

Facilitator or Barrier? The Impact of Government-Backed E-Payment Systems on Fintech Innovation in Saudi Arabia

Shouq Bader Alosaimi¹, Muna M. Alhammad^{2*}

¹ Postgraduate, department of Management of Information Systems, College of Business Administration, King Saud University, Saudi Arabia.

² Associate Professor, department of Management of Information Systems, College of Business Administration, King Saud University, Saudi Arabia.

* Corresponding Author: malhammad@ksu.edu.sa

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ABSTRACT

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Saudi Arabia's digital landscape is undergoing rapid development. Within this evolving environment, the widespread adoption of e-payment methods is crucial for the efficient delivery of e-government services. This study introduces the current situation of utilizing various e-payment methods in delivering e-government services. That includes e-government and its current state, the adoption of e-payments, and an overview of the government-supported e-payment system. The study examines whether the government-supported e-payment system works as a valuable facilitator or barrier to other alternative e-payment solutions in e-government services in Saudi Arabia. Research may assist and support e-government programs as they evolve, helping to determine best practices in delivering government services to citizens.

To explore this, we used a qualitative research approach. We gathered the data through semi-structured interviews with senior managers from both public and private sectors across Saudi Arabia. Their responses were subsequently analyzed using a thematic approach.

Our findings indicate a desire and readiness among Saudi government entities to diversify their e-payment options. Furthermore, the study identifies success factors and limitations surrounding the current e-payment system. This study recommends adopting new solutions that help in achieving a citizen-centered e-government approach, leading to improved e-government performance in Saudi Arabia.

Keywords: e-Payment, Payment Gateway, e-Government, Fintech, Financial Technology, Saudi Arabia.

INTRODUCTION

In recent years, the financial sector has undergone some remarkable innovations. The most significant innovations in the financial industry in recent years have emerged from the development of digital transformation, as seen in financial technology (fintech) initiatives. According to Gohary (2019), fintech business models have been classified into six domains, one of which is e-payment. Currently, the e-payment domain has several innovations, including electronic wallets, electronic money, and payment gateways (Khan et al., 2017; Bezhovski, 2016). These innovations are reshaping the way transactions occur and are currently pushing society towards a more efficient, cashless world (Khando et al., 2022).

Different e-payment solutions have emerged from the need to serve users in a convenient yet secure way to meet the requirements of the private and public sectors. The development of e-government programs aims to enhance citizens' quality of life and level of satisfaction by boosting the role of technology, including fintech innovations, to improve the services provided to them. Governments worldwide are striving to offer superior services to citizens through the adoption and integration of new technologies.

In recent years, Saudi Arabia has undergone a national transformation program aimed at revitalizing its economy and public services. According to El-sofany et al. (2012), one of the three foundational pillars of this transformation plan is the e-payment gateway that will facilitate the delivery of government services.

To further facilitate this digital infrastructure, the Saudi Central Bank (SAMA) has made significant improvements in enhancing financial services and e-payment systems through its national payment system, Sadad (Ameerbakhsh et al., 2021). Sadad was founded in 2004 as the national electronic bill presentment and payment service. Sadad is centralizing the processing of a substantial portion of government revenue collected through various e-government services.

The majority of government income collected through the various e-government services is processed through Sadad. Therefore, this research aims to investigate whether this government-supported e-payment system primarily serves as an enabler of alternative e-payment solutions or acts as a detriment to their development and adoption within Saudi Arabia's rapidly evolving e-government landscape.

In addition to this inquiry, the investigation is guided by three specific research questions:

1. How has Sadad influenced the development and proliferation of e-payment solutions within e-government services?
2. What challenges confront the adoption and integration of alternative e-payment solutions?
3. How can e-payment solutions be effectively supported and enabled within e-government services?

The importance of this research extends to both the fintech industry and the e-government industry, primarily because there is an apparent lack of research on the application of fintech innovation within e-government systems. Such research will support and assist e-government programs as they evolve, helping to determine best practices in delivering government services. The integration of advanced financial technologies has the potential to redefine public service delivery and significantly enhance citizen engagement (Senyo et al., 2024). Thus, the goal of this study is to provide important information that aids e-government programs in their transformation, establishing how best to provide government services efficiently and effectively.

This paper is organized as follows: Section 2 features a literature review that explores the development of e-government, its current status, and the factors influencing e-payment adoption, with a specific focus on government-supported e-payment systems in Saudi Arabia. Section 3 outlines the research methodology utilized in this study, detailing the strategies employed to collect and analyze data. In Section 4, we present the study's results, findings, and discussion. Finally, Section 5 concludes the paper by summarizing the key insights and offering recommendations for future research in this vital area.

