




EMPOWERING IRAQI CITIZENS THROUGH DIGITAL TRANSFORMATION: A LEGAL PERSPECTIVE ON E-GOVERNMENT SERVICES

Empoderar a los ciudadanos iraquíes a través de la transformación digital: una perspectiva legal sobre los servicios de gobierno electrónico

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DOI: <https://doi.org/10.5281/zenodo.13732428>**ABSTRACT**

The digital transformation could revolutionize public services by enhancing efficiency, user-friendliness, and transparency. The successful deployment of e-government services in Iraq hinges upon constructing a robust legal framework that safeguards residents' rights and ensures data security. The article seeks to analyze the required legal structure for implementing e-government services in Iraq to empower the Iraqi population via the digital transformation process. This study employs a comprehensive literature analysis to examine academic articles, legal documents, and publications related to digital transformation and e-government services. The findings underscore the essential need for a legal framework in establishing a secure and reliable digital infrastructure for e-government services. The significant benefits emphasized include increased governmental efficiency, enhanced service accessibility for citizens, and heightened transparency in governmental processes. The article confirms that having a legislative framework is crucial for encouraging digital transformation in Iraq, enabling its populace's empowerment.

Keywords: Digital transformation, e-government services, legal framework, public services.

RESUMEN

La transformación digital podría revolucionar los servicios públicos al mejorar la eficiencia, la facilidad de uso y la transparencia. El éxito de la implementación de los servicios de gobierno electrónico en Irak depende de la construcción de un marco legal sólido que salvaguarde los derechos de los residentes y garantice la seguridad de los datos. El artículo busca analizar la estructura legal necesaria para implementar los servicios de gobierno electrónico en Irak con el fin de empoderar a la población iraquí a través del proceso de transformación digital. Este estudio emplea un análisis bibliográfico exhaustivo para examinar artículos académicos, documentos legales y publicaciones relacionadas con la transformación digital y los servicios de gobierno electrónico. Los hallazgos subrayan la necesidad esencial de un marco legal para establecer una infraestructura digital segura y confiable para los servicios de gobierno electrónico. Los beneficios significativos destacados incluyen una mayor eficiencia gubernamental, una mayor accesibilidad a los servicios para los ciudadanos y una mayor transparencia en los procesos gubernamentales. El artículo confirma que tener un marco legislativo es crucial para alentar la transformación digital en Irak, lo que permite el empoderamiento de su población.

Palabras claves: Transformación digital, servicios de gobierno electrónico, marco legal, servicios públicos.

INTRODUCTION

The digital transformation of public services has become a global trend, offering numerous benefits for citizens, governments, and businesses. In Iraq, the potential for digital transformation to improve public services and enhance citizen participation is enormous, but there are several challenges to overcome. The purpose of this study is to provide a legal perspective on empowering Iraqi citizens through digital transformation, with a specific focus on e-government services [1], [2].

The significance of this study lies in its potential to provide policymakers and stakeholders with a roadmap for implementing e-government services in Iraq that can ultimately lead to greater citizen engagement and more effective public services. E-government services have been shown to improve the efficiency, accessibility, and transparency of public services in other countries [3], [4], and the same benefits could be realized in Iraq. However, a legal framework is necessary to ensure the protection of citizen rights and privacy, as well as to provide a secure and reliable digital infrastructure [5].

The present status of study in the area of electronic government services and digital transformation has been the subject of numerous studies [6], [7], [1]. While much of the literature has focused on the potential benefits of e-government services, there is a growing body of research that highlights the challenges and barriers associated with their implementation [8], [9], [10].

The legal perspective of this study is important as it provides a comprehensive framework for understanding the legal requirements necessary for successful e-government services in Iraq. The legal framework should include laws and regulations that protect citizen rights and privacy, estab-

lish a secure digital infrastructure, and ensure the authenticity and reliability of digital information. Without a legal framework, citizens may be hesitant to use e-government services, and there may be concerns about the safety and reliability of digital information [2], [5], [11], [12].

This study aims to examine the possible advantages and disadvantages of deploying e-government services and give suggestions to policymakers and stakeholders on how to proceed with e-government in Iraq. To achieve this aim, the study will review relevant literature and research on e-government services, digital transformation, and legal frameworks related to these topics. The study will also analyze the current state of e-government services in Iraq and identify potential benefits and challenges associated with their implementation.

The principal conclusions of this study are expected to highlight the importance of a legal framework in empowering Iraqi citizens through digital transformation. Potential advantages of e-government services in Iraq will be determined through the research, including increased efficiency, accessibility, and transparency, while also highlighting the challenges associated with their implementation, such as limited digital infrastructure, lack of digital literacy among citizens, and the need for effective training and support programs. The study is also expected to provide recommendations for policymakers and stakeholders to ensure successful implementation of e-government services in Iraq.

