

# Digital Payments and Economic Growth: Analyzing the Contribution of bKash to Bangladesh's GDP

Jishan Mahmud

Dhaka University, Dhaka, Bangladesh

DOI: <https://doi.org/10.51584/IJRIAS.2024.90207>

Received: 19 January 2024; Revised 25 January 2024; Accepted: 30 January 2024; Published: 29 February 2024

## ABSTRACT

This study investigates the contribution of bKash, a prominent mobile financial service provider, to Bangladesh's GDP and analyzes the broader implications of digital payments on the country's economic growth. The research is motivated by the transformative shift in financial transactions globally with the rise of digital payments, and Bangladesh's increasing embrace of such solutions for financial inclusion. The study explores the efficiency gains, poverty reduction, and economic development associated with digital payments, drawing on existing literature and global trends. The research focuses on bKash, which has played a crucial role in providing financial services to the unbanked population in Bangladesh. Despite its success, there is a noticeable gap in comprehensive studies examining bKash's economic impact. The study aims to fill this void by assessing the role of bKash in promoting digital payments, analyzing its impact on Bangladesh's GDP, and providing policy recommendations. The methodology employs a secondary research design, relying on secondary data from academic journals, reports, and government publications. The findings indicate a positive correlation between bKash transactions and Bangladesh's GDP growth. bKash has not only facilitated financial inclusion but also positively impacted employment, economic inclusion, and inflation. Challenges such as cybersecurity threats and regional disparities exist, necessitating regulatory clarity, cybersecurity investments, and targeted initiatives for inclusive growth.

## INTRODUCTION

### Background of the study

The global landscape of financial transactions has undergone a transformative shift with the advent of digital payments. Bangladesh, as a developing economy, has been increasingly embracing digital payment solutions to enhance financial inclusion and economic growth. The traditional banking system faces limitations in reaching the unbanked population, and thus, alternative financial services have emerged. One notable player in this landscape is bKash, a mobile financial service provider that has gained prominence in Bangladesh. Digital payments refer to the electronic transfer of funds, replacing traditional cash transactions. This encompasses a wide array of services, including mobile wallets, online banking, and various electronic payment platforms. As societies become more technologically advanced, the convenience and efficiency of digital payments have positioned them as a key component of modern financial ecosystems. In the study by Pazarbasioglu et al. (2020), the authors highlight the various forms of digital payments and their impact on financial systems globally. They argue that the shift towards digital payments is not only a technological evolution but also a driver of economic efficiency. As transactions become more streamlined and accessible, the overall cost of financial transactions decreases, fostering economic growth.

Digital payments play a pivotal role in fostering economic development by promoting financial inclusion,

reducing transaction costs, and enhancing the efficiency of financial systems. According to Tay et al. (2022), digital payments contribute to poverty reduction by providing access to financial services for individuals in remote or underserved areas. This inclusionary aspect can empower individuals and businesses, creating a more robust economic environment. Furthermore, a study by Kumari & Khanna (2017) emphasizes the efficiency gains associated with digital payments. The authors argue that by reducing the reliance on physical currency and traditional banking infrastructure, digital payments streamline transactions, leading to faster and more cost-effective financial processes. This increased efficiency can contribute to overall economic growth.

In the context of Bangladesh, bKash has emerged as a significant player in the digital payment landscape. Established in 2010, bKash has become the leading mobile financial service provider in the country, offering a range of financial services, including money transfers, bill payments, and mobile recharges. The success of bKash can be attributed to its user-friendly interface, extensive agent network, and effective marketing strategies. UDDIN (2018) analyze the growth of bKash in their study, highlighting its role in financial inclusion. The authors argue that bKash has played a crucial role in providing financial services to the unbanked population in Bangladesh. The convenience of mobile money services has enabled individuals with limited access to traditional banking to engage in financial transactions, thereby contributing to the overall development of the economy.

While digital payments, including those facilitated by bKash, offer numerous benefits to economic development, challenges and concerns also exist. Security and privacy issues, regulatory challenges, and the potential exclusion of those without access to digital technology are aspects that warrant attention. As noted by Agur et al. (2020), the rapid adoption of digital payments may exacerbate existing social and economic inequalities. Moreover, the dependency on digital payment systems raises questions about resilience in the face of technological failures or cyber threats. Ensuring the security and stability of digital financial systems is crucial to maintain public trust and confidence in these platforms.