LITERATURE REVIEW

E-government and its Current State in Saudi Arabia

The Information and Communication Technology (ICT) era has fundamentally reshaped how government organizations deliver and manage public services (El-sofany et al., 2012). A key objective for governments worldwide is to harness these new technologies to enhance e-government services. Many definitions describe the e-government concept, focusing on two key axes: the use of ICT by governments and citizen-centered e-government. Previous definitions concentrated on the utilization of ICT by governments to provide services and information. Accordingly, Fang (2002) defined e-government as a means for governments to utilize information and communication technology (ICT) to provide citizens and businesses with easier access to public information and services, thereby improving the quality of these services. Recent definitions focus on the quality and efficiency of public services by being more citizen-centered, e-government (Al-Nuaim, 2011). Furthermore, El-sofany et al. (2012) defined e-government as the government's way to improve services for citizens, increase the effectiveness and efficiency of the public sector, and reduce costs.

Electronic government (e-government), broadly encompassing all government roles and activities shaped by Information and Communication Technologies (ICTs) (Brown, 2005), offers profound solutions for enhancing

efficiency, transparency, and public participation in digital public services (Muhdiarta et al., 2025). It accelerates public service delivery, increases transparency, and mitigates bureaucracy and the potential for corruption (Muhdiarta et al., 2025). Furthermore, e-government has significantly impacted public administration, particularly across four key dimensions: promoting citizen-centered service, recognizing information as a public resource, cultivating new skills and working relationships, and evolving accountability and management models (Brown, 2005). While e-government presents unique challenges in developing countries, it also offers innovative solutions, demanding the adoption of fresh perspectives and leadership in public administration (Brown, 2005).

The practical implementation of e-government services faces three primary challenges that hinder progress: the absence of robust infrastructure, a shortage of adequate resources, and a lack of trust. The absence of robust digital infrastructures remains a significant barrier. Governments worldwide face significant challenges in establishing the necessary technological frameworks to enhance online service delivery. This infrastructure gap often results in slow, unreliable services that can frustrate users and deter them from engaging with e-government platforms (Muhdiarta et al., 2025).

There is a prevalent shortage of sufficient financial, technical, and human resources dedicated to the adoption and implementation of e-government policies. This shortage often leads to the development of incomplete or ineffective programs, resulting in failures and eroding public confidence and participation (Muhdiarta et al., 2025).

Furthermore, a critical challenge lies in the pervasive lack of trust among citizens regarding e-government initiatives. Numerous studies (e.g. Gohary (2019) and El-sofany et al. (2012)) indicate that concerns about privacy, data security, and the overall reliability of digital services contribute to skepticism and reduce adoption rates. When citizens do not feel confident in the security and effectiveness of these online services, their willingness to utilize them diminishes, ultimately stalling the overall progress of e-government efforts (Aleisa et al., 2024; Hasan et al., 2024).

As proposed by Alotaibi (2017), to address these challenges, governments should raise citizens' awareness about the e-government services available to them. Governments can develop targeted communication strategies, provide transparent information about data protection measures, showcase success stories, and engage with the community. As trust increases, so too can the adoption rate, leading to more effective and accessible governance.

The implementation of e-government in Saudi Arabia is significantly important and necessary to meet the needs of its large population (Al-Nuaim, 2011). Further, Alabdan (2019) claimed that Saudi Arabia will be one of the top five countries in the world for e-government services by 2030. Reflecting its robust digital transformation efforts, the Kingdom has made substantial progress in adopting digital services. By 2024, digital services had become integral to the daily lives of over 36 million people, underpinned by a nearly universal internet penetration rate of 99% (Digital Government Authority, 2025; UN E-Government Survey, 2024). The Kingdom has also achieved remarkable advancements in e-government development, securing a global ranking of 6th in the 2024 United Nations e-Government Development Index (EGDI), a substantial leap from its 31st position in 2022 (DGA). This consistent upward trajectory underscores Saudi Arabia's commitment to enhancing digital public services.

From an economic perspective, Saudi Arabia's rapid economic growth is driven by technological advancements (Alhashimi, 2019). In response, the government has developed comprehensive overall development plans that notably include a national e-government strategy. While the majority of Saudi Arabia's income traditionally stems from oil production and export, the nation is actively aspiring to foster a more diversified, knowledge-based economy (Asem et al., 2024).

