

The Impact of Digital Transformation on Improving the Performance of Parliamentary Research Services in the Iraqi Parliament: An Empirical Study

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Abstract

This study aims to digitize parliamentary research services by building a digital platform that provides a set of communication channels through which parliamentary research services can be provided with high quality and efficiency in performance, in order to support the work tasks of members of the Iraqi Council of Representatives at any time and under any circumstance, bypassing space obstacles to reach The places of their solution and their travels in an attempt to overcome the challenges of providing service in the traditional context through the use of the best techniques and software that ensure the achievement of the goal of the study and the satisfaction of the beneficiaries in the present and the future. The study adopted the experimental method and used the deliberate sample of the study community, which numbered (29) members out of (100) parliamentarians who actually benefited from parliamentary research services. Data collection tools were employed to achieve the results of the study and achieve its goals, where the observer and the interview were used, and a standardized scale form was prepared to measure the quality of parliamentary research services, the efficiency of their performance and their effectiveness from the point of view of the actual beneficiaries of the services in their traditional and digital forms (a pre- and post-questionnaire). The study concluded that the digitization of parliamentary research services through building the digital platform has achieved the standard of efficiency, effectiveness, quality and beneficiary satisfaction at a high level, which means rejecting null hypotheses and accepting alternative hypotheses.

Keywords

Digital Transformation, Iraqi Parliament, Parliamentary Research Services and Digital Platforms.

Introduction

Strong democratic parliaments are the ones that respond to the changes taking place in their societies, interact with them and keep pace with them, and one of the most important factors of change is information and communication technology, which today has formed the lifeblood of societies and its engine in the smallest details of their daily practices, as it contributed to increasing openness and public awareness of the various issues that affect the life of the individual. Thus, today, more than ever, we find that parliamentarians need parliamentary research centers that possess ICT tools and adapt them to achieve optimal access to impartial and reliable information at different times and in natural or emergency conditions to meet the requirements of their legislative and oversight functions and to enable them to communicate with citizens and seek a solution and treatment their problems. In addition, the availability of information and communication technology systems in parliamentary research departments can facilitate the process of preserving and disseminating information increasingly in various digital formats, allowing the reproduction and use of knowledge according to the requirements of need and presenting it to a wider audience at the same time. On the other hand, it is an accumulated and sustainable knowledge balance. It represents a historical memory for future generations.

Methodology

The study adopted the Experimental Methodology to find out the expected benefit of digitizing parliamentary research services in improving service performance and achieving beneficiaries' satisfaction. The experimental design for one group, The One Group Pre-Post Measurement, was adopted with a pre- and post-measurement, because it is the most suitable for the study among the designs of the experimental curriculum, in terms of human capabilities and sample characteristics, Figure 1 shows the experimental design of the study.

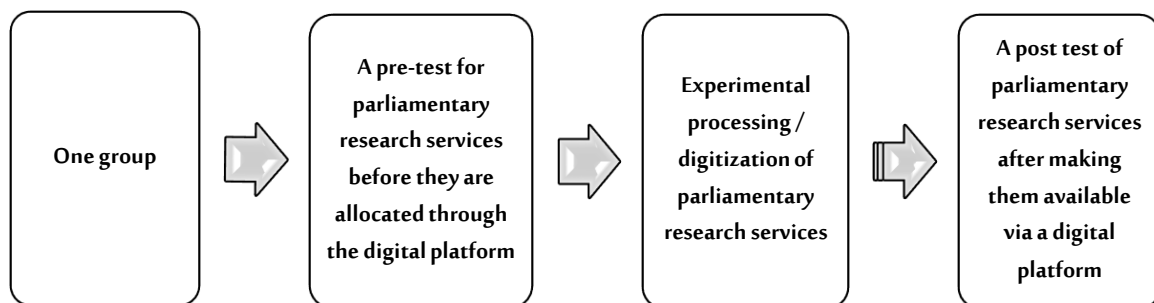


Figure 1 Represents the design of one experimental group for the study (pre- and post-test)

Digital Transformation

Digital transformation is defined as the integration of digital technology into all areas of work, and it is a cultural change that requires institutions to constantly challenge the status quo and constantly experiment, in addition to considering it as a change in business or governments, by making radical changes that affect the work model, procedures and processes, and it can be The transformation affects the process of changing the product or the way the service is provided completely to keep pace with modern changes, and the transformation can be strategic in line with digital development, as it overlaps with the functions of the entire organization (Gamila and Youssef, 2019).

Researcher Dalal Al-Harthy also adds that digital transformation is what comes with the use of digital technology to fundamentally change the way of working, to serve the beneficiaries faster and better (Al-Harthy, 2020). As for the Iraqi Authority for Technology Experts, it reminds during one of the workshops that digital transformation is investing in thinking and changing behavior to bring about a fundamental change in the way of work, by investing in the great technical development that occurred to serve the beneficiaries faster and better. Digital transformation also provides enormous potential for building effective, competitive and sustainable societies, by making a fundamental change in the services of various parties, including consumers, workers and beneficiaries, while improving their experiences and productivity through a series of proportional processes, accompanied by re-activation, implementation and necessary control procedures (Iraqi Commission for tech experts, 2020). Through the previous definitions and concepts, it turns out that the process of digital transformation requires the existence of work methods and technical and digital capabilities, through which innovative products and services can be created compared to traditional methods of providing services, in addition to improving the operational efficiency of services performed at the lowest cost (Carnep, 2020; Al-Masdar and Nasrallah, 2020). More advantages of Digital transformation could include increase of internal collaboration, increasing efficiency Quality of performance (Arab Entrepreneur, 2021; Al-Qasabi, 2018) Creating new business models (Mahmoud, 2018). Moreover, it helps institutions in general and companies in particular, to expand and spread across a wider range and reach a larger segment of beneficiaries (Al-Bar, 2019).

