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Key trends in the development of the payment system of Kazakhstan

Abstract. The COVID-19 pandemic not only brought fear into society, but also became the impetus for technological progress and the start of a new culture of people.

If until 2020, most retailers believed that their main sales channel was stores, and online was more of an image move, then the pandemic has changed the whole idea about e-commerce. The financial technology market at the international level has made a huge leap up over the past two years, this can be seen by the following growth: Revolut – from \$ 5.5 billion. up to \$30 billion, Klarna – from \$640 million to \$45.6 billion, Kaspi.kz with \$12.9 billion. US up to \$22.3 billion. These are isolated examples, but there are a lot of them. Companies whose main activity is financial technology are directly involved in making payments [1].

Today, the demand for contactless payment methods is unprecedented. Equally high is the demand for fast transaction settlements, instant payments, e-money, and other alternative payment methods. We bring to your attention an analysis of the key trends in the development of the Kazakhstan payment system.

Keywords: Payments, payment system, financial technologies, payment methods, ecosystem.

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Introduction

COVID-19 was a challenge both for the economy of Kazakhstan, its financial sector, and for the global economy as a whole. It should be noted that the payment market has undergone huge changes. These forced changes required the restructuring of the processes familiar to all, which was the trigger for the development of payment services in accordance with the new needs of customers. In connection with the Pandemic, prompt resolution of issues on payment mechanisms was required. We needed fast transfers, payments to different parts of the world, and of course all these processes had to be effective. It can be said that contactless payments have become the main payment method due to social distancing.

The above-mentioned quarantine restrictions have influenced the rapid decision-making, creating new fintech methods for services and services relevant in the current realities. Accordingly, the growth of online payments as a result was reasonably predictable. And Visa's research confirms this. 78% of consumers have chosen and changed the type of payment to online payments [2]. We can safely announce that the pandemic is the main factor that influenced the growth of digital, non-cash payments.

Methodology

For the purposes of writing this article, the data of professional financial market participants on payments made, the system, as well as the main bank of Kazakhstan (NBK) on payment cards, regardless of the place of residence of the issuer (domestic or foreign), are used. The payment system of the Republic of Kazakhstan is:

- cash withdrawal at ATMs;
- - payment methods aggregated in SmartPay, i.e. POS terminals, both online and offline.

Transfers of individuals are not covered by the study. It is impossible to determine the purpose of these transfers. The Eurosystem uses CPSS-IOSCO developed (PFMIS Instructions and Practices). The classification of the payment system does not matter.

Discussion

Payment systems and remittances represent the foundations of financial sector stability and financial inclusion. Payment systems support financial stability by reducing systemic and settlement risks, acting as a firewall to prevent contagion of losses, facilitating proper liquidity management, and through the effective transmission of monetary policy. Also, payment systems are a critical enabler of financial inclusion.

Deposits and withdrawals (cash-in/cash-out) are allowed across over 80 percent of the surveyed economies. From this analysis, it emerges that public salary payments, other government disbursements (such as cash transfers) and government collections (such as tax payments) can be affected via e-money accounts across half of the surveyed economies. Only 42 percent of the developing economies allow e-money to be used for channeling international remittances, compared to 70 percent of high-income economies. This could likely be explained by a more cautious approach to e-money regulation given the (actual or perceived) heightened risk (eg, AML/CFT) linked to international transfers. Figure 1 below depicts the transactions that can be performed using e-money, and how countries belonging to different income groups diverge away from the global averages [3].