Fintech and e-Payments Adoption in Saudi Arabia

Payment innovation is one domain of the fintech industry that is rapidly growing and spreading. The fintech industry evolved following the 2008 global financial crisis (Suryono et al., 2020). E-payment was developed as a convenient method of communication between customers and organizations as a result of the revolution in mobile technology and the rising number of mobile Internet users. E-payment is currently on the way to shifting from traditional payment methods and contributing to a significant move toward a cashless community (Albliwi & Alkharmani, 2020). Moreover, Albliwi & Alkharmani (2020) observed that the development of e-payment systems in Saudi Arabia meets the 2030 Vision objectives of achieving a cashless society.

Several studies have supported the expectation that e-payments will shift towards higher usage as a result of the high usage of mobile devices and the internet (Alswaigh & Aloud, 2021; Alabdan & Sulphey, 2020). The COVID-19 pandemic, in particular, accelerated the adoption of mobile wallet services in Saudi Arabia (Alswaigh & Aloud, 2021). In terms of users' adoption of digital payments, Albarrak & Alokley (2021) reported that locally, in Saudi Arabia, we have unique characteristics in terms of both financial customers and customers in general. In mid-2024, the estimated population of Saudi Arabia was 35.3 million (General Authority for Statistics, 2024). The population is predominantly young and has a high literacy rate of 99.89% for those aged 15-24 years (Education and Training Statistics 2024). These characteristics indicate a willingness to adopt and use e-payment channels in e-government services.

Additionally, the Kingdom's digital infrastructure plays a crucial role in driving this shift. Internet penetration, as of January 2024, reached as much as 99.0%, where mobile phones were the primary internet-accessing device, with 99.4% utilization (Communications, Space and Technology Commission, 2025). This widespread connectivity enables instant uptake of digital financial services. Electronic payments accounted for 70% of retail consumer transactions in 2023, increasing to 79% in 2024 (Saudi Central Bank, 2025). This increasing trend aligns with the Saudi Central Bank's strategic objective of reaching 80% non-cash retail transactions by 2030 (Saudi Central Bank, 2025). Saudi Arabia has also shown high interest in digital government services, ranking first in the 2024 E-Government and Mobile Services Maturity Index with a total maturity rate of 96% and a service usage and beneficiary satisfaction rate of 93% (Saudi Press Agency, 2025). These combined factors—a young, educated, and digitally active population with robust digital infrastructure and functioning government policies—enable a high willingness to adopt and use e-payment systems in e-government services and the economy in general (Communications, Space and Technology Commission, 2025; Albarrak & Alokley, 2021; General Authority for Statistics, 2024; General Authority for Statistics, 2024; Alnemer et al., 2022).

A variety of factors influence user adoption of e-payments in Saudi Arabia, with security, trust, ease of use, self-efficacy, benefit, and awareness identified as particularly critical. Security refers to consumers' perceptions of potential cyber threats, representing a significant risk factor (Ameerbakhsh et al., 2021; Alyabes & Alsalloum, 2018; Alabdan & Sulphey, 2020; Alswaigh & Aloud, 2021). Trust denotes confidence in the reliability and integrity of the service provider (Ameerbakhsh et al., 2021; Alyabes & Alsalloum, 2018; Alswaigh & Aloud, 2021). Ease of use pertains to the system's capability and readiness for use by any individual (Ameerbakhsh et al., 2021; Alyabes & Alsalloum, 2018; Alabdan & Sulphey, 2020). Self-efficacy is defined as an individual's self-perception of their capability to carry out a specific task effectively (Ameerbakhsh et al., 2021; Alyabes & Alsalloum, 2018). Benefit is a gain or advantage derived from utilizing electronic payment devices (Ameerbakhsh et al., 2021; Alyabes & Alsalloum, 2018). Finally, awareness is the public understanding, knowledge, and perception of the e-payment system and its implications (Alabdan & Sulphey, 2020).

While some earlier research (e.g. Alyabes & Alsalloum (2018)) suggested that security and trust factors did not significantly influence customer perceptions of e-payment, more recent studies consistently underscore their critical role in fostering adoption (Alaskar et al., 2025; Alhumoudi et al., 2024). Saudi users are increasingly demonstrating trust in e-payment systems, recognizing that established financial institutions and banks offer robust security and privacy measures alongside the capability to detect and prevent fraud and alert users proactively (Alyabes & Alsalloum, 2018).

