



A cashless government: an essential internal control system to halt cultural fraud

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"ARTICLE INFO"

Article history:

Received Aug 30, 2024

Revise Sep 10, 2024

Accepted Oct 01, 2024

Keywords:

Cashless government;
Cashless payment;
Cashless system;
Internal Control System;
Cultural fraud.

ABSTRACT

The idea of a cashless society has attracted attention because of its potential to transform financial transactions. The shift toward a cashless government presents a valuable opportunity to modernize public services, increase transparency, and promote financial inclusion. If all transactions occur electronically, it has potential to decrease corruption and curb cultural fraud. However, it comes with challenges. Governments must carefully design and implement strategies to address issues related to digital infrastructure, cybersecurity, digital literacy, and the inclusion of vulnerable populations. This academic study aims to examine the research gap concerning the implementation of a cashless government as a crucial ICS. By examining the benefits, challenges, and potential risks linked to the approach, we can gain a clearer understanding of its potential, effectiveness and feasibility as a solution. Due to the significant cultural influence in corruption attempts, a resilient ICS is crucial. By doing so, they can fully leverage the advantages of a cashless system, ensuring its benefits reach all regional area throughout Indonesia. This transition is a complex but essential part of digital evolution.

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INTRODUCTION

As digital technology transforms every element of life, governments are starting to integrate cashless systems into their operations. This move towards a cashless government entails substituting traditional cash with digital payments in public sectors. It can greatly enhance the efficiency of financial transactions. Cashless payment involves the exchange of currency where buyers do not use physical money, relying instead on cards or electronic methods (Rahman et al., 2020). The Covid-19 pandemic played an important role in increasing and boosting the adoption of cashless payment systems, particularly in government operations with the introduction of Government Credit Cards/ *Kartu Kredit Pemerintah* (KKP) and the use of Virtual Accounts in government agencies. This, along with the implementation of the integrated system called *Sistem Aplikasi Keuangan Tingkat Instansi* (SAKTI) in 2021, which is a comprehensive financial management

tool used by government agencies in Indonesia. It was created to improve the efficiency, transparency, and accountability of financial transactions within these institutions (KPPN, 2024).

SAKTI is a key component of the larger initiative to digitize and modernize public financial management in the country. The use of KKP is in line with the “2025 Indonesian Payment System Blueprint” (BI, 2019). Bank Indonesia mentioned that the increasing demand for financial services is closely aligned with the principles of a fast digital era, which is recently influencing all sectors, including payment systems. Based on Minister of Finance Regulation Number 97 of 2021, one of the advantages of using KKP is the automatic tax calculation at the Ministry of Finance. Thus, reducing the workload of financial staff at government agencies.

As systems become more advanced, fraudsters also become more sophisticated. According to Pal et al. (2018), when the adoption of technology challenges established practices, it faces resistance; therefore, such adoption should be considered within the broader context in which it occurs, as it involves more than just the user experience or the platform itself. This creates a significant challenge for the government to develop and maintain a strong system. An effective system can significantly reduce the likelihood of corruption. Kurniati & Nugroho (2020) stated that a cashless government can be considered a facet of public sector innovation, demonstrating the government's political commitment to enhancing governance systems, particularly in the processes and administration of state finance.

At its core, corruption is viewed as 'individual deviancy,' involving the abuse of public office for personal benefit, typically by key stakeholders responsible for managing funds and resource allocation, which undermines state effectiveness (Zargar et al., 2023). Studies indicate that corruption contributes to environmental degradation by obstructing the implementation and effectiveness of policies aimed at reducing the use of environmentally harmful production technologies (Varvarigos, 2023).

The use of KKP and virtual accounts should gradually decrease cash payment. However, this change often encounters obstacles in its implementation, especially for those who have the intention to commit fraud. Even though it strengthens control within the financial staff, and everyone involved in financial management and procurement, corruption continues to be widespread, and it is becoming increasingly sophisticated. As an example, the case of performance allowance (*Tunjangan Kinerja*) corruption at the Ministry of Energy and Mineral Resources/ESDM that occurred from 2020 to 2022 while using SAKTI and bank transfer. The corruption was carried out because a loophole was found in the performance allowance payment system by using bank transfers and cash deductions (Kompas, 2024b).

