

ABSTRACT

This study delves into the adoption of cashless payment methods among Malaysian university students, particularly focusing on evaluating initiatives cashless society programme. The problem underscores the need to address a significant gap in understanding the effectiveness and impact of cashless payment programs among university students in Malaysia, given the pivotal role of universities in shaping young adults' financial technology preferences and behaviours. This research comprehensively assess factors such as social influence, financial literacy, government policies, digital infrastructure, digital security, and perceived usability by utilizing the Unified Theory of Acceptance and Use of Technology (UTAUT). Through a quantitative approach, the research aims to provide empirically grounded insights informing regulatory and policy decisions for advancing financial inclusion and sustainable cashless adoption in Malaysia. This study aims to offer a nuanced understanding of cashless adoption dynamics among students and facilitate the design of targeted interventions promoting a resilient digital financial ecosystem. A suggestion for future research includes longitudinal studies to track cashless adoption trends over time, providing valuable insights for ongoing policy development.

Keywords: Cashless Society Programme, cashless adoption, Unified Theory of Acceptance and Use of Technology (UTAUT), digital infrastructure, digital security.

INTRODUCTION

The growth of cashless payments in Malaysia over the past few years has been tremendous, driven by national initiatives and the high adoption of digital payment platforms (Rahman, Ismail, & Bahri, 2020). Higher learning institutions in Malaysia have adopted the "Digital Campus 2.0" program under PayNet, which allows them to go completely cashless and thus provides students with the ease of making digital transactions and inculcating the culture of digital finance. For instance, digital transactions at campuses have grown tenfold from 800,000 in 2022 to 11.8 million in 2023 (PayNet, 2024). These initiatives mirror Bank Negara Malaysia's Financial Sector Blueprint, which aims to help a fully cashless society by encouraging the adoption of digital financial services (Bank Negara Malaysia, 2022).

By synthesizing insights from these studies (Balakrishnan & Shuib, 2021; Islam, Tamanna, & Islam, 2024; Rahman, Ismail, Bahri, & Rahman, 2022), this research aims to provide a comprehensive understanding of the factors influencing cashless adoption in driving this transition. Currently, there are cashless payment modes are being developed and enhanced such as in the form of e-wallets or mobile banking applications (Balakrishnan & Shuib, 2021; Rahman et al., 2020). University students are expected to be more open to receiving the innovation of cashless payments since they are the generation of 'digital natives'; however, their effective implementation also depends upon convenience, trust, and awareness of security features attributed to such platforms (Gunawan, Fatikasari, & Putri, 2023; Rahman et al., 2020).

Malaysia has grown its digital payments infrastructure, though some barriers still exist (Gunawan et al., 2023). Adopting digital-first mindsets and dealing with security concerns among students is still prevalent, where cash is preferred in making some transactions (Rahman et al., 2020). Meanwhile, cashless events and digital campaigns spearheaded by students do a lot in bringing e-payments into everyday campus life with seamless and secure digital transactions (Shaji & Mathias, 2021). The cashless society program at Malaysian universities contributes to and reflects the larger impetus toward digitalization. University-driven initiatives encourage not only the system of cashless payments but also act as training hubs for students, grooming them with the skill sets necessary for their futures (Shaji & Mathias, 2021). While these are good indicators of a promising path for Malaysia in its goal to become a cashless nation, more needs to be done to ensure that education and infrastructure are well-placed to address the remaining challenges in this transition (Gorshkov, 2022; Gunawan et al., 2023).

Therefore, this research seeks to evaluate the effectiveness of cashless society programme in fostering cashless adoption among university students in Malaysia. The primary objective is to assess the programme's influence on encouraging cashless transactions nationwide, considering its implications for various stakeholders and its contribution to Malaysia's digital economy (Dinh, 2024; Gorshkov, 2022). By scrutinizing the programme's effectiveness and impact, this study aims to provide valuable insights to guide future strategies for promoting cashless adoption in Malaysia.

PROBLEM STATEMENT

The emergence of digital payment technologies has transformed the way transactions are conducted worldwide, including in Malaysia. However, there is a limited number of students related to the adoption of cashless payments among university students in Malaysia (Rahman et al., 2020). This discrepancy raises

concerns about the accessibility, awareness, and usability of cashless payment options among university students. Additionally, there may be behavioural factors influencing cashless adoption among this demographic, which need to be explored further (Balakrishnan & Shuib, 2021; Javaid, Haleem, Singh, & Sinha, 2024). Therefore, understanding the specific challenges faced by university students in adopting cashless payments is crucial for designing targeted interventions to streamline cashless adoption in Malaysia's higher education sector.

