



Co-funded by  
the European Union



## **Innovative solutions in payments.**

Azimova M. Iroda and Fazlitdinova R. Nozima

Corporate Governance, Tashkent State University of Economics

BDA-88: Bank and audit

Dr. Muradova Ludmila

March 24, 2023

## Contents

I. Introduction .....	3
Background and significance of the research topic .....	<b>Ошибка! Закладка не определена.</b>
Research problem and questions.....	3
Goals and hypotheses.....	3
Scope and limitations.....	3
Methodology and data sources .....	4
II. Innovative payment solutions in the EU and Uzbekistan .....	4
Overview of existing payment systems in the EU and Uzbekistan.....	4
Analysis of innovative payment solutions in the EU and Uzbekistan.....	6
Comparison of innovative payment solutions in the EU and Uzbekistan .....	7
III. Factors influencing the implementation of innovative solutions in the field of payments .....	9
Technological and infrastructure factors .....	9
Legal and Regulatory Considerations.....	10
Socio-economic and cultural factors.....	10
IV. Case Study: EU Experience in Innovative Payment Solutions .....	11
Overview of innovative EU payment solutions .....	11
Factors contributing to the success of innovative EU payment solutions .....	11
Lessons learned from the EU experience.....	11
V. Adapting innovative EU solutions in the field of payments in Uzbekistan.....	12
Analysis of the possibility of introducing innovative EU payment solutions in Uzbekistan ....	12
Coping strategies.....	13
The role of stakeholders in the implementation of innovative payment solutions .....	13
VI. Conclusion.....	14
Summary of research findings .....	14
Implications and recommendations .....	14
Limitations and directions for future research.....	15
References .....	15

## **I. Introduction**

### **Research problem and questions**

Despite the potential benefits of innovative payment solutions, their adoption and implementation remain low in many parts of the world. There are several barriers to the adoption of innovative payment solutions, including lack of awareness, trust issues, and regulatory challenges.

Research Problem: What are the barriers to the adoption of innovative payment solutions, and how can they be overcome?

Research Questions:

1. What are the different types of innovative payment solutions, and how do they work?
2. What are the benefits of adopting innovative payment solutions for consumers and businesses?
3. What are the barriers to the adoption of innovative payment solutions, and how can they be overcome?
4. What are the regulatory challenges that hinder the adoption of innovative payment solutions, and how can they be addressed?

### **Goals and hypotheses**

The goal of this research is to identify the barriers to the adoption of innovative payment solutions and propose strategies to overcome them. The research also aims to provide insights into the benefits of adopting innovative payment solutions for consumers and businesses, as well as the regulatory challenges that hinder their adoption.

The hypotheses for this research are as follows:

1. Innovative payment solutions offer significant benefits to consumers and businesses, including increased convenience, reduced costs, and improved security.
2. Lack of awareness, trust issues, and regulatory challenges are the main barriers to the adoption of innovative payment solutions.
3. Strategies such as education and awareness campaigns, collaboration between stakeholders, and regulatory reforms can overcome the barriers to the adoption of innovative payment solutions.

### **Scope and limitations**

The scope of this research is global, and it covers different types of innovative payment solutions, including mobile payments, contactless payments, digital wallets, and blockchain-based payments. The research focuses on identifying the barriers to the adoption of innovative payment solutions and proposing strategies to overcome them.

The limitations of this research include the availability and reliability of data, the complexity of the payment ecosystem, and the dynamic nature of the payments industry.

### **Methodology and data sources**

This research will adopt a mixed-methods research approach, combining qualitative and quantitative data collection and analysis methods. The research will involve a review of existing literature on innovative payment solutions and their adoption, as well as case studies of countries and businesses that have successfully adopted innovative payment solutions.

The research will also involve primary data collection through surveys and interviews with consumers, businesses, and payment service providers. The data collected will be analyzed using descriptive and inferential statistics, content analysis, and thematic analysis.

The data sources for this research will include academic journals.

## **II. Innovative payment solutions in the EU and Uzbekistan**

### **Overview of existing payment systems in the EU and Uzbekistan**

Payment systems have become an integral part of daily life, and the European Union (EU) has a plethora of payment options available to its citizens in comparison with developing country like Republic of Uzbekistan. These payment systems range from traditional cash-based transactions to cashless digital transactions, and they have different features, levels of security, and convenience.

