

Ekonomika 2025, vol. 104(2), pp. 129–144

ISSN 1392-1258 eISSN 2424-6166 DOI: https://doi.org/10.15388/Ekon.2025.104.2.8

The Impact of Infrastructure on Employee Performance: Organizational Culture as a Mediating Variable (A Field Study in the Jordanian Income and Sales Tax Department)

Mahmoud Ali AL-ROUSAN

Faculty of Financial and Administrative Sciences, Irbid National University, Jordan, Email: Mahmod_alrousan@yahoo.com
ORCID: https://orcid.org/0009-0005-8709-6168

Avat Muhammad Nabil Wahib ABABNEH

Faculty of Financial and Administrative Sciences, Irbid National University, Jordan, Email: ayatwuhaib@gmail.com

ORCID: https://orcid.org/0009-0007-1586-1646

Abstract. This study aims to identify the impact of digital infrastructure in its dimensions (hardware components, software, communication networks, databases, human skills) on the performance of employees in its combined dimensions (work speed, work quality, and knowledge of work requirements) with the presence of organizational culture as an intervening variable in the Jordanian Income and Sales Tax Department. The study community may have been employees in the Jordanian Income and Sales Tax Department, and the research community was represented by a sample of (220) individuals. The simple random sample was adopted, and, in order to achieve the objectives of the study, the descriptive analytical approach was relied upon through a questionnaire that was distributed to the sample individuals and analyzed afterwards. The number of the distributed questionnaires was (250) questionnaires, of which, (220) questionnaires were deemed to be suitable for analysis, representing (48%) of the total community. The data were analyzed, and the hypotheses were tested using the (SPSS) software and adopting simple linear regression and hierarchical multiple regression. The study has yielded several results, the most important of which is the existence of a statistically significant effect at a significance level (a \(\) 0.05) of the digital infrastructure in its dimensions on the performance of employees in its dimensions combined; it has also been established that there is a statistically significant effect of the digital infrastructure on the performance of employees with the presence of the organizational culture as an intervening variable. Several recommendations have been presented based on the results of the analysis, the most important of which are: (1) enhancing the use of advanced technological means, (2) providing opportunities for training and continuing education, and (3) providing a positive work environment

Keywords: Digital culture, digital infrastructure, employee performance, Jordanian Tax and Sales Department.

1. Introduction

Organizations are keen to carry out their work efficiently and effectively by transforming their traditional strategy into a digital strategy so that to face many challenges they are encountering in today's world (Ubiparipovic et al., 2023). These challenges represent the human element and also one of the basic motives, and therefore the success or failure of organizations has become largely based on the performance of their employees, which requires their attention to the most important category of their resources. Reis and Meloa (2023) believe that digital transformation leads to improving the organization's physical and digital resources, while creating a greater value for customers, reducing costs, and raising the level of performance. which is the human element. This distinguishes the wealth that organizations are racing for so that to provide, attract and retain the wealth by providing ways to improve their level and interest in them; also, all organizations are keen to improve their overall performance, and this can only be achieved by raising the level of performance of their employees The use of information technology through the development of the digital infrastructure must be consistent with the performance of the employees, and the level of the digital infrastructure must be raised, and this can only be done in the light of the availability of an organizational culture in which the individual's personality grows, and affects the individual's ideas, trends, skills, and experiences (Köstekçi and Celik, 2024). In the context of seeking to improve the performance of their employees, organizations seek to provide real tools to support this, and, since the current era is mainly manifested by technological development, it is necessary to benefit from this by providing a digital infrastructure which would support the performance of workers, which is achieved by providing computer devices with advanced capabilities, programs, communication networks, databases, and cognitive skills, all of which play a vital role in supporting the work and performance of workers with the objective to reach high performance of organizations. But all this remains in need of a work atmosphere which would embrace all of this in order to improve the performance, and this can be expressed in the knowledge of management organizational culture, which expresses a set of beliefs, attitudes and behaviors common to all employees. The behaviors of employees are shaped and made consistent with the organizational goals that these organizations seek to achieve, in a more precise sense, this is the responsibility to remove the contradiction between the specialized goals and the organizational goals. Therefore, this study came to combine the previous three variables so that to determine the impact of the organizational culture as an intermediate variable on the relationship between the digital infrastructure and the performance of employees in the Jordanian Income and Sales Tax Department.

The Income and Sales Tax Department has achieved remarkable success during its years of work, and this matter is partly due to the human effort exerted by the working individuals, whereas the widespread use of technology in its work has led to improving the performance of its employees. In this context, the organizational culture has emerged as one of the factors supporting individuals. Hence, the current study is an attempt to reveal the impact of organizational culture as an intermediate variable on the relationship between

the digital infrastructure and the performance of employees in the Income and Sales Tax Department of Jordania. There are many questions that are based on this point, namely:

- What is the level of the digital infrastructure used at the Income and Sales Tax Department?
- What is the level of employees at the Income and Sales Tax Department?
- What is the positive level of organizational culture at the Income and Sales Tax Department?

The importance of this scientific study is highlighted by the fact that it has been subjected to three variables in the administrative literature which continue to be discussed and questioned. It has been linked to some of them as a scientific addition. The field on which the study has been conducted is one of the most important areas which constitutes an important financial pillar in the Jordanian economy.