Digital Transformation Technologies

Digital transformation is a transition process in which digital technologies are used to build new processes and services or modify pre-existing models, to simplify procedures

and provide ease of access, in response to the changing requirements of beneficiaries and in line with modern technology. Accordingly, digital transformation in parliamentary research centers is linked to many technologies, as shown in Figure (2) and as follows:

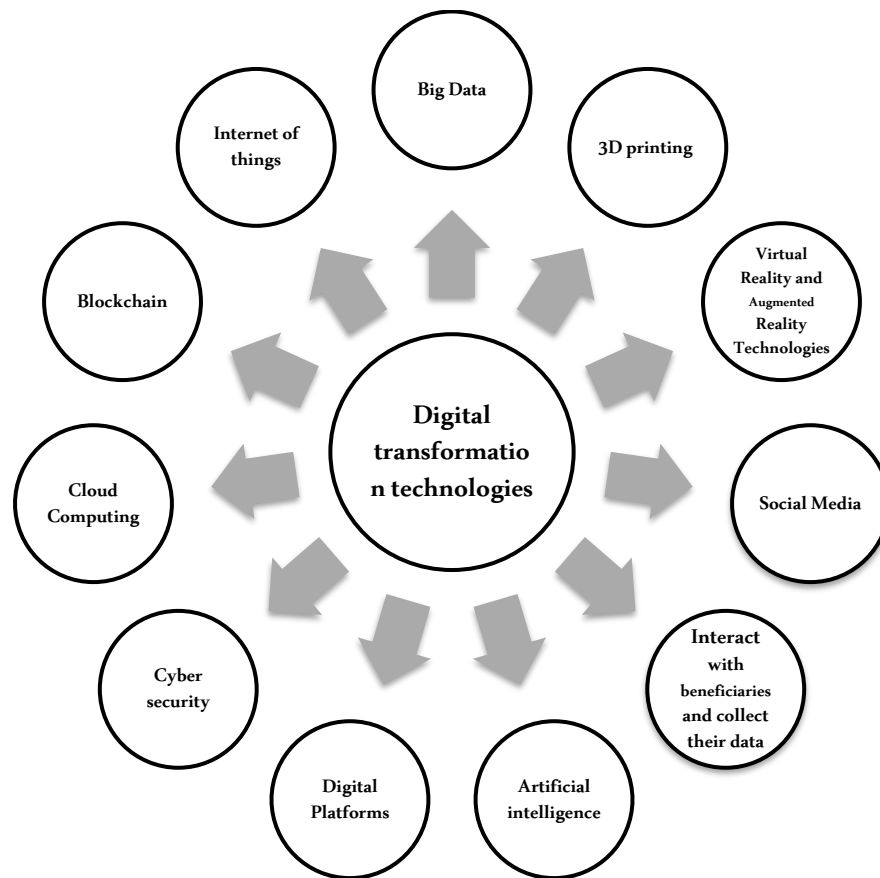


Figure 2 Digital Transformation Techniques

The Concept of Parliamentary Research Services

Parliamentary Research Services aims to provide knowledge support to Parliaments by providing timely information and analysis to members of Parliament, with a view to improving legislative decision-making. It can predict the impact of policies before they are adopted by parliaments. Good research enhances the legitimacy of the legislature, providing members of the House of Representatives with information to draft and amend legislation based on reliable facts (Papazoski & Bedy, 2014).

It also enables them to actively participate in discussions on matters before Parliament as the availability of reliable information and analysis is crucial to the debates taking place in Parliament. At all levels, whether to enact laws, supervise the executive branch, or represent citizens (Dhamo, 2015). Since the mid-twentieth century, many parliaments

have been keen to provide these services in response to the expectations and needs of parliamentarians, whether as individuals or at the level of committees. Many parliaments today are also seeking to establish parliamentary research centers capable of responding to urgent and growing parliamentary needs and contributing to the quantitative and qualitative development of parliamentary performance (Al-Khadi, 2020).

The distinction between information services (or reference services) and parliamentary research services is not a strong or consistent distinction, and it can even be considered that there is a tendency towards convergence between the two types of services. However, the essence of the Parliamentary Research Service is to provide expert policy analysis and briefing to parliamentarians and to provide longer and more important briefings than those provided by information services (Cunningham, 2009).

Parliamentary research services are specialized services, aiming to develop contemporary parliaments around the world into positions of excellence by providing timely information and analysis to members of the House of Representatives, facilitating daily legislative and non-legislative work, and helping them make informed decisions (Pakistan of Parliament, 2020). It is also a research service available to members of parliaments, providing research materials and support to members in the performance of their parliamentary duties (House of Commons, 2021).