Furthermore, the effectiveness of cashless society programme in bridging the digital divide among demographics of university students. While the programme aims to promote financial inclusion and digital literacy, it is essential to assess whether it has been successful in reaching marginalized student populations, such as those from low-income backgrounds or rural areas (Aurazo & Gasmi, 2024). Additionally, the programme's alignment with the needs and preferences of university students needs to be evaluated to ensure its relevance and sustainability in the long run (Bahri, Fauzi, & Ahmad, 2020). Therefore, there is a need to assess the programme's impact on different segments of the university student population to identify strategies for promoting equitable access to cashless payment options.

Additionally, understanding the preferences and attitudes of university students towards cashless payments is essential for designing effective interventions to promote adoption. Factors such as convenience, affordability, and perceived benefits of cashless payments may influence students' willingness to embrace digital payment technologies (Balakrishnan & Shuib, 2021; Islam et al., 2024). Therefore, it is important to explore students' perceptions and preferences regarding cashless payments can provide valuable insights for tailoring communication strategies and promotional campaigns to resonate with their needs and preferences.

RESEARCH OBJECTIVES

The cashless society programme initiated has garnered significant attention as a pivotal step towards modernizing financial transactions and bridging the digital divide. This research endeavours to conduct a thorough assessment of the programme's efficacy, its alignment with national objectives, comparison with analogous initiatives by other agencies, and its impact on targeted demographics. Therefore, this study analyse cashless society programme implementation and effectiveness which comprehensively assess factors such as financial literacy, social influence, government policies, digital infrastructure, digital security, and perceived usability.

LITERATURE REVIEW

Previous research shows that the adoption of digital payment methods has picked up significantly with government-supported initiatives to drive financial inclusion and growth of a digital economy (Balakrishnan & Shuib, 2021; Gorshkov, 2022; Lv, Li, Zhu, & Huang, 2024; Rahman et al., 2020). Programs like PayNet's Digital Campus would create a cashless campus for all universities, where students can make digital payments in all types of transactions, hence huge increases in digital transactions (PayNet, 2024; Rahman et al., 2020). The shift is also in line with Malaysia's Financial Sector Blueprint 2022–2026, whereby, under the broader economic plan, cashless systems are included to increase the digital economy (Bank Negara Malaysia, 2022). However, challenges in adopting cashless systems among students remain. Rahman et al., (2020) identified performance expectancy, facilitating condition, social influence, innovativeness, perceived technology security and hedonic motivation are crucial elements in digital

cashless adoption in Malaysia. Despite these factors, student-driven initiatives and educational campaigns are positively disposed of, as they help fight myths and support digital fluency and confidence among them.

Kumar, Pillai, Kumar, & Tabash (2023) suggested that financial literacy directly influences both financial decision-making and individuals' perception of their financial well-being. Furthermore, digital financial literacy plays a key role as both a direct predictor and a mediator in shaping financial decisions. Therefore, when individuals are better equipped with knowledge about managing their finances, understanding digital payment options, and recognizing their advantages, they are more likely to embrace cashless methods (Hanafizadeh & Kim, 2020; Rahman et al., 2020). With higher financial literacy, users can confidently navigate digital financial tools, make secure transactions, and manage their electronic payments effectively. Therefore, enhancing financial literacy is key to encouraging the widespread use of cashless systems, reducing dependence on cash, and promoting economic development.

Fikri (2024) defined social influence involves changes in a person's behavior to align with the expectations of their social surroundings, which in turn impacts their self-image in relation to the influencer, others, and society at large. The effectiveness of social influence and social networks in shaping students' attitudes and behaviours toward cashless payments merits exploration (Shaikh, Sharma, & Karjaluoto, 2020). University campuses serve as social hubs where students interact and exchange information with their peers regularly. Therefore, understanding the role of social influence in promoting cashless adoption can inform the design of targeted peer-to-peer engagement strategies and social marketing campaigns to encourage greater participation in cashless transactions among university students.

Rahman et al. (2020) argued that policymakers should recognise the essential role of consumers' performance expectancy and utilise it to develop efficient ways to maximise revenue in the financial service sector. The impact of external factors such as government policies and industry initiatives on cashless adoption among university students needs to be considered (Bank Negara Malaysia, 2022). Government policies aimed at promoting digital financial inclusion and industry-led initiatives to develop innovative payment solutions may influence students' access to and awareness of cashless payment options. Therefore, evaluating the synergies and gaps between government policies, industry initiatives, and university-level interventions can provide valuable insights for aligning efforts toward streamlining cashless adoption among university students in Malaysia. Therefore, the research gap focusing policymakers and educational institutions seeking to implement effective cashless programs (Bank Negara Malaysia, 2022).