*Cash-based payment systems* are the traditional way of making payments, and they involve the use of physical currency notes and coins. These payment systems are still widely used both in the EU and Uzbekistan, especially for small-value transactions. Cash-based payment systems have the advantage of anonymity, which means that the payer and payee do not need to provide personal information or identification to complete a transaction. This makes cash-based payments ideal for people who value their privacy or who do not have access to other payment systems. Another advantage of cash-based payment systems is that they are easy to use and widely accepted. Cash is a universal medium of exchange, and it is accepted almost everywhere, including in remote areas where electronic payment systems may not be available.

One of the main disadvantages of cash-based payment systems is that they are prone to theft and loss. If a person loses their cash or is robbed, they may not be able to recover it. This is unlike digital payment systems, where users can block their accounts or cancel transactions in case of theft or loss. Cash-based payment systems are also inconvenient for large transactions, and they may require a lot of cash to complete. This can be a security risk, especially when carrying large amounts of cash.

*Cheque-based payment systems* involve the use of written orders to transfer money from one account to another. These payment systems are still used in the EU, but they are becoming less popular due to the rise of digital payment systems. Cheque-based payment systems are also convenient for people who do not have access to electronic payment systems or who prefer not to use cash. They are widely accepted and can be used to pay bills, rent, and other expenses.

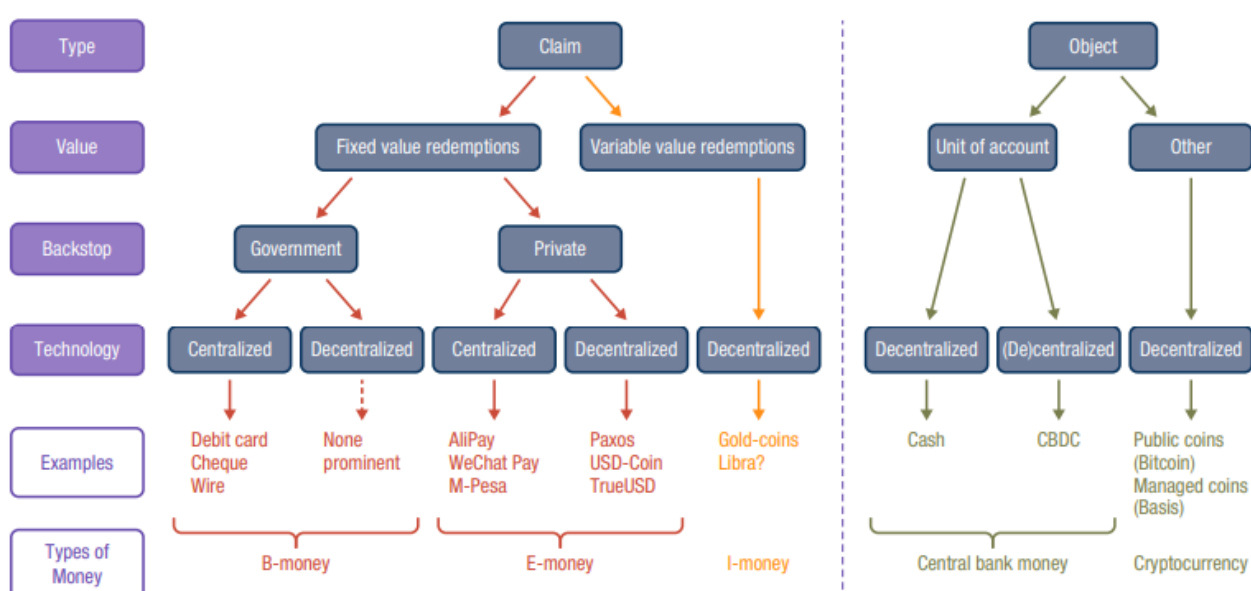
One of the main disadvantages of cheque-based payment systems is that they are slow and can take several days to clear. This can be a problem, especially when urgent payments are required. Cheque-based payment systems are also prone to fraud and forgery. It is easy to forge a cheque or alter the details, which can result in losses for both the payer and payee.

*Electronic payment systems* involve the use of digital technologies to transfer money from one account to another. These payment systems are becoming increasingly popular in the EU, and they are available in various forms, including credit and debit cards, bank transfers, and mobile payments. Electronic payment systems have the advantage of being fast, convenient, and secure. Transactions can be completed in seconds, and users can access their accounts from anywhere, at any time.

Electronic payment systems are also secure and traceable. They use encryption and other security measures to protect user data and prevent fraud. But in terms of speed and traceability they give in to digital currencies which are still in the stage of development.