Consumer trust in electronic payment systems is driven by a myriad of factors, including security features, user experience, transaction transparency, and customer service (Beheri et al., 2025; Shree et al., 2021). Trust depends on the availability of advanced security features such as encryption, two-factor authentication, and open communication on privacy and security issues (Law, 2007). Dimensions of user experience, such as usability and interface, are important, and adverse events may erode trust (Beheri et al., 2025; Rashid & Ahsan, 2024). Among older generations, unfamiliarity with technology is a significant hindrance, highlighting the need for training programs and support (Msweli & Mawela, 2020; Cham et al., 2022). Therefore, building a trustworthy framework requires a focus on security, transparency, user experience, risk management, and expert support based on various demographic segments (Beheri et al., 2025).

Several studies have highlighted that customers desire e-payment technology that provides secure, fast, accessible, and effective services on a single interface (Albliwi & Alkharmani, 2020; Alswaigh & Aloud, 2021). Furthermore, Alyabes & Alsalloum (2018) stated that the industry is continuously expanding, and Saudi citizens are eager to adopt e-payment systems to the extent that e-payment would eventually become the preferred method for processing transactions in Saudi Arabia.

The Saudi government is making concerted efforts to enable FinTech firms and develop the FinTech industry ecosystem. However, the Saudi Central Bank (SAMA) is widely recognized as a conservative regulator (Abubotain & Chamakiotis, 2021). While regulatory authorities are aggressively pushing for FinTech integration, their measured approach, evidenced by the protracted endorsement of particular initiatives, attests to this built-in conservatism. Nevertheless, national policymakers are driving reforms and encouraging changes through the massive financial development initiative.

Initially, the count of FinTech approvals granted by either the Saudi Arabian Monetary Authority (SAMA) or the Capital Market Authority (CMA) was a testament to this conservative stance. For example, in 2021, nearly 35 FinTech approvals were issued, and a significant percentage of these did not begin operation within the market (Albarrak & Alokley, 2021). However, notwithstanding these early cautious steps, the Saudi FinTech ecosystem has since demonstrated significant growth, with the number of active FinTech companies reaching 216 by the end of 2023, surpassing initial targets and attracting substantial investments (Fintech Saudi, 2024). This trajectory indicates a dynamic environment where an initial period of regulatory prudence has evolved to balance with an accelerated drive toward financial innovation.

Government Supported e-Payment System (Sadad)

Sadad is the most commonly used payment method for e-government services in Saudi Arabia. As one of the primary and core structures within the nation's payment landscape, the Sadad payment system plays a foundational role in the digital transformation efforts (Alyabes & Alsalloum, 2018). This national Electronic Bill Presentment and Payment (EBPP) service currently facilitates payment transactions between citizens and entities through commercial bank channels. An investigation study by Alsudairi & Vasista (2012) examining the successful rollout of Sadad emphasized the Kingdom's success in initiating this first-of-its-kind electronic bill payment system, as well as the international acknowledgment it garnered, notably the 2008 UN Public Service Award. Additionally, the Sadad payment system won first prize in the E-Economy category of the GCC e-Government Award at the First Gulf e-Government Conference in 2009, held in Muscat, Oman. It is confirmed by Alyabes & Alsalloum (2018) that Sadad has transformed the Saudi Arabian e-payment system by enabling 24/7 e-commerce transactions from local billers. The evolution of the digital payment system in Saudi Arabia notably began with the implementation of Sadad. Ameerbakhsh et al. (2021) further emphasized that Saudi Arabia's payment systems have undergone considerable change over the last 15 years, with the Saudi Central Bank leading commercial banks in the design and daily management of a sophisticated national payments system to support the Kingdom's financial infrastructure evolution.

METHODS

To explore whether the government-supported e-payment system serves as a valuable facilitator or a barrier to alternative e-payment solutions in the context of e-government services in Saudi Arabia, this study adopted a semi-structured interview approach. This qualitative methodology was particularly suitable for the study's exploratory nature, enabling an in-depth investigation into the nuanced perspectives and experiences of key stakeholders regarding the complex interplay between government-supported systems and the broader FinTech ecosystem.

Qualitative data was collected and analyzed using a thematic analysis approach. A pilot interview was conducted to examine and evaluate the validity of the proposed interview questions. The interviews were conducted with a number of interviewees representing payment enablers, e-payment providers, and e-government service providers. Seven interviewees were selected who belonged to varied backgrounds and experiences in the domain of e-government, digital banking, and FinTech solutions in Saudi Arabia. These interviewees belonged to the CEO, consultants, and senior manager categories, with a majority of them having more than fifteen years of experience working in the payments sector.

