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How cashless operations integrated into consumer lifestyle in Kazakhstan as a new habit

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Abstract

Nowadays digitalization has become an inextricable aspect of our lives, and the demand for new digital formats is growing.

The purpose of this paper work is to understand how consumers are used to cashless payments and whether it has become a habit or whether most people in Kazakhstan still using cash.

For this thesis work primary and secondary research was conducted. An interview with an expert and a survey of consumers from different cities of Kazakhstan is primary research, while theory sections and data made up the secondary survey. For a complete understanding of the work, the theoretical part is the main one, so it makes up the majority of the work, also an important part of the secondary research is statistics that provides information about consumer behavior and habits.

The study shows how cashless operations have become an integral part of the client's life and their habit, from what moment they started to switch and what problems they encountered during the transition.

Both qualitative and quantitative research methods have been selected in order to ensure that the analysis was reliable, likewise to prove or disprove the hypotheses.

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Introduction

The system of non-cash money transfers plays an important role in the economic life of society. Combining commercial, consumer, and budgetary transfers and mediating the movement of funds, affects many areas of the economy. In recent years, most people used to complete their payments in cash money. Consequently, it was inconvenient which in turn led to the insecurity of monetary resources and uncomfortable usage. Money transfers made using bank cards, namely transfers from card to card, have become more widespread. Nowadays, in civil circulation, one of the principles of which is retribution, the non-cash transfer is the most important instrument for fulfilling monetary obligations. Therefore, any negative processes in the system of non-cash transfers slow down, and often completely block the further execution of business transactions. The role of non-cash transfers in the financial and stock markets is even greater.

Increasing interest in harnessing the potential of remittances for social and economic development in the last decade has led to a surge in scientific publications, which have been comprehensively analyzed in several studies (Agunias, 2006; Rapoport & Docque, 2006; World Bank, 2006). These research all agree that remittances are economically beneficial. Moreover, the influence of remittances on migrants' home countries is described in these studies as a reasonably consistent supply of foreign cash and an alternate backup plan for the impoverished. Nevertheless, it is acknowledged that these kind of favorable effects may be offset. It appears to apply, for instance, to circumstances in which remittances cause demand-pull wage growth and income disparity; a rise in the actual worth of the currency or a postpone in devaluation - an impact of the so-called Dutch illness - that can impede countries' productivity and competitiveness, along with increase the vulnerability of countries reliant on remittances in the case of a sudden shocks. Furthermore, it is widely held that remittances are never a panacea and that they cannot substitute decent economic strategies and structural changes required for developing nations' overall growth.

For many countries in the region, such as Kazakhstan, Armenia, Georgia, Moldova, Kyrgyzstan, and Tajikistan, remittances are vital. Indeed, the massive inflow of remittances serves as a major source of foreign exchange and is used to limit the substantial current account deficits of these countries. Indeed, a significant increase in remittances prior to the global economic crisis helped mitigate the negative impact of higher energy prices on the current account.

The use of remittances for investment in physical capital and entrepreneurial activities has a direct positive impact not only on economic growth, but also on employment. Although a large proportion of remittances were used for consumer purposes rather than for savings or investment, even in these cases, remittances generated a positive multiplier effect, stimulating the development of retail, transport, construction, consumer goods and various services. This, in turn, should stimulate the creation of new jobs and the further reallocation of labor resources from the military and heavy industries inherited from the Soviet Union to the modern service sector and the production of consumer goods.

Given the changes, the current service mission of many financial companies sounds simple and logical - providing a high-quality and fast service that is accessible to everyone. Financial companies like Wirex and PayPal offer a hybrid financial solution for managing personal accounts, which is incomparably more flexible and user-friendly than traditional banking. These services allow you to make instant money transfers in USD, EUR, GBP, and digital currency, easily converting currencies among themselves, with the ability to issue a virtual or plastic card for settlements wherever MasterCard is accepted and for withdrawing cash from an ATM. Moreover, they provide their services all over the world, without being tied to the work schedule of bank branches and without excessive bureaucracy, which in turn greatly facilitates the everyday lives of millions of people.

The pandemic has pushed the whole world to switch to online mode, and Kazakhstan is no exception. In this difficult time, when everything was moving to an online format, digitalization began to develop very quickly. All people began to get used to the new realities and the habits that had been developed over the years at one moment turned upside down and people began to acquire new habits.

Each generation coped with this task in its own way. For generations Z and Y, this is a more familiar habitat, while generation X got used to the new reality more difficult and time-consuming. At a time when everything around in an online format, companies began to build their ecosystem and improve it, and such a company in Kazakhstan was Kaspi Bank that sets the pace for other banks and creates new chips every time surprising its users and making life easier for them to the maximum. They were the first to understand that the future lies in digitalization, that Kazakhstan will come to this sooner or later, and they should be the first to provide them with such an opportunity in terms of the convenience and functionality of their application and the bank as a whole.

Research hypothesis

H1: The pandemic has affected the use of cashless payments in large cities

H2: Kaspi had a greater impact on the transfer to a cashless operation than the pandemic

H3: Customers in the regions both used cash and still using cash for all the services

Research aim

The purpose of this thesis work is to explore how digitalization has influenced to the behavior of bank customers in Kazakhstan, as well as if consumers are willing to convert to online banking services.

Research objectives

- To determine the attitude of consumers to cashless payment
- To determine the willingness of customers to switch to full cashless payment
- To determine how much the habits of consumers have changed due to cashless payment

Research question

How did citizens of Kazakhstan adopt cashless payments as a new purchasing habit?

Literature review

Primary data

Cashless operations

Cashless operation is considered as a safe and convenient way of conducting payments. Cashless transaction refers to money operation without use of physical currency and it represents technological breakthroughs in a world economy. From a financial standpoint, electronic payments are a type of financial instrument that allows buyers and sellers to communicate electronically ¹(Abrazhevich,2004). Simply put, electronic payments are any payments done without the use of paper instruments² (Tella,2012). Electronic payments are defined as electronic value payments sent from a payer to a recipient over a comprehensive electronic payment channel that allows payers to freely access and control their transactions over the internet (Wendy,2013). An electronic payment instrument can be described as a mechanism of payment between parties that occurs through electronic means.

According to Tee and Ong (2016), moving to cashless operations is a change in behavior in which people minimize usage of cash as a method of exchange for goods and services by maximizing usage of electronic transactions or non-electronic payments by cheques.³ Money needs being a method of exchange for goods and services in the near term, therefore a cashless economy does not imply that currency will indeed be completely eliminated. This is a monetary ecosystem in which the need of actual cash is minimized by offering alternative payment solution (Alilonu, 2012).

Electronic banking became popular in 1990s and people started conducting cashless operations in a daily basis. Stanford Federal Credit Union launched the first internet-based online banking service in 1994 . It swiftly spreads around the world ⁴(Yoon,2010). PayPal was founded in the year 2000, and it

¹ Abrazhevich (2004). Book review: Electronic Payment Systems: A User-Centered Perspective and Interaction Design.

² Tella, A. (2012). Determinants of e-payment systems success: A user's satisfaction perspective. *International Journal of E-Adoption (IJE)*, 4(3), 15-38.

³ Tee, H., Ong, H.. Cashless payment and economic growth. *Financ Innov* (2016).

⁴ Yoon, C. (2010). Antecedents of customer satisfaction with online banking in China: The effects of experience. *Computers in Human Behavior*, 26(6), 1296-1304.

allowed customers to send money over the internet. eBay, an e-commerce platform, uses PayPal to facilitate transactions between users without requiring personal information such as bank account or credit card data.

Moreover, digital transactions were adopted by many countries around the world, developing intermediaries such as online paying systems like PayPal, digital wallet systems operated by giants like Apple, contactless payments using cards and smartphones, electronic billing and banking all being widely used⁵ (Kumari & Khanna, 2017).

Digital economy and marketing

Bukht and Heeks in their study analyzing the existing definitions of researchers and international organizations concluded that the digital economy, depending on the perspective and focus, has a distinctive nature. From the point of view of a marketer, the digital economy is digital consumer access to products and services, digital promotion and sale of products by suppliers, the digital exchange of information, values, and other resources, which in general creates an environment in which every individual interacts using the Internet, e-commerce and digital technology ⁶(Bukht & Heeks, 2017).

The digitalization of the economy was accompanied by the digitalization of marketing, in which there are significant differences from traditional marketing. First of all, the role of the participants has changed, if the seller hunted the consumer in the traditional format and segmented them according to demographic and social characteristics, and then in digital marketing, the relationship has become horizontal since the consumer has more of a role and importance in the process. The portrait of the consumer has been deformed, socio-demographic indicators have receded into the background and segmentation occurs due to community involvement of customers. With the research introduction by Seth Godin, the concept of marketing permission appeared when the consumer can regulate and control

⁵ Kumari, N., & Khanna, J. (2017). Cashless Payment: A Behaviourial Change To Economic Growth.