The study aims to determine the level of availability of the digital infrastructure in the Department of Taxation and Sales, as well as the level of performance of workers and organizational culture. The overall objective of the study is highlighted here by considering the impact of organizational culture as an intermediary variable in terms of the relationship between the infrastructure and the performance of workers under the organizational culture as an intermediary variable in the Jordanian Department of Income Tax and Sales.

The rest of this paper is divided into several sections, with the first section serving as the introduction. The second section provides a comprehensive review of the literature on digital infrastructure, organizational culture, and employee performance. The third section describes the framework of the study and the methodology used in the analysis. The fourth section presents the results of the hypothesis analysis. Finally, the fifth section discusses the findings and provides recommendations for policymakers.

Key hypothesis 1: (Ho1)

There is no statistically significant effect at the significance level of (a \leq 0.05) of the digital infrastructure with its dimensions (hardware, software, communication networks, databases, and human skills) on the performance of employees in the Jordanian Income and Sales Tax Department. The following sub-hypotheses emerge from this hypothesis:

- **Ho1-1:** There is no statistically significant effect at the significance level of (a≤0.05) of the hardware on the performance of employees in the Jordanian Income and Sales Tax Department.
- **Ho1-2**: There is no statistically significant effect at the significance level of ($a \le 0.05$) of the software on the performance of employees in the Jordanian Income and Sales Tax Department.
- **Ho1-3**: There is no statistically significant effect at the significance level of (a≤0.05) of communication networks on the performance of employees in the Jordanian Income and Sales Tax Department.
- **Ho1-4**: There is no statistically significant effect at the level of (a≤0.05) of databases on the performance of employees in the Jordanian Income and Sales Tax Department.

Ho1-5: There is no statistically significant effect at the significance level of (a≤0.05) of human skills on the performance of employees in the Jordanian Income and Sales Tax Department.

Second main hypothesis Ho2: There is no statistically significant effect at the significance level of ($a \le 0.05$) of the digital infrastructure in terms of its dimensions on the organizational culture in the Jordanian Tax and Sales Department.

Third main hypothesis Ho3: There is no statistically significant effect at the significance level of (a≤0.05) of the organizational culture on the performance of employees in the Jordanian Tax and Sales Department.

Fourth main hypothesis Ho4: There is no statistically significant effect at the significance level of (a≤0.05) of the infrastructure in its combined dimensions on the performance of workers in the presence of the digital infrastructure as an intermediate variable.

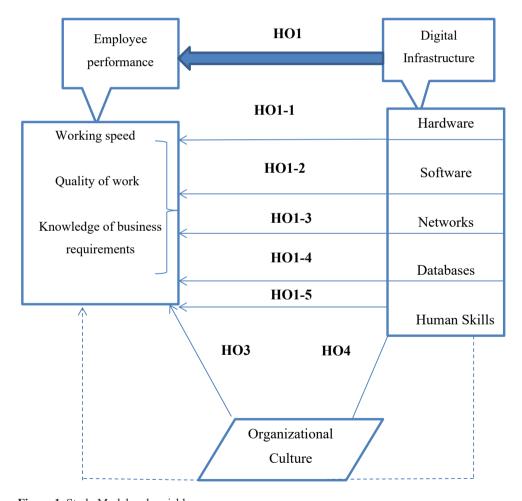


Figure 1. Study Model and variables

Source: prepared by the authors based on the references and the previous relevant studies approved.

2. Literature Review and Previous studies

Digital infrastructure refers to digital technologies which provide the basis for an organization's information technology and operations, such as broadband Internet, mobile and digital communications, cloud services and software, operational security, user identity and data encryption (Greenstein, 2019). Benavides et al. (2021) noted that digital infrastructure pertains to the reorganization or new investment in technology, business models and processes to create new value for customers and employees.

The researchers believe that digital infrastructure is a concept which expresses the resources necessary to enable the use of data, devices, methods, systems and computerized processes, as it is indispensable to improve the work of society and the quality of life of its citizens, and can also be expressed as linking systems between a group of different systems, which are undefined social systems that depend on devices and the Internet, which are highly rapid systems that carry with them information technology and design systems (Barak, 2022).

Digital infrastructure is critical to achieving SDGs and enabling digital development in fact as governments are increasingly working with digital infrastructure on a par with energy or access to water, given its importance for economic development. (Oughton, 2021). Digital infrastructure is also highly important in organizations, as it accelerates the way of daily work, improves the quality and enhances the performance levels, which leads to an increased workflow efficiency and reduced errors, and achieves the application of new services quickly and flexibly, which increases productivity, augments beneficiary satisfaction, and improves the quality of investment (Al-Alja, 2021). There are five dimensions of digital infrastructure as listed by writers and researchers as follows: first, hardware, which is represented by computers and their accessories, and which serves as the basic component of the infrastructure, (Zitikytė, 2020); the hardware components are now being updated, and their technology is frequently and quickly improved. This affects the rise in prices, and the durability of the devices is very important to meet the requirements of existing users and increase user requests (Alaa, 2021). Computer hardware and software represent important organizational assets that must be managed appropriately, (Butkus, M. 2022) and the most important issues are the management of computers and Software technology in understanding the new technology requirements for e-commerce and digital businesses and determining the total cost of technology assets (Hmoud & Las210,2019).second Software works to achieve three functions in the infrastructure: managing the organization's computer resources, providing workers with the advantages of these resources, and acting as an intermediary between the organization and the stored information (Fayyad and Tarablisiyah, 2020). Software helps in a better presentation of information, (Iarmolenko, I. and Chornous, G. 2020) as it enables users to access the Internet, which contains information about everything, and it also allows those concerned to learn modern tools and knowledge that will then make them ready for possible technological changes in the future (Cruz – Benito et al., 2019). third Communication networks are the means used to deal with data and information in terms of sending and receiving them, as they consist of a group of stations located in several locations, and

