

DIGITAL PAYMENT TRANSFORMATION IN THE PHILIPPINES: FROM CASH TO GCASH

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ABSTRACT

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This study examines the progression of digital payment systems in the Philippines, with a particular focus on the shift from traditional cash transactions to the adoption of GCash. The introduction underscores the significance of digital financial transactions within the contemporary economy, specifically emphasising the distinctive circumstances of the Philippines. The theoretical foundation is based on the Diffusion of Innovations hypothesis, which places emphasis on the process by which new technologies are embraced within communities. The methodology encompasses a comprehensive examination of existing scholarly literature, governmental publications, and industry analyses pertaining to digital payment systems and specifically GCash. The results indicate a notable transition towards digital payment methods, with a particular emphasis on GCash. This shift may be attributed primarily to the rise in smartphone usage, government-led efforts, and the demand for contactless transactions in response to the COVID-19 pandemic. The ensuing discourse provides a more comprehensive analysis of the obstacles and prospects within the realm of digital payments, including the issue of the digital divide and the possibilities for enhancing financial inclusivity. The study's findings indicate that the digital payment transformation has significant ramifications for the economy of the Philippines. It suggests that ongoing efforts are necessary to establish an inclusive digital financial ecosystem. These endeavours would entail the resolution of infrastructural deficiencies, enhancement of digital literacy, and execution of pertinent policies. This research study aims to enhance the comprehension of the process of digital payment transformation in developing nations, with a specific focus on the Philippines. It offers valuable insights that can be utilised by policymakers, financial institutions, and fintech startups.

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1. INTRODUCTION

The swift progression of technology has exerted a substantial impact on many sectors, including the financial industry [1], [2]. The advent of digital payment systems has brought about a significant transformation in the manner in which transactions are carried out, replacing conventional cash-based methods with technologically advanced digital platforms that offer enhanced efficiency [3], [4]. This study explores the process of digital payment transformation in the Philippines, with a particular emphasis on the shift from cash to GCash, a prominent mobile wallet platform in the nation [5].

The Philippines, known for its archipelagic topography and expanding digital infrastructure, offers a compelling subject for investigating the adoption of digital payment methods [6]. Notwithstanding its largely cash-based nature, the nation has witnessed an unparalleled upsurge in the adoption of digital payment methods. The aforementioned shift can be primarily ascribed to the widespread adoption of smartphones, digital initiatives spearheaded by governmental bodies, and the societal transformations brought about by the global COVID-19 crisis [7], [8].

GCash, a digital payment platform built by Globe Telecom, has become a prominent participant in the ongoing digital transformation. The services provided enable users to engage in various financial operations, including but not limited to transferring funds, settling bills, and acquiring things, all via their mobile devices [5]. The emergence of GCash signifies the capacity of digital payment technologies to revolutionise the financial terrain in the Philippines [5], [6], [8].

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Nevertheless, the transition towards digital payments is not devoid of obstacles. Challenges such as the digital divide, cybersecurity risks, and legal considerations provide possible obstacles in the extensive implementation of digital payment platforms such as GCash. The aforementioned problems require in-depth research in order to have a more thorough understanding of the digital payment landscape and to formulate efficient strategies for its advancement [9], [10].

The objective of this study is to make a scholarly contribution to the expanding corpus of literature concerning digital payment systems in emerging nations. This study offers useful insights into the reasons that drive the acceptance of digital payments, the challenges connected with it, and viable tactics for overcoming these obstacles. It achieves this by investigating the specific context of the Philippines and focusing on the case of GCash.

This document aims to provide information to policymakers, financial institutions, and fintech startups regarding the ongoing digital payment change. The results of this study have the potential to inform the development of policies and initiatives aimed at fostering inclusive growth within the digital financial ecosystem in the Philippines.

