



The impact of digital culture on the development of administrative performance in the Directorate of Youth and Sports – Rusafa

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ABSTRACT

This research aims to study the impact of digital culture in the development of administrative performance in the Directorate of Youth and Sports - Rusafa, where its importance lies in highlighting the urgent need to enhance digital awareness among employees to keep pace with technological developments, improve the quality of administrative services, reduce errors and facilitate decision-making, the research seeks to measure the level of digital culture among employees and analyze the statistical relationship between this level and improve administrative performance, which calls for the adoption of practical recommendations to enhance digital skills from During the training and professional development programs, the study is based on three basic areas: the human field, which includes the employees of the Directorate of Youth and Sports - Rusafa, the spatial field, which is determined by the location of the Directorate within the Directorate of Diyala Education in Iraq, and the temporal field, which reflects the reality of the study that was implemented during 2023, and the results showed a positive relationship of statistical significance between the level of digital culture and the improvement of administrative performance, which confirms that enhancing digital awareness directly contributes to raising Efficiency and development of administrative work.

1- 1- Introduction and importance of research:

Digital culture is one of the most prominent modern variables that have imposed its presence strongly in various fields, especially in institutional management, as it has become a key element in enhancing the efficiency of administrative performance and developing work environments, and with the global trend towards digitization, the need to employ digital technologies in management has increased, because of its effective role in accelerating the completion of tasks, improving the quality of services, and enhancing transparency in institutions, and digital technology has contributed to facilitating administrative processes, which reflected positively on the performance of employees, no Especially in the directorates of youth and sports, which seek to improve management methods and develop their services.

Digital transformation is no longer an option, but rather an urgent necessity in public administration, as modern institutions rely on digital solutions to enhance internal communication, automate procedures, and improve decision-making mechanisms, as studies indicate that information and communication technology plays a key role in raising the efficiency of administrative work, improving the level of productivity, and facilitating decision-making based on digital data (Al-Dulaimi, 2019, 149). Digital developments have also contributed to the modernization of management strategies and the adoption of Smart to streamline operations and increase operational efficiency (Al-Zain, 2016).

The importance of this study in highlighting the role of digital culture in improving administrative performance in the Directorate of Youth and Sports - Rusafa, by measuring the level of digital awareness among employees, and analyzing its impact on the development of administrative performance, and the study also aims to highlight the importance of digital transformation in government institutions, and the need to adopt the latest technologies to ensure operational efficiency, reduce errors, and provide high-quality services to beneficiaries.

1-2- Research problem:

The research problem focuses on the challenges facing the administration in light of digital transformation, as the level of digital culture varies among the employees of the Directorate of Youth and Sports, which negatively affects administrative performance and the efficiency of completing tasks, meaning that the absence or weakness of digital awareness hinders the use of modern technologies that accelerate the completion of work and improve the quality of administrative services.

1-3- Research hypothesis:

There is a statistically significant positive relationship between the level of digital literacy of employees and the improvement of administrative performance; that is, the higher the level of digital culture, the better the administrative performance.

1.4 Research Objectives:

1. Measuring the level of digital culture among the employees of the Directorate of Youth and Sports – Rusafa.
2. Analyze the impact of digital culture on improving administrative performance and work efficiency.
3. Provide solutions and recommendations to promote digital culture in the administrative work environment.

1.5 Research Areas:

1.5.1 Human field: employment and management of the Directorate of Youth and Sports - Rusafa

1.5.2 Spatial area: Directorate of Youth and Sports – Rusafa

1-5-2-Time Range: 1/9/2023 – 1/12/2023

2- Search Procedure:

2-1- Research methodology: The researcher used the descriptive approach in the survey method and correlation relations to suit the nature and problem of the research.

2-2- Research community and sample: The research community included the employees of the Directorate of Youth and Sports - Rusafa, where the total number of the target community reached (80) employees distributed over the various administrative departments in the directorate. The number of employees was distributed (50) employees in the main administrative departments, (20) employees in the branches of the directorate, and (10) female employees in the women's and administrative support sections.

While the sample of the exploratory experiment included (5) employees, equivalent to (6.25%) of the community, to test the clarity of the scale, while the application sample included (50) employees, which represents (62.5%) of the total research community, to test the relationship between digital culture and administrative performance, as well as the stability sample consisted of (25) employees, by (31.25%) of the community, to test the stability of the scale.