are connected to each other in a way that allows beneficiaries to send and receive data and information (Nayef and Jassim, 2017) Computer networks also allow access to data from computers on the same network and modify them according to the needs of the organization, and make it easier for workers to share ideas between workers (MirJalili, 2019). four human element which refers to the working individuals who use the system, and have computers and software to perform the specific tasks and duties entrusted to them in the organization (Al-Mutairi, 2021). The human element is one of the most important resources of organizations and the main engine for the advancement of their reality, (Madaleno, M. and Barbuta-Misu, N. 2019) and the most influential in productivity, and it is clear today that human resources in all organizations have become a big difference in excellence and that investment in them constitutes the highest important investment element (Bataineh, 2021) five databases It is a set of organized information that can be accessed, managed and updated easily, and database systems are very important because they transmit information related to sales transactions, product inventory, customer profiles and marketing activities (Monteiro et al., 2018), which is a set of elements related to logical data, these data are linked to each other from a mathematical relationship, and the data is stored in the computer in an organized manner so that it is easy to deal with it by searching and modifying such as adding or deleting. (Apaydin, F. and Szczepaniak, M. 2017)

Organizational culture is a pattern of basic assumptions, invented, discovered, or developed by a group of employees in the organization, and presented well to consider the assumptions correct, and taught to new members to facilitate their integration into the organization, as it is the right way to perceive, think and feel within it (Kimata & Itakura, 2021) .Organizational culture is a collaborative process that creates awareness and common understanding between managers and employees regarding their different views and interests (Nasr and Baghdadi, 2021).Organizational culture is a set of behaviors that influence the way individuals relate to each other, the context in which knowledge arises, their resistance to changes, and how they share knowledge. (Garcia-Louzao, J. and Tarasonis, L. 2021) Culture consists of shared values and assumptions that explain why and why organizations do the activity they do (Powell,et,2021)

Mubarak (2020) stated that culture consists of a set of components, the first of which is values, which are the principles that the individual is keen to acquire and preserve, the second is myths and legends, which are all the stories and tales told about the history of the organization, and the third is symbols, which are related to the cultural system such as dress style, places, and the fourth is rituals and rituals are generated from symbols in a way that makes them achieve the development of a sense of belonging, and finally the cultural network, which is the hidden structure of the organization and is interested in linking the elements of the organization to each other. (Fasano, A. and Boido, C. 2017)

The researchers believe that there is great importance of organizational culture through its reflection on the workflow, achievement and work with sincerity, commitment, (Bajrami, H. and Fejza, V. 2020) integrity and mutual respect among employees, and the organizational culture increases the cohesion of the organization and the loyalty of its members and to promote a high level of mutual respect between management and employees. (Haliti, B. 2020)

It has been mentioned that there is a set of characteristics and features, the first of which is the generality, which are the features that are shared by all members of society, and the second is the specificities, which are those elements that are shared by a certain group of members of society as the main components that relate to the basic skills of the job or profession, and the third is alternatives and variables, which are the elements that appear recently, and are published for the first time as a culture in society(Cannavale, C. and Laurenza, E. 2018). The researchers believe that the needs of organizations for organizational culture are related to the administrative levels that seek to achieve their goals, future vision, mission, ability to solve problems, seek to keep pace with permanent development, (Fareniuk, Y. and Chornous, G. 2023) access to new ideas, and innovate in valuable things in services, ideas, procedures and processes. (Kacandolli - Gjonbala, D. 2018)

The performance of employees is seen as the goals and outputs that the organization seeks to achieve through its employees (Shuaib 2021), which is the practical results, achievements, or work done by individuals, which is the practical practice of the contents of administrative plans and decisions (Khalida and Ferdous, 2021) and the researchers see it as the degree to which the individual achieves the goals set within the organization and the extent of its success through the optimal use of available resources. (Tetik, M. and Ceylan, R. 2021). The performance of employees is determined as a result of the processes of interaction and compatibility between the internal forces of the individual and the external forces surrounding him (Qishmo, 2020) and there are those who indicate that the performance of employees is determined as a result of the interaction between three main determinants, namely individual motivation, work environment, and ability to perform work (Deniel, 2019). There is almost agreement between writers and researchers that the dimensions of the performance of employees are determined by three dimensions: the speed of work, which means the amount of work accomplished that an individual can accomplish in normal circumstances during a specific period of time through the physical and mental energies exerted by the individual while doing work (Abu Jalida, 2018) and it is important to complete the work easily and easily and the need to agree on the period of work performed between management and workers to achieve good degrees of growth in the rate of performance commensurate with With the training, experience and facilities acquired by the individual during work so that it does not exceed the capabilities and capabilities of individuals and at the same time not less than their capabilities and capabilities (Blyton, et, al, 2017) quality of work, which is a planned process aimed at change that represents the responsible by achieving job satisfaction for employees by securing appropriate working conditions to raise the level of performance of employees and provide an appropriate work environment, which affects the performance of employees, their commitment and loyalty to the organization in a positive way, achieving growth and development and achieving strategic goals (Shanti, 2016). The quality of work represents the level of mastery and the degree of conformity of the effort exerted to certain quality specifications, so that within this framework the conformity of the department's outputs to the specifications specified by and within the approved quality standards, and measuring the extent to which they are free from errors during implementation, and the degree of measurement of the degree of creativity and innovation made by the individual during the performance of work (Abu Jalida, 2018)