Literature Review

Digitisation Payment in the Philippines

The existing body of literature pertaining to digital payment systems in the Philippines is extensive and varied, indicative of the dynamic characteristics of this industry. Numerous scholarly investigations have been conducted to examine the factors that influence the adoption of digital payment methods. The study conducted by De Leon et al emphasised the significance of smartphone adoption and internet connectivity in enabling the transition from cash-based transactions to digital payment methods [2]. This fact holds special significance in the context of the Philippines, where there has been a substantial surge in mobile phone usage in recent years [9], [11].

In conjunction with technological factors, governmental measures have been recognised as key drivers for the adoption of digital payment methods [12]–[14]. The importance of government-led digital policies in facilitating digital payments has been underscored in research. An example of a government initiative is the National Retail Payment System (NRPS) framework implemented by the Philippine government in 2015. The primary objective of this framework was to build a retail payment system that is secure, efficient, and dependable, with the ultimate goal of promoting the adoption of digital payment methods [15].

The emergence and growth of GCash, a prominent digital payment network in the Philippines, has garnered significant attention within academic circles. The success of the platform has been attributed to its user-friendly interface, wide array of services, and strong security measures [5], [9], [10]. Additionally, GCash has significantly broadened its scope and functionality through strategic alliances with other enterprises, hence fostering the widespread acceptance and utilisation of its services [9].

Nevertheless, the existing body of literature also sheds light on several obstacles encountered within the realm of digital payments. A significant issue of concern pertains to the digital divide, which refers to the existence of disparities in both digital access and literacy that can impede the general use of digital payment methods [16]–[18]. The matter at hand holds significant relevance within the context of the Philippines, owing to its diverse geographical landscape and the varied degrees of development in its infrastructure.

Another significant issue pertains to the domain of cybersecurity [19]. The escalation of digital transactions is accompanied by a corresponding rise in the vulnerability to cyber threats [20]. The significance of implementing strong cybersecurity protocols in fostering trust and assurance in digital payment systems. The aforementioned research indicate that it is imperative to solve cybersecurity risks in order to effectively facilitate the move to digital payments [21].

In brief, the existing body of literature pertaining to digital payment systems in the Philippines offers a complete perspective on the developmental trajectory of this industry. This analysis provides a comprehensive examination of the factors that drive and hinder the adoption of digital payment methods, presenting useful perspectives on the evolution of the digital financial landscape. The aforementioned observations provide a foundation for further investigations into digital payment systems, specifically within the context of developing nations such as the Philippines.

Technology Acceptance Model on Payment

The Technology Acceptance Model (TAM) initially proposed by Davis in 1989 has been extensively used in research studies that explore the adoption of technologies, digital payment systems [22]–[24]. According to the TAM peoples inclination to adopt a technology is mainly influenced by two factors; their perception of its usefulness and their perception of its ease of use[2].

In the context of payments perceived usefulness refers to how much individuals believe that using a payment system will enhance their job performance [1], [2]. Several studies have found a relationship, between the perceived utility of payment systems and their adoption rates [6]. For instance when people perceive payment systems as efficient and convenient compared to traditional methods they are more likely to embrace them[6].

On the hand perceived ease of use relates to an individuals perception of how effortless it's to use a digital payment system. Factors such, as user interfaces and straightforward transaction procedures significantly influence the adoption of payment systems .[25], [26] People are often attracted to payment systems that're simple to understand and easy to use. Despite its popularity TAM has faced criticism TAM fails to consider factors, like differences, human characteristics and the complexities of technology. This suggests that further refinement and contextualization of the model is needed in technology acceptance scenarios, including those related to payment systems.

To put it simply the Technology Acceptance Model presents a framework that helps us understand how people adopt payment systems. By exploring factors like perceived usefulness perceived ease of use, social impact and facilitating conditions the Technology Acceptance Model (TAM) gives us insights, into how users accept and embrace payment technologies. These insights can guide us in designing and implementing payment systems that meet user demands and expectations effectively.