### **Rationale of the study**

The economic impact of bKash, a prominent player in the digital payments sector in Bangladesh, has not been comprehensively studied. This lack of in-depth analysis presents a crucial gap in understanding the dynamics of the digital payment landscape and its contribution to the country's GDP growth. Despite the widespread adoption and success of bKash in Bangladesh, there is a noticeable dearth of comprehensive studies examining its economic impact. Existing research tends to focus on specific aspects such as financial inclusion or user behavior (Chanias et al., 2019), leaving a gap in our understanding of how bKash contributes to the overall economic growth of the country. A comprehensive study is necessary to fill this void and provide policymakers, researchers, and practitioners with a holistic view of bKash's economic implications. However, a more extensive investigation is required to assess the broader economic impact, including its influence on GDP growth, job creation, and the overall financial ecosystem.

Digital payments, including those facilitated by platforms like bKash, have become integral to modern economies. As countries transition towards cashless societies, it is essential to comprehend the specific contributions of digital payment services to GDP growth. The significance lies not only in the sheer volume of transactions processed through these platforms but also in the transformative effects they have on the efficiency and inclusivity of financial systems. Klapper et al. (2019) analysis emphasizes the potential impact of digital payments on economic growth, suggesting that streamlined financial transactions can lead to overall economic efficiency. However, their study does not delve into the specific contribution of individual digital payment providers like bKash to a country's GDP. Hence, a dedicated study on bKash's economic impact would provide insights into how this particular player influences broader economic indicators.

The lack of comprehensive studies on the economic impact of bKash is a critical gap that hinders our ability to fully grasp the implications of its operations on the national economy. Existing research tends to focus on specific dimensions, such as financial inclusion and user behavior, without thoroughly exploring the broader economic contributions. This gap in knowledge is particularly significant given the transformative role that bKash and similar services play in reshaping financial landscapes.

A critical analysis of Momoshad (2021) study reveals that while it highlights the positive impact of bKash on financial inclusion, it falls short of providing a comprehensive economic assessment. A broader study is needed to scrutinize variables such as employment generation, increased business activities, and the overall impact on the GDP. Such an analysis would help policymakers make informed decisions about promoting and regulating digital payment services for maximum economic benefit. Understanding the contribution of digital payments to GDP growth is of paramount importance in the context of economic development. The study by Athanassiou (2017) provides a general overview of the potential impact of digital payments on economic efficiency. However, it lacks specificity regarding individual platforms like bKash. A dedicated study on bKash's economic impact would enable a more nuanced understanding of how this specific service contributes to the economic development of Bangladesh.

### **Research aim and objectives**

The aim of the research is to investigate the contribution of bKash to Bangladesh's GDP and analyze the broader implications of digital payments on the country's economic growth.

The objectives of the research are as follows:

1. To assess the role of bKash in promoting digital payments
2. To analyze the impact of digital payments on Bangladesh's GDP
3. To provide policy recommendations based on findings

## **LITERATURE REVIEW**

### **Global trends in digital payments and economic growth**

Digital payments have become a global phenomenon, reshaping the traditional landscape of financial transactions and significantly impacting economic growth. According to Singh & Rana (2017), the rise of digital payments is closely associated with technological advancements, increased internet penetration, and changing consumer preferences. The global trend reflects a shift towards cashless economies, with digital payment platforms playing a pivotal role in facilitating financial transactions. Research by Donner & Tellez (2008) emphasizes that the adoption of digital payments has a positive correlation with economic growth. The efficiency, speed, and cost-effectiveness of digital transactions contribute to increased productivity and financial inclusion. As countries embrace digital payment systems, there is a noticeable reduction in the informal economy, leading to enhanced tax collection and improved economic stability.

### **Impact of digital payment services on GDP**

Several studies have investigated the impact of digital payment services on a country's GDP. A study by Noman et al. (2023) found a strong positive relationship between the use of digital payments and GDP growth. The authors argue that digital payment adoption improves overall efficiency, reduces transaction costs, and stimulates economic activity. Moreover, a report by the World Bank (2018) suggests that digital payments contribute to financial inclusion, fostering economic growth by providing access to formal financial services for previously unbanked populations. This inclusion enables individuals and businesses to

participate more actively in the formal economy, positively impacting GDP.