Currently, there are several types of electronic money, and following chart helps to distinguish between them:

**Figure 1. Money Trees**



Source: IMF Staff.

Note: CBDC = central bank digital currency.

In Uzbekistan, cash, virtual and local currency usage prevails. The most used services in the republic of Uzbekistan are *Apelsin*, *Click* and *PayMe*. The main card issuers are *UZCARD* and *HUMO*.

In the EU 19 of 28 member states, and the *SEPA* payment integration initiative has become an established pan-European method for transferring funds.

Despite debit and credit cards retaining their position as the most popular online payment methods in Europe, the market continues diversifying in terms of local alternative payment systems. *Sofort* and *Giropay* are popular in Germany, *iDEAL* is favored in the Benelux region, and *EPS* is used frequently in Austria. Merchants hoping to expand their operations into new markets must familiarize themselves with the extensive payment options preferred by local audiences. Most of the transactions in EU are performed through e-wallet PayPal.

### **Analysis of innovative payment solutions in the EU and Uzbekistan**

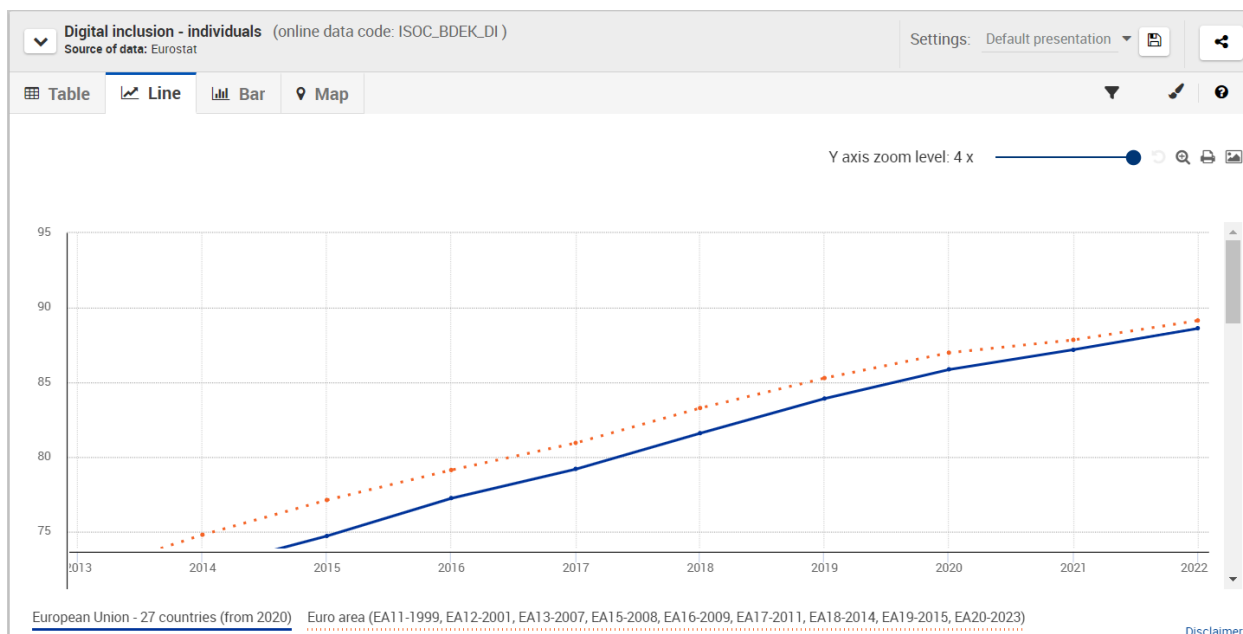
Innovative payment solutions have been a hot topic for many years. With the development of technology, traditional payment methods become obsolete and are replaced by new, more efficient ones. This analysis will focus on innovative payment solutions in the European Union (EU) and Uzbekistan.

The EU is home to some of the most advanced payment systems in the world. One of the most innovative is the Single Euro Payments Area (SEPA). SEPA is an initiative aimed at creating a single market for euro payments by harmonizing rules and payment standards across the EU. This has made cross-border payments within the EU much easier and more efficient.

Another innovative solution in the EU is contactless payments. Contactless payments have been around for a while, but they have become much more popular in recent years. Almost all major EU banks offer contactless payments via mobile devices or contactless cards. This has made payments much faster and more convenient for consumers, and has also helped reduce the use of cash.