The importance of parliamentary research services can be summarized as follows:

1. Supporting parliamentarians to perform their oversight role, by accessing legislative research on complex and multifactorial issues, which require specialized expertise to identify and explain the various influencing factors. Parliamentary Research Services acts as a 'one-stop shop', allowing Parliament members to request information on a wide range of topics. It can also provide opinions based on experience or through an assessment of available evidence (EMReF, 2018).
2. Parliamentary research services constitute a unique source of analysis and information provided to members of parliaments to support political activities due to the independence and quality of information (Jágr).
3. The parliamentary research service in parliaments is of paramount importance to ensure the quality and efficiency of parliamentary work, whether in the areas of legislation, public policy evaluation, government monitoring, or parliamentary diplomacy (Al-Khadi, 2020).

4. A secure platform through which all Parliament members from different political parties can ask their questions and obtain reliable answers to perform their legislative and oversight duties, as it is an independent, impartial and non-partisan analysis source. (IFLA, 2015).
5. Usability, which reassembles research information and presents it in a ready-to-use format. The sheer range of political issues that Parliament deals with makes it impossible for information consumers to be experts in all fields.
6. It meets the need of Representatives to access information and knowledge specifically designed to assist them in fulfilling their roles as legislators, decision-makers and representatives of the people. The majority of them seek timely, accessible information from a source they can turn to when they are unaware of the crux of the problem at hand due to their diverse backgrounds, interests, multiplicity of commitments, and crowded time (L'Heureux, 2013).

Measurement and Analysis

Parliamentary Research Services Provided to Beneficiaries in the Iraqi Council of Representatives (Pre-Measurement)

To get acquainted with the reality of parliamentary research services provided to beneficiaries in the Iraqi parliament before the experiment, the mean and standard deviation of the degrees of the research sample amounting to (30) deputies were calculated on the questionnaire for digitizing parliamentary research services for the beneficiaries in the Iraqi parliament, and to calculate the significance of the difference between the mean of the sample scores and the mean The hypothesis of (50) for the questionnaire as a whole, and the hypothetical mean of each of the four criteria of (12.5), using the One Sample t. test, which reached the calculated t-values and compared them with the tabular t-value of (2.048) at the level of significance (0.05) with a degree of freedom (28), as shown in Table (1).

Table 1 Show t-test for one sample

Variable	N	Mean	SD	Hypothetical mean	t-value *		Indication 0.05
					Calculated	Tabular	
For the resolution as a whole	29	53.2069	3.5994	50	4.798	2.048	Sig.
Efficiency	29	13.1724	1.5369	12.5	2.356	2.048	Sig.
Potency	29	13.5862	1.2682	12.5	4.612	2.048	Sig.
Quality	29	12.6207	1.1152	12.5	0.583	2.048	No sig.
Satisfaction	29	13.8276	1.5599	12.5	4.583	2.048	Sig.

*The t-table value equals (2.042) at the level (0.05) and at the degree of freedom (28).

It is clear from the above table that the calculated t-value (for the resolution as a whole) amounted to (4.798) and for the criterion (efficiency, effectiveness and satisfaction) (2.356, 4.612, 4.583), respectively, and all of them were statistically significant because all the calculated t-values are greater than the tabular t-value of (2.048). At the level of significance (0.05) and the degree of freedom (28), this indicates that the representatives use to a large or high degree the digitization of research services.

As for the (quality) criterion, the calculated t-value amounted to (0.583), which is not statistically significant because it is smaller than the tabular value of (2.048) at a significance level (0.05) and a degree of freedom (28), and this indicates the use of the quality criterion with a medium or acceptable degree. After identifying the regular parliamentary research services for the questionnaire as a whole and for each of the four criteria, the researcher verified each paragraph in each of the four criteria, and relied on the researcher to judge each paragraph, on the test is the mean of the alternatives of paragraphs (4,3,2,1) It is (2.5). Accordingly, each paragraph obtains an mean (2.5) and greater, the paragraph is considered fulfilled, and each paragraph obtains an mean less than (2.5) the paragraph is considered unrealized.

Parliamentary Research Services Provided to Beneficiaries in the Iraqi Parliament (Post-Measurement)

To get acquainted with the parliamentary research services for the beneficiaries in the Iraqi parliament after the experiment. The mean and standard deviation of the scores of the research sample of (30) deputies were calculated on the questionnaire for digitizing parliamentary research services (through a proposed digital platform) for the beneficiaries in the Iraqi Council of Representatives, and to calculate the significance of the difference between the mean of the sample scores and the hypothetical mean of (50) for the questionnaire as a whole, And the hypothetical mean for each of the four criteria of (12.5), using the One Sample t. test, which reached the calculated T-values and compared them with the tabular t-value of (2.048) at the significance level (0.05) and the degree of freedom (28), As shown in Table (2).

Table 2 Show single sample test

Variable	N	Mean	SD	Hypothetical mean	t-value *		Indication 0.05
					Calculated	Tabular	
For the resolution as a whole	29	78.3103	1.2846	50	118.67	2.048	Sig.
Efficiency	29	19.2759	0.7018	12.5	51.989	2.048	Sig.
Potency	29	19.5862	0.5680	12.5	67.180	2.048	Sig.
Quality	29	19.5862	0.6822	12.5	55.930	2.048	Sig.
Satisfaction	29	19.8621	0.3509	12.5	112.974	2.048	Sig.