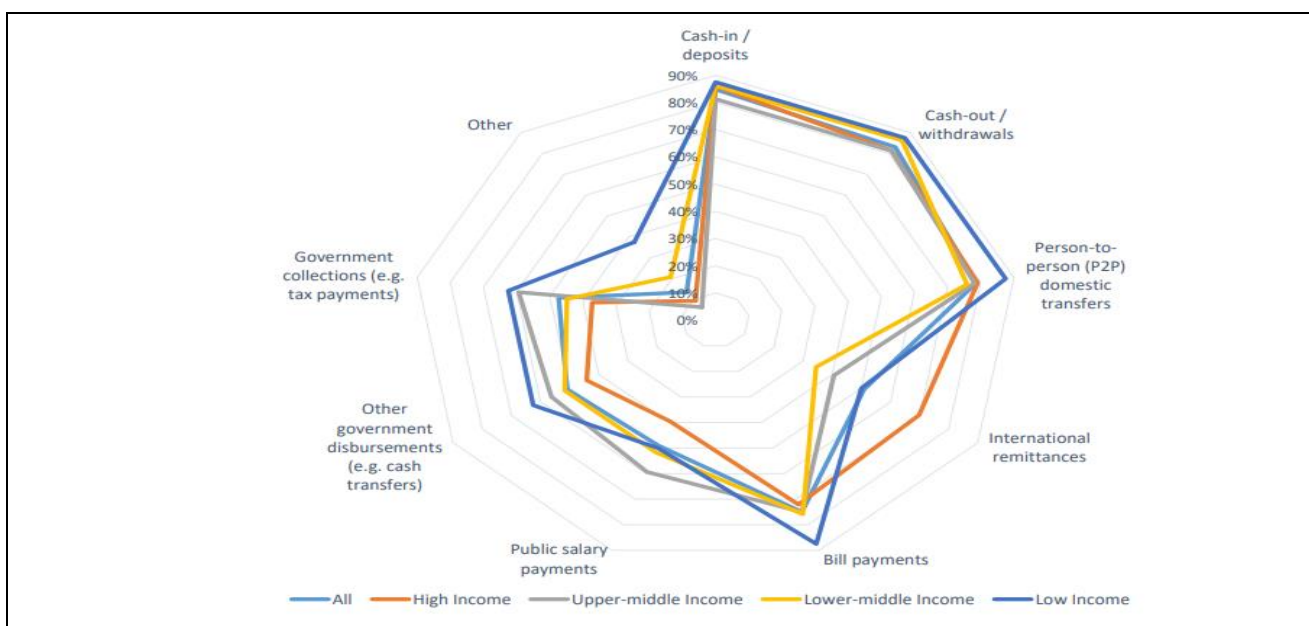


Figure 1 - Transaction that can be performed using e-money

On average across the surveyed countries, PSOs are required to obtain both license and registration in 34 percent of the cases, and in almost another third of the economies only a license is required. Registration only, or neither license nor registration is indicated by 4 percent and 7 percent of the economies, respectively. The latter is most often the case in EAP and ECA regions. Licensing is generally more frequent in high-income and larger economies, possibly also reflecting greater supervision capacity. Figure 2 below shows that PSOs are most commonly required to obtain either a license or more commonly license and registration to commence their operations.

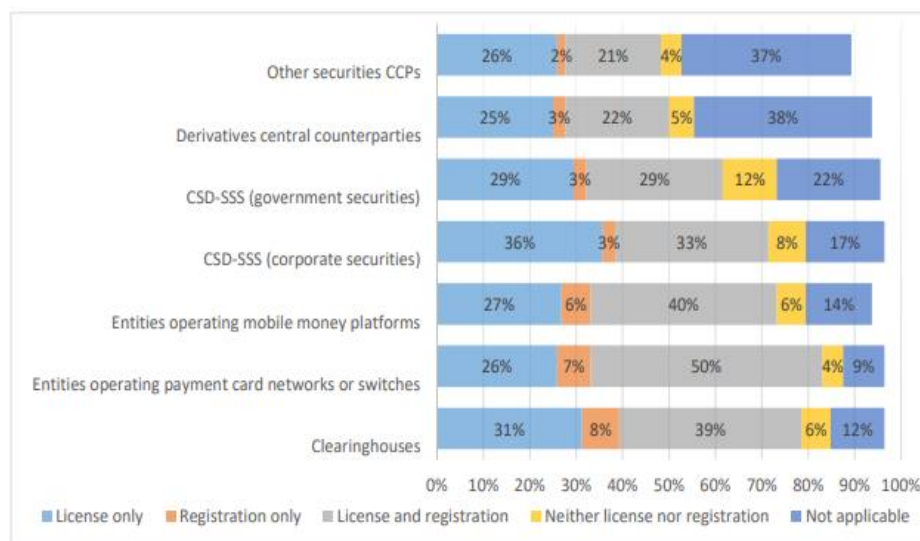


Figure 2 - Licensing of payment system operators

Having the capacity to generate and transmit disturbances of a systemic nature to the financial sector, large-value payment systems have long been the focus of central banks' involvement, including through the direct operation of these systems.