Mobile payments are another innovative solution that is gaining popularity in the EU. Many banks and financial institutions now offer mobile payment solutions such as Apple Pay and Google Pay. These solutions allow consumers to make payments using mobile phones, which is often more convenient than using a physical card.

Uzbekistan is a rapidly developing country that has experienced significant economic growth in recent years. However, its payment systems still lag behind those of the EU. The country is still heavily dependent on cash and many people do not have access to traditional banking services. In comparison, Uzbekistan have 70.1% of population that has access to internet. In Europe, this rank is 93%.



To address this issue, the government of Uzbekistan has launched several initiatives to promote digital payments. In 2019, the Central Bank of Uzbekistan launched a digital payment platform called *PayNet*. This platform allows users to make payments using their mobile phones or computers and is available to anyone with a bank account in Uzbekistan.

Another innovative solution in Uzbekistan is the introduction of biometric authentication for payments. In 2019, the National Bank of Uzbekistan introduced a system that allows users to make payments using fingerprints. This system is currently being tested in several banks in Uzbekistan and is expected to become more widely available in the near future.

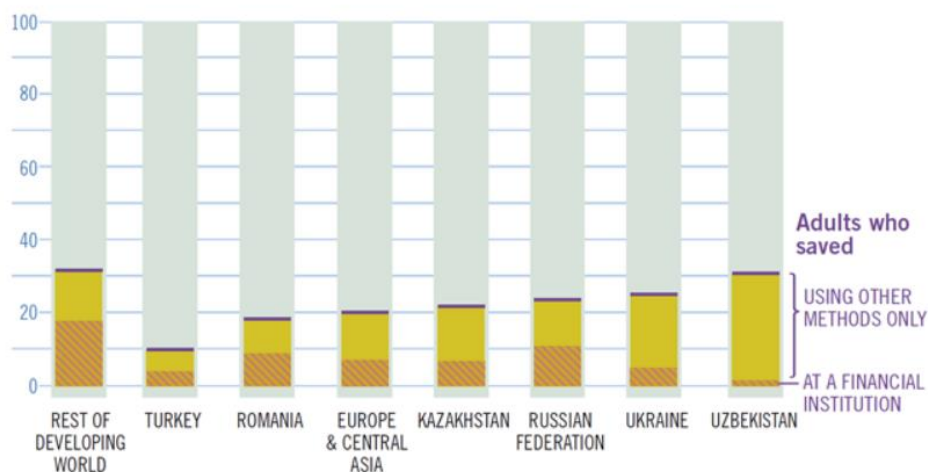
### Comparison of innovative payment solutions in the EU and Uzbekistan

Payment solutions in the EU are highly developed, with a wide range of options available to consumers and businesses. The EU has created a common payment system called the Single Euro Payments Area (SEPA), which allows cross-border payments in euros to be made just as easily as domestic payments. This has greatly simplified payment processing for businesses operating in multiple EU countries. In addition, the EU is at the forefront of developing innovative payment solutions such as contactless payments, mobile payments and digital wallets. These solutions provide greater convenience and security for consumers, as well as faster payment processing times.

In Uzbekistan, payment solutions are still in the early stages of development. However, some changes have recently taken place in the payment space of Uzbekistan. In 2019, the government launched a new payment system called PayMe, which allows online payments and money transfers using a mobile phone. This made it easier for consumers to make payments

Figure 2: Uzbekistanis save as much as the rest of the developing world and more than any other populous country in ECA—but too little at financial institutions

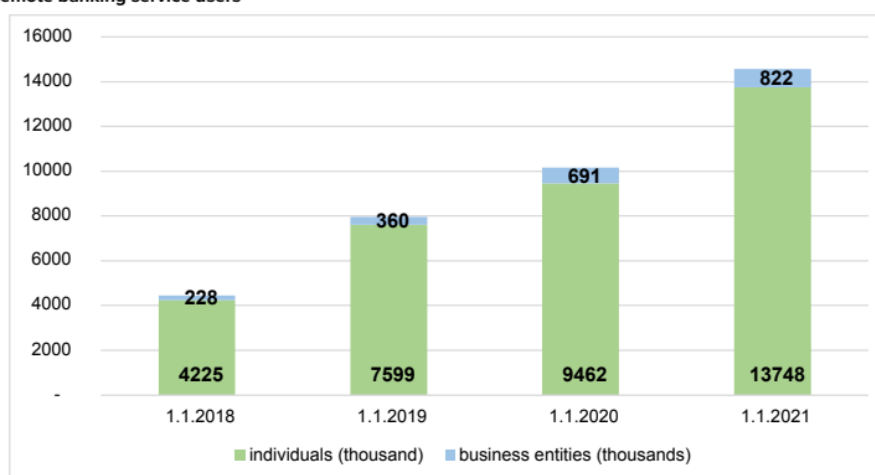
(Formal and informal saving, Adults saving any money in the past year in %)  
Source: The Global Findex database: *financial inclusion in Europe and Central Asia* (En). Findex notes no. 6. World Bank Group.