⁶ Bukht, R., & Heeks, R. (2017). Defining, conceptualising and measuring the digital economy. *Development Informatics working paper*, (68).

marketing influence through various channels. It turns out that in digital marketing, the tools and varieties of brand promotion methods used depend on consumer behavior and their desire. The desire also concerns payment methods, the more variable the offers by type of payment, the more customers can be covered. The trend of digitalization in marketing has influenced pricing policy too. The concept of dynamic pricing, which is actively used in the tourism sector when selling air tickets, and hotel rooms, has become relevant for other areas. Depending on the solvency, a unique price is formed for each client. The price is set due to the presence of big data which allows studying the entire chronology of the purchase, and the characteristics of a person who is the future customer. The changes also affected the promotion mechanism in which all types of advertising have a two-way channel of influence. In traditional, the consumer did not participate in the process, while in digital, the feedback and the behavior of the consumer will determine the format, intensity, and variety of the advertising offered. All of the above and other transformations have affected models and frameworks in marketing and sales ⁷(Kotler, 2019). An example is the partial de-actualization of the marketing mix and the commercialization of the four C's, as well as the modification of the AIDA framework, which is described in detail in the following paragraph.

Modified AIDA framework

If the AIDA framework was used in traditional marketing and sales and was effective, then with the active development of society, the relevance has shifted since consumer behavior has acquired a different character. A modified framework for updating the process of advertising and selling is a necessity and Derek Rucker proposed an option in components that: aware, attitude, act, and act again. The last recurring component is the result of new measurements in marketing that tracks consumer behavior after-sales and customer retention period. However, the acceleration of digitalization has deformed the concept and decision-making process of the consumer. If in the awareness phase the consumer is influenced by past experience and marketing communications and informatization of brand

⁷ Kartajaya, H., Kotler, P., & Hooi, D. H. (2019). Marketing 4.0: moving from traditional to digital. *World Scientific Book Chapters*, 99-123.

advocates, then in the appeal phase the brand passes on a long-term memory having been affected by the WOW strategy or in the short-term by losing attractiveness on the background of others. Next, the ask phase is accompanied by active research through both online reading reviews, recommendations, and comments and offline testing the product, asking friends, etc. The action phase is the culminating moment during which the consumer makes a purchase of the product. And the last phrase is the advocate which is the most important and key in creating loyalty when the consumer decides to stay on a long-term basis and actively shares his impressions surrounded by friends and relatives. The fourth and fifth phases are the moment of leverage with the maximum impact on the consumer's consciousness the desire for cashless payment is also revealed in these stages and a positive perception remains during implementation. It is possible to increase sales only through an integrated approach at all stages, but the major mistake in the last phases and without investigating different scenarios of events. There are cases when the client skips some phrases depending on the type and value of the product and service. Furthermore, impulsive purchases with a completely different course of events may depend on the power of the influence of exogenous and endogenous factors. Despite the different situations, the importance of the fifth step is crucial to work on loyalty and feedback in the era of active digitalization when there is no direct contact with the consumer⁸ (Kotler & Hooi, 2019).

Generation X,Y,Z

As described earlier, segmentation of consumers is now taking place by belonging to a certain generation. Generation X consumers are people born from 1965 to 1979 who have 21 % of the main share of consumers. Generation Y is consumers from 1980 to 1994, making up 21 percent of the total population. While generation Z was born from 1995 to 2009 having a 19 % share of the total population, but with potential active growth in the long term ⁹(McCrindle, 2011). According to Kotler's forecasts,

⁸ Kartajaya, H., Kotler, P., & Hooi, D. H. (2019). Marketing 4.0: moving from traditional to digital. *World Scientific Book Chapters*, 99-123.

⁹ McCrindle, M., & Wolfinger, E. (2011). *The ABC of XYZ: Understanding the Global Generations*. University of New South Wales Press Ltd.

Generation Z is the main consumer audience of cashless payment and the major active participant in the digital economy (Kotler, 2019). This kind of separation according to age cohort is based on the fact that these people have a general idea of life, the history of development, childhood, cultural heroes, and general memories that are displayed in their preferences. A brand is considered durable if it has loyal consumers belonging to at least two generations. Each generation has its own characteristics that distinguish it from other generations. Generation X people with a materialistic mindset are skeptical about choice and decision-making. For the period of their formation, the age subculture of retro, hippies is relevant¹⁰ (Hogg & Solomon, 2006). Consumers would like to know more about company's products as well as a description of why they're vital (Heaney, 2007). They want to hear about the product's characteristics as well as an explanation of why these features are important ¹¹(Himmel, 2008). Individuals have a low risk tolerance and a danger mentality ¹²(Reisenwitz and Iyer, 2009). As customers, Gen Xers appreciate consumer experience, community engagement, and brand. They have a history of being completely untrustworthy of brands and enterprises (Williams, 2005). One of Gen X's characteristics is that they appreciate the opinions of others. They may be self-conscious and want assurance whether their choices are acceptable. They are prone to dismissing any form of classification or marketing approach and disregarding targeted ads¹³(Peralta, 2015).

Generation Z is unique in its insightful nature when making decisions and consuming a product. Most often, they are financially literate, able to think freely and in a variety of ways, digital natives ¹⁴(Gupta, 2021).

Generation Z is the world's most materially well-off, technologically savvy, globally connected, and officially educated generation. Coming of age in the twenty-first century has given Generation Z a

¹⁰ Hogg, M., Askegaard, S., Bamossy, G., & Solomon, M. (2006). Consumer behaviour: a European perspective.

¹¹ Himmel, B. (2008). Different Strokes for Different Generations. *Rental Product News*, 30 (7), 42-46.

¹² Reisenwitz, T. H., & Iyer, R. (2009). Differences in generation X and generation Y: Implications for the organization and marketers. *Marketing management journal*, 19(2).

¹³ Peralta, E. (2015). Generation X: the small but financially powerful generation. *Centro*.

¹⁴ Gupta, D. G. (2021). Book Review: Consumer Behavior: A Digital Native.

unique viewpoint, as they have been shaped by the Global Financial Crisis while simultaneously being globally linked and engaged through global companies and global technologies ¹⁵(Parment, 2011). Consumers of Generation Z are less devoted to individual companies, and capturing and holding their attention is difficult ¹⁶(Priporas et al., 2017). Consumers in Generation Z are interested in new technology, seek simplicity, want to feel comfortable, want to escape from reality, have high expectations, and value experience more than anything else (Wood, 2013; Priporas et al., 2017). Using advertising campaigns to reach Gen Z customers is difficult. Other compositions, such as presenters or music, are not as appealing to them as ad content. Furthermore, individuals are more likely to be exposed to ad campaigns in which they are interested rather than efforts that invade their privacy (Brown,2017).

Businesses can now deliver their messages in a variety of methods. However, one disadvantage is that in order to keep the attention of Gens Y and Z, we must constantly update our messaging and tactics. These generations have shorter attention spans as a result of the numerous disruptions of a technology society. Individuals in Generation Y grew up amid a time of rapid economic expansion, the rapid rise of social media and reality television, and the fading of modernist values, all of which were aided by internationalization and significant popular culture influences (Parment, 2011). Due to their high speed and vitality, Gen Y is a confident, optimistic group that feels empowered to take positive action when things go wrong. They also have multi-tasking talents¹⁷(Kim, 2008). Gen Y is unconcerned about brands and prefers things that fit their personality and lifestyle. They see themselves as reasonable customers who value price and product characteristics over brand names (Phillips, 2007). The allegiance of Gen Y is believed to be fickle, shifting swiftly according to fashion, trend, and brand appeal, and emphasizing style and quality over money (Reisenwitz and Iyer, 2009). It's difficult to build consumer

¹⁵ Parment, A. (2013). Generation Y vs. Baby Boomers: Shopping behavior, buyer involvement and implications for retailing. *Journal of retailing and consumer services*, 20(2), 189-199.

¹⁶ Priporas, C. V., Stylos, N., & Fotiadis, A. K. (2017). Generation Z consumers' expectations of interactions in smart retailing: A future agenda. *Computers in Human Behavior*, 77, 374-381.

¹⁷ Kim, E. Y. (2008). Online Market Segmentation by Gen Y Consumers' Internet Use Motivations. *Korean Journal of Human Ecology*.

loyalty among them because their attitudes are obviously shaped by their experiences, which cast the deciding "vote" on who would benefit from their purchasing power (Parment, 2009).

Digital payment (cashless payment, QR code)

The impact of the type of payment was considered on the AIDA framework; however, a similar statement confirmed in practice was made by Young based on statistical data in the Bloomberg database. According to the results, 73 % of customers compare the type of payment and, depending on the availability of digital payment, make a choice in favor of the company, which has that option ¹⁸(Young, 2022). Digital payment is a type of cashless payment by digital wallet, QR code, tap-to-pay platforms, etc. A similar trend is observed in the Asian region, according to a survey organized among MasterCard users, 91% of respondents prefer contactless payment (Patel, 2020). In the example of Kazakhstan, the report for February 2022 of the National Bank demonstrated that the volume of cashless payments used was 96.8 %, while the value was 81.2 % of the total amount. The relevance due to the pandemic has also acquired payment through the QR code, a process in which the code is scanned and a cashless operation occurs. Karniawati's research has demonstrated that this type of payment has been integrated into society via various promotional offers, bonuses, government support, etc. Nevertheless, the pandemic has also catalyzed integration, as cashless, fast payment without the threat of interaction with the seller has become a habit of consumers ¹⁹(Karniawati, 2021).