More recently, automated transfer systems (ATS) have allowed combining a gross settlement functionality for large-value payments with a net clearing facility for low-value payments.

Today, digital transformation is actively observed in all sectors of the economy around the world, which is the result of technological development, including financial services, a change in behavioral foundations, as well as the portrait of the consumer of financial and payment services. Based on the current global trends of intensive digital development, including in the payment industry, financial experts announced the further growth of non-cash payments. PwC's reporting data show a forecast for an increase of more than 80% by 2025, which will amount to 1.9 trillion units of non-cash payments in the world [4]. According to ReportLinker's forecast, the digital payments market will grow at an average annual growth rate of 13.7% in the period from 2021 to 2026, which determines the maximum convenience of payments made on the basis of adopted reforms and corresponding changes in consumer behavior. Experts also estimate the volume of payments in the world made using mobile devices at a level above 2 trillion US dollars by 2023 [5].

New payment methods, technological services and mobile market participants influence the development of non-cash payments, create a new payment industry. Today, central banks around the world are considering the possibility of digital currencies. Making instant payments using biometric technologies is already a reality. We can say that payment systems have switched to ISO 2022, and these are not empty words. Capgemini research reports that over 4 billion people will use digital wallets by 2024 [6]. In 2020, 102.7 billion transactions were made from mobile wallets. According to forecasts, in 2025 this number will amount to 2582.8 billion units [7].

Over a period of three years, the cash payments market has seen a general growth trend by an average of 8% quarterly. A similar trend is observed in non-cash payments, but with faster growth rates, on average by 14% quarterly. At the same time, abnormal jumps in growth and decline are observed in 2020, which is explained by the COVID-19 pandemic and changing consumer preferences. The pandemic led to a worldwide quarantine, restrictions affected almost all small and medium-sized businesses, which led to market stagnation in the second quarter of 2020. However, this situation has triggered pent-up demand and a strong shift to online, which has led to a significant increase in payments in the third and fourth quarters of 2020 by 19% and 15%, respectively (Figure 3).

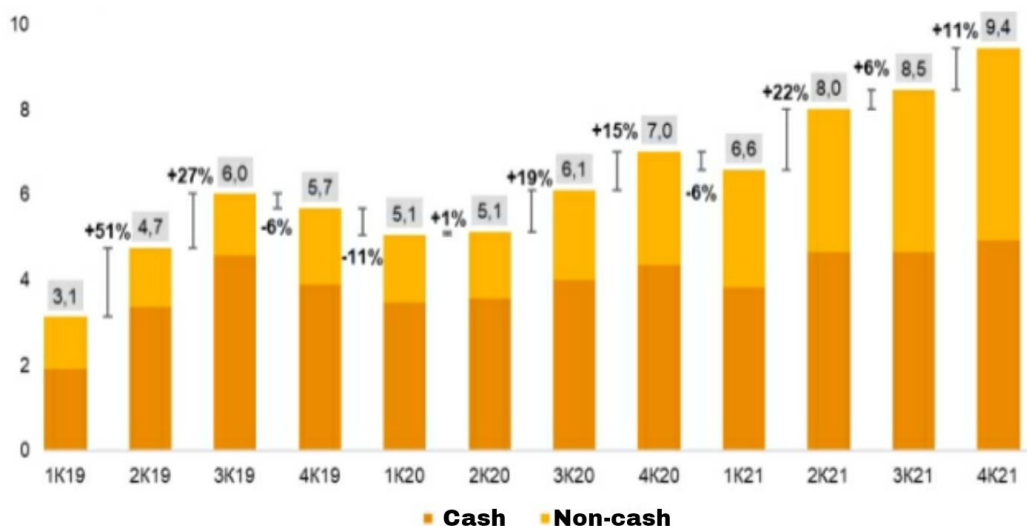


Figure 3 - Dynamics of changes in the volume of payments by quarters, trillion tenge