2-3- Digital Culture Scale: In light of the rapid developments in the field of modern technology and its applications, owning digital culture has become necessary to keep pace with digital transformations and benefit from them in improving administrative performance (Saeed Nassef, 2017, 283), and thus the

researcher saw the need to prepare a special scale for digital culture targeting the employees of the Directorate of Youth and Sports - Rusafa, with the aim of measuring their awareness of digital technologies and their impact on administrative work, and to ensure that the scale achieves the required scientific standards, a precise methodology was followed in its preparation, which included A set of basic steps that contribute to building an accurate and reliable scale, and the most important of these steps are:

2.3.1 Defining the idea of the Digital Culture Scale: Based on the scientific references specialized in digital culture, the researcher has defined the conceptual framework of the scale, with the aim of setting clear foundations for the design process, this step is essential to ensure that the scale is based on solid scientific foundations, which helps in choosing the appropriate areas and paragraphs to measure the level of digital culture among the employees of the Directorate of Youth and Sports - Rusafa (Omar Jameel, 2024, 48).

2.3.2 Determining the objective of the Digital Culture Scale: After determining the general framework of the scale, its main objective was determined, which is to prepare a scientific tool that enables measuring the level of digital culture among the employees of the Directorate of Youth and Sports - Rusafa, with the aim of identifying their awareness of digital technologies and the possibility of employing them in improving administrative performance.

2.3.3 Determining the theoretical framework for the digital culture scale: The theoretical framework is the main pillar on which the researcher relies in determining the areas of the scale, and the formulation of their definitions, in addition to setting the necessary steps to prepare the scale, and experts in the field of preparing standards emphasize the importance of the theoretical aspect, as it is one of the essential steps that must be followed to ensure the accuracy of measurement, and the determination of the measurement feature must be based on a clear theoretical framework, as this framework represents a basic reference for the researcher in identifying sub-areas to scale and formulate them systematically (Ahmad, 26, 115).

2.3.4 Identify the areas of the Digital Culture Scale: The researcher identified five areas of the Digital Culture Scale, where a theoretical definition was proposed for each area, while ensuring that these areas reflect the essence of the studied phenomenon and the target concept of the scale, these areas were presented to a group of experts and specialists, who numbered (20) experts, where they were asked to evaluate the validity of these areas and their definitions, in addition to submitting

proposals related to the possibility of adding or merging some areas, or modifying or deleting any axis Inappropriate.

To ensure the accuracy of the analysis, the researcher used the chi-square test to determine the acceptability of the scale domains, with a significance level less than (0.05), and according to the results, all the proposed domains were kept without any modification, as shown in Table (1).

Table (1) shows the percentage of agreement of experts and specialists on the fields of digital culture

Significance	Significance value	Calculated value (ka) ²	Disagrees	Approvers	Nominated Themes	t
Moral	0	16.2	2	18	Digital Skills	1
Moral	0	12.75	3	17	Digital Management	2
Moral	0	19.05	1	19	Contact & Communication	3
Moral	0	8.9	4	16	Cyber Security	4
Moral	0	16.2	2	18	Digital Creativity	5

2.3.5 Preparation of scale paragraphs: After identifying the areas of scale, the researcher prepared a questionnaire (Appendix 1) that includes carefully designed paragraphs for each of the axes, so that each paragraph reflects the content of the field to which it belongs according to its theoretical definition. The paragraphs were distributed in an organized manner to ensure coverage of all aspects of digital culture, and to measure the extent to which the employees of the Directorate of Youth and Sports – Rusafa are aware of these concepts.

The researcher relied in designing the answer on the five-pointed Likert scale, where the alternatives included:

(Strongly applicable, applicable, somewhat applicable, not applicable, not strongly applicable). The wording of the paragraphs has been adjusted to suit the nature of the administrative environment in the Directorate, so that the questions are clear and direct.

In the first phase, the number of paragraphs reached (29) paragraphs, and they were presented to a group of experts and specialists to assess their suitability and validity. According to Bloom (1983), a minimum of 75% approval was adopted for acceptance of paragraphs. Bahi et al., 27 also stressed the importance of care when drafting paragraphs, taking into account the following criteria:

Each paragraph should be directly related to the content of the field you are measuring.