*The tabular t-value equals (2.042) at the (0.05) level and at the (28) degree of freedom.

It is clear from the above table that the calculated t-value (for the resolution as a whole) amounted to (118.67) and for the criterion (efficiency, effectiveness, quality and satisfaction) reached (51.989, 67.180, 55.930, 112.974), respectively, and all of them were statistically significant because all the calculated t-values are greater than the tabular t-value The amount of (2.048) at the significance level (0.05) and the degree of freedom (28). This indicates that parliamentarians are using to a large or high degree the digitization of parliamentary research services (through a proposed digital platform) to provide services to beneficiaries in the Iraqi parliament.

After identifying parliamentary research services (through a proposed digital platform) to provide services to beneficiaries in the Iraqi parliament, for the questionnaire as a whole and for each of the four criteria, the researcher verified each paragraph in each of the four criteria, and relied on the researcher to judge each paragraph, at stake is the mean of the paragraphs alternatives (4,3,2,1) is (2.5). Accordingly, each paragraph obtains an mean (2.5) and greater, the paragraph is considered fulfilled, and each paragraph obtains an mean less than (2.5) the paragraph is considered unrealized.

Hypothesis Testing

Describe the Demographic Information of the Sample of the Beneficiaries, the Field of Study

The table details the sample distribution according to demographic data. They are as follows:

Table 3 Show distribution of the sample according to demographic variables

Demographic variables for members of parliament		Repetition	Percentage
Gender	male	21	72.4%
	female	8	27.6%
	Total	29	100%
Age	41-50	11	37.9%
	51-60	13	44.8%
	61 and over	5	17.3%
	Total	29	100%
Academic qualification	PhD	9	31 %
	Master's	3	10.3%
	Bachelor's	17	58.7%
	Total	29	100%

Table (3) indicates the details of the distribution of the research sample according to demographic variables, as the percentage of males exceeds the percentage of females in

the study sample, as the number of males category reached (21) individuals, and 70% of the total, while the number of females was (9), with a percentage of 30% of the grand total.

As for the age group, the table shows that the age group (51-60) represented the highest group within the study sample, as their number reached (13) individuals, representing (43.3%) of the total. The age group (41-50) ranked second, as their number reached (11) individuals, with a percentage of (36.7%) of the total. Finally, the age group was (61 and over), as their number reached (6) individuals, or (20%) of the total.

As for the academic qualification, as the table shows, the percentage of holders of a bachelor's degree was the highest, as their number reached (17) individuals and a percentage of (6.75%) of the total number. Followed by the percentage of those who obtained a doctorate degree, as their number reached (9) individuals, representing (30%) of the total number. While the number of master's degree holders was (4) individuals, at a rate of (13.3%) of the total.

- First hypothesis: There are no statistically humiliating differences at the level (0.05) in the efficiency criterion between traditional parliamentary research services and digitization (through a proposed digital platform) for beneficiaries in the Iraqi parliament. To achieve the first hypothesis, the mean and standard deviation of the scores of the experimental group sample of 30 Parliament members were calculated on the questionnaire before preparing the digitization of parliamentary research services. After digitizing parliamentary research services (through a proposed digital platform) for the beneficiaries in the Iraqi parliament, and to calculate the significance of the difference between the pre-and post-tests, the T-test was used for two interrelated samples, as shown in Table (4).

Table 4 Show the t-test of two correlated samples to find out the differences between the pre- and post-tests of the competency criterion

Variable	experimental group	N	Mean	The difference between the averages	SD	df	t-value		Indication 0.05
							Calculated	Tabular	
Efficiency Standard	Pretest	2	13.172	6.103	1.5369	28	21.966	2.048	Sig. for posttest
	Posttest	9	19.275		0.7018				

It is clear from the above table that the calculated t-value amounted to (21.966), which is greater than the tabular t-value of (2.048) at a significance level (0.05) and a degree of freedom (28). What indicates the rejection of the null hypothesis and acceptance of the alternative hypothesis that confirms the existence of statistically significant differences in favor of the post-test, that is, the differences are significant in favor of the efficiency standard after preparing the digitization of parliamentary research services (through a proposed digital platform) for beneficiaries in the Iraqi parliament, as shown in the graph (3).