Case of COVID-19

Definitely, the rapid growth of users who prefer cashless payment was influenced by COVID-19, which limited the offline contact between people and there was a massive transition to the digital environment. During the months of lockdown in Kazakhstan, according to Kredina's observations, the

¹⁸ Young. M. (2022). Consumers Prefer to Pay Digitally Instead of Using Cash, Select Vendors Who Offer Cashless Payments. Bloomberg.com.

¹⁹ Karniawati, N. P. A., Darma, G. S., Mahyuni, L. P., & Sanica, I. G. (2021). Community Perception of Using QR Code Payment in Era New Normal. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(1), 3986-3999.

dynamics of cashless payment were as positive ²⁰(Kredina, 2021). This kind of change has been the case in many countries, but the Pey noted specific variables such as favorable conditions, environment, social impact, expected performance, and effort expectance that influenced the desire and behavior of customers to use cashless payment during the pandemic in Malaysia (Pay & Kosim, 2021). However, the most effective subsequent of COVID-19 was the fear of paying in cash due to the spread of diseases by water droplets. Ardizzi & Rocco in their research concluded that measures to limit interaction reinforced by governmental regulations on the transition to non-cash types of payments and the installation of curfews forced consumers to actively use digital payment methods ²¹(Ardizzi & Rocco, 2020). Despite the long duration, the pandemic is a temporary phenomenon, but the habits acquired by customers during this period remained in the post-pandemic era too ²²(Setyanto & Sunarjo, 2021). In an interview organized with Rashid Yurishiev, the Consul of Kazakhstan in Hong Kong, the concept of digital literacy was used to determine the prospects of Kazakhstan after the pandemic. In the post-pandemic era, the country's residents have become largely skilled at using digital tools ²³(Chan, 2021). This statement is confirmed by the statistics on digital literacy, which is 87.3% ²⁴(Bureau of National Statistics, 2022).

Secondary data

A cashless type of payment is a monetary transaction without the participation of physical money. That is, money has an intangible characteristic and moves within the radius of the economy or between economies without physical presence. The process of integration into the economy of this payment method goes through adaptation in society and, accordingly, each country perceives innovation in the field of payment differently, depending on different factors. This situation is interesting and important for

²⁰ Kredina, A., Akparova, A., & Vasa, L. (2021). Nalysis Of The Dynamics Of Cashless Payments In Kazakhstan In The Context Of The Covid-19 Pandemic. *Экономика: стратегия и практика*, 16(2), 54-61.

²¹ Ardizzi, G., Nobili, A., & Rocco, G. (2020). A game changer in payment habits: evidence from daily data during a pandemic. *Bank of Italy Occasional Paper*, (591).

²² Setyanto, R. P., & Sunarjo, W. A. (2021). Will cashless payment become consumer's transaction habit in the " new normal" era?. *Trikonomika*, 20(1), 47-53.

²³ Chan, L. (2021). Post-Covid Prospects: Kazakhstan. *The Hong Kong Trade Development Council research*.

²⁴ Bureau of National Statistics. (2021). Describing indicators of development of E-commerce in the Republic of Kazakhstan. *Basic indicators*.

research to use the results in practical use during the planning and implementation of economic projects. Using the example of Rahman's research, the model of adaptation of cashless payment in Malaysia was considered. Using a quantitative research method, the author conducted a survey among the local population with a variety of socio-demographic parameters. During the survey, each of the respondents determined the degree of agreement with the given statement regarding the influence of behavioral factors on the adaptation of cashless payments. As a result, it was found that a high level of security is appreciated largely among users of cashless payment methods since the possibility of theft is minimized. In addition, the innovativeness of the method that determines the level of comfort and entertainment for the consumer has a positive effect on adaptation ²⁵(Rahman & Bahri, 2020).

In the process of integrating a cashless payment, it is also important to determine the level of readiness of the consumer audience. Humbani and Wiese's article focuses on the study of a cashless society on the readiness to use mobile payment services. The researchers using the quantitative method organized an online survey format in which users participated and made offers to complete the payment. In this study, the sampling method, setting the number of respondents and the audience of respondents is similar to Rahman's study, which means the effectiveness of the quantitative method with the organization of a sample group of respondents. In addition, the results have common ground, as Humbani also noted the innovativeness factor as one of the influential aspects in the integration of cashless payment in society. The author classified the types of telephone payment into remote, which implies payment without restrictions of distancing and proximity in which payment is made at the place of using the service and purchasing the product ²⁶(Humbani & Wiese, 2018). For each of the types, the perception of consumers is significantly different, since the close process has a more trusting principle while paying at a distance can revive doubt.

²⁵ Rahman, M., Ismail, I., & Bahri, S. (2020). Analysing consumer adoption of cashless payment in Malaysia. *Digital Business*, 1(1), 100004.

²⁶ Humbani, M., & Wiese, M. (2018). A cashless society for all: Determining consumers' readiness to adopt mobile payment services. *Journal of African Business*, 19(3), 409-429.

For the diversity and comparative analysis between before the pandemic and during the pandemic, an article written in 2018 about the formation of a cashless economy was considered. The author aimed to detect the process of cashless economy formation by determining the accelerating and slowing down factors by using mixed a method with an analysis of available statistical data and survey results. As a result, it was revealed that the formation of a cashless economy is largely unique for each country and the experience of developed countries is not always implementable to the developing ones, since there are significant differences in politics, economics, society, culture, mentality, and other constituent spheres. In addition, attention was focused on the role of the government and the establishment of governmental programs for the development of cashless payments for utilities, public transport, and other types of public services ²⁷(Oleshko & Trokhymets, 2018).

According to Mastercard Consumers' preference for contactless cards has been fueled by perceptions of safety and convenience, as well as a reminder of the ease of tapping. Globally, 46% of respondents have replaced their top-of-wallet card with a contactless card. In the Asia-Pacific region, 51% of people have switched. Also Mastercard server showed that Due to the safety and peace of mind it gives, COVID-19 has boosted worries about cash usage and led to good impressions of contactless. Contactless is viewed as the cleaner way to pay by the majority of respondents (82%) around the world, with 80 percent in Asia Pacific agreeing ²⁸(Mastercard.com, 2020)

Further, research was reviewed on the adaptation of another type of non-cash payment as an e-wallet. Yang defines the concept of an e-wallet as a cashless transaction tool that is used to make payments for a service and a product. In the course of the survey, researchers found factors of positive influence on adaptation in society. According to findings, ease of use and the degree of trust has a positive impact on the intention of use and adaptation. In addition, the adaptation process is affected by the characteristics

²⁷ Oleshko, A., Tymoshenko, O., & Trokhymets, O. (2018). Formation of the Cashless Economy in Ukraine and in the World. *Baltic Journal of Economic Studies*, 4(2), 147-150.

²⁸ Mastercard.com (2020). MasterCard study news room.

of the consumer too, since in this study a difference in opinions on gender was found ²⁹(Yang & Zainol, 2021). Humbani also had this kind of conclusion, who discovered the active role of women in adapting and being ready to adopt cashless payments in society. It can be observed how opinions and results converged in many studies, but on the example of the study of Balakrishnan, it was found that the willingness of the consumer to use a non-cash payment is not an influential factor, since a favorable environment and economic conditions are more important ³⁰(Balakrishnan & Shuib, 2021). Zhao's research on the study of cashless payment and consumers' perception of mobile payment turned out to be the most informative and theoretically justified. The author skillfully used the theoretical basis and various methodologies in detecting influence factors. In comparison with the authors who noticed differences in opinions between women and men, there was no difference in this example. Additionally, the factors of influence were identified as external and internal ³¹(Zhao, 2019). External factors may be due to various triggers, but the author had similarities with the report of Mckinsey about global cashless payment, which noted COVID-19 as an external phenomenon that served as an inhibitor of the adaptation process. ³²Zhao as an internal factor determined the culture, the same conclusion is observed in the report for 2021 when Asian Pacific countries had intensive integration of cashless payment (Australia, which reached 90%), and rather other countries differed due to the uniqueness of consumer behavior depending on the culture.

The main audience of cashless payment consumers, according to Nikolaou, is customers from generation Z, in whose life this type and format of payment have been in effect since their reasonable living experience. The technological and digital literacy of this generation allows them to use digital tools as efficiently as possible ³³(Nicolaou, 2022). However, Daragmeh and Sagi, in their study on the example

²⁹ Yang, M., Mamun, A. A., Mohiuddin, M., Nawi, N. C., & Zainol, N. R. (2021). Cashless transactions: A study on intention and adoption of e-wallets. *Sustainability*, *13*(2), 831.

³⁰ Balakrishnan, V., & Shuib, N. L. M. (2021). Drivers and inhibitors for digital payment adoption using the Cashless Society Readiness-Adoption model in Malaysia. *Technology in Society*, *65*, 101554.

³¹ Zhao, Z. (2019). *Cashless society: consumer-perceived value propositions of mobile payment* (Master's thesis)

³² McKinsey & Company. (2021). The 2021 McKinsey Global Payments Report.