The level of corruption in Indonesia is high compared to others in Asia Pacific, along with several other countries such as Malawi, Gambia, Sierra Leone, and Nepal. Meanwhile amongst Southern East Asia, Indonesia ranked 7th out of 11 countries, far below Malaysia, Timor Leste, Thailand, and Vietnam. According to Tran & Wang (2023), Vietnam's treasury department has developed a cashless system and launched a project aimed at modernizing state budget revenue management. This initiative involves the electronic sharing of collection data and the coordination of state budget collections with commercial banks or through digital portals of “the General Department of Taxation and the General Department of Customs”. Meanwhile, Malaysia's shift towards a cashless society is propelled by a combination of policy-driven efforts and technological innovations that address the demands of specific market segments (Rahman et al., 2022).

Corruption is widespread within local government circles in Indonesia, with many Regional Heads being implicated in corruption cases in recent years. Between 2004 and 2023, a total of 188 cases were recorded, including 25 at the provincial level and 163 at the district and city levels (KPK, 2024). This situation is influenced by the deep-rooted presence of legal nihilism and ethical dualism at the macro level, along with various micro-level factors (Fürstenberg et al., 2023). According to the KPK's findings, several sectors have been identified as hotspots for corrupt activities, particularly in the procurement of goods and services. Those involved in various

unethical practices, including bribery, abuse of power, extortion, and money laundry. The practice of bribery is the most prevalent among these modes and mostly done using cash.

The rise in corruption cases over the past decade has led to various prevention initiatives, including the issuance of Presidential Instruction Number 10 of 2016, which outlines measures to prevent and combat corruption. This regulation builds on the foundation established by the National Strategy for Corruption Prevention and Eradication for the years 2012-2015. In response to this regulation, the Ministry of Home Affairs issued Circular Letter Number 910 in 2017, which mandates the implementation of cashless transactions across Provincial, Regency, and City Governments. These circulars are designed to accelerate the regional governments' transition to cashless transactions, aiming to improve accountability and transparency in financial management and to curb corruption (Risky et al., 2020).

Law Number 17 Year 2003 on State Finance requires that state finances be managed in an orderly fashion, in compliance with laws and regulations, ensuring efficiency, economy, effectiveness, transparency, and accountability, while upholding principles of justice and propriety. In line with the mandate of Article 58 of Law Number 1 of 2004 on State Treasury, The President established and oversees the Government Internal Control System (ICS) to ensure transparent and accountable management of the State's finances. In Law Number 15 of 2004 It also emphasized the significance of the Government's ICS in Article 12, which states that auditors and/or examiners are responsible for conducting tests and evaluations of the implementation of the Government's ICS.

Government Regulation Number 60 Year 2008 on The Government ICS (SPIP) strengthens the government's commitment to combating corruption, collusion, and nepotism across various aspects of governmental operations. This is in accordance with the mandate of the People's Consultative Assembly (MPR) in the decree Number XI of 1998 and Law Number 28 of 1999 in establishing a government that is clean and free from Corruption, Collusion, and Nepotism (KKN). On the other hand, the Government ICS policy, which has been in place since 2008, seems to have not been functioning as intended. This is evident in the increasing corruption cases in Indonesia, including those involving high-ranking officials such as Ministers, and the Chairman of KPK.

Organizations may encounter various challenges when adopting internal control systems in cashless systems such as SAKTI, Virtual Accounts, and KKP. Technology: cybersecurity threats, system failures, and compatibility issues can arise when integrating new cashless systems with existing ones. Increased reliance on digital systems also raises the risk of cyberattacks. Operations: employees might resist switching from cash-based methods and will need training to use the new system effectively and understand potential risks. Regulations: keeping up with changing regulations for cashless payments and implementing fraud prevention measures is crucial for compliance and security.

The use of cashless technology in Indonesia's government financial transactions has greatly improved efficiency, transparency, and accountability. Transactions are now faster and require less paperwork, saving time and money. Digital platforms update financial data in real-time, making processes smoother. For transparency, cashless systems provide a clear digital record of every transaction, making it easier to monitor and reducing the risk of fraud. Some government platforms also share financial information with the public, allowing people to see how funds are being used. In terms of accountability, cashless technology ensures that funds are used correctly by providing accurate oversight. Automated systems reduce human errors and manipulation, improving the overall integrity of financial management in government agencies.

Issues related to research and writing on internal controls in both the public and private sectors have frequently been explored, often appearing in journals, theses, dissertations, or media articles. This research has been carried out by a diverse range of groups, including academic researchers, observers, and government agencies or institutions involved in public-private

partnerships. The discussions typically focus on topics such as accountability, internal auditing, and the performance of government agencies.