The study objective

This article aims to investigate the legislative framework required to allow e-government services in Iraq and the possible advantages and difficulties connected with their implementation. The writer's goal is to provide readers with an understanding of the law from the standpoint of digitally empowering the inhabitants of Iraq.

They review related studies and publications, analyze the legal context, and identify possible advantages and obstacles. The ultimate goal is to provide recommendations for lawmakers and stakeholders in order to facilitate the efficient rollout of e-government services in Iraq.

Problem statement

The Iraqi government sees potential advantages of digital transformation in enhancing public services and civic engagement. A big reason why many people in Iraq do not use e-government services is that they need to be regulated by a single set of laws. Citizens' rights and data security may be jeopardized without adequate legal safeguards. The ineffective usage of e-government services is further hampered by inadequate digital infrastructure and people's low digital literacy rates. As a result, it is necessary to create a legislative framework that addresses the difficulties associated with digital infrastructure and digital literacy while simultaneously ensuring individual rights and data security.

LEGAL FRAMEWORK FOR DIGITAL TRANSFORMATION IN IRAQ

On recent years, there has been a widespread movement towards digitizing governmental services, which offers several advantages for all levels of society and the private sector. There is a huge opportunity for digital transformation to improve public services and increase citizen engagement in Iraq, but this is complicated by a number of obstacles. With an emphasis on e-government services, this research intends to provide a legal viewpoint on empowering Iraqi people via digital transformation.

2.1. Existing e-government services legislation in Iraq

A legal framework is necessary to ensure the protection of citizen rights

and privacy, as well as to provide a secure and reliable digital infrastructure. In Iraq, there are several laws and regulations that address aspects of digital transformation, but they are not comprehensive enough to address all the challenges and opportunities that come with e-government services [13], [1].

Legally speaking, e-services in Iraq are subject to a wide variety of laws and rules. The government of Iraq has enacted legislation encouraging the development of e-services in the nation. This legislation covers topics such as electronic transactions, data protection, and intellectual property rights.

In Iraq, all electronic financial dealings are governed under Law No. 78 of 2012, known as the Electronic Transactions Law. The legislation specifies the necessary elements of an electronic contract or transaction and recognises electronic signatures and records as legally binding and enforceable. In addition, the statute specifies how electronic documents and signatures may be used in court [14], [15].

The Iraqi government passed the Personal Data Protection Law (No. 78 of 2019) in 2018, with the intention of ensuring the confidentiality and safety of individual citizens' personal information. Individuals have the right to access, amend, and delete their personal data, and the legislation defines legal criteria for the collecting, processing, and storage of such data. In addition, those who break the law face consequences including fines and jail time [16].

IPR-related international treaties and agreements to which Iraq is a party include the Paris Convention for the Protection of Industrial Property and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) [17]. The Trademarks and Geographical Indications Law (No. 21 of 1957) and the Copyright

Law have both been adopted by the Iraqi government to safeguard intellectual property (No. 3 of 1971) [18].

Cybersecurity is an additional crucial aspect of the law that affects e-services in Iraq. There have been several cyber assaults against Iraqi government websites and other infrastructure in recent years. The Iraqi government has responded by establishing the National Authority for Electronic Certification and Cybersecurity in 2019. This is part of a larger effort to create a legislative and regulatory framework for cybersecurity in Iraq [19].

Unauthorized access to computer systems, hacking, and the distribution of harmful software are all now felonies under the Cybercrimes Law (No. 9 of 2018). The legislation specifies punishments for various offences, such as jail time and monetary fines.

Concerns have been raised concerning the ability of regulatory bodies in Iraq to effectively implement the country's cybersecurity rules and regulations due to a lack of funding and manpower. Maintaining investments in cybersecurity infrastructure and human capacity is essential for the efficient application of these rules and legislation [20].

There are currently no rules or regulations in place in Iraq to control trade conducted online. Yet online purchases are covered under the Electronic Transactions Law, and new legislation is being drafted to further define the parameters of online commerce in the nation.

The question of digital access and inclusion is also crucial in legislative discussions about e-services in Iraq. Particularly in rural and distant sections of the nation, where access to technology and the internet is restricted, the government has recognised the significance of digital access and inclusion. The government has launched projects to increase internet infrastructure and connection in un-

dereserved regions to further its goal of promoting digital access and inclusion.

The Iraqi government has formed the Communications and Media Commission (CMC) to oversee the country's media and telecommunications industries. The CMC has established rules for ISPs and mobile network operators, such as data privacy and network security obligations [21].

As part of its efforts to encourage the widespread use of information and communication technology, the Iraqi government has launched the Iraq Digital Transformation Initiative. The project aims to improve access to digital services in unserved regions by concentrating on sectors like e-government, e-commerce, and digital infrastructure.