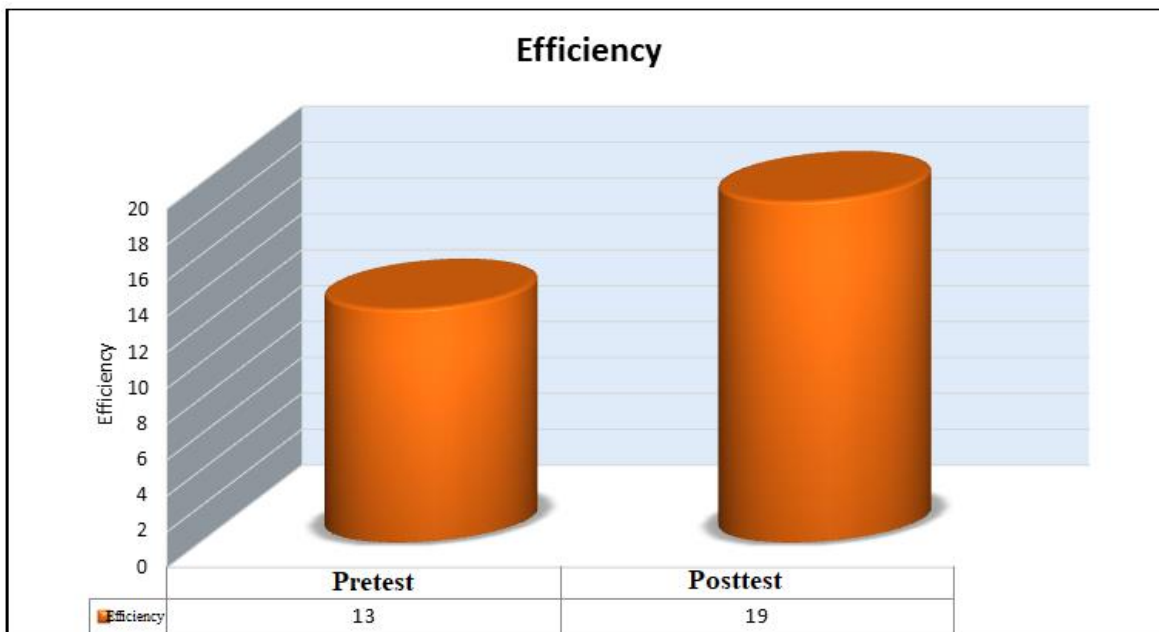


Figure 3 The differences between the pre and posttests of the competency criterion

- The second hypothesis: There are no statistically humiliating differences at the level (0.05) in the criterion of effectiveness between traditional parliamentary research services and digitization (through a proposed digital platform) for beneficiaries in the Iraqi Council of Representatives. To achieve the second hypothesis, the mean and standard deviation of the scores of the experimental group sample of (30) deputies were calculated on the questionnaire before preparing the digitization of parliamentary research services and after digitizing parliamentary research services (through a proposed digital platform) for the beneficiaries in the Iraqi Council of Representatives, and to calculate the significance of the difference between the two pretests. The post-test was used for two correlated samples, as shown in Table (5).

Table 5 The t-test of two correlated samples to find out the differences between the pre- and post-tests for the effectiveness criterion

Variable	experimental group	N	Mean	The difference between the averages	SD	df	t-value		Indication 0.05
							Calculated	Tabular	
Efficacy criterion	Pretest	29	13.586	6.000	1.2682	28	24.179	2.048	Sig. for posttest
	Posttest		19.586		0.5680				

It is clear from the table that the calculated t-value amounted to (24.179), which is greater than the tabular t-value of (2.048) at a significance level (0.05) and a degree of freedom (28). What indicates the rejection of the null hypothesis and acceptance of the alternative hypothesis that confirms the existence of statistically significant differences in favor of the post-test, that is, the differences are significant in favor of the effectiveness criterion after preparing the digitization of parliamentary research services (through a proposed digital platform) for beneficiaries in the Iraqi parliament, as shown in the Figure (4).

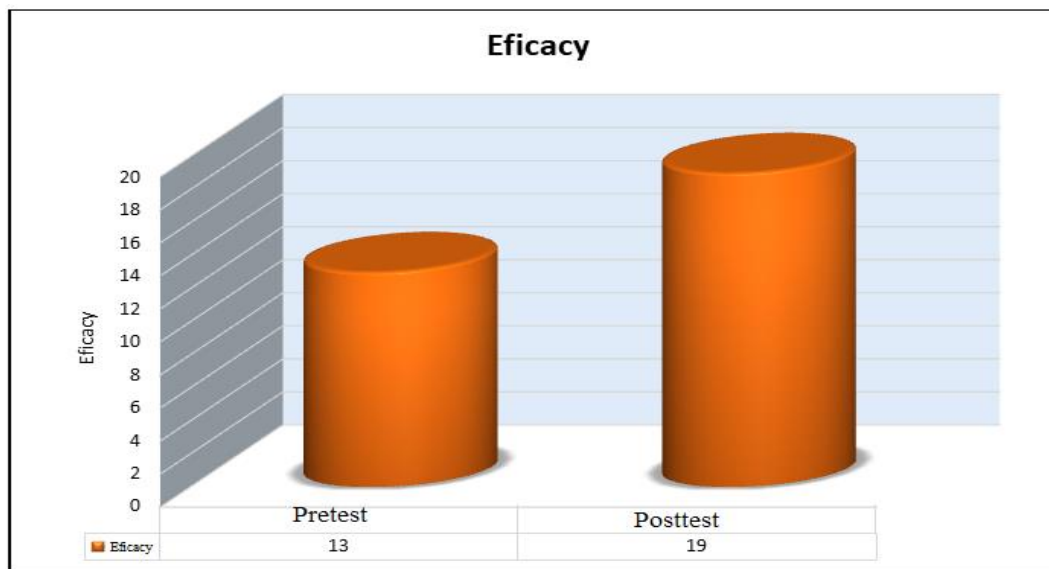


Figure 4 The differences between the pre and posttests for the effectiveness criterion

- The third hypothesis: There are no statistically humiliating differences at the level (0.05) in the quality standard between traditional parliamentary research services and digitization (through a proposed digital platform) for beneficiaries in the Iraqi Council of Representatives. To achieve the third hypothesis, the mean and standard deviation of the scores of the experimental group sample of (30) deputies

were calculated on the questionnaire before preparing the digitization of parliamentary research services and after digitizing parliamentary research services (through a proposed digital platform) for the beneficiaries in the Iraqi Council of Representatives, and to calculate the significance of the difference between the two tests The pre and posttest was used for two correlated samples, as shown in Table (6).