Diffusion of Innovation Theory

The theory of Diffusion of Innovations, proposed by Rogers in 1962, has played a pivotal role in comprehending the dissemination of novel concepts and technological advancements within social systems[27], [28]. The idea posits that the adoption rate of an innovation is influenced by five primary factors: relative advantage, compatibility, complexity, trialability, and observability [29], [30]. Relative advantage is a concept that pertains to the extent to which an invention is seen to be superior to the existing alternatives it replaces [30]. Within the realm of digital payment systems, previous research has demonstrated that the perceived benefits of digital payments, such as convenience and speed, play a substantial role in influencing the rate at which they are adopted [31].

Compatibility, as a significant factor in the adoption process, pertains to the degree to which an innovation is viewed as congruent with prevailing values, prior experiences, and existing demands. The degree of compatibility between digital payment systems and individuals' lifestyle and established financial practises significantly influences their inclination to embrace these systems [30], [31]. The adoption of an innovation is influenced by its level of complexity, which refers to the degree of difficulty associated with comprehending and utilising it. There is a positive correlation between the adoption of digital payment systems and their simplicity and user-friendliness [1], [2].

The factors of trialability, which refers to the capacity to conduct experiments with an innovation prior to making a commitment, and observability, which pertains to the visibility of the outcomes of the innovation, have also been identified as influential in determining the rates of adoption. The Diffusion of Innovations theory has been criticism for its primary focus on the individual adoption process, potentially neglecting the significant impact of social and contextual elements on the diffusion of an innovation [32]. This implies that the theory could potentially be enhanced by its integration with other models or frameworks that take into account these issues.

In summary, the Diffusion of Innovations theory offers a thorough conceptual framework for comprehending the process by which digital payment systems are adopted. The theory provides useful insights into the dissemination process of digital payments by taking into account characteristics such as relative advantage, compatibility, complexity, trialability, and observability. These insights have the potential to inform policy formation and strategy creation aimed at increasing the adoption of digital payment methods.

2. METHOD

The methodology employed in this study is based on a thorough examination of existing literature, providing a comprehensive framework for comprehending the shift from cash-based transactions to

digital payments, with a specific focus on the utilisation of GCash in the context of the Philippines. This approach was selected based on the wide range of scholarly material pertaining to the subject, which facilitated a comprehensive comprehension of the various dimensions associated with the adoption of digital payment methods.

The literature review procedure's initial stage entailed identifying pertinent sources. A variety of databases, such as Google Scholar, JSTOR, and online databases, were employed to collect a diverse array of literature about digital payments, GCash, and the financial landscape of the Philippines. The inquiry encompassed a range of topics, encompassing but not restricted to "digital payments", "GCash", "financial technology in the Philippines", and "Technology Acceptance Model".

Subsequently, a meticulous examination of the compiled literature was conducted. The evaluation process involved assessing the relevance, source credibility, and contribution to the comprehension of digital payment acceptance for each literary work [33]–[35]. The procedure as mentioned earlier facilitated the identification of significant topics, including the factors that drive and hinder the adoption of digital payment methods, the role played by GCash in this context, and the theoretical frameworks that may be applied to analyse this phenomena.

Upon the identification of the important topics, a meticulous examination and synthesis were conducted to yield a comprehensive comprehension of the digital payment transformation in the Philippines. The analysis provided the foundation for the future sections of the article, including the discussion and implications. Considerable emphasis was placed on the examination of divergent perspectives and deficiencies within the current body of scholarly work, as these domains can yield valuable perspectives and avenues for subsequent investigation.

Finally, the literature review was conducted in a methodical and transparent manner in order to guarantee the ability to replicate the study and confirm its validity. The methodology employed in this study involved a comprehensive explanation of the procedures for source selection, data extraction, and analysis. Moreover, all sources utilised in this research were duly acknowledged through suitable citation. The rigorous and complete study of the digital payment transition in the Philippines was ensured through the meticulous strategy taken in conducting the literature review.