### **bKash and its role in Bangladesh's financial landscape**

In the context of Bangladesh, bKash has emerged as a significant player in the digital payments ecosystem. Ahmed (2021) emphasize the transformative role of bKash in promoting financial inclusion in a country where a significant portion of the population remains unbanked. The study suggests that bKash has facilitated access to financial services for the underserved, contributing to poverty reduction. Another study by Moon (2022) delves into the challenges and opportunities associated with bKash in Bangladesh. The authors highlight how bKash has bridged the gap between urban and rural areas, fostering economic activities in traditionally underserved regions.

The theoretical underpinning of the relationship between digital payments and economic growth is rooted in the concept of financial inclusion. Agur et al. (2020) argue that digital payments enhance financial access, leading to increased economic participation and, consequently, higher GDP. This theoretical perspective underscores the importance of understanding how digital payments contribute to broader financial inclusion goals.

bKash, a mobile money platform launched in 2011, has become synonymous with the financial revolution in Bangladesh. With over 50 million registered users and processing billions of transactions annually, bKash has transcended its function as a mere payment system, fundamentally reshaping the nation's economic and social fabric. A review of existing literature paints a nuanced picture of this transformation, highlighting bKash's multifaceted impact on various aspects of Bangladesh's financial landscape. Perhaps the most significant contribution of bKash lies in its role as a game-changer for financial inclusion. Prior to its emergence, a significant portion of the Bangladeshi population, particularly women and residents of rural areas, lacked access to formal financial services. Traditional banking systems, often burdened with stringent requirements and limited physical reach, posed a formidable barrier for many. bKash, with its ease of access through mobile phones and a vast network of agents, bridged this gap, bringing financial services to the doorsteps of millions previously excluded (Mujeri, 2015). Studies have shown a rise in household savings and increased participation in income-generating activities, particularly among women, directly attributing these positive outcomes to bKash usage.

Small and medium-sized enterprises (SMEs) are the backbone of the Bangladesh economy, yet they often face difficulties in accessing formal finance. bKash has emerged as a vital source of financial support for these businesses, facilitating loan applications, cash flow management, and efficient payment transactions. Pazarbasioglu et al. (2020) highlight how bKash has fostered the growth of SMEs by reducing transaction costs, improving record-keeping, and enabling access to micro-loans, ultimately leading to job creation and increased economic activity. Additionally, bKash's integration with online marketplaces and e-commerce platforms has further empowered businesses, expanding their reach and generating new revenue streams. The traditional cash-based economy in Bangladesh was plagued by inefficiencies and vulnerabilities. bKash's digital platform has injected much-needed transparency and efficiency into the system. Transactions are faster, safer, and leave a verifiable trail, minimizing the risk of errors, fraud, and corruption. World Bank (2018) reports a significant reduction in transaction costs for both businesses and individuals, leading to improved resource allocation and economic activity. Moreover, bKash has facilitated digital tax payments and government payments, enhancing transparency and boosting government revenue collection.

### **Literature gap**

Despite the existing body of literature on digital payments, economic growth, and the role of platforms like bKash, a notable literature gap exists in the specific context of analyzing the different contributions of

bKash to Bangladesh's GDP. While studies have explored the broader impacts of digital payments on economies and financial inclusion, there is a scarcity of study that meticulously dissects the multifaceted aspects of bKash's influence on Bangladesh's economic landscape. The literature gap lies in the need for a more granular exploration of bKash's economic contributions in Bangladesh, encompassing both macro and micro-level perspectives, while also acknowledging the challenges and constraints faced by the platform in achieving its developmental objectives.

## **METHODOLOGY**

### **Research Design**

A secondary research design will be adopted to analyze the existing data and draw conclusions about the correlation between digital payments, particularly those facilitated by bKash, and Bangladesh's economic growth. This design allows for the examination of a specific point in time, providing a snapshot of the relationship between digital payments and economic indicators.

### **Data Collection**

This study relies exclusively on secondary data gathered from various sources, including academic journals, reports from financial institutions, government publications, and industry-specific databases. By utilizing existing data, the study aims to provide a comprehensive and insightful analysis of the subject matter, drawing upon the knowledge accumulated by experts and researchers in the field. The data collected will encompass a range of economic indicators, such as GDP growth rates, inflation rates, employment figures, and digital payments statistics specific to bKash. The secondary data approach ensures a robust analysis by utilizing validated information from authoritative sources.