Knowledge of work requirements is the real wealth of organizations and therefore it is a vital tool to carry out jobs and conduct activities to achieve the goals and objectives for which the organization was established (Abu Afifeh, 2019) The importance of knowledge of work requirements lies in allowing the organization to focus on the most creative departments, and directing individuals to do business and is an essential driver of how the organization develops and matures and creates a competitive advantage (Abu Afifeh, 2019)

Study (Gao et al, 2021) The study aimed to clarify the potential of digitizing rural information, using digital information as a bridge between rural and urban areas, and connecting stakeholders from top to bottom and vice versa through a network or platform, and the study showed the importance of the place in particular to encourage weak links to information infrastructure to promote digital construction in rural areas, and the study recommended building digital infrastructure in rural areas. Study (Mohsen et al,2020) aimed to identify and determine the organizational culture on the performance of employees in Afghanistan, and the study was conducted on (211) employees in telecommunications companies in Afghanistan, and it was found that there are relationships and effects of culture in the performance of individuals, and the study recommended coordinating teamwork and team spirit. Study (Hebat Allah, 2020) The study aimed to determine the level of use of the digital society, and determine the level of participation in planning decision-making, and the study was conducted in Egypt on (67) individuals through the questionnaire on the Port Said Directorate, and the results of the study came with the priority of activating the contributions of the digital society, and supporting infrastructure, and the study recommended the need to develop long-term strategic plans for the use of the digital society in the health sector. Study (Alshehani, Alshurideh, Alhurdi, 2020): This study aimed to study the impact of ethical leadership on the performance of workers within the business organization, and how the leader should be a role model to be followed by promoting ethical behaviors and procedures among employees, data was taken from (30) articles that indicated that ethical leadership has a positive impact on the job performance of workers and confirmed all hypotheses, and the results of the study were that there is a statistically significant impact between ethical leadership on employee performance and the study also recommended improving the approach to ethical leadership On the performance of employees. Study (Otaebey, 2020) The study aimed to find out the level of organizational culture prevailing in the German Private University and the level of strategic thinking among the administrative leaders of the university, the study was conducted at the German Private University, and the study sample reached (270) factors, and the questionnaire was the study tool, the method of collecting information and the descriptive analytical approach to data analysis, and the results showed that there is a positive impact of organizational culture on strategic thinking, The study also recommended that the administrative leadership understand the problems in the first place. Study (Shaibani, 2019) The study aimed to identify the repercussions of administrative creativity on job performance through the following question (What is the extent to which administrative creativity reflects on job creativity among the employees of the Department of Social Sciences?), The study was conducted on the University of Larbi bin Al-Muhaidin, um Al-Bouaghi in the Department of Science, and the sample of the study represented all the employees of the Department of Social Sciences Management and the number of 30 employees, and recommended the head on the organization to adopt the concept of creativity and consider it the essence of its activities.

After reviewing the previous studies mentioned in the research and those not mentioned, we find that there is an absence of the sub-axes of the digital infrastructure and taking it in general, or taking some axes without others, and the performance of the workers was sub-variables different from what was studied here and we did not find any study that took the organizational culture as an intermediary variable between the digital infrastructure and the performance of the workers, showing the research gap of the study.

3. Practical application of the study

The questionnaire was used to obtain the initial information by distributing it to a sample of (220) individuals in a simple random way, multiple regression analysis and trajectory analysis were used as statistical means, and the questionnaire was developed as the main tool for the study in a manner commensurate with its variables by reviewing previous studies, and the tool consisted of three main parts, the first part included the five dimensions of the digital infrastructure by (20) items, the second part included the dimensions of the performance of the three employees by (12) items, and the third part organizational culture by (6) paragraphs.

The questionnaire was presented to a group of arbitrators specialized in a number of Jordanian universities, and the deletion, addition and merger were based on their proposals, as for the stability of the study tool, the internal consistency coefficient was calculated using the Cronbach alpha coefficient and the alpha value of the sub-variables that make up the questionnaire ranged between (0.813) and (0.915), all of which are greater than (0.60) and this is an indicator of consistency between the paragraphs of the study tool and its documentation and the possibility of relying on its box to conduct statistical analysis.