3. RESULT AND DISCUSSION

GCash Adoption by Gen Z

GCash, a prominent mobile wallet in the Philippines, has shown substantial uptake among Generation Z, referring to individuals born from the mid-to-late 1990s to the early 2010s. There are other elements that contribute to this prevailing pattern, encompassing technological proficiency, ease, and a transition towards digital-oriented ways of living. Generation Z is frequently characterised as individuals that are highly proficient in using digital technology, as they have been exposed to the internet and digital tools from an early age. The level of comfort with technology exhibited by individuals is positively correlated with their inclination to adopt and utilise digital financial systems such as GCash. The adoption of the GCash digital payment system has been assisted by the user-friendly design of its app, which aligns with the prevalent use of smartphones among Generation Z.

The popularity of GCash among Generation Z is further influenced by the factor of convenience. The platform facilitates a diverse array of transactions, encompassing activities such as money transfers, bill payments, purchasing of mobile phone credits, and movie ticket reservations, all inside a single application. This is consistent with the inclination of Generation Z towards expeditious and effective resolutions that cater to their dynamic and rapid lifestyles.

The overwhelming adoption of GCash among Generation Z is further facilitated by its integration with popular social media platforms and e-commerce sites. The capacity to engage in financial transactions directly on platforms like as Facebook, Instagram, Lazada, and Shopee aligns with the preferences of Generation Z for streamlined digital experiences [36]–[42]. Additionally, GCash offers a range of unique features, including GSave, GInvest, and GCredit, which enable Generation Z to conveniently access financial services that were historically challenging for younger individuals to obtain. These characteristics not only facilitate the development of financial literacy but also enable Generation Z to assume agency over their financial prospects [12], [13], [31].

The digital transformation among Generation Z has been expedited by the sociocultural changes resulting from the COVID-19 epidemic. The increasing demand for contactless transactions, along with the growing prevalence of online shopping and digital services, has rendered digital wallets such as GCash

indispensable, transforming them from mere conveniences into essential tools. Therefore, it is anticipated that GCash will maintain its influence and experience further expansion within the Gen Z demographic in the foreseeable future. The shift from conventional mobile banking and credit card services to mobile wallets such as GCash is propelled by various factors. The aforementioned factors encompass ease, accessibility, and a diverse array of services.

One of the primary advantages inherent in mobile wallets such as GCash is their inherent convenience. Individuals have the ability to engage in a diverse range of financial activities, encompassing tasks such as transferring funds, settling payments, and acquiring products and services, all through the utilisation of a singular application. This feature obviates the necessity of accessing numerous websites or applications, hence enhancing the expediency and efficacy of financial operations. On the other hand, mobile banking and credit card services provide digital transaction capabilities; nonetheless, they frequently necessitate customers to traverse across many platforms and undertake multiple procedural stages.

The adoption of mobile wallets is being propelled by the element of accessibility. In the context of the Philippines, where a considerable proportion of the populace lacks access to formal banking services, mobile wallets such as GCash offer a viable and convenient substitute [1], [2], [43]. Individuals who lack access to traditional banking services or credit cards can conveniently establish a GCash account by solely utilising their mobile number, hence facilitating their inclusion in the digital economy. Mobile wallets provide a more extensive array of services in comparison to conventional mobile banking and credit card services. For example, GCash provides a range of new functionalities, including GSave, which enables users to create a savings account, GInvest, which allows users to invest their funds, and GCredit, which provides users with a credit line. These characteristics afford users convenient entry to financial services, hence fostering the advancement of financial inclusion and literacy.

The appeal of mobile wallets is further enhanced by their integration with widely used e-commerce platforms and social media sites. Consumers have the ability to engage in transactions directly on these platforms, thereby facilitating a smooth digital experience that is in line with the changing patterns of consumer behaviour. The digital transformation has been expedited by the COVID-19 pandemic, leading to significant societal changes. The increasing demand for contactless transactions, along with the growing prevalence of online shopping and digital services, has transformed mobile wallets from a mere convenience to an essential requirement. Therefore, the transition from mobile banking and credit card services to mobile wallets such as GCash will persist in the foreseeable future.