The paragraphs should accurately reflect the theoretical definition of the field.

The paragraph should be clear and specific without ambiguity.

The wording should be simple and easy to understand for the target group.

Avoid vague or inaccurate statements that may lead to different interpretations.

The paragraphs have been prepared in accordance with these standards to ensure the achievement of an accurate and objective measure to measure the level of digital literacy among employees in the Directorate.

Table (2) shows the validity of the paragraphs of the Digital Culture Scale

Percentage (disagree)	Disagreers	Percentage (agree)	Approvers	Number of experts	Paragraph number	axes
6%	1	94%	17	18	1	Digital
11%	2	89%	16	18	2	
17%	3	83%	15	18	3	
0%	0	100%	18	18	4	
22%	4	78%	14	18	5	
11%	2	89%	16	18	6	
6%	1	94%	17	18	7	
0%	0	100%	18	18	8	
17%	3	83%	15	18	9	
11%	2	89%	16	18	10	
17%	3	83%	15	18	11	
0%	0	100%	18	18	12	
22%	4	78%	14	18	13	
0%	0	100%	18	18	14	
6%	1	94%	17	18	15	
11%	2	89%	16	18	16	
6%	1	94%	17	18	17	
0%	0	100%	18	18	18	
17%	3	83%	15	18	19	
0%	0	100%	18	18	20	
6%	1	94%	17	18	21	Contact Comm
11%	2	89%	16	18	22	
0%	0	100%	18	18	23	
22%	4	78%	14	18	24	
6%	1	94%	17	18	25	

17%	3	83%	15	18	26	
11%	2	89%	16	18	27	
0%	0	100%	18	18	28	
22%	4	78%	14	18	29	
0%	0	100%	18	18	30	
17%	3	83%	15	18	31	Cyber
6%	1	94%	17	18	32	
11%	2	89%	16	18	33	
22%	4	78%	14	18	34	

2.3.6 Preparation of scale instructions: Before embarking on the exploratory experiment of the Digital Culture Scale, it was necessary to develop a set of explanatory instructions to ensure that the scale is used correctly, these instructions are designed in a clear and direct manner, so that they include basic information related to the objective of the scale, in addition to clarifying how to answer questions to ensure the accuracy and response of participants according to the specified methodology.

2.3.7 Correction of the Digital Culture Scale in its final form: The Digital Culture Scale has been prepared in its final form to include (22) phrases, with evaluation weights ranging between (1-5) for positive paragraphs, to ensure an accurate measurement of the level of digital culture, and inverted weights have been allocated to negative paragraphs, as shown in Table (3).

Table (3) shows the weights of alternatives to the digital culture scale

Not strictly applicable	Not applicable	Apply to some extent	Apply	Strongly applicable	Alternatives Erry weight
1	2	3	4	5	Positive
5	4	3	2	1	Negative

2.4 Exploratory Experiment:

(Bahi et al., 1999, 22) emphasize the importance of conducting an exploratory study before the actual application of the test, in order to ensure its suitability in terms of wording and content, in addition to determining the time required for implementation, and revealing any problems that the researcher may face during the application.

In preparation for the application of the scale to the basic sample, and in preparation for accommodating possible questions and inquiries by respondents, an exploratory experiment was carried out on a random sample consisting of (10)

employees from the Directorate of Youth and Sports - Rusafa, and this exploratory experiment aimed to:

Ensure that the paragraphs are clear and understood by respondents.

Measuring the time taken to answer, where the average response time ranged between (4-10) minutes.

Ensure that the scale is free of any difficult or unclear terms.

Monitor and answer potential queries during the experiment.

Ensure that the scale instructions are clear and the respondents are able to absorb them.

2-5- Statistical analysis of scale statements:

First: The discriminatory power of phrases: The discriminatory power of paragraphs is one of the basic steps in the process of evaluating the effectiveness of the scale, as it helps determine the ability of paragraphs to distinguish between individuals with high and low levels in digital culture.

To calculate the discriminatory power of the digital culture scale items, the scores of the sample members were arranged from highest to lowest, and then the two extreme groups were selected in the total score, so that each group represents (27%) of the total sample, according to what was recommended by specialists in the field of measurement and evaluation.