Notwithstanding these initiatives, there are considerable obstacles to the efficient rollout of e-services in Iraq. The paucity of resources, both human and technological, as well as the skepticism and unfamiliarity of certain populations with digital services, all contribute to these difficulties.

The protection of customers' rights is another crucial aspect of Iraq's legislative framework for e-services. Provisions pertaining to the quality and safety of goods and services, as well as the rights of customers in respect to advertising and pricing practices, are all codified in the Consumer Protection Law (No. 1 of 2010), which provides a legislative framework for the protection of consumer rights in Iraq [22].

With the purpose of upholding the legislation and safeguarding consumer rights, the Consumer Protection Directorate has been established inside the Ministry of Commerce. Those who work in the directorate are authorised to look into consumer complaints and pursue legal action against companies that break consumer protection regulations.

E-commerce laws have been enacted by the government in addition to the Consumer Protection Law. Provisions relating to consumer protection and dispute resolution are also included in the e-Commerce Regulation Framework (No. 70 of 2017), which lays out the legal criteria for online purchases and sales [23].

Yet, given the low resources and capability of regulatory bodies in Iraq, there are still obstacles to the efficient execution of consumer protection laws and regulations. Continued investment in regulatory frameworks and human capacity is necessary to enable the efficient enforcement of these rules and regulations.

Consumers in Iraq need to be better informed about their rights, as well as the legal obligations and hazards connected with e-services, although there are already regulatory frameworks in place to safeguard such rights. The efficient application of consumer protection legislation and regulations pertaining to e-services in Iraq also requires closer cooperation between government, industry, and civil society parties.

Data privacy and protection is another key aspect of the law governing e-services in Iraq. Individuals in Iraq have the right to access, amend, and delete their personal data as outlined in the Personal Data Protection Law (No. 78 of 2019) [24].

To comply with the law, companies need to get people's permission before collecting and using their personal information, and they also need to take precautions to keep that information safe and secret. And, of course, there are fines and jail time associated with breaking the law's restrictions.

Yet, obstacles remain in Iraq when it comes to the efficient application of data protection rules and regulations. These obstacles include the lack of resources and capability within regulatory authorities, as well as a lack of

knowledge and education regarding the legal responsibilities and hazards related with personal data protection on the part of enterprises and customers.

More work needs to be done to raise awareness and educate businesses and consumers about their rights and responsibilities in relation to data privacy and protection, and more money needs to be put into regulatory frameworks and infrastructure to support the effective implementation of data protection laws and regulations in Iraq.

Although the government of Iraq has taken steps to ensure the security of citizens' private information while using e-services, more needs to be done to inform companies and customers alike of their respective legal obligations and rights in this area. More cooperation between the government, businesses, and civil society is also required to enable the successful enforcement of Iraq's data protection laws and regulations.

Building a comprehensive legal framework for digital transformation and e-government services in Iraq: addressing challenges and opportunities

To ensure a comprehensive legal framework for digital transformation in Iraq, there is a need for new laws and regulations that address the challenges and opportunities of e-government services. These laws should provide protection for citizen rights and privacy, establish a secure and reliable digital infrastructure, and address issues related to digital literacy and access.

There are several legal and regulatory frameworks that must be in place to ensure the success of digital transformation and e-government services in Iraq. Some of the key aspects of this legal framework are discussed in Table 1.

Table 1. Key legal and regulatory frameworks for digital transformation and e-government services in Iraq

Framework	Description	Under Development (Yes/No)
Cybercrime Law	A law that criminalizes cybercrime, including hacking, identity theft, and phishing.	Yes
Electronic Transactions Law	A law that establishes the legal framework for electronic transactions, including electronic signatures, contracts, and records.	No
Electronic Evidence Law	A law that establishes the legal framework for the admissibility of electronic evidence in court.	No
Data Protection Law	A law that establishes the legal framework for the protection of personal data, including the collection, processing, and sharing of data.	Yes
Access to Information Law	A law that establishes the legal framework for access to information held by public authorities, including freedom of information laws.	No
Privacy Law	The legislation regulates the private gathering, storage, and disclosure of individuals' personal information.	Yes
Consumer Protection Law	A law that establishes the legal framework for the protection of consumer rights in e-commerce transactions, including online purchases and contracts.	No
Electronic Payment Systems Law	A law that establishes the legal framework for electronic payment systems, including regulations for payment processors and financial institutions.	No
Intellectual Property Law	A law that establishes the legal framework for the protection of intellectual property rights, including copyright, patents, and trademarks, in the digital environment.	Yes
Telecommunications Law	A law that establishes the legal framework for telecommunications services, including regulations for service providers and network operators.	No
Digital Signature Law	A law that establishes the legal framework for the use of digital signatures in electronic transactions.	No
Internet Service Providers Law	A law that establishes the legal framework for internet service providers, including regulations for content filtering and censorship.	No
Cybersecurity Law	A law that establishes the legal framework for cybersecurity, including the prevention, detection, and response to cyber threats.	Yes
Electronic Health Records Law	A law that establishes the legal framework for electronic health records, including regulations for the collection, storage, and sharing of health data.	Yes