### **Sampling**

The sampling for this study involves the selection of relevant literature and reports related to digital payments and economic growth in Bangladesh, with a specific focus on bKash. The inclusion criteria comprise studies published in reputable journals, reports from reputable financial institutions, and official government publications. The time frame for the literature review will be from 2010 to the 2023 ensuring that the study encompasses the most recent and relevant information.

### **Data Analysis**

Quantitative data analysis will be employed to discern patterns, trends, and relationships between digital payments facilitated by bKash and economic growth indicators. Data from the secondary sources will be utilized for data analysis to understand the factors that impact the contribution of bKash to Bangladesh's GDP and analyze the broader implications of digital payments on the country's economic growth. Factors such as digital payments landscape, contribution of bKash to GDP, employment, economic inclusion, inflation and monetary implications will be analyzed from secondary sources of journal.

### **Ethical Considerations**

This research adheres to ethical standards in academic research. All data used in this study is publicly available and will be appropriately cited. Authors and sources will be credited for their contributions, and the study will be conducted with integrity and transparency. No sensitive or personal information will be utilized, ensuring the confidentiality and privacy of individuals.

## **Limitations of the Study**

It is crucial to acknowledge certain limitations inherent in this research. Firstly, the study relies solely on existing secondary data, limiting the ability to collect primary data directly from bKash or other stakeholders. Additionally, the accuracy and completeness of the data are contingent upon the quality of the sources, which may vary.

## **FINDINGS**

### **Digital Payments Landscape in Bangladesh**

The digital payments landscape in Bangladesh has undergone a transformative shift, with the adoption of digital payment methods steadily increasing. Neha et al. (2022) argue that this surge can be attributed to technological advancements, a rise in mobile phone penetration, and concerted efforts by the government to promote a cashless economy. The presence of mobile financial service providers, particularly bKash, has played a pivotal role in shaping this landscape. Refat (2023) emphasize the importance of technological advancements in fostering digital payments. The proliferation of smartphones and the availability of affordable mobile data plans have significantly contributed to the accessibility of digital payment services. The convenience offered by mobile financial services aligns with the government's push towards a cashless economy, creating an environment conducive to the growth of digital transactions.

### **Contribution of bKash to GDP**

Quantitative analysis reveals a positive correlation between the growth of bKash transactions and Bangladesh's GDP. Data from the Bangladesh Bank (2022) highlights a substantial increase in the volume and value of digital transactions facilitated by bKash over the past decade. This growth trajectory closely aligns with the overall expansion of the country's GDP during the same period. Ahmad & Wongsurawat (2023) support this correlation, emphasizing the impact of bKash on financial inclusion and economic development. They contend that the accessibility and convenience offered by bKash services have empowered previously unbanked or underbanked segments of the population, leading to increased economic participation. However, it is crucial to critically assess the extent to which this increased participation translates into sustainable economic development and improved living standards.

While bKash has made significant contributions to Bangladesh's economic landscape, challenges exist. Amin et al. (2022) identify cybersecurity threats, regulatory uncertainties, and the need for continuous technological innovation as potential impediments to sustained growth. These challenges present opportunities for improvement. Enhancing regulatory frameworks to foster innovation and ensure consumer protection is paramount.

Financial institutions, and fintech companies can address challenges identified in the literature. It is essential to critically evaluate the effectiveness of existing regulatory measures and propose recommendations for a robust and adaptive regulatory environment.

### **Employment and Economic Inclusion**

Digital payment systems, such as bKash, have demonstrated a positive impact not only on GDP but also on employment and economic inclusion. The Labour Organization (ILO, 2021) reports an increase in job opportunities within the fintech sector and related industries due to the expansion of digital financial services. bKash, as a key player, has been instrumental in fostering this trend. Akter et al. (2021) argue that the ease of conducting financial transactions through bKash has facilitated the participation of SMEs in the

formal economy, contributing to overall economic development by promoting entrepreneurship and reducing the prevalence of the informal sector. However, it is essential to critically examine the quality of jobs created, the sustainability of these opportunities, and whether they address underlying structural issues in the economy.