Table 6 The t-test of two correlated samples to find out the differences between the pre and posttests of the quality standard

Variable	experimental group	N	Mean	The difference between the averages	SD	df	t-value		Indication 0.05
							Calculated	Tabular	
Quality Standard	Pretest	22	12.60	6.9655	1.1152	28	39.725	2.048	Sig. for posttest
	Posttest	19	19.586		0.6822				

It is clear from the table that the calculated t-value amounted to (39.725), which is greater than the tabular t-value of (2.048) at a significance level (0.05) and a degree of freedom (28). What indicates the rejection of the null hypothesis and acceptance of the alternative hypothesis that confirms the existence of statistically significant differences in favor of the post-test, that is, the differences are significant in favor of the quality standard after preparing the digitization of parliamentary research services (through a proposed digital platform) for beneficiaries in the Iraqi parliament, as shown in the graph (5).

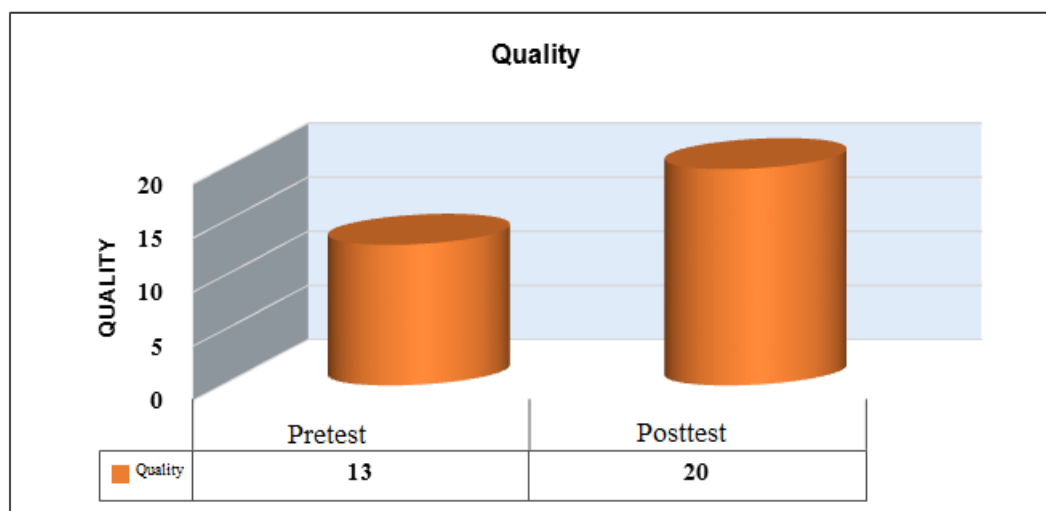


Figure 5 The differences between the pre and posttests of the quality standard

- Fourth hypothesis: There are no statistically humiliating differences at the level (0.05) in the beneficiary satisfaction criterion between traditional parliamentary research services and digitization (through a proposed digital platform) for beneficiaries in the Iraqi parliament. To achieve the fourth hypothesis, the mean and standard deviation of the scores of the experimental group sample of (30) deputies were calculated on the questionnaire before preparing the digitization of parliamentary research services and after digitizing parliamentary research services (through a proposed digital platform) for the beneficiaries in the Iraqi Council of Representatives, and to calculate the significance of the difference between the two tests Before and after the t-test was used for two correlated samples, as shown in Table (7).

Table 7 The t-test of two correlated samples to find out the differences between the pre- and post-tests of the beneficiary satisfaction criterion

Variable	Experimental group	N	Mean	The difference between the averages	SD	df	t-value		Indication 0.05
							Calculated	Tabular	
Beneficiary satisfaction standard	Pretest	27	13.82	6.0345	1.5599	28	21.670	2.048	Sig. for posttest
	Posttest	92	19.862		0.3509				

It is clear from the table that the calculated t-value amounted to (21.670), which is greater than the tabular t-value of (2.048) at a significance level (0.05) and a degree of freedom (28). What indicates the rejection of the null hypothesis and acceptance of the alternative hypothesis that confirms the existence of statistically significant differences in favor of the post-test, that is, the differences are significant in favor of the beneficiary satisfaction criterion after preparing the digitization of parliamentary research services (through a proposed digital platform) for beneficiaries in the Iraqi parliament, as shown in the figure (6).