The market shows a general trend towards an increase in the amount of payments in Kazakhstan. In 2021, the amount of cash payments increased by 31%, and non-cash payments by almost 2.5 times compared to 2019. Cash in 2019 was used to pay for goods worth 13.8 trillion tenge, which accounted for 70% of all retail payments. However, 2020 and 2021 showed a downward trend in cash use as a percentage of the total – 66% and 55%.

Accordingly, the share of non-cash payments grew. The average amount of cash withdrawals in 2021 increased by 84% compared to 2019, which most likely indicates an increase in wages and a decrease in the use of ATMs for cash withdrawals. At the same time, the average check for non-cash payments decreased by 7%. In the Republic of Kazakhstan, the amount of payments itself has increased and the trends in the directions of transactions are different, this affects the change in the average check. From 2019 to 2021, cash withdrawal operations decreased by 17%, non-cash transactions increased by 168%.

Despite the fact that the activities of central banks, as well as second-tier banks, are aimed at increasing the share of non-cash payments, using credit and debit cards, as well as electronic money, people still continue to pay for purchases and services in cash for various reasons. These may include: distrust of the financial system, receiving payment for services in cash, behavioral habits and difficulties with the use of new technologies, tax and loan evasion, and concealment of the intended use of money. However, according to market players from 2019 to 2021, there has been a gradual decline in the share of cash payments* in the total market by 21% (or 15 p.p.) and a decrease in the frequency of cash withdrawals from ATMs by 17% (or 54 million units).

The accelerated development of non-cash payments, the availability of electronic devices, various promotions and cashback when paying with cards, and the development of e-commerce in connection with the pandemic have affected the decline in the share of cash payments.

The rapid growth of non-cash payments is due to changes in consumer demands and the emergence of new payment technologies. According to data for 2021, the amount of non-cash payments amounted to 14.5 trillion tenge, which is 82% more than in 2020. At the same time, in 2020, the increase compared to 2019 was at the level of 37%. It is worth noting that the frequency of payment (number of transactions) via bank transfer is also growing, as evidenced by the annual growth in 2020 and 2021 by 34% and 77%, respectively. Despite the fact that the COVID-19 pandemic and restrictive measures have accelerated the transition from cash to non-cash payments, the active demand for non-cash payment methods began earlier: since the first quarter of 2019, we have seen an increase in the amount due to payments through POS terminals. According to National

Bank of the Republic of Kazakhstan data for 2019, the number of offline POS terminals increased by 27%, from 126,000 to 161,000, which may mean an increase in demand for card payments. Already in 2019, the amount of non-cash payments accounted for one third of the total payment market (Figure 4).

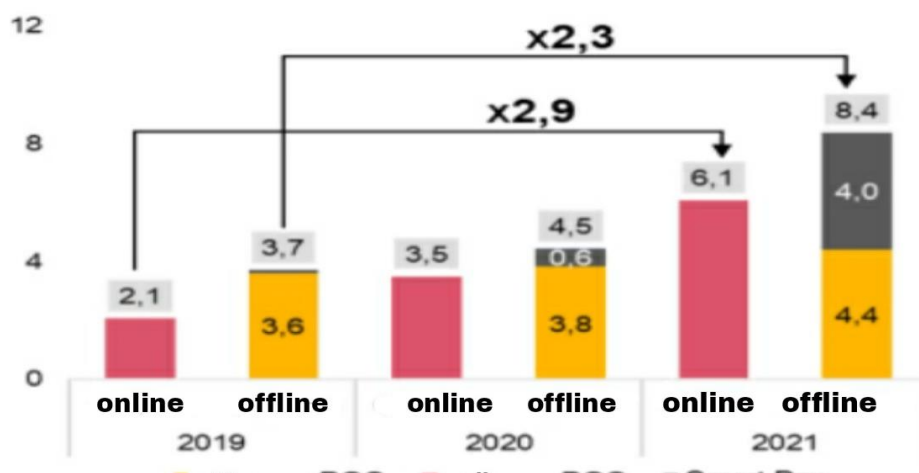


Figure 4 - Change in the amount of non-cash payments from 2019 to 2021, trillion tenge