Note: Country-level data are shown for the 6 economies with the largest adult population.

without having to open a bank account. Uzbekistan almost doubled the share of adults with bank accounts from 23 percent in 2011 to 44 percent in 2021, according to Global Findex. The number of debit cards in circulation rose almost 60 percent from 19 million in 2017 to 30 million by July 2022. At the same time, the number of users of the remote banking system grew sixfold — reaching about 25 million users. However, Uzbekistan is still in the early stages of developing its payment infrastructure.

Figure 4: Remote banking service users

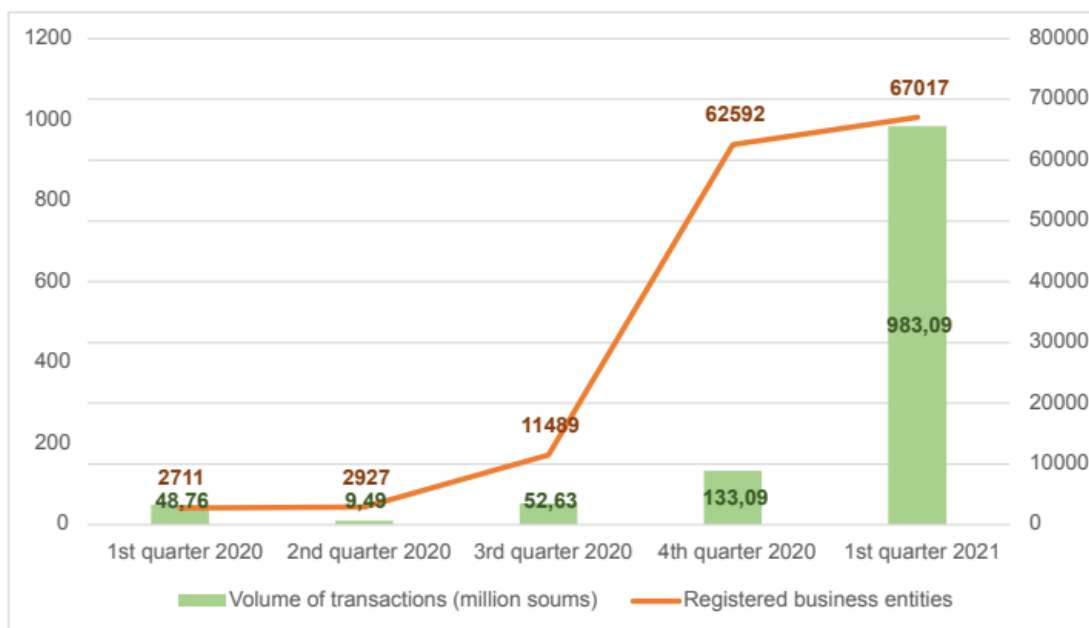


In recent years, significant economic reforms have been carried out in Uzbekistan, including the modernization of payment systems. The country has introduced innovative payment solutions to improve the efficiency, security and convenience of financial transactions. This essay presents an analysis of these innovative payment solutions in Uzbekistan.



One of the most popular payment solutions in Uzbekistan is mobile payments. Mobile payments have become an integral part of the daily lives of many Uzbeks who use them to pay for goods and services, transfer money to friends and relatives, and receive payments from employers. Mobile payment providers in Uzbekistan include UZCARD, HUMO, Aloqabank, PayMe and CLICK. These payment systems offer a variety of payment methods including QR codes, SMS payments, and mobile wallets. The most common payment methods are QR codes and mobile wallets, which are easy to use and secure.

**Figure 5: The number of registered QR-online system customers and transactions carried out**



Another innovative payment solution in Uzbekistan is biometric payments. Biometric payments use biometric data such as fingerprints and facial recognition to authenticate payments. Biometric payment providers in Uzbekistan include PayMe and Aloqabank. These payment providers offer a variety of payment methods, including fingerprint and facial recognition payments. The most common payment method for biometric payments are fingerprint payments, which are easy to use and secure.