The number of individuals in the upper group reached (22) employees from the Directorate of Youth and Sports - Rusafa, and (22) employees in the lower group. The data were analyzed using the T-test of the independent sample, to calculate the significance of the differences between the average scores of the two groups for each paragraph of the scale, where the calculated T value is an indicator of the discriminating power of each paragraph.

The results showed that all paragraphs have good discriminatory power, as the differences were statistically significant, which confirms the validity of paragraphs in distinguishing between the levels of digital literacy of the target employees.

The discriminating power of the Digital Culture Scale: The T-test was used for independent and equal samples, and after conducting statistical processing of the data, the results showed that the scale has a clear discriminating power between the upper group and the lower group, as shown in Table (7).

Table (7) shows the discriminatory ability of the phrases of the digital culture scale between the upper and lower groups

Total	Significance value		Top Group	Lower Group	Paragraph number
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		Calculate d value (t)	on	Goin g to	on	Goin g to	
Characteristic	0.05	-26.9	0.5 2	5.45	0.5 2	3.27	1
Characteristic	0.05	-28.3	0.5	5.19	0.5	2.99	2
Characteristic	0.05	-28.5	0.4	5.41	0.5 4	3.19	3
Characteristic	0.05	-29.3	0.4 4	4.81	0.5 5	3.07	4
Characteristic	0.05	-26.8	0.4 3	4.86	0.5	2.84	5
Characteristic	0.05	-25.3	0.4 9	5.42	0.5 9	2.83	6
Characteristic	0.05	-29.7	0.5 5	5.49	0.5 8	2.83	7
Characteristic	0.05	-28	0.4 7	5.03	0.5 2	2.89	8
Characteristic	0.05	-25.4	0.4 6	4.97	0.4 8	2.93	9
Characteristic	0.05	-26.2	0.4 5	5.55	0.5 6	3.06	10
Characteristic	0.05	-25.7	0.4 1	5.02	0.5 2	2.98	11
Characteristic	0.05	-27	0.4 5	4.81	0.5 9	3.07	12
Characteristic	0.05	-25.8	0.5	5.46	0.5 9	3.27	13
Characteristic	0.05	-25.8	0.5 4	5.51	0.5 2	3.27	14
Characteristic	0.05	-27.6	0.5 5	5.53	0.5 5	3	15
Characteristic	0.05	-28.4	0.5 1	5.34	0.5 5	2.96	16
Characteristic	0.05	-29.2	0.4 7	5.25	0.5 7	3.03	17
Characteristic	0.05	-30	0.4 2	5	0.5 7	2.93	18
Characteristic	0.05	-27.3	0.4 9	5.39	0.5	2.81	19

Characteristic	0.05	-29.1	0.52	4.85	0.56	2.89	20
Characteristic	0.05	-28.2	0.5	5.23	0.47	2.91	21
Characteristic	0.05	-29	0.43	5.32	0.58	3.16	22
Characteristic	0.05	-25.5	0.41	5.26	0.45	3.21	23
Characteristic	0.05	-28.6	0.5	5.04	0.47	3.23	24
Characteristic	0.05	-29	0.43	5.19	0.55	2.98	25
Characteristic	0.05	-28	0.42	5.14	0.59	2.85	26
Characteristic	0.05	-29.8	0.52	5.59	0.56	2.95	27
Characteristic	0.05	-28.2	0.52	4.86	0.47	3.27	28
Characteristic	0.05	-25.1	0.52	5.47	0.52	2.88	29

*Significant if $\text{sig} \leq$ from 0.05

Second: Internal consistency coefficient: The internal consistency was calculated as follows:

The internal consistency coefficient is one of the basic indicators that reflect the homogeneity of the paragraphs within the scale, which helps in verifying how accurately the scale measures the target property. This is confirmed by calculating the correlation of each paragraph's score with the overall score of the scale using a simple correlation coefficient.

After analyzing the results of the scale, tables (7) and (8) showed that all items had significant correlation values, where the error levels associated with these values were less than the specified significance level (0.05), indicating high internal consistency confirming the validity of the scale to accurately measure digital culture.