This study introduces a fresh perspective by analyzing both the content of policies and the organization of policy implementation within the government's internal control system as an essential tool. This study offers a novel approach by analyzing both the content of policies and the organizational structure of policy implementation within the government's ICS (SPIP). The aim is to formulate future policy implementation strategies based on a thorough review of the policy content and the factors contributing to the ineffectiveness of policy implementation following the issuance of Government Regulation No. 60 of 2008.

In decision-making, several factors and individuals are involved, making it crucial to establish a control system that can prevent human error and eliminate opportunities for fraud, where the outcome is shaped by the interaction of decision-makers within the framework of administrative politics, resulting in either material achievements or programmatic outputs. The political process is reflected in the decision-making activities that involve various policy actors, while the administrative process is evident in the general administrative actions that can be analyzed within the framework of a specific program.

In the explanation of the Law of the Republic of Indonesia No 30 of 2002 concerning KPK, it is highlighted that corruption in Indonesia has become deeply entrenched within society and continues to escalate each year. This increase is evident not only in the growing number of cases and the rising financial losses to the state but also in the more systematic nature of these corrupt acts, which now permeate every aspect of public life. As per 22nd January 2024, a total of 1,681 corruption cases have been handled by KPK since 2004 (KPK, 2024). Corruption cases are widespread across various sectors, involving actors from the public sector, private sector, legislature, state-owned enterprises, regional leaders, and independent individuals. However, these cases are predominantly carried out by civil servants, 25.96% of 1.681 cases (Kompas, 2024a).

It is also noted that the State Civil Apparatus (ASN) is claimed for the highest number of corruption cases, with 420 cases, followed closely by the private sector for 430 cases, 344 cases from legislative, and the last is from other cases. Corruption and clientelism within the government, security, and judicial institutions of developing and conflict-affected nations significantly harm the poor and impede the state's ability to provide services, uphold the rule of law, and ensure security (Zargar et al., 2023). But even in developed countries such as Japan, using cashless method payments is low (Sekine et al., 2022) even though a Japanese company, Denso Wave, developed the Quick Response (QR) code back in 1994 (Ryu & Murdock, 2013).

In Indonesia, the push towards cashless transactions is not new. Various studies have been conducted to assess the opportunities and challenges of this approach, emphasizing the importance of transitioning to a cashless system, such as (Bahri et al., 2023; Puspita, 2024; Rahman et al., 2022). Some of the key benefits include boosting state revenue (Odhiambo & Nyariki, 2022), reducing the costs of cash production, curbing the spread of counterfeit currency, and minimizing fraud, particularly within central and regional government operations. The cost associated with each cash payment is higher compared to that of debit card payments (Schmiedel et al., 2012). Approaching fraud prevention can be centered on two primary strategies: implementing internal controls to prevent fraud and taking corrective actions when fraud is detected.

In this study, the focus is on fraud prevention orientation, which converting to cashless government. Reference It has been suggested that leveraging technological safeguards is an effective method for preventing fraud (Krishna et al., 2023). Additionally, it is emphasized that enhancing internal control is crucial, and effective internal control must be accompanied by strong leadership commitment. Another concept highlights that fraud occurs primarily due to the presence of opportunities (fraud by opportunity), making it essential to minimize such opportunities to effectively prevent fraud. The references are consistent in their belief that

establishing strong internal controls is key to minimizing opportunities for fraud (Fürstenberg et al., 2023).

This aligns with the two main strategies that are developed based on the factors contributing to fraud, particularly within the framework of the fraud triangle. There are three main reasons someone commit frauds, the first is the pressure, the second opportunity, and the third is the rationalization of the deeds done.

Moreover, a key barrier to the effective implementation of the Internal Control System (SPIP) is the commitment of leadership. Leaders often fail to recognize the significance of SPIP in managing their programs and activities, viewing it merely as a formality rather than a crucial tool for safeguarding control measures. This lack of commitment results in diminished motivation to organize activities that contribute to the development of SPIP infrastructure. The general unawareness of SPIP's purpose and functionality among both leadership and employees further exacerbates this issue, leading to ineffective implementation. This study seeks to validate the assertion that implementing cashless transaction policies can help reduce fraud, analyzed through the lens of the fraud triangle. The paper is structured into several sections, including a literature review, methodology, discussion of results, and conclusions (Risky et al., 2020).