In the coming years, the Central Bank of Uzbekistan is committed to further expanding the range of non-cash payments available in the country, as well as ensuring the stability of payment systems, which is one of CBU's core strategic goals. Stay tuned for news related to financial inclusion and literacy, including CBU's ongoing work to organize remote and biometric identification of individuals and much more.

### **III. Factors influencing the implementation of innovative solutions in the field of payments**

#### **Technological and infrastructure factors**

The implementation of innovative solutions in the field of payments is highly dependent on technology and infrastructure. The development of digital payment solutions requires advanced technological infrastructure, including reliable communication networks, secure servers, and advanced software platforms. The availability of these resources is essential for the development and implementation of digital payment solutions.

The adoption of innovative payment solutions is also influenced by the availability of devices that can support these applications. The proliferation of smartphones, tablets, and other mobile devices has created new opportunities for the development of digital payment solutions. Mobile phones have become the most popular devices for making digital payments, thanks to the widespread adoption of mobile internet and the availability of mobile apps that support digital payments. The availability of payment gateways is another important factor that affects the implementation of innovative payment solutions. Payment gateways are platforms that enable merchants to accept payments from customers using different payment methods, including credit cards, debit cards, and digital wallets. The availability of reliable payment gateways is essential for the adoption of digital payment solutions by merchants.

### **Legal and Regulatory Considerations**

The adoption of innovative payment solutions is also influenced by legal and regulatory considerations. Payment systems are regulated by various laws and regulations, including consumer protection laws, data protection laws, and anti-money laundering laws. These regulations are designed to protect consumers and prevent fraud and other illegal activities.

The legal and regulatory environment can also affect the development and adoption of innovative payment solutions. In some countries, regulatory barriers can limit the adoption of digital payment solutions, while in others, regulations can promote the development of these solutions. For example, in some countries, regulations require banks to provide access to their payment systems to non-bank payment service providers, which can promote the development of innovative payment solutions.

The legal and regulatory environment can also affect the security and privacy of digital payment solutions. Regulations can require payment service providers to adopt certain security measures to protect customer data and prevent fraud. These regulations can also limit the collection and use of customer data by payment service providers.

### **Socio-economic and cultural factors**

The socio-economic factors that affect the adoption of digital payment solutions include the level of financial inclusion, the availability of banking services, and the level of economic development.

In countries with high levels of financial inclusion, the adoption of digital payment solutions is likely to be higher than in countries with low levels of financial inclusion. Similarly, in countries with a high level of economic development, the adoption of digital payment solutions is likely to be higher than in countries with low levels of economic development.

Cultural factors can also influence the adoption of digital payment solutions. In some cultures, cash is still the preferred payment method, and there may be resistance to adopting digital payment solutions. In other cultures, there may be a preference for certain payment methods, such as mobile payments, which can promote the adoption of innovative payment solutions.

#### **IV. Case Study: EU Experience in Innovative Payment Solutions**

##### **Overview of innovative EU payment solutions**

The European Union (EU) has been at the forefront of developing innovative payment solutions that facilitate seamless transactions, enhance security and reduce costs. The following are some of the innovative payment solutions that have emerged from the EU:

1. **SEPA Direct Debit:** The Single Euro Payments Area (SEPA) Direct Debit enables businesses and individuals to make cross-border payments in euros through a single bank account. This solution has simplified cross-border payments and reduced transaction costs.
2. **Instant Payments:** The EU has launched an instant payment system that enables individuals and businesses to transfer funds in real-time. This solution has enhanced the speed and efficiency of transactions.
3. **Contactless Payments:** The EU has also adopted contactless payments, which enable customers to make payments using their mobile devices or contactless cards. This solution has enhanced the convenience and security of payments.
4. **Open Banking:** The EU has implemented open banking regulations that require banks to share customer data with third-party providers. This solution has enabled the development of innovative payment solutions such as payment initiation services and account information services.

##### **Factors contributing to the success of innovative EU payment solutions**

The success of innovative EU payment solutions can be attributed to several factors:

1. **Regulatory Support:** The EU has provided a supportive regulatory environment that has encouraged the development of innovative payment solutions. The EU has implemented regulations such as PSD2 and GDPR that have enhanced the security and efficiency of payments.
2. **Collaboration:** The EU has promoted collaboration between stakeholders such as banks, fintechs, and regulators. This collaboration has facilitated the development of innovative payment solutions that meet the needs of consumers and businesses.
3. **Technological Advancements:** The EU has leveraged technological advancements such as blockchain, artificial intelligence, and machine learning to develop innovative payment solutions that enhance security, speed, and efficiency.
4. **Consumer Demand:** The EU has responded to the changing needs of consumers and businesses by developing innovative payment solutions that are convenient and secure.