Cloud Computing Law	A law that establishes the legal framework for cloud computing, including regulations for data privacy and security in cloud-based services.	Yes
Social Media Law	A law that establishes the legal framework for social media platforms, including regulations for content moderation and user data privacy.	Yes
E-Commerce Law	A law that establishes the legal framework for electronic commerce, including regulations for online marketplaces, payment systems, and consumer protection.	No
Domain Name Law	A law that establishes the legal framework for domain name registration and dispute resolution.	No
Mobile App Development Law	A law that establishes the legal framework for mobile app development, including regulations for data privacy and security.	Yes
Geolocation Data Law	A law that establishes the legal framework for the collection, processing, and sharing of geolocation data by mobile devices and apps.	Yes
Artificial Intelligence Law	A law that establishes the legal framework for artificial intelligence, including regulations for data privacy, bias, and transparency.	Yes
Blockchain Law	A law that establishes the legal framework for blockchain technology, including regulations for digital assets and smart contracts.	Yes
Electronic Voting Law	A law that establishes the legal framework for electronic voting systems, including regulations for security and transparency.	Yes
Smart City Law	A law that establishes the legal framework for smart city initiatives, including regulations for data privacy, security, and ethical use of technology.	Yes
Autonomous Vehicle Law	A law that establishes the legal framework for autonomous vehicles, including regulations for safety, liability,	No

The time required to complete each framework will vary depending on a variety of factors, such as the size and complexity of the legal issues, the availability of resources, the number of stakeholders involved, and the level of political will to implement the changes. For example, a relatively straightforward framework addressing the protection of personal data may require less time to complete than a more complex framework dealing with the regulation of digital financial transactions.

Additionally, the level of political will and public support for digital transformation and e-government services will be crucial in determining the amount of time needed to complete each framework. If there is strong political will and public support, the frameworks may be completed more quickly. Conversely, if there is resistance or opposition to digital transformation, the implementation of the frameworks may take longer.

Moreover, the current state of Iraq's digital infrastructure will also

impact the time required to complete the frameworks. If the digital infrastructure is already in place and functioning well, the implementation of the frameworks may be relatively straightforward and quick. However, if the digital infrastructure is inadequate or in need of significant improvements, this could significantly delay the implementation of the frameworks [25].

Therefore, it is challenging to provide an accurate timeline for completing each of the frameworks without more detailed information about the specific context and challenges faced by Iraq. However, it is clear that the development of a comprehensive legal framework for digital transformation and e-government services in Iraq is a complex and time-consuming process that will require significant resources and the collaboration of various stakeholders.

In conclusion, a comprehensive legal framework is necessary to ensure the success of e-government services in Iraq. Issues of digital literacy and accessibility should also be addressed in this framework, along with the preservation of citizens' rights and privacy.

Issues of digital literacy and accessibility should also be addressed in this framework, along with the preservation of citizens' rights and privacy. While there are some laws and regulations in place in Iraq that address aspects of digital transformation, there is a need for new laws and regulations that comprehensively address the challenges and opportunities of e-government services. It is hoped that this legal framework will empower Iraqi citizens to participate more fully in their government and improve.

**E-GOVERNMENT SERVICES:
EMPOWERING IRAQI CITIZENS
THROUGH EFFICIENCY, AC-
CESSIBILITY, AND TRANSPA-
RENCY**

E-government services are a crucial part of Iraq's ongoing digital transformation and have the potential

to provide individuals more political agency by making governmental services more user-friendly, transparent, and easily available. E-government services make it possible for people to have easier access to government services and information, save time and money, and cut down on bureaucracy and corruption by using digital technology [1].

A wide range of e-services are available to Iraqi citizens, albeit their accessibility may vary depending on factors including location, internet speed, and other technological infrastructure. The following are some examples of e-services that are currently accessible in Iraq:

Systems of electronic payment Systems of electronic payment, such as mobile banking and electronic wallets, are gaining more and more traction in Iraq. Customers of the nation's many financial institutions now have access, through their cell phones and other mobile devices, to a variety of mobile banking services, including the ability to transfer money, pay bills, and check account balances. In addition, a number of businesses have introduced services known as electronic wallets, which enable customers to make payments online and move money between different accounts [26], [27].