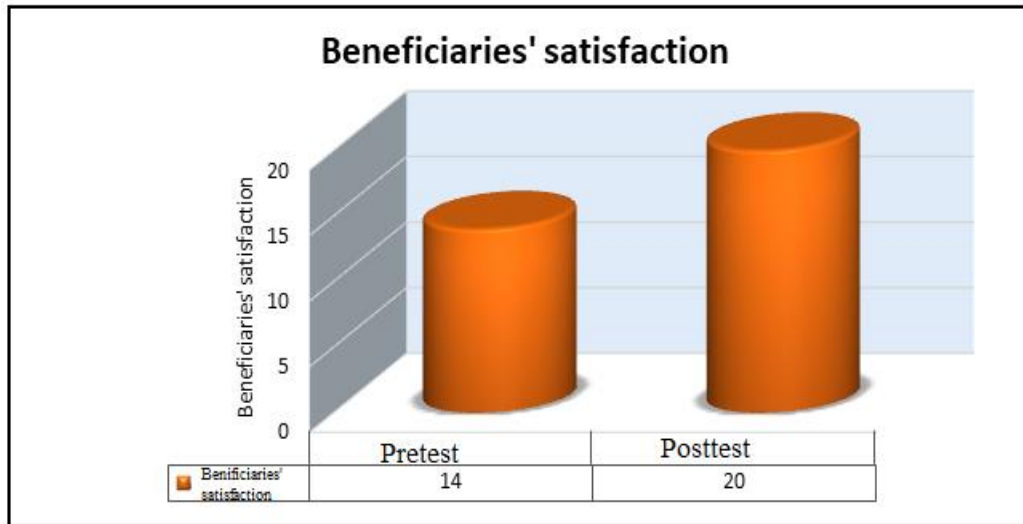


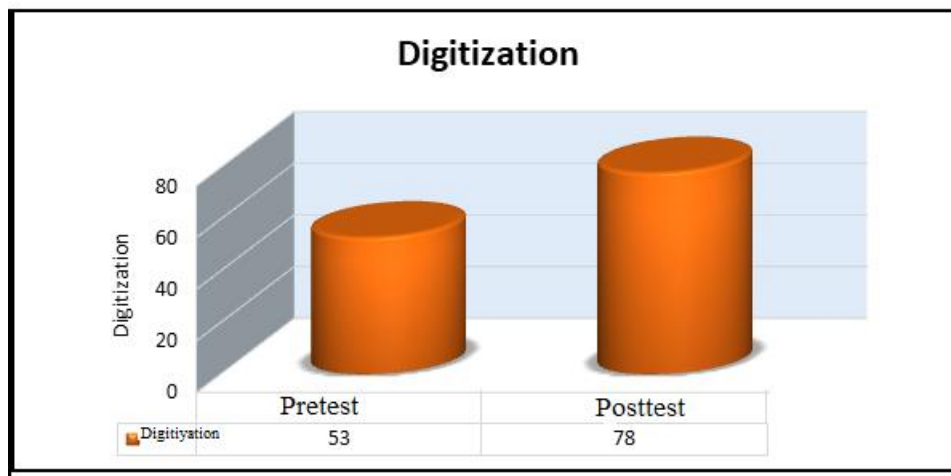
Figure 6 The differences between the pre and posttests of the beneficiary satisfaction criterion

- The fifth hypothesis: There are no statistically humiliating differences at the level (0.05) in the scale form as a whole between traditional and digital parliamentary research services (through a proposed digital platform) for beneficiaries in the Iraqi Council of Representatives. To achieve the fifth hypothesis, the mean and standard deviation of the scores of the experimental group sample of (30) deputies were calculated on the questionnaire as a whole before preparing the digitization of parliamentary research services and after digitizing parliamentary research services (through a proposed digital platform) for the beneficiaries in the Iraqi Council of Representatives, and to calculate the significance of the difference between The pre and posttests the t-test was used for two correlated samples, as shown in Table (8).

Table 8 A t-test for two correlated samples to find out the differences between the pre- and post-tests for the questionnaire as a whole

Variable	Experimental group	N	Mean	The difference between the averages	SD	df	t-value		Indication 0.05
							Calculated	Tabular	
For resolution as a whole	Pretest	2	53.206	25.1034	3.5994	28	40.071	2.048	Sig. for posttest
	Posttest	9	78.310		1.2846				

It is clear from the table that the calculated t-value amounted to (40.071), which is greater than the tabular t-value of (2.048) at a significance level (0.05) and a degree of freedom (28). What indicates the rejection of the null hypothesis and acceptance of the alternative hypothesis that confirms the existence of statistically significant differences in favor of the post-test, that is, the differences are significant in favor of (the questionnaire as a whole) after preparing the digitization of parliamentary research services (through a proposed digital platform) for the beneficiaries in the Iraqi parliament, as shown in the figure Graphic (7).



Results

The beneficiaries indicated that the digitization of parliamentary research services has achieved the standards of efficiency, effectiveness and quality at a high level, which means rejecting the null hypotheses (first, second and third) and accepting alternative hypotheses after conducting the process of digitizing parliamentary research services (through a proposed digital platform). Through The beneficiaries' answers, supported a high satisfaction from them about the digitization of parliamentary research services, which means rejecting the fourth null hypothesis of the beneficiaries' satisfaction, and accepting the alternative hypothesis, by proving the existence of statistically significant differences in favor of the posttest.

The analysis of the beneficiaries' answers showed that the existence of a digital platform to provide parliamentary research services will achieve many gains in addressing the challenges of providing the service in its traditional form, the most prominent of which are: First; avoid repetition of service requests by beneficiaries, and repetition of research efforts by service providers. Second; The diversity of communication services between the beneficiary and the service provider (service request form and chat, contact us), in

order to reach a common understanding of the service requester's need, which is reflected in the quality of the research product.