³³ Nicolaou, A. (2022). Examination of motivations of Generation Z and Millennial consumers with regards to alternative payment options in terms of user experience and product offerings. Literature Review.

of generation X in Hungary, concluded that despite the passive transition of representatives of this generation to cashless operations, COVID-19 managed to speed up the process and create the most necessary conditions. This kind of conclusion leads to a positive prognosis due to the successful adaptation of consumers from generation X to cashless payment methods that include the use of mobile phones, cards, E-wallets, QR codes, etc ³⁴(Daragmeh & Sági, 2021).

Studying the process of transition to a non-cash type of payment in Kazakhstan, a number of official sources of analytical companies, and national organizations were considered. According to the Association of Financiers of Kazakhstan, in 2017, a mobile payment using QR technology was adapted to the country's market, which was developed based on the experience of the VISA company ³⁵(AFK, 2017). Likewise, according to AFK In 2021, the volume of non-cash card transactions doubled and reached 89% of GDP (kapital.kz). According to research made by PWC in 2019, the share of non-cash transactions in Almaty was 64%, in Nursultan - 50%, and in the regions - 30%. The statistics of 2021 are noticeably different and in the cities of Shymkent, Nursultan and Almaty, the share of non-cash transactions ranged from 77% to 87% in the amount of transactions. While in total in 14 regions of Kazakhstan this indicator is at the level of 69%. Diagram of dynamics of changes in the volume of payments by quarters given in Appendix A ³⁶(PWC.com).

As noted by the chairman of Halyk Bank Shayakhmetova the transition will be accompanied by the activation of the entrepreneurship sector and the optimization of small and medium-sized businesses. Optimistic forecasts were justified, but the highest point of growth was during the pandemic. According to experts of Forbes for 2020, the growth of non-cash payments amounted to 16 %. Referring to the statistics of the Center for the Development of Innovations and Financial Technologies, a positive

³⁴ Daragmeh, A., Lentner, C., & Sági, J. (2021). FinTech payments in the era of COVID-19: Factors influencing behavioral intentions of "Generation X" in Hungary to use mobile payment. *Journal of Behavioral and Experimental Finance*, 32, 100574.

³⁵ AIFC. (2021). Development of cashless economy and programs to support small and medium-sized businesses were discussed at Astana Finance Days.

³⁶ PWC (2022) , Анализ рынка платежей в Республике Казахстан.

conclusion is made on the duration of the intensity of the use of non-cash types of payments and the sharp increase of local e-commerce ³⁷(forbes.kz, 2020). The volume of non-cash payments for the year increased 2.4 times and amounted to almost 30 trillion tenge (finprom.kz, 2020). The Analytical Center of AFK presented an overview of statistics on non-cash payments by cards as of July 01, 2020 in the Republic of Kazakhstan. After updating the historical maximum in May, the volume of non-cash card payments in the country in June again broke the record for the entire history of observations. The indicator increased from 2.4 to 2.7 trillion tenge (+15.4%) ³⁸(profit.kz, 2020)

Tracing the chronology of events, it is important to note the AIFC forum on the development of cashless payments and support for small and medium-sized businesses, during which announced growth for 2021 was 2.2 times more than last year, which is a clear indicator of leadership among the CIS countries in the transition to a cashless economy. Experts noted the positive impact of government initiatives to create a favorable environment for the digitalization of public types of services (AIFC, 2021). Summarizing the situation in Kazakhstan, 67% of entrepreneurs of macro, medium, and small businesses actively use the function of cashless payment adapting to the demand of consumers in the market ³⁹(atameken.kz, 2021). Based on the analytical infographic of the Visa, it is important to note the high rates in such megacities as Nursultan, Almaty, and Shymkent due to the high concentration of services and products in these regions (Vaal, 2020). As it was noted, the role of the state has a tremendous impact and, according to Vlast.kz, it is planned to create a digital currency tenge, which would serve as an inhibitor of the integration of cashless payment (vlast.kz, 2021). However, the legislative proposal was postponed for more detailed research in this area.

The catalyst for the process of transition to the digital environment with the application of innovative financial, technological, marketing, and cashless payment solutions was Kaspi Bank. Kaspi is not in the usual sense, an institution that bases its work on the lending and saving financial capital, it is a

³⁷ Forbes.com. (2020). Коронавирус стал драйвером безналичных платежей в Казахстане. Forbes.kz.

³⁸ Profit.kz (2020), Казахстанцы ускоренно переходят на безналичную оплату.

³⁹ Atameken.kz. (2020). Исследование: 63% казахстанских предпринимателей достаточно активно используют возможности онлайн-торговли. Atameken.kz.

company that provides a number of services for digital payments, financial transactions, the creation of e-commerce, etc. According to the analysis of the segmentation of the profitability of the company, noticeable growing profitability from creating conditions for cashless payment, which means an increase in demand for this service in the economy of Kazakhstan ⁴⁰(Ivashina, 2019). Kaspi has become a phenomenon in the market of Kazakhstan, creating its own unique ecosystem where both the seller and the consumers of the seller's products are in the role of the client of the bank's service. The company, focusing on the digitalization of all processes, introduced the possibility of cashless payment before the pandemic. The payment could be made through the mobile application, Kaspi Transfer, Kaspi QR, and through Kaspi gold cards. In general, by offering a wide range of non-cash payment types, the company has increased awareness in society. Further adapting the payment platform to the requirements and necessity of sellers activated the function of Kaspi pay, Kaspi QR checkout, etc. In one year, the Kaspi payment platform has gained growth in the number of consumers by 58 % and the duration of growth is expected as the company increasingly attracts new sellers who find the platform convenient, safe, fast, and attractive for customers. Kaspi has created a program for users to accumulate a bonus when using Kaspi QR and other non-cash types of payments, while for sellers it has made it possible to issue interest-free installments for their customers ⁴¹(Kaspi.kz, 2021). In general, the company has become a leader in the organization of cashless payments by speeding up the integration process and creating the most favorable conditions.

Kaspi Bank has become a successful case for reasoning the position of a bank whose main product is being created and developed driven buy customers. The chronology of the bank's development demonstrates an active transition to the digital environment since 2012 with the use of e-wallet, then until 2019, almost all innovations in the field of cashless payment were introduced into the main functionality of the bank's application. According to the Harvard research integration of the marketplace, digital

⁴⁰ Ivashina, V., & Cekin, E. (2019). Kaspi.kz IPO. Harvard Business School.

⁴¹ Kaspi.kz. (2021). Innovation makes life better. *Annual report 2020*.

payment functions, and fintech has created an innovative product that implements its work for consumers of all social categories (Ivashina, 2019).

In conclusion, the literature review gave a complete overview of the theoretical basis of the research topic and found secondary data analyzing which the further direction of research was determined.

Research methodology

The research will be conducted both qualitative and quantitative research methods. Structured in-depth interviews were used to conduct the qualitative research. The purpose of qualitative research was to obtain a deeper understanding of the situation in terms of a new habit and integration of cashless operations in our country. While, quantitative was conducted to gain the information from generations such as Y, which includes those who were born from 1981 to 1996, and anyone born from 1997 onward is part of a new generation, generation Z (Dimock, 2019).⁴²These generations have diverse life experiences, values, attitudes, and preferences, all of which have an impact on their decision making.

In-depth interviewing is a form of research approach that entails conducting lengthy face-to-face interview with respondent to learn about perspectives on a specific idea, issue, or circumstance. This research method is critical to our thesis since it allows us to elucidate more particular facts about the integration of cashless operations in daily life of Kazakhstan citizens concerning the situation at hand. In-depth interviews had the key benefit of allowing us to gather more precise knowledge and insights test our hypothesis and make research of diploma topic more objective.

Furthermore, scheduling appointments for in-depth interviews was quicker and easier.

Structured in-depth interviews were used in the qualitative study, which included asking prepared questions in a specific order so that the respondents' responses could be compared and analyzed. The in-

⁴² Dimock, M. (2019). Defining generations: Where Millennials end and Generation Z begins. *Pew Research Center*, 17(1).

depth interview questions (Appendix C) were developed in response to the research questions, habits and cashless operations, and, of course, in accordance with the thesis' theoretical section.

Methodology of qualitative research in-depth interviews will be conducted with Industry Experts who will provide their professional opinions on the research questions as well as provide objective reasons and responses. As a result, the current theory would be thoroughly examined.

The quantitative research method will be conducted to understand the differences between two generations and find out which generation prefer cashless operation systems more and why. Moreover, to see the number of users in each region and which regions are using non-cash operations more. At least 100 customers from different cities of Kazakhstan will be surveyed, which will give us reliable statistics and will help to prove our hypothesis or otherwise disprove.

The survey will include 15-20 questions, including general questions about usage of cashless operations, about their attitude to digitalization. The survey will be distributed among all generations in all cities of Kazakhstan and they will answer the same questions. Random sampling method used according to confidence level equal to 90% overall necessary population size is 243 with margin of error 5%.