RESEARCH METHOD

This study is classified as a literature review, including a comprehensive examination of existing references within a particular field, without the collection or direct analysis of original data. The data used in this study is considered secondary, as it is obtained indirectly through intermediaries who have previously collected and recorded the data from third-party sources (Supomo & Indriantoro, 2016). This study examines the use of cashless payment methods as part of internal control system to reduce corruption.

This research reviews journal articles published over the last decade, from 2014 to 2024. This study uses data from the last 10 years to illustrate long-term trends and to assess how much the cashless system has evolved in Indonesia compares to other countries. Long-term data is also needed as a learning resource to identify obstacles in implementing the internal control system and to adopt best practices that can be applied in Indonesia. Nonetheless, the study still depends on some foundational theories from priors. Researchers selected articles for the review by using highly relevant keywords in their literature search, such as "cashless government," "cashless payment," "cashless system," "internal control system," and "cultural fraud. This research utilized the PoP (Publish or Perish) application and VOS Viewer to gather data on articles. PoP is used to search, analyze, and collect bibliometric data from various databases. VOS Viewer is used to visualize the network of relationships between articles, authors, or keywords in the form of bibliometric maps. This allows one to easily see the connections and interrelationships between different topics or scholars. It was conducted on over 25 articles, available in both Indonesian and English, and indexed in Scopus or Sinta journals. Selected articles based on inclusion criteria, specifically choosing open access articles. Subsequently, books, articles, and citation files were downloaded and systematically organized by publication year for further review and analysis. All downloaded articles were carefully extracted and compiled.

RESULTS AND DISCUSSIONS

There are several advantages of cashless payments. First, digital payments cut down the time and expenses involved in handling, storing, and moving physical cash. Automatically, it reduces human errors, accelerates transactions, and optimizes government operations, thereby making public services more accessible and better aligned with citizens' needs. In addition, cash allows

transactions to remain anonymous, which can potentially enable underground or illegal activities and result in additional law enforcement expenses (Schmiedel et al., 2012). Second, digital payments provide a clear and traceable record of transactions, lowering the chances of corruption and financial wrongdoing. By reducing reliance on cash, governments can establish a more transparent financial system where each transaction is recorded and monitored. This increased transparency promotes greater accountability among public officials and strengthens the trust between the government and its citizens, supported by Ling et al., (2023) which stated that adopting cashless payments across all levels—consumers, businesses, and the government—is crucial to shift towards a completely cashless economy.

Third, cashless systems can enhance financial inclusion by offering access to banking and financial services, particularly in remote regions. Digital payment platforms allow individuals without traditional bank accounts to engage in the formal economy, access government benefits, and pay for public services. This increased inclusion is vital for reducing poverty and driving economic development. Cash-based economies often experience slower growth and miss out on key opportunities in global commercialization (Tran & Wang, 2023). Rahman et al. (2022) stated the experience of developed countries demonstrates that regulators play a crucial role in promoting financial inclusion. In regions like Africa, India, and China, technology acts as a key driver of financial inclusion.

Fourth, shifting to a cashless system can result in considerable cost savings for governments. The expenses related to printing, distributing, and managing physical currency can be quite high. By adopting digital payments, governments can lower these costs and redirect resources toward essential sectors like healthcare, education, and infrastructure. And, the growing use of cashless payment instruments, along with the increasing volume of cashless transactions each year, has led government agencies to recognize their growing significance in shaping monetary policies (Tran & Wang, 2023). In addition, Younus et al. (2023) stated that by digitizing payments, the government can more effectively regulate each transaction and money transfer, which helps reduce the size of the undocumented economy, as it primarily operates with physical cash. Significant cost and time savings will contribute positively to GDP growth, while cashless payments help reduce opportunities for tax evasion, the underground economy, and corruption (Rahman et al., 2022).

While this change offers many advantages, such as greater efficiency, transparency, financial inclusion, and cost savings, it also brings challenges that need to be carefully addressed to ensure a fair and seamless transition. Therefore some challenges we must overcome are digital infrastructure, cybersecurity risk, digital literacy, exclusion of vulnerable groups, and resistance to change.