Furthermore, a consent letter was given to each interviewee to verify and ensure confidentiality. All interviews were recorded with the prior consent of the participants. The participants' names and organizations have been anonymized, except where approval was granted for revelation.

For the analysis, the researchers utilized Happyscribe to transcribe, review, and proofread the interviews. Subsequently, the transcripts were imported into MAXQDA Plus for a thorough examination to discover recurring themes, ideas, and patterns of meaning in the data through the application of codes and interview analysis. The data were analyzed thematically, with the codes being data-driven; some labels were derived from the data by the researchers, while other labels were actual terms used by participants, referred to as "in vivo" codes. The coding process began with the initial coding of one interview. With further review, the coding structure was enhanced and agreed upon to effectively serve the research and facilitate the discovery of answers to the research questions.

RESULTS

It was found that one of the reasons for relying on Sadad is that government institutions have their own specific requirements and limitations regarding payment and money collection. According to a Saudi Payments (SP) participant, 75% of government transactions are processed through Sadad, while only a few government entities have adopted Mada and transfers as a secondary payment method. This is because the majority of these incomes are government-related, and according to government laws and regulations (State Revenue Law), such income mandates not only a high level of governance but also the highest security standards. As highlighted by the SP participant, these stringent requirements are uniquely met by Sadad. Saudi Payments offers and governs the entire Sadad system; however, it does not provide operations and reconciliation for Mada services, as this remains the entity's responsibility to manage.

DISCUSSION

RQ1: How has Sadad affected the development of e-payment solutions within e-government services in Saudi Arabia?

Notably, the study participants reached a consensus on the positive effects of Sadad and its facilitation of digital payment collection for e-government services many years ago. This is particularly important when investigating the impact of government-supported payment systems on the adoption of alternative e-payment solutions. Further, participant 4 described the success of Sadad as follows:

"When Sadad started back in 2004, it made a huge transformation in the digital payment industry in Saudi Arabia and achieved its goal for 10 years".

This quote implies that nowadays, there is a need to introduce alternative e-payment methods within e-government services due to the changes and developments in the payment industry. In contrast, the SP participant elaborated that card payments have many limitations that cannot be compared to Sadad. The current study identified several success factors for Sadad that have made it the most suitable payment method for government services over the past decades. First, the trust provides a complete integration with all local banks; thus, the payment process is done within the user's payment channel. The second factor is the old adoption, as all government ministries have started integrating with Sadad since its inception in 2004; from the user's perspective, this has been well-known for many years. Third, it is a national platform supported and provided by the government, and it is the first local online payment introduced to the market. Fourth, Sadad is built with very high-security standards, and banks are well known for implementing higher security standards to meet SAMA's requirements. When comparing the current study results to those of older studies, it is worth noting that trust aligns directly with the previous finding of (Al-Nuaim, 2011), and security supports the findings of (Albliwi & Alkharmani, 2020).

However, the way the new generation is thinking about payments is changing. Following the introduction of new e-payment channels, there are some limitations surrounding Sadad as a payment method, particularly in terms of user experience and ease of use.

Sadad is currently one of Saudi Payments products, which is a subsidiary of SAMA. To the best of our knowledge, Sadad is now transitioning to become a payment enabler in the market rather than a service provider. Thus, since 2015, they have begun offering alternative payment schemes beyond Sadad, including Mada and the Instant Payment System (IPS). The utilization of Mada in e-government services is limited. Participant 3 stated:

"There are multiple government entities who are using Mada and transfers as a secondary payment method. I would say that there are quite a few of them now that are adopting the cards as a payment method".

Additionally, participant 7 from SP described the changes in the payment industry as:

"In terms of the payment changing, the new payment trend takes some time to be adopted; users currently trust Sadad and the banks to log and process their payments rather than jumping from wallet to wallet or service to another to process their monthly bills for example," She added, "Our goal is to avail all payment channel to different market needs."

Generally, for anything to be widely used or to move forward, the challenges need to be understood and addressed in order to be overcome. Additionally, it is the general adoption rule or the technology adoption curve, as confirmed by Participant 1:

"It will take its own time; it is not about Sadad, and it is not restricting the growth."

RQ2: What are the challenges associated with adopting other e-payment solutions?