Findings

Quantitative research results

There were 248 respondents in our survey, and their answers are very different according to their personal experience in cashless ecosystem. Residents of the 4 most populated cities of Kazakhstan participated in our survey: Nur-Sultan, Almaty, Shymkent and Aktobe. Moreover, other residents of the regions of Kazakhstan such as: Turkestan, Aktau, Semey, Karaganda and so on. Generation Z is 33.9%, 25-34 is 19.8%, 35-44 is 23.4%, 45-54 is 10.9%, 55-62-7.7%, and the number of respondents is 11 (4.4%) people from the category 63+. Additionally, respondents are divided by employment: 23.4% students, 21.8% entrepreneurs, 31% company employees, 12.1% freelancers, 6.9% retirees, the rest vary.

The survey was conducted in a Google questionnaire, and they were also sent through social networks such as WhatsApp, Instagram, Telegram. All questions will be provided in Appendix.

Most respondents prefer cashless payments, which shows that people are used to the new type of payment and the percentage is 68.5%. There are also those for whom the type of calculation is unimportant and they make up 1/5 of all respondents. 42.3% of people would not like to go back to cash, which is almost 4 times more than those who want to go back to cash. This proves that cashless payments have become preferable for residents of Kazakhstan.

One of the forcing factors shifting into cashless payments is the pandemic. It follows that the pandemic has significantly accelerated two important factors:

1. Transition from cash to non-cash transactions
2. Consumer trust in online platforms

This affected half of the people surveyed and after that they began to prefer cashless payments. This prompted companies to move to online platforms. It is noticeable in the large cities of Kazakhstan that more non-cash transactions take place where there is a wide choice of Internet platforms, as well as delivery services.

The result shows that consumers' purchases have changed in different ways, for some significantly and the percentage shows 34.3%, purchases have not changed so much after the appearance of cashless payment platforms for 64.7% of respondents. In the majority, people buy essential goods through bank transfer, these are food, medicines, household goods and things. The market has adapted to the new business conditions and those who paid more attention to the ecosystem and digitalization received more customers. Top 3 apps people use daily: Kaspi, Yandex, Glovo.

93% of respondents answered that they use Kaspi Bank. The study showed that of all available payment methods, residents of Kazakhstan, according to our survey, prefer QR and money transfers. Most non-cash transfers occur from card to card and through QR. Payment via QR is the most famous - 46.8% of respondents are aware of it. This method is also the most used daily compared to others - 65% of

respondents indicated this, a big plus is receiving bonuses when paying. Since it is safe and convenient to use in daily environment.

It was found that people spend more money through non-cash payments than cash and the percentage is 59.7%.

According to our data, there are still people who cannot get used to cashless payments, and these people are mostly baby boomers (11%). Due to their age and habits, it is the most difficult for them to adapt to new technologies and payment methods. The rest of the age categories are accustomed immediately and make up (89%).

Most of the respondents face the following problems with non-cash payments:

1. Less privacy (49.6%)
2. Technological addiction (44.4%)
3. Spending more money (43.5%)
4. Hacking (31.4%)

When asked about the convenience of cashless payments, people answered, 50.8% put 10/10, 21% rated it 9/10, which once again proves that people prefer cashless payments and are used to it.

The following findings are relevant for detecting consumer behavior and habits:

- Women have a greater predisposition to cashless procedures and use more accessible online shopping apps. While the audience of men has relatively adapted more to cash payments and have less active and diverse activity when making online purchases.
- The main audience of digital active residents live in large, densely populated cities such as Nur-Sultan, Almaty and Shymkent.
- The diversity of applications used, products purchased, and services used is observed in the category of people from 18 to 24 years old.
- The higher the profitability, the greater the activity and diversity when using the platforms.

- The category of respondents aged 35-44 years most of all uses card payments and were more likely to change their opinion regarding non-cash payments due to the pandemic. In addition, this category is the most active users of Kaspi.kz.

Interpreted findings illustrated on diagrams given in Appendix C.

Qualitative research results

An employee of the second-tier bank who has at least 5 years of experience in this field was selected for the interview. The interview was conducted face-to-face through the transcript of the answers, this kind of approach helped to get the maximum number of answers without unnecessary information. In general, 6 open-ended questions were asked, which organically complemented the survey results. Interpreted findings of interview illustrated on transcript given in Appendix D.

Cashless operations from the perspective of Bank

Interviewed expert's work experience consists in servicing both individuals and legal entities, so customers are consumers of different categories. For each of clients, cashless payment is disclosed from different sides, if individuals use this function more for everyday payment procedures for products, services, then legal entities use it for payroll, international transactions, currency transfers within an account, etc. As a specialist working in a bank, an expert who regulates monetary transactions, advises consumers, and is engaged in creating cash flow through lending and storing deposit investments. In general, in expert's understanding, cashless operations are all types of monetary procedures without the use of hard money in the direct sense of the word.

Cashless operations from the perspective of Customers

From the point of view of the consumer, cashless transactions are all types of services rendered with money turnover using intangible money. An example is the online purchase of clothing, food, medicines and other necessary products, the use of mobile application services for calling a taxi, watching

movies, online training, buying tickets to theaters, movie, concerts and other activities in which the payment is carried out through online cashless method of payment when securing bank card data, etc.

Digital ecosystem in Kazakhstan

Expert did not use exact, accurate data about other countries to conduct parallel development and comparison, but he is confident that Kazakhstan is not considered a backward country, since non-cash payment existed before the pandemic and was well advanced with the governmental policy of digitalization of the economy. He noted that since 2013, activation began when switching to cashless payments through an increase in POS terminals, all banks began to improve their mobile banking offers and in general, the community began to trust more cards that were the main type of cashless payment at the time. According to his observations, the digital literacy of people in the use of mobile phones, the Internet served as a big breakthrough and the outburst of Kazakhstanis occurred as smoothly as possible without any special and sharp jumps. At the moment, people are increasingly trusting and switching to conscious consumption of cashless payment services, as this kind of approach has proven to consumers its advantages in saving time, convenience, speed of operation, security, etc.

Tendencies after COVID-19

The pandemic is definitely one of the most influential events that have become a key moment for the whole world, including Kazakhstan. Strict restrictions on the work of small, medium sized businesses in the field of food, entertainment, and other services have largely adapted both suppliers and consumers to the transition to cashless payment through the demand for online, distant services, delivery of products etc. In addition to government initiatives on restrictions, people were controlled by the fear of contracting the disease, since it was possible to easily and as unexpectedly become infected with a corona virus unknown to anyone at that time. In society of the country, during the pandemic, as in many economies, due to the isolation at house and a sharp reduction in the types of activities, online shopping was the only salvation. Online shopping takes place without the participation of a tangible cash payment, as the consumer contacted the seller through a mobile applications, online banking, social networks, etc.

There were many catalysts, but each of them differed in the level of influence. To a greater extent, in opinion of the expert, for the formation of public consciousness and attitude to cashless payments, the activity of Kaspi Bank played a big role, if not more, then equally to the pandemic. Kaspi Bank has been actively developing not as a traditional second-tier bank, but as a fintech product that increasingly invests in innovation, digitalization and other types of modern business trends. Kaspi has become a people's bank with the help of a strong orientation to the needs and demands of people. More precisely, in the language of marketing and management, it became customer oriented and earned the greatest amount of trust. The functions of Kaspi for money transfer, the use of Kaspi.kz mobile app were activated before the pandemic and were used by local business owners with the best conditions. But the pandemic was the impetus that led to record growth and improvement in the quality of the company's cashless operations services. In addition to Kaspi, based on the development strategy of Kazakhstan 2050, a policy for the transition to a digital economy was clearly outlined, which is also a catalyst. Furthermore, no matter how generalized it sounds, globalization is also an influential process that has created demand for international cashless transactions through the development of tourism, exports, imports, etc.

There were different theories and outcomes of the event for the post-pandemic period. Some expected a sharp decline in demand and interest in online services, while others predicted continued growth. In general, according to statistics, the introduction of the second group turned out to be more likely since growth has not stopped and people still use cashless payment methods. Even public services have actively switched to accepting cashless payments, tax payments, fines, utility services; everything has switched to mobile banking. One of the main trends is the expansion of the audience of cashless payments users, if young people were more interested and active, now literally everyone, regardless of age, has a certain position in relation to cashless operations. Elderly clients of expert's bank are increasingly interested in how to make pension accruals immediately fall to the account of Kaspi, etc. Additionally, one of the observed trends is the variation of products and services that can be purchased by cashless payment are becoming more and more diverse. Almost any kind of product can be found

through online stores. Expert’s expectations for the future are positive, because despite the active development of cashless payments, remote regions of the country still do not have access to online services or cashless operation methods. He thinks innovations introduced in big cities will be actively practiced in small cities. He also expects the digital tenge to make a revolution in society and increase the solvency of our residents by increasing the scarcity of money turnover.

Discussion

The conducted research was justified by the results that confirmed the research hypothesis or supplemented. During the quantitative analysis, it was found that consumers were generally active in using cashless payments, but the behavior differed in terms of age and gender variations in the level of profitability. The variety of platforms used is wide, but there is a leadership of Kaspi kz. This kind of outcome was created thanks to the ecosystem of cashless operation, which was created over 10 years through the joint work of the state and representatives of private business, commercial banks etc. Further, a more detailed influence of different spheres on the creation of a cashless society in Kazakhstan is explained through a PESTEL analysis.