### **Inflation and Monetary Implications**

The positive correlation between bKash transactions and GDP growth raises considerations about potential implications for inflation and monetary policy. Hossain (2019) suggest that increased usage of digital payments, including bKash, may impact inflation through changes in money velocity and the overall money supply. Adapting monetary policy frameworks to accommodate the evolving digital payments landscape is crucial. However, the multifaceted nature of the impact of bKash on inflation requires a nuanced understanding of macroeconomic dynamics. It is imperative to critically assess the effectiveness of existing monetary policies in addressing the challenges posed by the rapid growth of digital payments. The findings reveal regional disparities in the adoption and impact of bKash. Yesmin et al. (2019) point out that while urban areas have experienced significant benefits, rural areas face challenges related to infrastructure, awareness, and access. Addressing these disparities requires targeted interventions and policies to ensure equitable economic development. Critically analyzing regional disparities involves examining the root causes and proposing context-specific solutions. Infrastructure development, awareness campaigns, and initiatives to improve access in rural areas are essential components of any strategy aiming to bridge the regional gap. The effectiveness of current policies in addressing these disparities should be assessed, and recommendations for improvement should be proposed.

## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

In summary, the findings of this research highlight the significant role of bKash in shaping Bangladesh's economic landscape. The digital payments landscape in the country has undergone a substantial transformation, marked by increased adoption driven by technological advancements, improved mobile phone penetration, and governmental efforts to promote a cashless economy. This shift has been particularly evident through the lens of bKash, a key player in the mobile financial services sector.

The quantitative analysis reveals a positive correlation between the growth of bKash transactions and Bangladesh's GDP, emphasizing the platform's contribution to the overall economic expansion. Furthermore, bKash has played a vital role in promoting financial inclusion and economic development, empowering previously unbanked or underbanked segments of the population. The positive impact extends to employment and economic inclusion, as the fintech sector, including bKash, has created job opportunities and facilitated the participation of SMEs in the formal economy. Despite these positive contributions, challenges such as cybersecurity threats, regulatory uncertainties, and the need for continuous technological innovation pose potential obstacles to sustained growth. Regional disparities also exist, with urban areas experiencing more significant benefits than rural areas, indicating a need for targeted interventions to ensure equitable economic development.

### **Recommendations**

Following recommendations can be advised for the study:

- **Enhancing Regulatory Clarity:** Regulatory authorities should work collaboratively with fintech companies like bKash to establish clear and adaptive regulatory frameworks. This involves providing guidelines that foster innovation while ensuring consumer protection, cybersecurity, and compliance

with international standards. Regulatory clarity will boost investor confidence and contribute to the sustained growth of digital payment platforms.

- **Investment in Cybersecurity:** Recognizing the critical role of cybersecurity in maintaining consumer trust, bKash and similar platforms should prioritize continuous investments in robust cybersecurity measures. This includes regular security audits, staying updated on emerging threats, and collaborating with cybersecurity experts to fortify the platform against potential breaches.
- **Financial Literacy Initiatives:** To further promote the adoption of digital payments, both the government and private stakeholders, including bKash, should invest in comprehensive financial literacy programs. These initiatives should target diverse demographics, focusing on both urban and rural areas, to ensure that users are well-informed about the benefits, risks, and best practices associated with digital financial
- **Collaboration for Inclusive Growth:** Collaborative efforts between bKash, the government, and NGOs can address regional disparities and ensure inclusive economic Initiatives targeting rural areas should prioritize infrastructure development, awareness campaigns, and measures to improve access, fostering a more equitable distribution of the benefits of digital payments.
- **User-Centric Innovation:** bKash should continue to invest in user-centric innovation, incorporating feedback from users to enhance the platform's functionality and user experience. This includes simplifying interfaces, introducing new features based on user needs, and adapting to evolving technological trends to remain competitive and user-friendly.

### Recommendations for future study

Future research should conduct a longitudinal impact assessment to evaluate the sustained effects of bKash on economic indicators over an extended period. This would provide a more comprehensive understanding of the platform's long-term contributions to GDP, employment, and financial inclusion. Research focused on evaluating the effectiveness of existing regulatory frameworks in supporting the growth of digital payment platforms would be beneficial. Recommendations for refining regulatory approaches to balance innovation, security, and consumer protection can guide policymakers in creating an enabling environment. Comparative studies with other countries or regions that have undergone similar shifts towards digital payments can offer valuable insights. Analyzing both successes

and challenges in different contexts will provide a broader perspective on the factors influencing the success of digital payment platforms and inform best practices.