It is clear from Table (1) that there is an availability of digital infrastructure, where the general arithmetic average reached (3.95) with high relative importance, while the general arithmetic average of the organizational culture came by (3.38) with medium relative importance, and the performance of workers came with a general arithmetic average (3.61) and with medium relative importance.

Table 1. of the relative importance of the study variables

Study variables	Arithmetic mean	Standard deviation	Materiality
Digital Infrastructure	3.95	0.898	High
Organizational Culture	3.38	0.887	Medium
Employee performance	3.61	0.968	Medium

4. Results Hypothesis analysis

To verify the validity of the first main hypothesis and the sub-hypotheses emanating from it, the multiple regression equation was applied, and it appears from Table (2) that there is a statistically significant effect at the significance level (a \leq 0.05) The dimensions of the digital infrastructure on the performance of employees in the Jordanian Tax and Sales Department, as the value of (R = 0.874), showing a statistically significant correlation between the independent variables combined and the dependent variable, and it appeared that the coefficient of determination (R² = 0.764), showing that the digital infrastructure explained its ratio 76.4% of the variation in the performance of the employees, while the rest is due to other variables that were not included in the model, and accordingly the first main hypothesis is rejected and the alternative hypothesis is accepted.

It appears from the table of coefficients that the values of (B) at the distance (hardware) amounted to (0.466) and that the value of (t) was (8.036) and statistically significant (0.000), showing that the effect of this dimension is significant, and this means that the increase in the physical components by one unit will lead to an increase in the performance of the workers. Based on the above, the first sub-hypothesis is rejected and the alternative hypothesis is accepted.

It is clear from the table of coefficients that the values of (B) remotely (software) have reached (0.213) and that the value of (t) was (3.742) and statistically significant (0.000), showing that the impact of this dimension is significant, and this means that the increase in (software) by one unit will lead to an increase in the performance of workers by (0.213) and this leads us to reject the second hypothesis and accept the alternative hypothesis.

It appears from the table of coefficients that the values of (B) at the distance (communication networks) amounted to (0.106) and that the value of (t) was (2.474) and statistically significant (0.014), showing that this dimension is significant, which means that any increase of one unit in communication networks will lead to an increase in the performance of workers by (0.106), which means rejecting the third sub-hypothesis and accepting the alternative hypothesis.

It is clear from the table of transactions that the values of (B) at the distance (databases) amounted to (0.224) and that the value of (t) was (4.616) and statistically significant (0.000), showing that the impact of this dimension is significant, as the increase in databases by one unit will lead to an increase in the performance of workers, and accordingly the fourth sub-hypothesis is rejected and the alternative hypothesis is accepted.

It appears from the table of coefficients that the values of (B) at the distance (human skills) have reached (0.486) and that the value of (t) was (12.009) and statistically significant (0.000), showing that the impact of this dimension is significant, and this means that the increase in (human skills) by one unit will lead to an increase in the performance of employees by (0.486) and on this basis the fifth sub-hypothesis is rejected and the alternative hypothesis is accepted.

Model ANOVA Coefficient Summary Dependent variable Standard R F Т \mathbb{R}^2 DF Sig.F Statement В Sig.T error 0.344 0.144 2.389 Constant 0.018 Hardware 0.466 0.058 8.036 0.000 **Employee** Software 0.213 0.057 3.742 0.000 perfor-0.874 | 0.764 | 182.88 | 5.282 0.00 Networks 0.106 0.043 2.474 0.014 mance 0.224 Databases 0.048 4.616 0.000 Human Skills 0.486 0.040 12.009 0.000

Table 2. Reslt Multiple Regression Analysis of the Impact of Digital Infrastructure on the Performance of Employees in the Jordanian Income and Sales Tax Department

To verify the validity of the second main hypothesis, a simple linear regression analysis was used, and this is evident through Table (3), where the results indicate a statistically significant impact of the dimension of the infrastructure with its combined dimensions on the organizational culture, where the correlation coefficient reached (R = 0.743), which indicates a statistically significant correlation between the independent variable and the intermediate variable, and it appeared that the value of the coefficient of determination ($R^2 = 0.550$) and this means that the digital infrastructure has explained 51.6% of The variation in the organizational culture while the rest is due to other variables that were not included in the model, and the value of (F = 305.078) at a confidence level (sig=0.000), and this confirms the significance of the regression.

It appears from the table of transactions that the values of (B) at the digital infrastructure dimension have reached (0.790) and that the value of (t) was (17.466) and statistically significant (0.000), which indicates that the impact of this dimension is significant, and this means that the increase in infrastructure by one unit will lead to an increase in organizational culture by (0.790) Based on the above, the second main sub-hypothesis is rejected and the alternative hypothesis is accepted.