E-government services: The government of Iraq has established a number of different e-government services in an effort to increase both the effectiveness and the availability of public services. These services include paying taxes and registering vehicles and applying for employment with the government online. Other examples are online job applications and online auto registration.

Platforms for electronic commerce E-commerce is a rapidly developing industry in Iraq, and in recent years, a number of online marketplaces and platforms for electronic commerce have emerged. These platforms provide users the ability to purchase and

sell products and services online, with a variety of alternatives available for payment and delivery depending on the platform [28], [29], [30].

E-learning platforms: As a result of the COVID-19 epidemic, a number of schools and institutions in Iraq have been forced to transition to online learning, and as a result, various e-learning platforms have evolved in Iraq to accommodate remote learning. Students and teachers may access a variety of online materials, tools, and learning environments via these platforms, which facilitate remote education [31], [32], [33], [34].

In spite of the fact that these e-services are available, there are a number of obstacles in the way of their implementation and utilisation in Iraq. A lack of dependable internet connection, restricted access to technology in some regions, and a lack of understanding and confidence in digital services among certain subsets of the population are some of the problems that need to be overcome. In addition, there is a need for increased investment in technology infrastructure as well as legal frameworks in order to facilitate the expansion of e-services in the Iraqi market.

Transforming public services: benefits of the potential of e-government adoption in Iraq

One of the key advantages of using electronic government services is the increase in productivity. By digitising their processes and procedures, governments may increase their level of responsiveness and the efficiency of their services. For instance, residents may now submit applications and documents online, which eliminates the need for in-person visits and speeds up the processing time. This may result in quicker response times, shorter wait periods, and greater service quality all around. E-government services, in addition, may lessen the administrative strain placed on government workers, freeing them up to

concentrate on other important responsibilities.

Accessibility is yet another important benefit that comes with using online government services. Because of a lack of physical infrastructure, such as roads and public transit, or because they reside in distant locations, many individuals in Iraq confront significant hurdles when attempting to access government services. E-government services may help overcome these problems by offering online access to services and information. This gives individuals the ability to access government services whenever and wherever they need them. This might be particularly helpful for vulnerable groups including the elderly, persons with impairments, and individuals living in rural or isolated portions of the country [1], [5].

E-government services also come with the significant advantage of increased transparency. Citizens are able to hold their governments responsible for their actions and choices when such information is made available to them online and in other digital formats. E-government services have the potential to promote openness by exposing government activities and decision-making processes to the general public. This may serve to minimise instances of corruption, boost public confidence in the government, and encourage a civil society that is more involved with and participating in its activities.

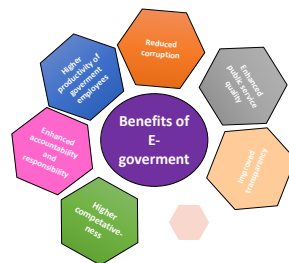


Figure 1. Benefits of e-government

So far, the benefits of e-government services cannot be realised unless the challenges associated with their introduction are addressed. These problems include a lack of digital literacy among residents, inadequate digital infrastructure, and the need for more comprehensive training and support programs. In addition, there may be issues over the safety and reliability of digital information, which need to be addressed via proper legal and regulatory frameworks. These concerns must be addressed.

Notwithstanding these obstacles, the use of e-government services has the potential to provide considerable advantages to the people of Iraq. These benefits include higher levels of productivity, accessibility, and transparency. With digital technology, e-government services may give citizens more say in their interactions with government and make it simpler for them to access public services and information. The result is a more engaged and informed populace, which is essential to a healthy democracy. Iraq's ongoing digital transformation includes the introduction of e-government services, which have the potential to significantly change the relationship between the government and its population. As a result, Iraq's public services may become more effective, user-friendly, and open to scrutiny.

Global best practices in e-government services: lessons for Iraq

Governments worldwide have been implementing e-government services to improve efficiency, accessibility, and transparency for citizens. These services have the potential to provide numerous benefits to citizens, including saving time and effort, increasing convenience, and reducing the need for physical visits to government offices. While each country has its unique context, several examples of successful e-government services can be adapted to the Iraqi context.

MyInfo is a one-stop digital platform in Singapore that allows citizens to access and manage their personal data with ease. Iraq could adopt a similar platform to simplify citizens' access to government services.

Estonia's e-Residency program allows non-residents to establish and manage an Estonian-based company online, providing access to the European Union's digital marketplace. Iraq could offer a similar program to attract foreign investment and simplify business registration processes [35], [36].

South Korea's National Information Society Agency: This agency is responsible for developing and implementing policies related to digital transformation and e-government services. Iraq could establish a similar agency to oversee and coordinate the implementation of e-government services [37].

India's Digital Locker: This platform allows citizens to store and access their official documents online, simplifying administrative processes. Iraq could adopt a similar platform to streamline the process of accessing and managing official documents [38].