Future of Digital Payments on the Philippines

Over the course of the upcoming three years, digital payment services in the Philippines are anticipated to see substantial expansion and alteration, propelled by breakthroughs in technology, legislative backing, and shifts in customer behaviour. Initially, it is anticipated that there will be a surge in the utilisation of digital payment methods among the Filipino population. With the ongoing rise in smartphone penetration and internet accessibility, a larger portion of the population will possess the necessary resources to engage in the use of digital payment systems. The COVID-19 pandemic has precipitated an expedited transition towards digital platforms, as an increasing number of consumers and businesses are acknowledging the advantages of digital transactions in terms of ease and safety.

Furthermore, it is anticipated that there would be an expansion in the array of services provided by digital payment systems. At now, platforms such as GCash provide a diverse array of services encompassing money transfer, bill settlement, e-commerce, as well as financial offerings such as savings and investing options. In subsequent periods, it is plausible that there will be an integration of more advanced functionalities, such as insurance and loan provisions, thereby enhancing the advancement of financial inclusion and literacy throughout the nation.

Furthermore, there is an anticipated deepening of the integration of digital payments with other digital platforms. One potential development could be an increase in collaborations between digital payment systems and various entities such as e-commerce sites, social media platforms, and online service providers. This functionality would empower consumers to do transactions directly within these platforms, hence facilitating a streamlined digital experience. Furthermore, it is anticipated that there would be an enhancement in regulatory backing for digital payment systems. The promotion of digital payments has been vigorously pursued by the Philippine government through the implementation of the National Retail Payment System (NRPS) framework. In subsequent periods, it is plausible that an increase in policies and initiatives would be observed, with the objective of cultivating the expansion of the digital

payment ecosystem. These measures may include regulatory frameworks that facilitate interoperability among diverse platforms.

Furthermore, it is anticipated that there would be an escalation in rivalry within the digital payment market. With the expansion of the market, it is anticipated that an increasing number of participants, both domestic and international, will enter the industry. This phenomenon has the potential to expand the range of options available to consumers and stimulate innovation within the industry. In summary, the outlook for digital payment services in the Philippines appears to be favourable. Nevertheless, it is imperative to acknowledge and confront some obstacles in order to guarantee the long-term development of the industry. These problems encompass the ever-present cybersecurity dangers as well as the imperative task of extending financial services to the unbanked population.

4. CONCLUSION

In summary, the phenomenon of digital payment systems, specifically GCash, being adopted and diffused in the Philippines, reflects the global trend towards cashless economies. The transformation has been driven by various factors, including the proficiency in technology, the need for convenience, and the adoption of digital lifestyles, especially among the Generation Z demographic. The transition from conventional mobile banking and credit card services to mobile wallets has been propelled by heightened accessibility, a diverse array of services, and seamless connectivity with other digital platforms. In anticipation of forthcoming developments, it is anticipated that the digital payment services sector in the Philippines would persistently undergo transformation. The sector is expected to be influenced by several factors in the upcoming three years, including increased usage, expanded offerings, enhanced integration with other platforms, heightened regulatory backing, and intensified rivalry. Nevertheless, it is imperative to acknowledge and confront obstacles such as cybersecurity vulnerabilities and the inclusion of individuals without access to traditional banking services in order to guarantee long-term and stable expansion. The ongoing transformation of the Filipino financial landscape by digital payment systems necessitates a persistent analysis and comprehension of this phenomenon by policymakers, enterprises, and consumers. Financial operators are advised to engage in continual innovation and expand their portfolio of services in order to effectively address the changing demands and expectations of consumers. With the growing prevalence of digital lifestyles, individuals are increasingly seeking financial experiences that are more streamlined and interconnected. Hence, establishing alliances with e-commerce platforms, social media sites, and online service providers may prove to be a prudent strategic decision. Moreover, directing attention towards financial literacy initiatives could prove advantageous. Such programmes would not only serve to educate individuals about the advantages and potential drawbacks associated with digital payment systems, but also cultivate a sense of confidence and reliance in these platforms. Finally, it is imperative to establish strong cybersecurity protocols in order to safeguard user data and uphold user confidence, a critical aspect within the realm of digital payment systems.

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