A cashless government depends on strong digital infrastructure, namely reliable internet access, secure payment gateways, and advanced cybersecurity protections. In many developing nations, the absence of such infrastructure presents a major challenge to adopting cashless systems. The findings on study by Zhang et al., (2023) The findings suggest that for uniformed officials, the optimal level of supervisory involvement that maximizes government benefits is minimal, especially when per capita income is low. This is largely due to budget constraints that limit the effectiveness of anti-corruption measures. Governments need to invest in creating and sustaining the essential digital infrastructure to facilitate a cashless economy.

As governments shift to digital payments, they become increasingly susceptible to cyberattacks and data breaches. Cyberattacks represent a major obstacle that can severely hinder the advancement of digital payment systems (Krishna et al., 2023). A reduction in cash use will likely lead to a decrease in traditional crimes, but a fully cashless society may see a rise in cybercrime, electronic fraud, and digital hacking. Implementing strong encryption and robust authentication methods can help mitigate these risks (Rahman et al., 2022). Safeguarding sensitive financial information and ensuring transaction security is crucial. To address these risks, governments must

implement comprehensive cybersecurity strategies, including regular audits, encryption technologies, and public awareness initiatives.

The effectiveness of a cashless government hinges on the digital literacy of its citizens. Digital literacy is the capability to utilize technology and access information through digital tools for learning or obtaining specific information (Techataweewan & Prasertsin, 2018). Many individuals and government offices, especially those in rural and low-income areas, may not possess the skills or knowledge needed to use digital payment systems. Digital literacy also involves the skill of effectively using media to discover new and relevant knowledge aligned with the information being sought (Bahri et al., 2023). To address this, Governments should allocate resources to digital literacy programs that educate citizens on how to safely and effectively navigate these systems.

Electronic payments offer a more convenient and cost-efficient method of transferring funds compared to traditional paper-based payments (Rahman et al., 2020). Based on study by Puspita (2024) on Digital literacy programs in rural African communities in Indonesia empower residents by providing access to essential resources, education, and opportunities, which, in turn, enhances their overall quality of life. These initiatives help bridge the digital divide, allowing individuals to better engage with modern technologies and improve their socio-economic conditions. These programs help bridge the digital divide, fostering a more connected and informed community.

A cashless government must take steps to ensure that vulnerable groups, including the elderly, disabled, and those lacking access to digital devices, are not excluded from public services. Governments should offer alternative payment methods or support systems to guarantee that all citizens can engage in a cashless economy. Mubarak & Suomi (2022) whom examine the current trends in addressing the grey digital divide focus on identifying and implementing potential solutions to reduce digital disparities among seniors. This involves exploring strategies that can bridge the gap, such as increasing digital literacy, providing accessible technology, and offering tailored support to older adults. A key finding from the study is that the grey digital divide is hindering effective healthcare services for the elderly. This gap in digital access and literacy among older adults is compromising their ability to benefit from modern healthcare technologies and services.

The shift to a cashless system may encounter resistance from various stakeholders, including businesses, citizens and even public servants who are accustomed to cash transactions. This resistance can stem from cultural preferences, a lack of trust in digital systems, and concerns about privacy. To overcome these barriers, governments need to engage in comprehensive outreach and communication strategies to address these concerns and foster the adoption of cashless payment methods. This one is the most difficult to overcome because it involves culture. Usually, cashless payment is easier amongst millennials and Gen Z but harder for Gen-X. Ling et al., (2023) revealed that usage, tradition, and image barriers have a significant and positive impact on the resistance to adopting cashless payments among Gen-Xers in the Klang Valley.

Important Factors for Establishing a Cashless Government

Puspitasari & Salehudin (2022) and Ridwan et al., (2022) on their study on (Quick Response Indonesian Standard (QRIS) stated that the primary factor driving the long-term adoption of cashless payment systems is strong government support. As governments begin the transition to a cashless system, it is essential to address several key considerations to ensure both the successful implementation and long-term viability of these systems. The government must encourage the use of KKP and bank transfers for operational transactions. If the government implements a zero-tolerance policy on corruption and offers sufficient compensation to its employees, ensuring that all relevant authorities are equipped to resist corruption, then corruption can be eradicated (Zhang et al., 2023). In this regard, the Ministry of Finance, through State

Treasury Service Office (KPPN), has regularly present an award to the highest use of as well as recognition for other achievements amongst government agencies. This is a positive initiative by the Ministry of Finance.