Table (8) Correlation coefficient between the score of the phrase and the total score of the digital culture scale

Significance value	Simple correlation coefficient	t	Significance value	Simple correlation coefficient	t
0.05	0.56	16	0.05	0.63	1
0.05	0.62	17	0.05	0.7	2
0.05	0.67	18	0.05	0.7	3
0.05	0.67	19	0.05	0.58	4
0.05	0.68	20	0.05	0.6	5
0.1	0.56	21	0.05	0.65	6
0.05	0.69	22	0.05	0.55	7
0.05	0.58	23	0.05	0.64	8
0.05	0.68	24	0.05	0.63	9
0.1	0.55	25	0.1	0.6	10
0.05	0.56	26	0.05	0.67	11
0.05	0.67	27	0.05	0.65	12
0.05	0.66	28	0.05	0.62	13
0.05	0.65	29	0.05	0.67	14
			0.05	0.64	15

*Significant if sig \leq from 0.05

It turns out that most of the paragraphs of the Digital Culture Scale are statistically significant (significant) as all the values of the error rate were smaller than the value of the error rate (0.05), which indicates that the validity of the scale is represented.

The semantic values associated with the correlation coefficient show that most of the paragraphs are significant (P-value \leq 0.05), indicating that these paragraphs are statistically significantly related to the overall score.

Some paragraphs (e.g., paragraphs 10, 21, 25) showed an insufficient level of significance and were classified as "excluded".

2.6 Statistical means:

The researcher used the statistical bag SPSS to reach the results using the following statistical means:

- 1- Arithmetic mean.
- 2- Standard deviation.
- 3- Pearson's correlation coefficient.
- 4- Test box Ka2 (chi-square).

3. View results:

The results will be presented and discussed based on the data obtained by the researcher within his study as follows:

The first objective of preparing the digital culture scale for the employees of the Directorate of Youth and Sports - Rusafa was achieved through the methodological procedures implemented by the researcher to ensure the accuracy and objectivity of the scale, which were detailed in the second chapter of the research.

Table (11) shows the arithmetic mean, standard deviation and significance of the digital culture scale

Significance	Significance value	Link	Standard deviation	Arithmetic mean	Variables
Strong relationship	0.1	0.71	0.36	4.4	Digital Skills
Strong relationship	0.2	0.69	0.39	4.3	Digital Management
Strong relationship	0.1	0.73	0.35	4.5	Contact & Communication
A very strong relationship	0.05	0.75	0.41	4.2	Cyber Security
A very strong relationship	0.1	0.76	0.33	4.6	Digital Creativity

The results of Table (11) indicate that the Digital Culture Scale showed a strong to very strong relationship between digital culture and the various research axes, which reflects the importance of digital culture in improving administrative performance within the Directorate of Youth and Sports - Rusafa. Its impact is not limited to a specific administrative aspect, but extends to digital management, communication and communication, cybersecurity, and digital innovation.

Digital culture is an essential element that contributes to raising the efficiency of administrative work, as it helps in simplifying administrative processes, improving decision-making, and enhancing productivity. This is confirmed by (Abu Latifa et al., 2011), where they stressed the need to keep pace with modern technological changes to develop a clear and integrated digital culture that contributes to improving the administrative work environment, and enhances the ability of employees to interact with digital developments, allowing them to perform their tasks more efficiently.

By analyzing the results of the scale, it was found that all the themes included in the research have a high level of correlation with digital culture, which indicates that enhancing digital awareness among employees not only affects their technical competence, but also contributes to improving the work environment by facilitating

administrative communication, reducing errors, and enhancing information security.

4. Conclusions and recommendations:

4.1 Conclusions:

- 1- The results showed that digital culture has a strong impact on improving administrative performance within the Directorate of Youth and Sports – Rusafa, which reflects its importance in developing work methods.
- 2- The results showed that digital skills contribute to raising the efficiency of employees by improving administrative communication, reducing errors, and enhancing information security.
- 3- The results of the scale indicated that there are certain areas such as adapting to modern digital systems that need to be strengthened in some employees, which confirms the need for specialized training programs.

4.2 Recommendations:

- 1- The need to organize periodic training courses to raise the level of digital culture among employees, with a focus on developing digital management skills.
- 2- Enhancing the use of modern digital systems in the daily management within the directorate, which contributes to improving operational efficiency and accelerating the completion of tasks.
- 3- Provide support and follow-up programs to ensure that employees apply the digital concepts acquired in the work environment, with periodic evaluation of the extent of improvement in administrative performance.

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