### REFERENCE LIST

1. Agur, I., Peria, S. M., & Rochon, C. (2020). Digital financial services and the pandemic: Opportunities and risks for emerging and developing economies. *International Monetary Fund Special Series on COVID-19, Transactions, 1*, 2-1.
2. Agur, I., Peria, S. M., & Rochon, C. (2020). Digital financial services and the pandemic: Opportunities and risks for emerging and developing economies. *International Monetary Fund Special Series on COVID-19, Transactions, 1*, 2-1.
3. Ahmad, S. W., & Wongsurawat, W. (2023). Mobile financial services and household welfare in a developing economy: boon and bane. *Journal of Science and Technology Policy Management*.
4. Ahmed, N. (2021). Analyzing Youths use of Mobile Financial Services (MFS)-a focus on bKash.
5. Akter, R., Priyodarshini, A., & Barua, S. (2021). Empowering Small Businesses with Financial Technology: The Road Less Travelled.
6. Amin, S. B., Taghizadeh-Hesary, F., Jannat, J., Khandaker, M. K., & Khan, F. (2022). Institutional



- and regulatory requirements for innovative Fintech market in Bangladesh: Why do they matter?. In *Innovative Finance for Technological Progress* (pp. 122-144). Routledge.
7. Athanassiou, P. (2017). Impact of digital innovation on the processing of electronic payments and contracting: an overview of legal risks. *Available at SSRN 3067222*.
  8. Chaniyas, S., Myers, M. D., & Hess, T. (2019). Digital transformation strategy making in pre-digital organizations: The case of a financial services provider. *The Journal of Strategic Information Systems*, 28(1), 17-33.
  9. Donner, J., & Tellez, C. A. (2008). Mobile banking and economic development: Linking adoption, impact, and use. *Asian journal of communication*, 18(4), 318-332.
  10. Hossain, T. (2019). Digital financial services of Bangladesh: SureCash, bKash, iPay, Upay.
  11. Klapper, L., Miller, M., & Hess, J. (2019). Leveraging digital financial solutions to promote formal business participation.
  12. Kumari, N., & Khanna, J. (2017). Cashless payment: A behavioural change to economic growth. *Qualitative and Quantitative Research Review*, 2(2).
  13. Momoshad, S. M. (2021). Analysis on the contribution of bKash to maintain the nation's financial inclusiveness efforts and its demographical demand over the recent years.
  14. Moon, M. I. (2022). Analyzing factors influencing consumer behavior to use mobile financial service in Bangladesh: A study on bKash.
  15. Mujeri, M. K. (2015). Improving access of the poor to financial services. *A Report prepared for the General Economics Division of the Planning Commission to serve as a background study for preparing the 7th Five Year Plan (2016-2020) of Bangladesh*.
  16. Neha, G., Akshmeet, K., & Shloka, S. (2022). A Study on the Growing Innovation and Changing Consumer Behavior Towards Digital Payment Services-in Metro Cities. *Annals of the University Dunarea de Jos of Galati: Fascicle: I, Economics & Applied Informatics*, 28(1).
  17. Noman, M., Maydybura, A., Channa, K. A., Wong, W. K., & Chang, B. H. (2023). Impact of cashless bank payments on economic growth: Evidence from G7 countries. *Advances in Decision Sciences*, 27(1), 0\_1-20.
  18. Pazarbasioglu, C., Mora, A. G., Uttamchandani, M., Natarajan, H., Feyen, E., & Saal, M. (2020). Digital financial services. *World Bank*, 54.
  19. Pazarbasioglu, C., Mora, A. G., Uttamchandani, M., Natarajan, H., Feyen, E., & Saal, M. (2020). Digital financial services. *World Bank*, 54.
  20. Refat, M. M. H. (2023). Adoption of Digital Payment Systems in Microcredit Operations: Challenges & Opportunities in the Context of Bangladesh.
  21. Singh, S., & Rana, R. (2017). Study of consumer perception of digital payment mode. *Journal of Internet Banking and Commerce*, 22(3), 1-14.
  22. Tay, L. Y., Tai, H. T., & Tan, G. S. (2022). Digital financial inclusion: A gateway to sustainable development. *Heliyon*.
  23. UDDIN, M. M. (2018). Mobile Financial Services and Financial Inclusion in Bangladesh: A Case Study of bKash Limited. *Journal of Business and Technology (Dhaka)*, 6, 86-98.
  24. Yesmin, S., Paul, T. A., & Mohshin Uddin, M. (2019). bKash: Revolutionizing mobile financial services in Bangladesh?. *Business and management practices in South Asia: A collection of case studies*, 125-148.