Table 3. Reslt Analysis of the simple linear regression of the impact of infrastructure in its combined dimensions on the organizational culture in the Jordanian Tax and Sales Department

Inter- mediate Model Summary		ANOVA			Coefficient					
variable	R	R ²	F	DF	Sig.F	Statement	В	Standard error	Т	Sig.T
Organi-						Constant	0.217	0.173	1.255	0.211
zational Culture	0.718	0.516	305.78	1.286	0.000	Digital Infra- structure	0.790	0.045	17.466	0.000

To verify the validity of the third main hypothesis, a simple linear regression analysis was used, and this is evident through Table (4) and the results indicate a statistically significant effect of the organizational culture dimension on the performance of employees in

its combined dimensions, where the correlation coefficient reached (R = 0.743), showing a statistically significant correlation between the intermediate variable and the dependent variable, and it was shown that the value of the coefficient of determination ($R^2 = 0.552$), showing that the organizational culture interpreted 55.2% of The variation in the performance of employees, while the remaining is due to other variables that were not included in the model, and the value of (F = 351.889) at the confidence level (sig=0.000) and this confirms the significance of the regression at the level of significance ($0.05 \ge 9$) and it appears from the table of transactions that the values of (B) at the distance of organizational culture have reached (0.810) and that the value of (t) was (18.759) and statistically significant (0.000), showing the significance of the impact, and this means that the increase in organizational culture by one unit will lead to An increase in the performance of employees by (81.0%) Based on the above, the third main hypothesis is rejected and the alternative is accepted.

Table 4. Reslt Analysis of the simple linear regression of the impact of organizational culture on the performance of employees in the Jordanian Income and Sales Tax Department

Dependent variable	Model Sum- mary		ANOVA		Coefficient			Model Summary			
	R ²	R	F	DF	Sig.F	Statement	В	Standard error	Т	\mathbb{R}^2	R
Empoyee perfor- mance	0.552 0.		.743 351.889	1.286	0.000	Constant	0.213	0.161	1.324	0.552	0.743
		0.743				Organi- zational Culture	0.810	0.043	18.759		

Path analysis was used to determine the significance of the indirect impact measured through the intermediate variable Table (5) shows the values of the direct and indirect effects of the relationship of the median variable (organizational culture) on the infrastructure relationship on the performance of employees, and by reviewing the values of direct effects in the table, it is found that the value of the effect of the independent variable on the dependent (in the presence of the median) has reached (0.171) and the value of the influence of the independent variable on the median (0.886) and the value of the direct impact of the median on the dependent (0.714) has been expressed These effects using standard values, where it is noted that all the values of these effects (coefficients) were statistically significant as they were all less than (0.05), which means that there is an indirect effect of the median variable as all the values of the significance level were statistically significant.

Table 5. Reslt Track analysis of the impact of digital infrastructure on the performance of employees in the presence of organizational culture intermediate variable

Direction of influence	В	T	Sig (t)	Direct impact	Indirect effect
Independent on the dependent	0.783	18.089	*		
Independent on the broker	0.886	26.912	*	0.783	0.71
Median on the dependent	0.741	15.955	*		

5. Discussion

It was found that there is a statistically significant effect at the significance level (a \leq 0.05) for the digital infrastructure with its combined and individual dimensions on the performance of employees with its combined dimensions. It was also found that there is a statistically significant effect at the significance level (a \leq 0.05) for the digital infrastructure with its combined dimensions on the organizational culture, in addition to the presence of a statistically significant effect at the significance level (a \leq 0.05) for the organizational culture on the performance of employees with its dimensions. There is also a statistically significant effect at the significance level (a \leq 0.05) for the infrastructure with its combined dimensions on the performance of employees with the presence of organizational culture as an intervening variable. It was found that the level of interest in the infrastructure was at a high level, while the organizational culture and employee performance were at an average level.

6. Conclusion

Based on the analysis of the variables of the study, the management of the Jordanian Tax and Sales Department must adopt many policies, the most important of which are: openness and facilitation of communication between management and employees, creating a system of material and moral incentives, providing continuous training and learning opportunities, providing a positive work environment and supporting cooperation between workers through work teams and automating routine tasks, and introducing modern technological means such as data analysis and artificial intelligence. and expand the participation of employees in decision-making.

7. Policy recommendations

Policy recommendations for the impact of organizational culture as a mediating variable on the relationship between digital infrastructure and employee performance in the Jordanian Income and Sales Tax Department include a set of strategic measures aimed at improving institutional performance and enhancing the effective use of technology. First, it is recommended to develop a comprehensive policy to promote an organizational culture that supports innovation and collaboration. This policy should include the creation of training programs aimed at promoting organizational values that encourage active participation, which contributes to building a positive work environment that encourages the exchange of ideas and suggestions.

Second, internal communication channels should be enhanced to ensure a smooth flow of information between all levels of the organization. This can be achieved by creating interactive platforms that allow employees to communicate with management and provide their opinions on improving the work environment and technology use processes. This will contribute to increasing employee loyalty and enhancing their sense of empowerment.

Third, investment in digital technology is vital, but it must be accompanied by investment in developing organizational culture. Therefore, it is advisable to allocate financial and human resources to improve digital infrastructure, while ensuring that employees are provided with appropriate training on how to use these tools efficiently. These training programs should include multiple aspects, from technical skills to communication and collaboration skills.

In addition, it is recommended to implement a periodic evaluation system to measure the effectiveness of organizational culture and its impact on employee performance. Key performance indicators (KPIs) can be used to determine the success of cultural programs and initiatives, allowing for the necessary adjustments to be made to achieve the desired goals.