##### **Lessons learned from the EU experience**

The EU experience in developing innovative payment solutions provides several lessons that can be applied in other regions:

1. **Collaboration is Key:** Collaboration between stakeholders such as banks, fintechs, and regulators is critical in developing innovative payment solutions that meet the needs of consumers and businesses.
2. **Regulatory Support is Essential:** A supportive regulatory environment is critical in promoting innovation in the payments industry. Regulations such as PSD2 and GDPR have enhanced the security and efficiency of payments.
3. **Technological Advancements are Transformative:** The use of technological advancements such as blockchain, artificial intelligence, and machine learning can transform the payments industry and facilitate the development of innovative payment solutions.
4. **Consumer Demand Drives Innovation:** Responding to the changing needs of consumers and businesses is critical in developing innovative payment solutions that are convenient and secure.

In conclusion, the EU experience in developing innovative payment solutions provides valuable insights on the factors contributing to success and the lessons learned. Collaboration, regulatory support, technological advancements, and consumer demand are critical in developing innovative payment solutions that enhance security, speed, and efficiency. These lessons can be applied in other regions to promote innovation in the payments industry.

## **V. Adapting innovative EU solutions in the field of payments in Uzbekistan**

### **Analysis of the possibility of introducing innovative EU payment solutions in Uzbekistan**

Uzbekistan has been undergoing rapid economic growth in the past decade, with a focus on modernization and digitization. As a result, the country has seen a rise in the use of electronic payments, with an estimated 45% of the population using them in 2020. However, there are still challenges to be addressed, such as the low level of financial literacy and the limited availability of digital financial services in rural areas.

The European Union has developed several innovative payment solutions that could be adapted to the Uzbekistani market. For example, the EU has implemented a system called SEPA (Single Euro Payments Area), which allows for cross-border payments within the EU in euro currency. This system could be adapted to allow for cross-border payments between Uzbekistan and other countries, which would facilitate international trade and investment.

Another EU solution is the use of mobile payments, which have become popular in Europe due to their convenience and ease of use. Uzbekistan has already seen a rise in mobile payments, with about 30% of the population using them in 2020. However, there is still room for improvement, as the infrastructure for mobile payments is not yet fully developed, and there is a lack of trust in the security of these systems.

One of the most innovative payment solutions developed by the EU is blockchain technology. Blockchain allows for secure, decentralized transactions without the need for intermediaries such as banks. This technology has the potential to revolutionize the financial sector

in Uzbekistan, as it could increase transparency, reduce transaction costs, and improve the speed and efficiency of payments.

However, there are challenges to be addressed before these innovative EU payment solutions can be introduced in Uzbekistan. For example, there is a need for greater financial literacy among the population, as many people are still hesitant to use digital financial services due to a lack of knowledge about them. Additionally, there is a need for greater investment in digital infrastructure and cybersecurity to ensure the security and reliability of these payment systems.

### **Coping strategies**

To address these challenges, several coping strategies could be implemented. One strategy is to increase financial literacy among the population through education and awareness campaigns. This could be done in partnership with banks, fintech companies, and other stakeholders in the financial sector. By increasing knowledge and understanding about digital financial services, people will be more likely to use them and trust them. A couple of years ago financial literacy project “FinLit” by Central Bank of Uzbekistan was launched.

Another strategy is to invest in digital infrastructure and cybersecurity. This could be done through public-private partnerships, where the government works with private companies to develop and maintain digital infrastructure and cybersecurity systems. By investing in these areas, Uzbekistan can ensure the security and reliability of digital financial services, which will increase trust among the population and encourage greater use of these services.

A third strategy is to develop regulations and standards for digital financial services. This could be done in partnership with international organizations such as the International Monetary Fund (IMF) and the World Bank, which have experience in developing regulations and standards for the financial sector. By developing clear regulations and standards, Uzbekistan can ensure that digital financial services are safe, transparent, and accessible to all.

### **The role of stakeholders in the implementation of innovative payment solutions**

Stakeholders play a crucial role in the implementation of innovative payment solutions. These are individuals or groups that have an interest or are impacted by the implementation of a new payment system. They can include customers, merchants, financial institutions, government agencies, and other third-party providers.