Norway's Altinn: Altinn is a digital platform that enables businesses and individuals to access and manage their tax information, simplifying tax processes. Iraq could adopt a similar platform to simplify tax processes for its citizens [39].

Australia's myGov: myGov is a platform that allows citizens to access a range of government services, including tax, healthcare, and social security, through a single account. Iraq could adopt a similar platform to simplify access to government services [40].

United Kingdom's GOV.UK: GOV.UK is a platform that provides information and services related to government, including tax, education, and healthcare. Iraq could establish a si-

milar platform to provide information and services related to government [41].

Canada's Passport Online service: This service allows citizens to apply for passports online and track the status of their application. Iraq could adapt this service to provide citizens with a more convenient way to apply for passports [42].

New Zealand's RealMe service: This service provides citizens with a secure digital identity that can be used to access a range of online services, such as banking and government services. Iraq could adapt this service to provide citizens with a secure and convenient way to access government services online [43].

Ukraine successful e-government services from other countries and explain how they could be adapted to the Iraqi context. Here are 10 examples of successful e-government services from Ukraine and how they could be adapted to the Iraqi context:

Diya – This is a mobile app developed by the Ukrainian government for accessing a range of e-government services, such as paying taxes, obtaining ID cards, and registering a business. Iraqi authorities could develop a similar app to provide citizens with easy access to a range of public services [44].

Examples of successful e-government services from other countries, such as Estonia, South Korea, and Singapore, can be adapted to the Iraqi context. These services have demonstrated the potential to increase efficiency, accessibility, and transparency while enhancing citizen participation in governance. To ensure the successful implementation of e-government services in Iraq, decision-makers and other interested parties must prioritize stakeholder engagement, user-centric design, and capacity building. It is essential to ensure that e-government services

are accessible and beneficial for all citizens, including those in rural and remote areas.

In conclusion, successfully implementing e-government services in Iraq requires a multi-faceted approach that addresses legal, technical, and societal challenges. By learning from successful examples from other countries and prioritizing the needs and rights of citizens, Iraq can leverage digital transformation to provide efficient, accessible, and transparent public services and enhance citizen engagement in governance.

Implementing successful e-government services in Iraq

As governments around the world continue to move towards digitalization, e-government services have become increasingly popular. These services provide citizens with greater convenience, accessibility, and transparency in their interactions with the government. However, for e-government services to be successful, they must be implemented with a user-centric approach, supported by a comprehensive legal framework, a reliable digital infrastructure, and sufficient digital literacy training for citizens.

In this article, we have covered why e-government services may be useful for the people of Iraq, and we've shown some instances of how other nations have implemented them. We have also explored how these examples can be adapted to the Iraqi context.

To implement successful e-government services in Iraq, there are several steps (Table 2) that can be taken to ensure efficiency, accessibility, and transparency.

Table 2. Navigating obstacles and maximizing benefits: implementing e-government services

Steps	Description
Establishing a comprehensive legal framework	A comprehensive legal framework is necessary to ensure the protection of citizen rights and privacy, as well as to provide a secure and reliable digital infrastructure.
Developing a user-centric approach	E-government services should be designed with the needs and preferences of citizens in mind. Extensive research and stakeholder engagement are necessary to understand what citizens want and need from e-government services.
Building a reliable and secure digital infrastructure	A reliable and secure digital infrastructure is necessary for e-government services to function properly. Iraq should invest in the development of a strong digital infrastructure that can support e-government services.
Providing digital literacy training	Many citizens in Iraq may not have the necessary digital literacy skills to use e-government services. Therefore, it is essential to provide citizens with digital literacy training to ensure they can take advantage of e-government services.
Encouraging citizen engagement	Citizen engagement is crucial for the success of e-government services. Iraq should encourage citizen engagement through various means, such as feedback mechanisms, public consultations, and online forums.
Implementing successful e-government services from other countries	Several countries have successfully implemented e-government services. Iraq can learn from these examples and adapt them to its context.

Several steps need to be taken to implement successful e-government services in Iraq, including establishing a comprehensive legal framework, developing a user-centric approach, building a reliable and secure digital infrastructure, providing digital literacy training, encouraging citizen engagement, and implementing successful e-government services from other countries. A comprehensive legal framework is necessary to ensure the protection of citizen rights and privacy, as well as to provide a secure and reliable digital infrastructure. E-government services should be designed with the needs and preferences of citizens in mind. Extensive research and stakeholder engagement are necessary to understand what citizens want and need from e-government services. A reliable and secure digital infrastructure is essential for e-government services to function correctly. Digital literacy

training should be provided to ensure citizens can take advantage of e-government services. Citizen engagement is crucial for the success of e-government services, and Iraq should encourage it through various means. Lastly, Iraq should learn from the successful implementation of e-government services in other countries and adapt them to its context.