PESTEL analysis

Political	Kazakhstan's political position largely determines the direction of cooperation and development of second-tier banks. The situation with the war between Russia and Ukraine has largely created a high demand for bank offers from Russians. However, it will be important for the country to maintain a balance and not provoke dissonances in the international arena related to the support of the aggressor country, according to Kuat Akizhanov, an expert in scientific research center of Political Economy, since sanctions will be applied to Kazakhstan (vlast.kz, 2022).
Economical	The import and export process creates an environment in which it is important to interact with partner countries to conduct a transaction. If the trade turnover becomes more active, the growth of demand for products will increase and the money turnover will increase too. The economic downturn of neighboring country Russia will affect the high demand for Kazakhstan's products and services, which will activate the work of local small, medium sized businesses that create a cashless environment for remote payments.
Social	In the course of the quantitative method of research, it was found that with increasing profitability, activity increases when using non-cash payments, since consumers will be able to use the entire specter of services and goods that are

	provided in cashless payment platforms. In addition, the level of digital literacy, the provision of high-quality Internet, and the mobilization of the population have a significant impact on the adaptation of cashless procedures.
Technological	Technological progress on the example of Kaspi Bank, which positions itself as a fintech company, significantly affects the local market. Innovative methods of making payments for the local population, offers for making online purchases, a variety of functionality creates a favorable environment.
Environmental	As environmental factors, it is possible to define a pandemic that, through hard power, forced all countries to adapt to new conditions that meet the criteria of safety for people or consumers, efficiency in application, flexibility to influencing factors. It is also possible to note the opposite effect in which the transition to non-cash payment reduces the physical presence and activity of consumers who will use services at home. As a result, the load and damage in the environment is reduced.
Legal	The legislation of the country is the basis for the transition of Kazakhstanis to cashless operations. The fact that obliges all small, medium sized business owners to issue a check when making a transaction has an indirect effect on the demand of POS terminals that accept payment via a card and instantly issue a check. A negative aspect can be article 32 on the payment request, which states that the transaction between the beneficiary and the sending bank is carried out within 10 calendar days, which leads to a slowdown in the process.

Based on the research results for consumer-oriented strategies to increase cashless operations following recommendations are suggested for business owners.

Recommendations for business owners

- Segment consumers and create a portrait of a customer that will determine the main socio-demographic characteristics, psychological indicators and customer behavior.
- To develop a special loyalty program for consumers who make purchases and use services by cashless payment method.
- Respond to consumer requests and create conditions for different categories.
- Offer a variety of cash payment methods depending on the main target of consumers. If young people more precisely Millennials focus more on the functionality of mobile payment, then the generation aged 35-44 years prefer credit cards, etc.
- Digital high activity of female consumers is used to activate the behavior of male consumers through the creation of complex paired offers and payment methods.

It is also important for the society to involve different groups of specialists when switching to cashless payment. Therefore, the following recommendations are of a general nature.

Recommendations for policy makers

- To organize joint work of different sectors such as the state, private business, consumers, commercial banks, etc.
- Affect society through a combination of hard and soft power, which will give maximum influence on people's behavior and consciousness.
- At the legislative level, to facilitate the transaction procedures for cashless payment methods.
- Motivate consumers through marketing benefits of cashless operations.
- Create favorable conditions for the development of digital literacy of the generation over 35 years old; accelerate the process of providing Internet access to remote regions of the country.

Conclusion

The pandemic has significantly affected the habits of Kazakhstanis, changed the behavior of customers when using non-cash transactions in everyday life. Cash used to be used frequently, but our research now shows that it has become rare. Our first hypothesis was correct and our research proved it completely. In large cities of Kazakhstan, many companies, due to COVID-19, began to adapt to new realities and began to develop online platforms. During the pandemic, users began to trust online shopping and this was reflected in the habits of residents of large cities.

The second hypothesis is incorrect, as the study shows that Kaspi and the pandemic both played a big role in the development of cashless payments. Kaspi existed before the pandemic, but quarantine helped Kaspi develop many services. The pandemic has accelerated the digitalization process. Even in the regions, people are switching to cashless payments, and this is also convenient for them. They don't have as many apps as in major cities, but they do have transfers and card payments. Outside the big cities, development is also underway, it is slower than in big cities, but it is continuing. Hypothesis 3 has been

refuted and, according to our data, in other regions and cities, people also refuse cash payments and prefer transfers and card payments.

In the course of the study, there were limiting factors that were present during the quantitative method of research. The underdeveloped research literacy in society and the lack of available applications and databases with volunteer respondents complicated the process of collecting a large number of responses. However, the use of a variety of social networks in random sampling and distribution of the survey facilitated situation. In addition, the reluctance of experts in the field of banking to participate in interviews served as a limitation. This kind of behavior is justified by various factors related to the difficulties of disclosing personal opinions, time management, etc. However, since the mixed method was used in the study, the presence of one interview was sufficient due to a large amount of primary data and survey results were used. In further research, the priority will be to expand the diversity of respondents and increase the number. The opinions of experts from different fields who have direct activities with cashless procedures, such as business owners, employees of public organizations for the digitalization of the economy, specialists of banks of different levels, etc., will also be taken into account.

In general, the study has theoretical and practical importance due to the relevance of the research question, the use of the mixed method for the full disclosure of the topic, the results of which are indicative. For an overview of the development of cashless payments in the time period after the pandemic, it has theoretical value for further research, since there is minor research base with up-to-date data on the example of Kazakhstan. From a practical point of view, the findings and recommendations will be useful for business representatives who work with consumers of different generation categories, for local government organizations like Atameken business, etc. to implement digitalization projects in different regions of Kazakhstan.

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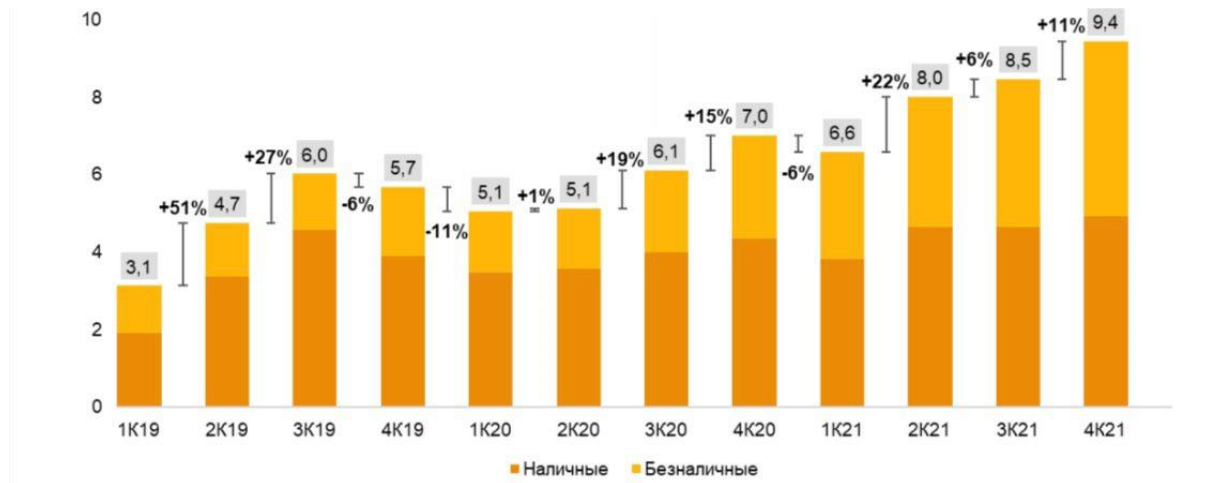
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Appendices

Appendix A

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



Appendix B

Survey questions

1. Gender

- Male
- Female

2. Age

- 18-24
- 25-34
- 35-44
- 45-54
- 55-62
- 63+

3. City

- Nur-Sultan
- Almaty
- Shymkent
- Aktobe
- Other _____

4. Income level

- 150-250K
- 251-300K
- 300-350K
- 350-400K
- 401-450K

- 450-550K
- other_____

5. Occupation

- Student
- Freelancer
- Employee of company
- Entrepreneur
- Retired
- Other_____

6. At the moment, what money type do you prefer more?

- Cash
- Non-cash
- Does not matter

7. If you had a choice, would you return to cash?

- Of course
- Never
- Perhaps
- Other_____

8. Have your purchases changed much after the appearance of cashless operation platforms?

- Very
- Medium
- Not much
- Other_____

9. What do you usually buy via cashless services? (will be offered ticks)

- Food
- Clothes
- Household goods
- Medicines
- Other_____

10. What kind of cashless operation platforms do you prefer more? (will be offered ticks for picking)

- Glovo
- Yandex
- Kaspi
- Halykbank
- Arbuz
- Wolt
- Chocolife
- Lamoda
- Aviata
- Booking
- Krisha.kz
- Kolesa.kz
- Forte
- Other_____