Finally, it is essential that senior management commits to enhancing organizational culture by making decisions that are in line with organizational values. Management should be a role model in implementing these values, which enhances trust between employees and management and creates a motivating work environment. By implementing these recommendations, the Jordanian Income and Sales Tax Department can achieve sustainable improvements in performance and enhance work effectiveness, which contributes to achieving long-term strategic goals

Author contributions

Mahmoud Ali Al-Rousan: conceptualization, methodology, formal analysis, investigation, writing - original draft, writing - review & editing, visualization. Ayat Muhammad Nabil Wahib Ababneh: conceptualization, methodology, formal analysis, investigation, writing - original draft, writing - review & editing, visualization.

References

- Abu Jalida, S. (2018). The Impact of Human Resources Management on the Performance of Employees in Libyan Telecommunications Companies. Master's Thesis, Middle East University.
- Abu Afifeh, Abdel Rahman. (2019). Knowledge management and its relationship to administrative creativity, an applied study on Bank of Palestine, Gaza Strip. Master's Thesis, Al-Azhar University.
- Ahmed, S. N., and Ahmed, M. J. (2017). The use of information technology infrastructure and its impact on human resources performance in public universities. *Journal of Accounting and Financial Studies*, 12 (38). https://doi.org/10.34093/jafs.v12i38.194
- Alaa, Mohamed El-Sayed Abdo. (2021). Artificial Intelligence between Artificial Marketing and Smart Advertising. *Journal of Architecture, Arts and Humanities*, 8(38), 238-267. https://doi.org/10.21608/ MJAF.2021.69811.2297
- Al-Ajla, M. (2021). The Role of IT Infrastructure for the Transition to Digital Transformation in Government Institutions. Master's Thesis, Ahmed Bin Yahya El Ouncharissi University, Algeria.
- Apaydin, F. and Szczepaniak, M. (2017). Analyzing the Profile and Purchase Intentions of Green Consumers in Poland. *Ekonomika*, 96(1), 93-112. https://doi.org/10.15388/Ekon.2017.1.10666.
- Ballaro, J. M., & Polk, L. (2024). Developing on organisation for future growth using succession planning. *Organization Development Journal*, 35(4), 41-60.

- Bataineh, M. M. (2021). The Role of Human Resources Planning in Achieving Institutional Excellence in Telecommunications Companies – Jordan. Master Thesis, Faculty of Business, Ajloun National University, Jordan.
- Bajrami, H., and Fejza, V. (2020). The Role of Marketing and Business Approach on SME Development. *Ekonomika*, 98(2), 76–84. https://doi.org/10.15388/Ekon.2019.2.5
- Barak, D. (2022). The Impact of Income Inequality, Renewable Energy Consumption, Non-Renewable Energy Consumption and Per Capita Income on Poverty: Evidence from BRICS Economies. *Ekonomika*, 101(1), 62–83. https://doi.org/10.15388/Ekon.2022.101.1.4.
- Benavides, L.M.C., Arias, J.A.T., & Burgos, D. (2021). Behavior Analysis of Digital Transformation in Latin American and Colombian Universities, Based on a General Identification of Variables. In: *Radical Solutions* for Digital Transformation in Latin American Universities (pp.129-156). https://doi.org/10.1007/978-981-16-3941-8
- Blyton, P., Hassard, J., Hill, S., & Starkey, K. (2023). Time, work and organization. London: Routledge. https://doi.org/10.4324/9781315267272
- Butkus, M. (2022). Do Gender and Age Matter in Employment Sectoral Growth Relationship Over the Recession and Expansion. *Ekonomika*, 101(2), 38–51. https://doi.org/10.15388/Ekon.2022.101.2.3.
- Cannavale, C. and Laurenza, E. (2018). The International Entry Choices of Italian SMEs in Emerging Markets: a Case-based Analysis. *Ekonomika*, 96(3), 102–125. https://doi.org/10.15388/Ekon.2017.3.11578.
- Cruz-Benito, J., García-Peñalvo, F. J., & Therón, R. (2019). Analyzing the software architectures supporting HCI/HMI processes through a systematic review of the literature. *Telematics and Informatics*, 38, 118-132. https://doi.org/10.1016/j.tele.2018.09.006
- Daniel, Cross Ogohi. (2019). Effects of Incentives on Employees Productivity. *International Journal of Business Marketing and Management (IJBMM)*, 4 (1), 41-48.
- Barongo, E. K. (2013). The Role of Financial Incentives on Employees' Motivation in Financial Institutions in Tanzania": A Case of Bank of Tanzania" is the original and individual work of Edmund Kyaruzi Barongo.
- Fareniuk, Y. and Chornous, G. (2023). Optimization of Media Strategy via Marketing Mix Modeling in Retailing. *Ekonomika*, 102(1), 6-25. https://doi.org/10.15388/Ekon.2023.102.1.1.
- Fasano, A. and Boido, C. (2024). Concentration and Behavioral Biases in the Active Management of BRIC Funds. Ekonomika, 96(1), 58-73. https://doi.org/10.15388/Ekon.2017.1.10664.
- Haliti, B. (2020). The impact of the Ease Doing Business Indicators on Foreign Direct Investment in the European transition economies. *Ekonomika*, 98(2), 19-32. https://doi.org/10.15388/Ekon.2019.2.2.
- Hmoud, B., Laszlo, V. (2019). Will artificial intelligence take over humanresources recruitment and selection? Network Intelligence Studies, 7(13), 21-30.
- Iarmolenko, I. and Chornous, G. (2020). The Model of a Second-Hand Goods Resale Exchange under Transactional Pricing Strategy. Ekonomika, 99(1), 69-78. https://doi.org/10.15388/Ekon.2020.1.4.
- Garcia-Louzao, J. and Tarasonis, L. (2021). A First Glance at the Minimum Wage Incidence in Lithuania Using Social Security Data. *Ekonomika*, 100(1), 31–53. https://doi.org/10.15388/Ekon.2021.1.2.
- Gao, X., Guo, X., & Lo, T. (2021). Digital Infrastructure A Potential Method for Rural Revitalization through Digitization of Rural Information.
- Greenstein, S. (2019). Digital infrastructure .In Economics of Infrastructure Investment. University of Chicago press.
- Kacandolli-Gjonbala, D. (2018). The Efficiency of Public Procurement in the Republic of Kosovo: an Econometric Approach. Ekonomika, 97(2), 70–90. https://doi.org/10.15388/Ekon.2018.1.11787.
- Khalida, M., and Ferdous, B., L. (2021). The Implications of Knowledge Management Practices on Improving Employee Performance (A Field Study). Messila University.
- Khalida, M. (2021). The Implications of Knowledge Management Practices on Improving Employee Performance (PhD thesis), Messila University.
- Köstekçi, A. and Celik, A. (2024). Modelling the Relationship Between Public Expenditure, Tax Revenue and Economic Growth in Türkiye Using the AARDL Approach. *Ekonomika*, 103(2), 90-108. https://doi. org/10.15388/Ekon.2024.103.2.5.