In conclusion, successfully implementing e-government services in Iraq requires a multi-faceted approach that addresses legal, technical, and societal challenges. By learning from successful examples from other countries and prioritizing the needs and rights of citizens, Iraq can leverage digital transformation to provide efficient, accessible, and transparent public services and enhance citizen engagement in governance.

RESULTS

The article looked at the legislative framework needed to make e-government services available in Iraq as well as the advantages and disadvantages of doing so. According to the study, e-government services and digital transformation can completely reshape Iraq's public sector by boosting effectiveness, accessibility, and transparency.

However, the launch of electronic government services in Iraq must be solved with difficulties. Iraq's inadequate digital infrastructure is the first barrier to adopting e-government services. The potential advantages of e-government services may be improved if individuals can receive digital services because of a shortage of digital infrastructure.

Iraq's residents' low levels of digital literacy may significantly hinder the adoption of e-government programs. Many people need to learn more about computers to use online government services well. It is essential to provide training and support programs so that people can effectively use e-government services.

A legislative framework that safeguards people's rights and guarantees data security in the execution of e-government services is required. This legislative framework should provide people with a reliable and secure digital infrastructure that protects their information from prying eyes.

Notwithstanding these difficulties, the article lists numerous advantages of Iraq's e-government services. Some of them are increased productivity, ease of use, and openness. By eliminating paperwork and bureaucracy, e-government services may improve public service efficiency. Citizens in outlying or disadvantaged regions may also benefit from this expansion of internet access to public services. By giving people easy access to official data and information, e-government services may also improve openness.

In addition, the research uncovered various obstacles that must be overcome to guarantee the full potential of e-government services in Iraq. There is a need for practical training and assistance programs and more digital literacy among residents. The report also stressed the need for a robust legislative framework for protecting people's privacy and data security.

As the world becomes increasingly digital, governments are turning to e-government services to improve efficiency and accessibility for citizens. However, implementing e-government services is not without its challenges, particularly in developing countries with limited digital infrastructure and low levels of digital literacy. Iraq is no exception, and there are significant obstacles to overcome in the implementation of e-government services. In this article, we will discuss the challenges and opportunities involved in implementing e-government services in Iraq.

The research concluded that e-government services might improve public service efficiency, accessibility, and transparency. More public participation and improved service delivery may result from this. With e-government services, Iraqi residents will have easier access to services and information, less bureaucracy, and more openness in government operations.



Figure 2. Challenges to implementing e-government services in Iraq

In order to successfully deploy e-government services in Iraq, the paper underlines the necessity for a robust legislative framework that protects citizen data and privacy. To overcome the obstacles and reap the rewards of digital transformation in the nation, authorities and stakeholders must collaborate. E-government services can change public services in Iraq and empower individuals with the help of a solid legislative framework and realistic training and support programs.



Figure 3. E-Government services in Iraq: opportunities

The benefits and drawbacks of implementing an e-government platform in Iraq are covered in this article. To enable the effective deployment of e-government services in the nation, regulators and participants must work together from a legal perspective to empower people via digital transformation. E-government services have the potential to alter public services and increase citizen participation in Iraq by overcoming obstacles and exploiting the advantages of digital transformation.

DISCUSSION

The discussion on empowering the Iraqi population via digital transformation, particularly regarding legal frameworks that facilitate e-government services, is based on a diverse array of well-established research and studies. This discussion not only discusses the findings of our study but also situates them within a broader comparative context, referencing significant publications in the field.

The current article emphasizes the need for a thorough legal framework in promoting the secure and effective implementation of e-government services in Iraq. This finding aligns with the findings of Mutar et al. [1], who propose a comprehensive strategy for implementing e-government in Iraq, highlighting the need to attain sustainable development via digital means. Similarly, our study focuses on the legal basis, which aligns with the concerns raised by Azzawy [2] on the challenges of building knowledge-based societies via e-governance, where legal, technological, and managerial issues cross.

In addition, our study's examination of the possible advantages and difficulties aligns with the conclusions drawn by Zeebaree, Agoyi, and Aqel [3] about the sustainable implementation of e-government, as seen via the UTAUT framework. Both studies recognize the substantial potential of e-government services to enhance efficiency, transparency, and accessibility. However, our research improves comprehension of the topic by explicitly examining the legislative barriers and infrastructural limitations that might impede this transformation in the Iraqi context.

The e-government initiatives emphasized by Shareef and Arreympi [4] in the Kurdistan region, which concentrate on the needs and interests of residents, provide a significant contrast to our broader focus on Iraq as a whole. While both studies prioritize improving the user experience and accessibility of e-government services, our research takes a further step by investigating the legal frameworks necessary to enable these activities on a national scale. This indicates a deeper understanding of the fundamental requirements for digital empowerment.