The new crisis caused by the COVID-19 pandemic has provided the basis for a safer and more resilient payment system. Many market participants have adapted to new conditions through digitalization, improved their business models and processes, and expanded the range of services offered. As a consequence, these factors have helped to build greater consumer confidence in online shopping, as can be seen from the growth in the share of non-cash payments through online POS terminals in the second half of 2020. In 2021, the trend towards convenience and safety continued. New ecosystems with diverse consumer services are being created, thereby covering an increasing market share.

The amount of online payments has increased by 2.9 times since 2019, and the number of transactions by 2.7 times due to changed consumer behavior – people have begun to trust online purchases more. Other reasons for this growth were: the successful introduction of mobile commerce and banking ecosystems, the development of delivery services and incentive systems such as cashback.

Internet online services and mobile applications have become significant in the financial industry in recent years and have a growing trend. Financial services are moving to remote service channels (online/mobile banking). The principles of customer service using new financial technologies have changed. The transition of banks from physical customer service to remote is carried out thanks to the introduction of innovative technologies.

Thus, we can identify the main trends of the Kazakhstan payment market today:

1. Formation of focused banking digital ecosystems with elements of the functions of Fintech companies.
2. Digitization of financial and payment services, Internet and mobile banking.
3. New innovative services for making payments – QR codes, payments using simplified banking details, biometrics, etc.

Results

The Eurosystem's assessments of payment systems are carried out in accordance with PFMIS on the basis of CPSS-IOSCO documents and regulations. There is no dependence on the classification of this system.

CPSS-IOSCO Report “Principles for Financial Market Infrastructures: Information Disclosure Structure and Evaluation Methodology” (December 2012) defines the scope, definition of facts, structure of evaluation reports, etc. According to the SIPS Regulations, the following evaluation rating is used (Table 1).

Table 1

Rating of assessment of levels of compliance with the SIPS Regulations	
Compliant	The SIPS complies with all provisions of the article.
Broadly compliant	The assessment has identified an infringement of one or more provision(s) of the article which the SIPS operator shall address and follow-up on in a defined timeline.
Partly compliant	The assessment has identified an infringement of one or more provision(s) of the article that could become serious if not addressed promptly. The SIPS operator shall accord a high priority to addressing these issues.
Not compliant	The assessment has identified a serious infringement of one or more provisions of the article that warrant(s) immediate action. Therefore, the SIPS operator shall accord the highest priority to addressing these issues.

Note: based on source [8].

In accordance with the CPSS-IOSCO methodology, each principle is given a rating, and the article is assigned according to the SIPS Rules. Violation of the SIPS Rules is always detected in relation to a specific provision of the Rules, that is, not the article as a whole. The authorized body, in accordance with article 22 of the Regulations, must inform the SIPS operator about the nature of the discrepancy. Then the competent authority can take corrective measures. Regarding sanctions, according to article 23 of the Regulation, the European Central Bank imposes sanctions. Corrective measures can be introduced independently of or in parallel with sanctions. This document has two parts: 1) questions for evaluating payment systems (of all categories); 2) questions for evaluating the links between RPSS. According to the chronology of the articles of the SIPS Regulations, evaluation questions are built up, which are so formed to meet all the requirements and editions of the SIPS Rules. The central banks of the Eurosystem regularly assess the compliance of these systems with the regulatory requirements of SIPS and/or PFMIS, depending on what is applicable.