One important challenge identified was the conservative approach SAMA is following in Saudi Arabia. This basic finding aligns with the findings reported by Abubotain & Chamakiotis (2021) in the literature. Moreover, according to participant 1:

"Government has, let's say, a comfort zone of dealing with government-to-government entities rather than going into other schemes like Mastercard or Visa, which are processed outside of Saudi Arabia."

In addition, the analysis found several risks that form another significant barrier. These risks relate to electronic payment solutions and do not exist in Sadad; for example, data privacy concerns, cases of fraud, card hijacking, and exposure to foreign markets in some schemes. Participant 1 elaborated:

"The way you pay through Sadad is different from the digital payment gateway. With the payment gateways, there is an information exposure, your card info and personal info, while in Sadad, you log in to your bank account, which is more secure".

From the findings mentioned in this section, it is clear that managing the collection of government income through various services provided within e-government portals requires considerable effort to successfully overcome the challenges, considering all the different aspects of efficiently managing the income. For the adoption of e-payments in e-government, the SP participant added:

"In the backend, it has different aspects to be considered, such as operations, reconciliations, technical capabilities, and their capability to manage the government income from different online payments. In addition to the technical and operational aspects, in Sadad, we provide the reconciliation and operation; in other types, it will be the entity's responsibility."

RQ3: How can e-payment solutions be enabled within the e-government services?

The key findings for e-payment enablement within e-government portals revealed three main common themes. These themes include digital payments, the public-private partnership (PPP) model, and technological advancements, representing opportunities to enable e-payment methods. The digital payments represent MADA, credit cards, and e-wallets. Technological advancement refers to the process of incorporating new and advanced technologies into local platforms and solutions, whether by the government or private sectors.

Different government entities are seeking to introduce e-payments to meet the diverse needs of various users. Participant 4 reported:

"All e-government portals are advanced in adopting new technologies and going into enhancing the user experience through providing a fully digital solution, so they are ready, but waiting for the regulators to adopt online payment besides Sadad, and all platforms will immediately implement."

The few government entities that have introduced e-payment channels have done so by utilizing the Public-Private Partnership (PPP) model. There have been some independent efforts by government entities to understand user needs and develop suitable payment methods. For instance, the Moqim service adopted the wallet, the Ejar service is currently implementing the wallet, and other platforms, such as Efaa, have adopted online payments. It is found that the PPP model facilitates the agility process needed to implement an e-government project through the partnership with the private sector in terms of budgeting, resources, and technical capabilities, according to Participant 1:

"Because the private has more flexibility in having their budget to be utilized in the investment of certain products and services in order to generate more revenue or even generate value-added services."

Accordingly, these three themes interact with each other, where digital payments support the technological advancements the government portals are seeking, and this can be achieved through the utilization of the PPP model. Furthermore, it is beneficial for the payment industry to evolve and develop innovative payment methods tailored to user needs. However, the enablement and support from the payment enablers and regulators are highly needed to meet the top standards in terms of security, privacy, and availability. It is seen now that the e-payment solutions are adopting higher security measures, as described by Participant 3:

"It is about the changing in habits and changing of the way we look at the card industry and the development of the card industry for the government needs. Awareness of cards has been growing since around 2017 or 2018. The development and the additional functions that cards are adding to their solutions, such as 3D security or other security methods. The one-time password thing that is there is availing, the fraud tools that they are availing where they can manage and control the IP, the countries, the regions, the type of payment, the number of payments, the settlement cycle, the claim, and associated operational aspects. It's encouraging all the merchants to adopt card payment".

CONCLUSION

To conclude, the effective utilization and integration of electronic payment solutions within Saudi Arabia's e-government platforms rely on the regulators' sharp observation of changing user behavior, acceptance levels, and electronic payment preferences, as well as continuous improvement of payment security mechanisms. The research purposively sought to establish whether the government-approved electronic payment system is a significant enabler or a potential disruptor of other electronic payment options within Saudi Arabia's e-government services. The research established a central theme that enhanced the comprehension of the existing level of electronic payments within the e-government sector, including its inherent constraints and potential opportunities for embracing new solutions.

This study lays the groundwork necessary, making it easier for future research to investigate a more sophisticated explanation of e-payment adoption in the e-government context. Although the current research is accepted despite its limitations, including a small participant sample, which may limit the generalizability of the findings, future research efforts should broaden their scope to include a wider array of stakeholders, such as regulators and end-users. A quantitative strategy should also be used in future research to enhance the statistical generalizability of the findings.

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