Najm and Tavallaee [5] specifically examine the effect of electronic governance on social justice in Iraq due

to digital transformation. Our study contributes to this understanding by conducting a comprehensive analysis of how a robust legal framework may foster social equity and provide many benefits, including increased governmental transparency and more public engagement.

The study conducted by Abd et al. [6] investigates the relationship between e-government and cloud computing development, specifically focusing on implementing unified citizen identity. The paper proposes a technological solution to address specific issues identified in our research. After examining these findings, it is clear that in addition to technical infrastructure, the legal and regulatory environment must also adjust to support these technological advancements effectively.

We enhance the existing discussion by offering a legal examination of the digital transformation process in Iraq based on previous research. Although we acknowledge the valuable contributions made by scholars like Hassan [7] and Shahoodh, Al-Salman, and Mustafina [8] in understanding the complexities and context-specific strategies associated with digital government, our study presents a precise roadmap for addressing these challenges through legal reforms and policy recommendations.

The article supports the conclusions of prior research on the significance of digital transformation in improving public services in Iraq and contributes to the conversation by emphasizing the required legal frameworks for this transition. By examining our study compared to previous studies, we provide a unique perspective on the legal considerations necessary to realise the benefits of e-government services fully. This initiative aims to empower the Iraqi people and foster a more transparent, accessible, and efficient government..

CONCLUSIONS

In this paper, we discussed how e-government services may assist Iraqi residents and gave case studies of successful e-government initiatives in other nations. We have also discussed how these examples can be adapted to the Iraqi context. To ensure the success of e-government services in Iraq, a comprehensive legal framework must be established, a reliable and secure digital infrastructure must be developed, and citizens must receive digital literacy training. Encouraging citizen engagement and learning from successful e-government services implemented in other countries will also be crucial.

Our article highlights the importance of a legal perspective in empowering Iraqi citizens through digital transformation. A comprehensive legal framework is necessary to ensure the protection of citizen rights and privacy, as well as to provide a secure and reliable digital infrastructure. We have already shown that enhanced public engagement and involvement may result from a solid legal framework that fosters confidence between people and the government.

We highlighted the potential advantages of e-government services to Iraqi citizens, such as better efficiency, more accessible access, and more openness. Examples of successful e-government services from other countries, such as Estonia and South Korea, demonstrate the positive impact of e-government services on citizen satisfaction and trust in government. These findings are consistent with previous research that has demonstrated the positive impact of e-government services on citizen satisfaction and trust in government.

However, successful implementation of e-government services in Iraq requires a multifaceted approach. In addition to a comprehensive legal framework, policymakers and stakeholders must ensure the develop-

ment of a reliable and secure digital infrastructure, provide digital literacy training for citizens, and encourage citizen engagement. The examples of successful e-government services from other countries provide useful insights into how these elements can be implemented in the Iraqi context.

To ensure the success of e-government services in Iraq, we recommend that policymakers and stakeholders take the following steps:

1. Establish a comprehensive legal framework: A legal framework is necessary to ensure the protection of citizen rights and privacy, as well as to provide a secure and reliable digital infrastructure. Iraq should ensure that all relevant laws and regulations are in place before implementing e-government services.
2. Develop a user-centric approach: E-government services should be designed with the needs and preferences of citizens in mind. Iraq should conduct extensive research and engage with stakeholders to understand what citizens want and need from e-government services.
3. Build a reliable and secure digital infrastructure: A reliable and secure digital infrastructure is necessary for e-government services to function properly. Iraq should invest in the development of a strong digital infrastructure that can support e-government services.
4. Provide digital literacy training: Many citizens in Iraq may not have the necessary digital literacy skills to use e-government services. Therefore, it is essential to provide citizens with digital literacy training to ensure they can take advantage of e-government services.
5. Encourage citizen engagement: Citizen engagement is crucial

for the success of e-government services. Iraq should encourage citizen engagement through various means, such as feedback mechanisms, public consultations, and online forums.

6. Implement successful e-government services from other countries: Iraq can learn from the experiences of other countries that have successfully implemented e-government services. Policymakers and stakeholders should study these examples and adapt them to the Iraqi context.

In conclusion, Iraqi residents stand to gain a great deal from access to e-government services. E-government services may boost governmental efficacy, public participation, and public trust, as well as these individual outcomes. However, the successful implementation of e-government services in Iraq requires a comprehensive legal framework, a reliable and secure digital infrastructure, and digital literacy training for citizens. Policymakers and stakeholders must also encourage citizen engagement and learn from successful e-government services implemented in other countries. By taking these steps, Iraq can empower its citizens through digital transformation and provide them with the efficient and accessible government services they deserve.

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