Conclusion

The finding of this study has revealed the benefit of using digital technologies to provide parliamentary research services to beneficiaries in parliamentary research departments to adapt to changing events and circumstances, especially after the spread of the Corona pandemic. In addition, the study revealed many gains of digital transformation in addressing the challenges of providing the research services in its traditional form. Motivating Parliament members to use the digital platform to obtain information and access the services provided by the Parliamentary Research and Studies Department. A further development strategy is needed to develop the quality of parliamentary research services to meet the challenges and renewed desires of the final beneficiary, especially after the emergence of modern digital technologies.

References

- Dhamo, Z. (2015). *Understanding The Use and The Benefit Of The Research Services in The Parliaments in The Region*. Parliamentary Institute. Skopje: Parliamentary Institute. <https://www.shareweb.ch/site/DDLGN/Documents/Understanding%20the%20use%20and%20the%20benefit.pdf>
- EMREF. (2018). *Parliamentary Research Training Manual*. Parliamentary Center of Canada, <https://parlcent.org/parliamentary-research-training-manual-launch/>
- House of Commons. (2021). *The Parliamentary Research Service*. Parliamentary Research Service, <https://parliamentaryresearch.uk/>
- IFLA. (2015). *Guidelines for Parliamentary Research Facilities*. IFLA. <http://archive.ipu.org/pdf/publications/research-en.pdf>
- Inter-Parliamentary Union. (2008). *Informing Democracy: Building capacity to meet parliamentarians' information and knowledge needs*. Inter-Parliamentary Union. <https://www.ipu.org/resources/publications/reference>
- Jágr, D. (2020). *Parliamentary research services as expert resource of lawmakers. The Czech way*. *The Journal of Legislative Studies*. <https://www.tandfonline.com>
- Kenny, C., Rose, D.C., Hobbs, A., Tyler, C., & Blackstock, J. (2017). *The Role of Research in the UK Parliament*. UK Parliament. <https://www.parliament.uk/globalassets/documents/post/The-Role-of-Research-in-the-UK-Parliament.pdf>
- L'Heureux, S. (2013). *The Library of Parliament's Research Service: Adding Value for Parliamentarians*. *Canadian Parliamentary Review*, 17-19. <http://www.revparl.ca/english/issue.asp?param=217&art=1558>
- Markhus, H. (2005). *Updated and reliable knowledge to parliamentarians –the main challenge for parliamentary research services*. *Library and research services for parliaments*

- conference – OSLO 10 – 12 August 2005. OSIO: World Library and Information Congress. <https://storinget.no>
- Pakistan of Parliament. (2020). Parliamentary research a practical guide. Pakistan Institute for parliamentary services. <https://www.pips.gov.pk/resources/parliamentary-research-a-practical-guide-second-edition-2020/>
- Papazoski, Z., & Bedy, S. (2014). Development of Parliamentary Research Services in Central Europe and the Western Balkans. National democratic institute for international affairs. Czech Republic and Hungary: National Endowment for Democracy. <https://www.ndi.org/node/23737>
- Ungoti. (2020). 11 Objectives of digital transformation. Matching is easy! Ungoti inovating ideas. <https://ungoti.com/blog/objectives-of-digital-transformation/>
- Iraqi Authority for Technology Experts. (2020). Components of the digital transformation strategy for Iraq 2030. Baghdad, Iraq. <https://muc.edu.iq/adv/workshop/workshop18.pdf>
- Jamila, S., & Youssef, B. (2019). Digital transformation between necessity and risk. *Journal of Legal Sciences*, 10(2), 944-967.
- Dalal Al-Harthy. (2020). Digital transformation in the Kingdom. Al Riyadh, Saudi Arabia. https://tts-attaa-webinar.s3.me-south-1.amazonaws.com/files/webinars/216/files/9d9f337_1602445760.pdf
- Arab Entrepreneur. (2021). Digital Transformation: A comprehensive guide to learning about the transformation of the digital world. <https://the-arabic-entrepreneur.com/>
- Abeer Al-Qasabi. (2018). Digital Transformation for Non-Profit Organizations: Opportunities and Challenges. *Mozn for Non-Profit Sector Technology*. <https://www.mozn.ws/56693>
- Adnan Mustafa Albar. (2019). Digital transformation strategy. The Arab Informatics Supervisors Association. <https://www.arab-cio.org/>
- Ali Abdel Fattah Kanaan. (2020). Parliamentary and political media. Al Yazouri Scientific Publishing and Distribution House.
- Keith Cunningham. (2009). Guidelines for Parliamentary Libraries: A modern and revised second edition. IFLA. <https://www.ifla.org>
- Mahmoud, M.I. (2018). Business and digital transformation. *Journal of the Egyptian Society for Information Systems and Technology*, 21(21), 24-31.
- Najeeb Al-Khadi. (2020). Information and document services in Parliament, a comparative study. The People's Deputy News Portal. <https://nayebashab.com/?p=7370>
- Hadeel Karneeb. (2020). Digital transformation: the main reasons behind the success of some Arab countries in this strategy. Arab day. <https://www.annaharar.com/arabic/science-and-technology/08102020093124641>
- Haytham, A. (2020). The role of digital transformation in improving government services in Palestine. *The First International Conference on Information Technology and Workers (ICITB2020)*, 1-27. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3688246
- Ministry of Communications and Information Technology. (2019). Government digital transformation measurement model (the eighth measurement). Abu Dhabi: Ministry of Communications and Information Technology.