Rahman et al. (2020) emphasized continue improvement of the digital infrastructure, such as increased access to the internet and security of transactions, making cashless payment more possible and attractive to university students. In addition, regulators must focus on developing an infrastructure that addresses consumer safety concerns effectively. This involves ensuring robust security measures within digital payment systems and creating a reliable framework to protect users from potential risks. The literature in general suggests that university students in Malaysia increasingly adopt cashless payment systems due to convenience and the influence of digital culture; however, there is still a need for holistic approaches in addressing the availability and robustness of technology infrastructure that promotes cashless programme. Therefore, the research gap exists in the availability and quality of digital infrastructure, such as internet coverage and transaction systems on campuses. Limited or inconsistent access to stable, high-speed internet can hinder seamless digital transactions and may affect students' willingness to rely solely on cashless systems.

Hanafizadeh & Kim (2020) explore how user digital security is crucial in protecting from any unlawful acts such as gathering and potentially using data from unauthorized businesses, professionals, and policymakers. Therefore, the evolving landscape of digital payment technologies poses challenges in terms of security and privacy concerns among university students. As digital transactions become more prevalent, there is a growing need to address cybersecurity risks and protect students' sensitive financial information (Fikri, 2024). Therefore, evaluating security measures and privacy protections of cashless payment platforms used by university students is essential to ensure their trust and confidence in adopting cashless payment options. Additionally, addressing these concerns can enhance the overall user experience and encourage greater participation in cashless transactions among university students.

The utilization of digital payment systems has garnered global attention for its potential to streamline financial transactions' efficiency and convenience. In Malaysia, various governmental initiatives, notably the cashless society programme have been introduced to advocate for cashless adoption across various sectors. However, the efficacy of such initiatives, particularly among university students, remains uncertain. Comprehending the factors influencing cashless adoption within this demographic is pivotal for tailoring interventions to facilitate cashless integration within Malaysia's higher education (Shaji & Mathias, 2021).

The cashless society programme aims to promote the adoption of cashless transactions across Malaysia. Despite the efforts to encourage cashless payments, there is a lack of understanding regarding the effectiveness and impact of the programme among university students in Malaysia. This gap in knowledge poses a significant challenge as universities play a crucial role in shaping the behaviour and preferences of young adults towards financial technologies. Therefore, there is a pressing need to evaluate the effectiveness and impact of cashless society programme among university students to identify barriers and opportunities for streamlining cashless adoption in Malaysia's higher education institutions.

CONCEPTUAL/THEORETICAL FRAMEWORK

The concept of a cashless society has been researched in great detail, especially in areas where digital transformation has smoothened financial and transactional processes. In Malaysia, the push towards cashless systems e-wallets and mobile payment platforms gained traction among university students due to convenience, security, and alignment with digital financial trends. Previous studies have indicated that the success of any cashless payment system depends on perceived ease of use, reliability, and security, among other factors, normally measured using established models like the Unified Theory of Acceptance and Use of Technology (UTAUT). This model underlines the fact that students' behavioral intention to adopt cashless systems depends on social influence, financial literacy, government policies, digital infrastructure, digital security, and perceived usability.

In the context of cashless adoption among university students in Malaysia, UTAUT can provide valuable insights into the factors influencing students' attitudes and behaviours toward cashless payment systems (Islam et al., 2024). The model can be adapted to examine students' perceptions of the usefulness and ease of use of cashless payment technologies, as well as other relevant factors such as social influence, institutional support, and trust.