Here are some specific roles that stakeholders can play:

1. Customers: Customers are the end-users of payment solutions, and their feedback and concerns are essential in the development and implementation of new payment systems. They can provide valuable insights into their payment preferences, which can help shape the design of new payment solutions.
2. Merchants: Merchants are another critical stakeholder in the implementation of payment solutions. They are the ones who will be accepting payments from customers, so it is important that they are on board with any new payment system. Merchants can provide feedback on their

experience with a new payment solution, identifying areas that need improvement or any issues that arise.

3. **Financial Institutions:** Financial institutions play a critical role in the implementation of payment solutions. They are often the ones responsible for processing transactions and ensuring that all parties involved in a transaction are properly authenticated. Financial institutions can also provide valuable feedback on the security and efficiency of new payment solutions.

4. **Government Agencies:** Government agencies can also be important stakeholders in the implementation of payment solutions. They may have regulations or guidelines that must be followed, and they can also provide guidance and support for the implementation of new payment systems.

5. **Third-Party Providers:** Third-party providers, such as payment processors or technology companies that provide payment solutions, can also be critical stakeholders. They can provide expertise in the development and implementation of new payment solutions, as well as support for ongoing maintenance and updates.

## **VI. Conclusion**

### **Summary of research findings**

Innovative payment solutions are rapidly changing the landscape of financial transactions in the EU. This research has examined the various payment systems and services available in the EU, including mobile payments, digital wallets, and contactless payments. It has also explored the challenges and benefits of adopting these solutions in Uzbekistan.

### **Implications and recommendations**

The findings of this study suggest that Uzbekistan can benefit from adopting innovative payment solutions. This can improve financial inclusion, reduce transaction costs, and increase efficiency. However, to successfully adopt these solutions, Uzbekistan needs to address several challenges, such as the lack of infrastructure, the low level of financial literacy, and the absence of regulatory frameworks.

To address these challenges, the following recommendations are suggested:

1. **Increase awareness and education:** The government and financial institutions in Uzbekistan should launch public awareness campaigns to promote innovative payment solutions and educate consumers about their benefits.
2. **Develop infrastructure:** The government should invest in the necessary infrastructure, such as the internet and mobile networks, to support the adoption of innovative payment solutions.
3. **Develop regulatory frameworks:** The government should develop regulatory frameworks to ensure the safety and security of financial transactions.

4. Foster collaboration and partnerships: Financial institutions and technology companies should collaborate to develop innovative payment solutions that meet the needs of Uzbekistan's population.

### **Limitations and directions for future research**

This study has several limitations, including the limited scope of the research and the lack of empirical data. Further research is needed to examine the challenges and benefits of adopting innovative payment solutions in Uzbekistan. Future research can also explore the impact of these solutions on financial inclusion and economic growth in Uzbekistan

### **References**

#### **EU:**

[https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633171/EPRS\\_BRI\(2019\)633171\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633171/EPRS_BRI(2019)633171_EN.pdf)

<https://www.efpia.eu/media/554543/novel-pricing-and-payment-models-new-solutions-to-improve-patient-access-300630.pdf>

<https://www.sciencesphere.org/ijispm/archive/ijispm-100403.pdf>

European Commission: [https://commission.europa.eu/index\\_en](https://commission.europa.eu/index_en)

European Data Strategy: [https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy_en)

<https://www.bis.org/cpmi/paysys/ecbcomp.pdf>

<https://www.imf.org/en/Publications/fintech-notes/Issues/2019/07/12/The-Rise-of-Digital-Money-47097>

#### **Uzbekistan:**

Digital in Uzbekistan: <https://datareportal.com/digital-in-uzbekistan>

Digital Ecosystem Country Assessment (DECA) in Uzbekistan: [https://www.usaid.gov/sites/default/files/2022-05/USAID\\_UzbekistanDECA.pdf](https://www.usaid.gov/sites/default/files/2022-05/USAID_UzbekistanDECA.pdf)

Digital Uzbekistan: <https://digital.uz/>

Uzbekistan E-Government Development Center: <https://egov.uz/en>

Ministry for Development of Information Technologies and Communications of Uzbekistan: <https://mitc.uz/en/>

World Bank. (2021). Uzbekistan Digital Economy Diagnostic:

<https://www.worldbank.org/en/home>

<https://cbu.uz/upload/medialibrary/e7c/CBPN-payment-systems.pdf>