11. How frequently do you use the above selected platform?

- Everyday
- Once a week
- Once a month
- Rarely
- Other_____

12. When did you decide to make the transition from cash to non-cash?

- After pandemic
- Before pandemic situation
- Still using cash
- Other

13. How quarantine time changed your opinion about cashless operations?

- Extremely strong
- Medium
- Weakly
- Didn't affect

14. What is your regular payment method?

- Cash
- Card
- Money transfers
- QR

15. How frequently do you pay with a card or QR code?

- Everyday
- Not so often
- Never
- Other_____

16. Usually do you spend more money when you have cash or when the money is on the card?

- Cash
- On the card
- Other_____

17. How long did it take you to get used to cashless operations?

- Immediately
- Couple of days
- More than necessary
- Still can't get used to

18. What problems do you face during cashless payments?

- Less privacy
- Technological dependency
- Overspending
- Hacking
- Other_____

19. Rate the convenience of cashless payments from 0-10?

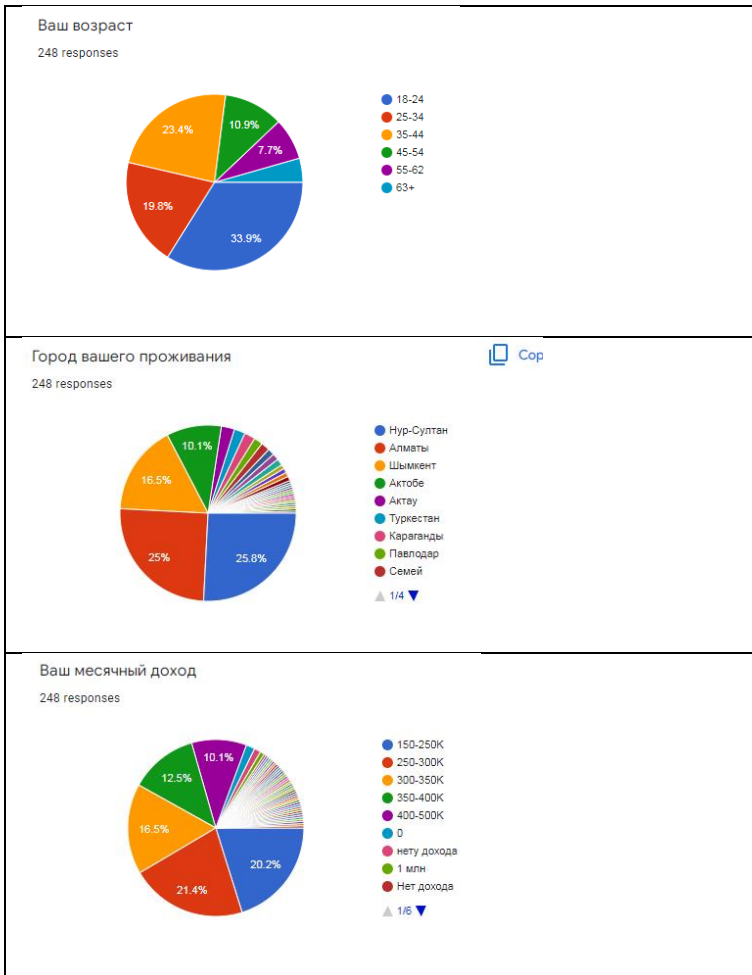
1	2	3	4	5	6	7	8	9	10
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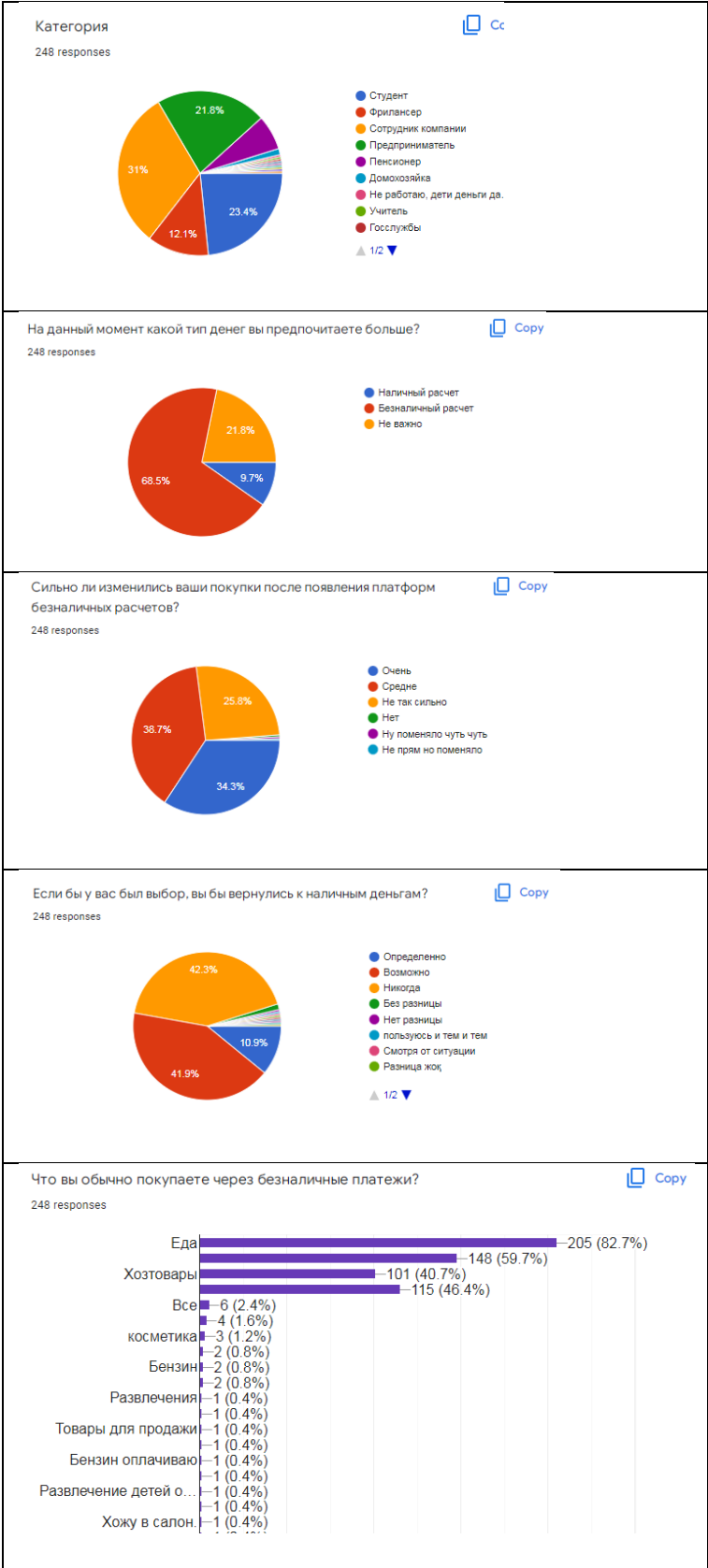
20. Which bank do you prefer in using cashless payments?

- Kaspi
- Forte bank
- Halyk bank
- Jusan bank
- Other_____

Appendix C

Survey results illustration

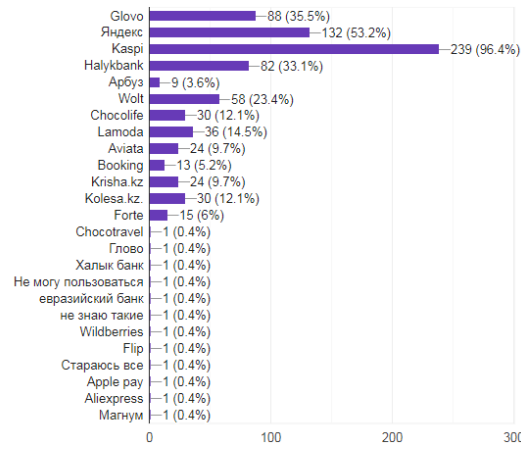




Какие ТОП 3 приложения вы используете ежедневно для безналичных операций?

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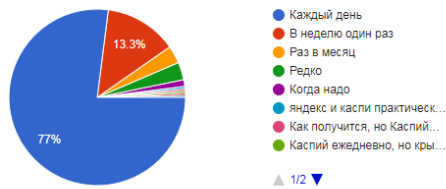
248 responses



Как часто вы используете выбранную выше платформу?

Copy

248 responses



Когда вы решили перейти с наличного расчета на безналичный?

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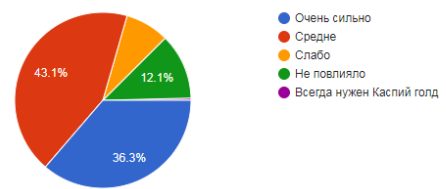
248 responses



Как время карантина изменило ваше мнение о безналичных расчетах?

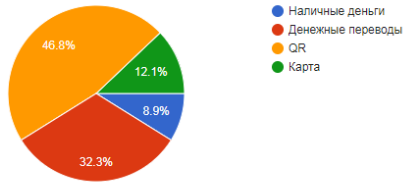
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248 responses



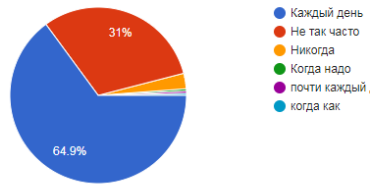
Какой у вас обычный способ оплаты?