Formulating a Comprehensive Digital Strategy; A strong and all-encompassing digital strategy is crucial for effectively transitioning to a cashless government because it also serves as an internal control for the entity. This strategy should detail the steps needed to establish and sustain the required infrastructure, strengthen cybersecurity (Putrevu & Mertzanis, 2023) , and advance digital literacy across the population. Furthermore, it should include specific timelines, milestones, and benchmarks to track progress and ensure accountability throughout all levels of government. A major concern with cashless systems is the security of citizens' personal and financial information. Governments must place a high priority on data privacy by enacting strict data protection laws and regulations. These regulations should dictate how data is collected, stored, and utilized, ensuring that citizens' information is protected from misuse.

Enhancing Public Awareness and Building Trust; Gaining public trust is essential for the effective adoption of cashless systems. Governments must proactively engage with citizens to address their concerns, clearly communicate the benefits of cashless payments, and show the measures in place to safeguard their data. Public awareness campaigns, workshops, and educational programs are key tools for fostering trust and encouraging the broader acceptance of digital payment methods. It is crucial to raise awareness among taxpayers about the system's existence, functionality, and benefits to increase its adoption and improve compliance levels (Odhiambo & Nyariki, 2022).

In addition to the significant role the government plays in raising awareness about digital literacy, gaining public trust is crucial for creating a cashless society. To build this trust, the government must demonstrate that technologies like SAKTI, KKP, and virtual accounts will effectively reduce corruption levels. Meanwhile, Hashim et al. (2023) stated that compatibility, hedonic motivation, habits, and self-efficacy are all significantly associated with how users engage with e-wallets or digital payments.

Addressing Economic Disparities; The shift to a cashless government needs to be inclusive, ensuring that all citizens, irrespective of their economic status, can access digital payment systems. Governments should introduce policies that address economic inequalities, such as making digital devices affordable, providing subsidies for internet access, and establishing support programs for low-income households. These measures can help prevent the digital divide from expanding and ensure that the advantages of a cashless system are available to everyone as stated in several studies such as Mubarak & Suomi (2022), Putrevu & Mertzanis (2023), Techataweewan & Prasertsin (2018).

Collaborating with the Private Sector; The private sector is vital to the development and rollout of cashless systems. Governments should work closely with financial institutions, technology companies, and other key stakeholders to create innovative solutions that address citizens' needs (Adzariat et al., 2023). Public-private partnerships can speed up the establishment of digital infrastructure (Pal et al., 2018) , improve cybersecurity (Younus et al., 2023) (Krishna et al., 2023), and design user-friendly payment platforms that accommodate a wide range of user (Mubarak & Suomi, 2022).

Continuous Monitoring and Evaluation; This is where the audit function comes into play. Consistent monitoring and evaluation are essential to ensure the long-term effectiveness of a cashless government system. This process should include feedback from citizens, businesses, and other stakeholders to ensure that the system continues to meet their needs effectively. Additionally, governments should invest in cutting-edge encryption technologies and conduct regular security audits to prevent data breaches. Researchers have found that cashless payment systems could help curb illegal activities such as terrorism, illegal immigration, human trafficking, and corruption (Abbas, 2017).

CONCLUSION

As technology upgrades, the idea of a cashless government is anticipated to advance. The use of SAKTI, Virtual Accounts, and KKP in Indonesia is an excellent innovation. In addition to reducing paper usage and associated costs, it also enhances transparency between government agencies and the public, as reports are generated in real time. The absence of cash transactions also helps build public trust. It also improves the internal control system by making it easier to monitor and track transactions. Strong internal control can reduce the likelihood of fraud. However, to strengthen internal control, it must be supported by adequate infrastructure and human resources to prevent obstacles in terms of technology, operations, and regulations. As systems become more advanced, the possibility of fraud becoming more sophisticated also increases. A completely cashless government will require careful planning, collaboration, and a firm commitment to inclusivity. Governments must remain vigilant to the challenges associated with digital payments while seizing opportunities to modernize public administration. By doing so, they can create a more efficient, transparent, and inclusive government that effectively serves all citizens in the digital era. The development of concepts and the expansion of literature references discussed in the study aim to assist readers in identifying, managing, and resolving issues based on specific circumstances. Future research should consider expanding the scope to explore additional potential factors of cashless system's potential risks that may emerge in addition to the factors currently identified. The scope of cashless government's system could also be identified more involving behavioral studies related to aspects such as resistance to change and ethics in government agencies.

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