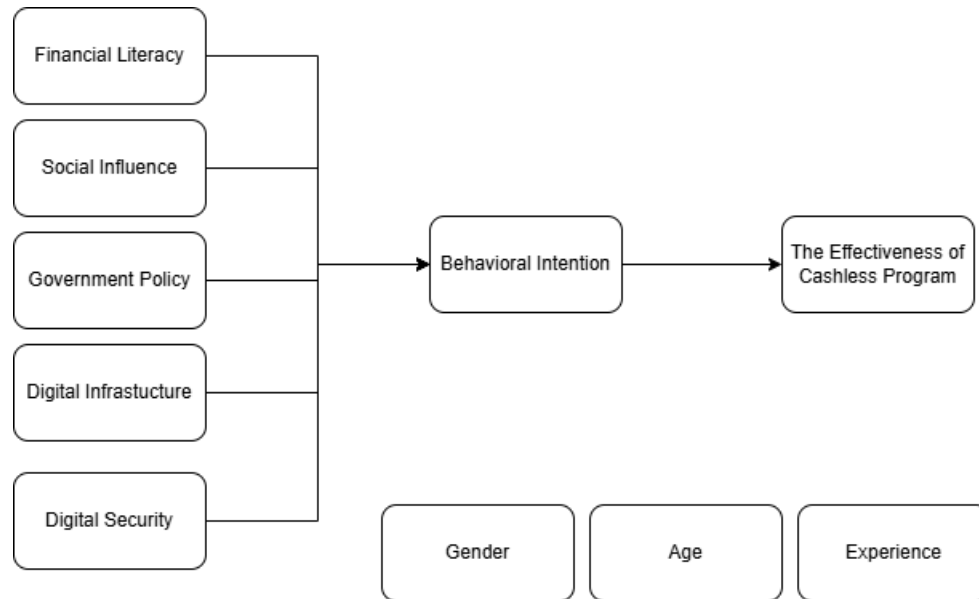


Figure 1: Theoretical Framework

METHOD, DATA, AND ANALYSIS

This study adopts a quantitative methods approach to comprehensively investigate the effectiveness of cashless society programme among university students in Malaysia. This research allows for the collection of measurable data, which can provide insights into the adoption rates, factors influencing usage, and challenges faced by students. This study will use a structured questionnaire to gather data on students' experiences, perceptions, and frequency of cashless payment usage. Key areas of investigation will include ease of use, perceived security, and the influence of digital infrastructure on adoption rates.

The population for this study will consist of university students currently enrolled in Malaysian public and private universities. University students are the primary focus as they are directly impacted by campus cashless programs and represent a key demographic for digital payment adoption in Malaysia. By focusing on both public and private universities, the study aims to capture a diverse student population with varying levels of exposure to digital infrastructure and cashless payment options.

To ensure a representative sample, stratified random sampling will be used. This technique is suitable for this study as it allows for dividing the population into subgroups, or strata, based on university type (public and private). After stratifying, random sampling will be applied within each subgroup to ensure that the sample reflects the diversity of the university sector. This approach helps in obtaining balanced insights across different institutional settings, accounting for any variance in digital infrastructure or accessibility that may exist between public and private universities.

A sample size of approximately 400-500 students will be targeted, aiming for a minimum of 200 students from each sector (public and private) to ensure statistical power and generalizability of results. Data analysis will involve descriptive and inferential statistics to assess patterns in cashless payment adoption, identify significant influencing factors, and evaluate correlations between infrastructure, ease of use, and frequency of cashless transactions.

CHALLENGES

One of the biggest challenges is collecting accurate and widespread data to understand students' cashless adoption behavior across different institutions. Factors such as variation in infrastructure quality, campus area and internet connectivity across regions can cause the data to not be consistent and comprehensive since it is difficult to cover all aspects of cashless adoption across the universities. Moreover, to design the surveys tactfully so that students feel free to honestly comment on these issues without being worried about confidentiality.

Besides that, there are widespread variations in the rapidly changing world of digital technology and the cashless ecosystem. The nature of cashless payment systems is changing for various payables, policies, and regulatory standards being defined rather frequently. Keeping track of the latest digital payment trends and regulatory guidelines is crucial, especially for technology, finance, education and industries. In addition, since this research may be done in conjunction with universities and financial institutions, researchers may also encounter logistical and bureaucratic barriers when accessing needed resources or data. Allocating attention and resources to attending to these mandates, while complying with ethical considerations and ensuring both the validity/reliability of findings takes a lot.

CONCLUSION

The research concludes that cashless society programs in Malaysian universities will have a substantial impact on encouraging digital payment adoption among students, enhancing convenience, and aligning with national goals of advancing a cashless economy. Future findings may reveal that while students largely appreciate the benefits of cashless payments such as ease of use and time savings several factors influence the effectiveness of these programs. The study emphasizes the importance of tailored strategies to support digital readiness and address the digital divide among students from different backgrounds. By improving infrastructure, implementing educational initiatives, and ensuring inclusive access, universities and policymakers can enhance students' confidence in cashless transactions. These efforts are essential not only for fostering a cashless campus environment but also for equipping students with digital skills that are critical for their future in an increasingly digitized economy. The research contributes valuable insights into the role of cashless society programs within educational institutions and provides recommendations for refining these programs to support broader financial inclusion and digital engagement among Malaysia's youth.

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