Conclusion

The world is undergoing significant changes due to the digitalization of most processes, the payment industry is no exception, which is as comfortable as possible for consumers today thanks to the emergence of new service systems. The development of financial technologies has led to a chain of transformations that redefine the creation of new business processes and models of interaction with customers, the removal of territorial barriers. In the fight for customers, financial organizations are doing everything possible to provide the maximum number of digital services and meet individual customer requests. Digital opportunities have opened new ways of working with clients.

Historically, the banking sector has always had a fairly high level of innovative technologies. Over the past decade, there has been even more significant progress in this direction of development and expansion of the areas of application of new digital solutions. Various mobile services for payments using "smartphones" have become widespread. Digitalization contributes to the widespread modernization of financial and payment services, where there is a qualitative combination with traditional solutions [9].

The main trends currently include the following: scaling of online remote payment services, the use of mobile devices for remote payments and contactless transfers, payments using QR codes and contactless payments, the use of biometric data, recognition, instant payments, digital currencies of central banks, etc.

The above analysis demonstrates global trends aimed at the development of the payment architecture, a new format for providing services in this industry, payment instruments, which is undoubtedly relevant for the Kazakh market, where the process of forming a new architecture of the payment environment is actively underway.

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Тұрақты қаржыландыруды дамытудағы жасыл облигациялар

Аннотация. COVID-19 пандемиясы қоғамға қорқыныш әкеліп қана қоймай, технологиялық прогрестің Серпін және адамдардың жаңа мәдениетінің бастамасы болды.

Егер 2020 жылға дейін бөлшек саудагерлердің көпшілігі өздерінің негізгі сату арнасын дүкендер деп санаса, ал желіде бұл имидждік қадам болса, пандемия е-commerce туралы барлық түсініктерді өзгертті. Нәтижесінде 2020-2021 жылдардағы финтехтің әлемдік нарығы орасан зор өсім көрсетті (2021 жылы Revolut 5,5 млрд. АҚШ долл.дейін 30 млрд. АҚШ долл., Кларна 640 млн. АҚШ долларына дейін 45,6 млрд. АҚШ, а Kaspi.kz 12,9 млрд. АҚШ долларына дейін 22,3 млрд. АҚШ. Бұл жүздеген мысалдардың үшеуі ғана). Финтех компаниялар өз қызметін қандай да бір жолмен төлемдермен байланыстырады [1].

Бүгінгі таңда контактісз төлем әдістеріне сұраныс бұрын-соңды болмаған. Транзакцияларды, жедел төлемдерді, электрондық ақшаны, сондай-ақ басқа да балама төлем әдістерін жылдам есептеуге

сұраныс бірдей жоғары және сұраныс. Біз Сіздердің назарларыңызға Қазақстан Төлем жүйесін дамытудың негізгі трендтерін талдауды ұсынамыз.

Түйін сөздер: Төлемдер, төлем жүйесі, қаржылық технологиялар, төлем әдістері, экожүйе.

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Ключевые тренды развития платежной системы Казахстана

Аннотация. Пандемия COVID-19 вызвала не только страх в обществе, но и стала толчком технологического прогресса и стартом новой культуры людей.

Если до 2020 года большинство ритейлеров считало, что их основной канал продаж - это магазины, а онлайн - это больше имиджевый ход, то пандемия изменила все представление про e-commerce. Рынок финансовых технологий на международном уровне за последние два года сделал огромный скачок вверх, это видно по следующему росту: Revolut – с \$5,5 млрд. до \$30 млрд., Klarna – с \$640 млн. до \$45,6 млрд., Kaspi.kz с \$12,9 млрд. США до \$22,3 млрд. Это единичные примеры, а ведь их большое множество. Компании, основной деятельностью которых являются финансовые технологии, непосредственно занимаются осуществлением платежей [1].

Сегодня спрос на бесконтактные способы оплаты беспрецедентен. Столь же высок и спрос на быстрые расчеты по транзакциям, мгновенные платежи, электронные деньги, а также другие альтернативные способы оплаты. Авторы статьи предлагают вашему вниманию анализ ключевых трендов развития платежной системы Казахстана.

Ключевые слова: платежи, платежная система, финансовые технологии, способы оплаты, экосистема.

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