presence of an impact of the strategy dimension on human resource flexibility.

Testing the Second Sub-Hypothesis: There is a statistically significant impact of the organizational culture dimension on human resource flexibility.

The alpha (α) value is 0.720, the lowest value for the human resource flexibility variable. The beta (β) value is 0.738, indicating a positive impact of the organizational culture dimension on human resource flexibility. The coefficient of determination with a value of 0.432 suggests that 43% of the variation in human resource flexibility is explained by organizational culture. The F-test value is 106.277, with a significance of 0.000, less than the statistical significance level of 0.05, indicating the impact of the organizational culture dimension on human resource flexibility.

Testing the Third Sub-Hypothesis: There is a statistically significant impact of the information infrastructure dimension on human resource flexibility.

The alpha (α) value is 0.720, the lowest value for the human resource flexibility variable. The beta (β) value is 0.738, indicating a positive impact of the information infrastructure dimension on human resource flexibility. The coefficient of determination with a value of 0.432 suggests that the information infrastructure explains 43% of the variation in human resource flexibility. The F-test value is 106.277, with a significance of 0.000, which is less than the statistical significance level of 0.05, indicating the presence of an impact of the information infrastructure dimension on human resource flexibility.

Testing the Fourth Sub-Hypothesis: There is a statistically significant impact of the leadership dimension on human resource flexibility.

The alpha (α) value is 0.720, the lowest value for the human resource flexibility variable. The beta (β) value is 0.738, indicating a positive impact of the leadership dimension on human resource flexibility. The coefficient of determination with a value of 0.432 suggests that 43% of the variation in human resource flexibility is explained by leadership. The F-test value is 106.277, with a significance of 0.000, which is less than the statistical significance level of 0.05, indicating the presence of an impact of the leadership dimension on human resource flexibility.

Table 6: Impact of Digital Transformation and Its Dimensions on Human Resource Flexibility.

Dimensions	A	β	t(β)	Sig.	R ²	F	Sig.
Strategy	1.547	0.548	8.593	0.000	0.281	73.838	0.000
Organizational Culture	1.324	0.592	9.076	0.000	0.304	82.373	0.000
Information Infrastructure	1.588	0.538	10.749	0.000	0.379	115.531	0.000
Leadership	1.390	0.578	9.898	0.000	0.341	97.968	0.000
Digital Transformation Variable	0.374	0.882	14.071	0.000	0.512	197.995	0.000

5. Discussion of Results:

There is a discrepancy in the performance of the digital transformation process between the Ministry of Communications and the General Company for Communications and Information, and a comprehensive analysis was conducted to identify weak points, which led to adjustments in the strategy and improvements in communications technology. Emphasis was placed on implementing project management and enhancing communication with stakeholders to ensure effective digital transformation. However, the implementation of the digital transformation strategy was weak due to lack of initial strategic analysis, insufficient resource allocation, employee resistance to change, lack of technology monitoring, and lack of continuous evaluation strategy, which resulted in the targeted objectives not being achieved. Digital transformation also faces a lack of financial allocation necessary to support and develop it, which leads to challenges in securing resources to implement digital projects and improve infrastructure. In addition, employees need more training and development to acquire new digital skills, which hinders their ability to adapt to digital requirements. Overcoming these challenges requires a comprehensive approach focused on cultural change, increased financial support, extensive training, and strategic adjustments. The study also aims to increase interest in incorporating current research variables into formulating policies to confront environmental changes and using models compatible with the organization's work.

6. Conclusion:

Employees find it difficult to quickly adapt to new digital roles, indicating technological and organizational challenges affecting the adaptation process. There is a need to provide additional support and immediate training to employees to facilitate and accelerate adaptation to new digital roles. The shift in HR practices reflects a conservative stance in the business environment, demonstrating the organization's readiness to face challenges and changes in the market and industry. The focus on changes in HR practices indicates an organization's desire to enhance flexibility and adapt to rapid developments in the business environment. The difficulties and challenges of adjusting an organization's HR system are evident due to cost constraints and employee resistance to change, which indicates the need for improvement measures to facilitate and accelerate the adaptation process. The results showed a statistically significant positive effect between digital transformation and the human resources flexibility variable, which is affected by various factors such as strategy, organizational culture, information infrastructure, and leadership.

Authors Declaration:

Conflicts of Interest: None

-We Hereby Confirm That All The Figures and Tables In The Manuscript Are Mine and Ours. Besides, The Figures and Images, which are Not Mine, Have Been Permitted Republication and Attached to The Manuscript.

- Ethical Clearance: The Research Was Approved by The Local Ethical Committee in The University.

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