- Madaleno, M. and Barbuta-Misu, N. (2019). The Financial Performance of European Companies: Explanatory Factors in the Context of Economic Crisis. *Ekonomika*, 98(2), 6–18. https://doi.org/10.15388/Ekon.2019.2.1.
- Mirjalili, S. (2019). Evolutionary algorithms and neural networks. Springer International Publishing.
- Monteir, C.S., Costa, C., Pina, A., Santos, M.Y., & Ferrao, P. (2018). An urban building database (UBD) Supporting a smart city information system. *Energy and Buildings*, 158, 244-260.
- Mubarak, F.A., (2020). The Impact of Organizational Culture on Job Instillation in the Kuwaiti Business Environment, A Field Study on the Commercial Banking Sector. Master's Thesis, Mutah University, Faculty of Graduate Studies, Karak, Jordan.
- Nasr, A.G.M., Baghdadi, M. M., (2021). Improving the organizational culture to support digital transformation in public secondary education schools in Egypt: a proposed concept. *Journal of the Faculty of Education*, 2(4).
- Oughton, E. (2021). Policy options for digital infrastructure strategic: A simulation model for broadband universal service in Africa. https://doi.org/10.48550/arXiv.2102.03561
- Powell, B. J., Mettert, K. D., Dorsey, C. N., Weiner, B. J., Stanick, C. F., Lengnick-Hall, R., Ehrhart, M. G., Aarons, G. A., Barwick, M. A., Damschroder, L. J., & Lewis, C. C. (2021). Measures of organizational culture, organizational climate, and implementation climate in behavioral health: A systematic review. *Implementation research and practice*, 2, 26334895211018862. https://doi.org/10.1177/26334895211018862
- Qishmo, A. (2020). The Role of Human Resources in Developing the Performance of Palestinian Private School Employees from the Perspective of the Workers Themselves. *Journal of Social Sciences*, 79.
- Reis, J., & Melão, N. (2023). Digital transformation: A meta-review and guidelines for future research. *Heliyon*, 9(1), e12834. https://doi.org/10.1016/j.heliyon.2023.e12834
- Samer, F. and Shiraz, T. (2020). Assessing the suitability of the IT infrastructure for the flexibility of human resources at Tishreen University - A field study on employees at Tishreen University. *Hama University Journal*, 3(4).
- Shoaib, H. (2021). The Impact of Activating Electronic Management Information Systems on Improving the Performance of Workers in Light of Epidemics and Crises: An Applied Study, University of Business and Technology, Saudi Arabia.
- Shanti, N.A.R. (2016). The reality of job quality of life in government institutions and its relationship to work ethics (an applied study on the Ministry of Public Works and Housing). Master's thesis, joint graduate program between the Academy of Management and Tourism for Postgraduate Studies and Al-Aqsa University in Gaza. Gaza.
- Tetik, M. and Ceylan, R. (2021). Evaluation of Stackelberg Leader-Follower Interaction Between Policymakers in Small Open Economies. *Ekonomika*, 100(2), 101–132. https://doi.org/10.15388/Ekon.2021.100.2.5
- Ubiparipović, B., Matković, P., and Pavlićević, V. (2023) Key activities of digital business transformation process. Strategic Management, 28(1), 033-040. https://doi.org/10.5937/StraMan2200016U
- Zitikytė, K. (2020). To Work or not to Work: Factors Affecting Bridge Employment Beyond Retirement, Case of Lithuania. *Ekonomika*, 98(2), 33–54. https://doi.org/10.15388/Ekon.2019.2.3