248 responses



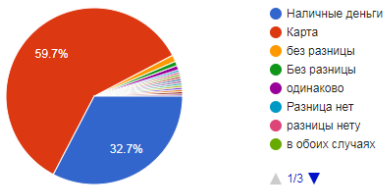
Как часто вы платите картой или QR-кодом?

248 responses



Вы обычно тратите больше денег, когда у вас есть наличные или когда деньги на карте?

248 responses



Как долго вы привыкали к безналичному расчету?

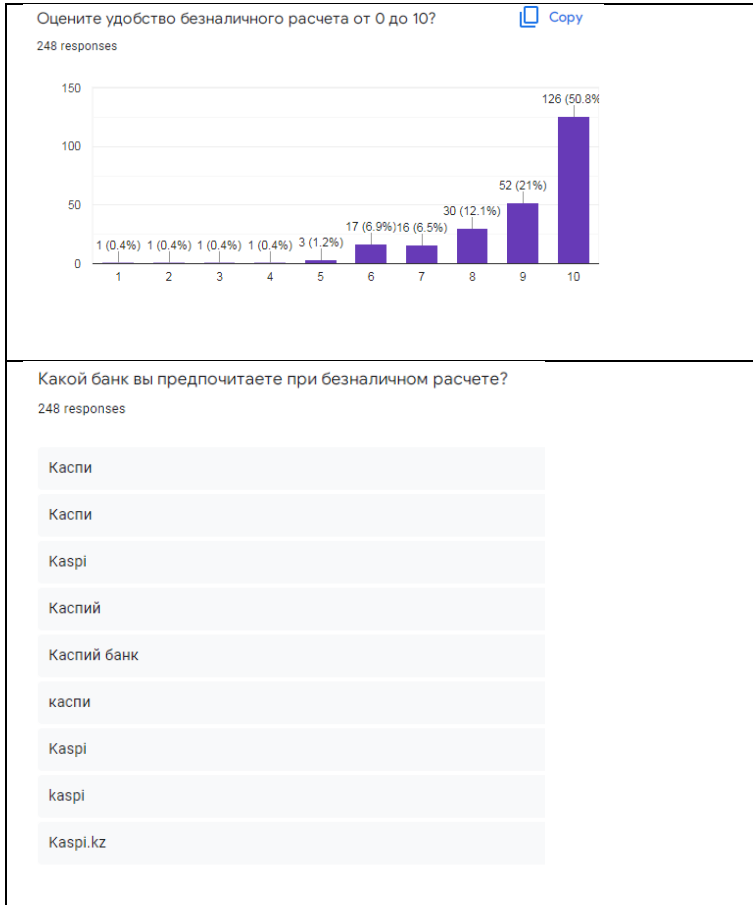
248 responses



Как долго вы привыкали к безналичному расчету?

248 responses





Appendix D

Interview transcript

Questions	Answers
Q1: How can you define cashless operations based on your professional experience?	My work experience consists in servicing both individuals and legal entities, so our customers are consumers of different categories. For each of our clients, a non-cash payment is disclosed from different sides, if individuals use this function more for everyday payment procedures for products, services, then legal entities use it for payroll, international transactions, currency transfers within an account, etc. That is, from the point of view of the consumer, cashless transactions are all types of services rendered with money turnover using intangible money. As a specialist working in a bank, I am an expert who regulates monetary transactions, advises consumers, and is engaged in creating cash flow through lending and storing deposit investments. In general, in our understanding, cashless operations are all types of monetary procedures without the use of hard money in the direct sense of the word.

<p>Q2: What is the overview of cashless payment in the Kazakhstani market?</p>	<p>I do not have accurate data on other countries to conduct parallel development and comparison, but I can say for sure that Kazakhstan is not considered a backward country, since non-cash payment existed before the pandemic and was well advanced with the governmental policy of digitalization of the economy. If I'm not mistaken, since 2013, activation began when switching to cashless payments through an increase in pos terminals, all banks began to improve their mobile banking offers and in general, the community began to trust more cards that were the main type of cashless payment at the time. According to our observations, the digital literacy of people in the use of mobile phones, the Internet served as a big breakthrough and the outburst of Kazakhstanis occurred as smoothly as possible without any special and sharp jumps. At the moment, people are increasingly trusting and switching to conscious consumption of cashless payment services, as this kind of approach has proven to consumers its advantages in saving time, convenience, speed of operation, security, etc.</p>
<p>Q3: What is the role of the pandemic in accelerating the process of transition to a digital environment in payment system?</p>	<p>The pandemic is definitely one of the most influential events that have become a key moment for the whole world, including our country. Strict restrictions on the work of small businesses in the field of food, entertainment, and other services have largely adapted both suppliers and consumers to the transition to cashless payment through the demand for online, distant services, delivery of products etc. In addition to government initiatives on restrictions, people were controlled by the fear of contracting the disease, since it was possible to easily and as unexpectedly become infected with a corona virus unknown to anyone at that time. In our society, during the pandemic, as in many economies, due to the isolation of the house and a sharp reduction in the types of activities, online shopping was the only salvation. Online shopping takes place without the participation of a tangible cash payment, as the consumer contacted the seller through a mobile applications, online banking, social networks, etc.</p>
<p>Q4: What are other catalysts of the cashless operations development in Kazakhstan?</p>	<p>There were many catalysts, but each of them differed in the level of influence. To a greater extent, in my opinion, for the formation of public consciousness and attitude to cashless payments, the activity of Kaspi Bank played a big role, if not more, then equally to the pandemic. Kaspi Bank has been actively developing not as a traditional second-tier bank, but as a fintech product that increasingly invests in innovation, digitalization and other types of modern business trends. Kaspi has become a people's bank with the help of a strong orientation to the needs and demands of people. More precisely, in the language of marketing and management, it became customer oriented and earned the greatest amount of trust. The functions of Kaspi for money</p>

	<p>transfer, the use of Kaspi.kz mobile app were activated before the pandemic and were used by local business owners with the best conditions. But the pandemic was the impetus that led to record growth and improvement in the quality of the company's cashless operations services. In addition to Kaspi, based on the development strategy of Kazakhstan 2050, a policy for the transition to a digital economy was clearly outlined, which is also a catalyst. Furthermore, no matter how generalized it sounds, globalization is also an influential process that has created demand for international cashless transactions through the development of tourism, exports, imports, etc.</p>
<p>Q5: What trends in cashless ecosystem have been observed in the post-pandemic period and what are you forecasting for the future of digital economy?</p>	<p>There were different theories and outcomes of the event for the post-pandemic period. Some expected a sharp decline in demand and interest in online services, while others predicted continued growth. In general, according to statistics, the introduction of the second group turned out to be more likely since growth has not stopped and people still use cashless payment methods. Even public services have actively switched to accepting cashless payments, tax payments, fines, utility services; everything has switched to mobile banking. One of the main trends is the expansion of the audience of cashless payments users, if young people were more interested and active, now literally everyone, regardless of age, has a certain position in relation to cashless operations. Our elderly clients are increasingly interested in how to make pension accruals immediately fall to the account of Kaspi, etc. Also one of the observed trends is the variation of products and services that can be purchased by cashless payment are becoming more and more diverse. Almost any kind of product can be found through online stores. My expectations for the future are positive, because despite the active development of cashless payments, remote regions of the country still do not have access to online services or cashless operation methods. I think innovations introduced in big cities will be actively practiced in small cities. I also expect the digital tenge to make a revolution in society and increase the solvency of our residents by increasing the scarcity of money turnover.</p>
<p>Q6: As you mentioned, all the audience of residents of small regions is still in the process of switching to non-cash transactions, please tell me in what way do you plan to attract the attention of users of the traditional cash payment method to the cashless operations?</p>	<p>With regard to this question, I would like to start with a case study of the country, the experience of which we once studied at the university is applicable when discussing bank issues. We analyzed the experience of Sweden, which is among the top cashless economies that have integrated all methods of non-cash payments into society as a whole. This country has created the best conditions for maximum adaptation of cashless operations through the joint work of representatives of different positions. That is, society was influenced by state initiatives at the legislative level at which every seller had the right not to accept cash</p>

payments, policies to improve the digital ecosystem, commercial banks that offered the best options to their consumers when opening debit cards, and of course consumers themselves who, due to a high level of education, digital literacy, quickly moved to the cashless environment. This all means that the initiative of our bank is only part of the actions to attract an audience of new consumers who wish to purchase a debit card. In general, we are not inventing anything new from our side, since Kaspi Bank is expanding its activities and their case is a real example and direction for development. Usually marketing strategies are developed by another department and we do not have the right to disclose, but according to my observations, I would personally recommend using a mix of soft and hard power that will give the best effect. As a soft power method, it is possible to hold information sessions with the consultation of residents of sparsely populated regions, to expand the diversity of the offer to meet the needs of residents. As a hard force, it is possible to oblige each resident to open a bank account from the moment of birth for the accrual of benefits. That is, not the mother will receive, but will be credited to the account of the child who will be valid and perform various functions.