

IMPACT OF THE COVID-19 OUTBREAK ON DIGITAL PAYMENTS

Vrabie Doina, PhD Student
e-mail: doina_la@yahoo.com

Academy of Economic Studies of Moldova
61 Bănulescu-Bodoni Street, 2005 Chişinău, Republic of Moldova
Web page: www.ase.md

Abstract: *This study covers the impact of the COVID-19 pandemic on the electronic payments sector at global and national level, the current effect, implications and future trends. An extensive arsenal of research methods was applied to the research, such as: analysis method, synthesis method, comparison, induction, inference, etc.*

Key words: *COVID-19, impact, economic, payments, electronic, digital.*

JEL CLASSIFICATION: O14, O3

1. INTRODUCTION

The continued spread of COVID-19 has become one of the greatest threats to the global economy. Given that payments and payment services are, in themselves, an important part of the financial services package, in certain circumstances they can not only facilitate access to other financial services, but in many cases are essential for their efficient provision.

2. THE IMPACT OF THE COVID-19 PANDEMIC ON THE GLOBAL ECONOMIC AND PAYMENTS SECTOR

In the context of the COVID-19 pandemic, payment service users are affected differently, depending on their exposure to different sectors. Faced with store blocking and closing regimes, many businesses have been forced to migrate to the online environment, so the share of global retail sales generated by e-commerce is growing and is estimated to reach a third by 2024. At the same time, some segments, including travel and airlines, have experienced a severe decline due to COVID-19 (both online and offline channels). The resulting economic disruption is huge and the short-term decline in activity for businesses, both large and small, considerable.

However, there are also a few areas that are seeing an uptick in digital payments by way of increased adoption during the lockdown. These include online grocery stores, online pharmacies, OTT players (telecom and media), EdTechs, online gaming, recharges and utility/bill payments.

Consumer payment behaviour has also changed because of the corona virus epidemic, and the level of use of digital payment methods has increased during the COVID-19 epidemic. Consumers make online and mobile payments to buy food and other products, as well as to pay for daily necessities, and some of them have adopted the practice for the first time during the epidemic. In this context, the use of digital and contactless payment methods has increased against the background of the COVID-19 outbreak. According to the Report "*COVID-19 Impact on Global E-Commerce & Online Payments - 2020*" (Research And Markets, 2020) almost 50% of consumers use digital payments more than before the pandemic. The tendency is to maintain this trend through Electronic wallets and contactless cards, that are the top payment methods used as a result of this change, as consumers use less cash and make more purchases online. In an international survey cited in the aforementioned report, nearly three-quarters of Respondents reported that contactless was a "cleaner" way to pay in stores, so contactless payments received an unprecedented boost during the pandemic, with consumers also trying new payment methods

while shopping online. e-commerce and prefer the methods that have the strongest protection against losses caused by fraud. on e-commerce sites during the pandemic, consumers mainly use payment cards and e-wallets. Although there is also a strong variation in how shoppers in different countries pay online, payment security has been the main criterion applied by online shoppers when selecting their payment method.

3. THE ECONOMIC IMPLICATIONS OF THE COVID-19 PANDEMIC ON NATIONAL ELECTRONIC PAYMENTS SECTOR

The ongoing spread of COVID-19 has become one of the biggest threats to the global economy and financial markets. To contain the impact of the coronavirus outbreak, Republic of Moldova, like many countries across the globe, has taken several measures, including a nationwide lockdown; limiting movement of the entire population; shutting down public places and transport; and urging the public to stay indoors, maintain social distance, and work from home.

The digital payments sector of the Republic of Moldova is no exception. Below is the information, for each payment instrument, on the trends recorded during 2020, as well as their evolution prospects based on the "Report on the evolution of financial market infrastructures in the Republic of Moldova – year 2020" of National Bank of Moldova (NBM).

3.1. Credit transfer

Out of the total number of payment transactions made through credit transfer initiated by banks' customers (18.4 million transactions), 86.8 percent were initiated electronically through Automated Remote Service System (ARSS), which reflects the degree of digitization of payment services in the Republic of Moldova.

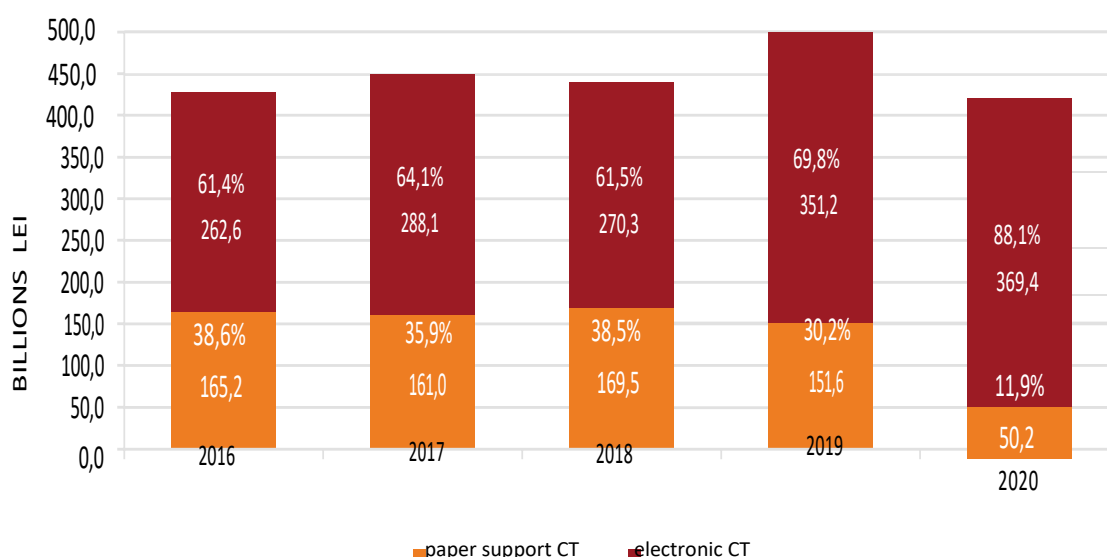


Figure 1. The evolution of Credit Transfer digitization depending on the value of operations
 Source: NBM website - Report on the evolution of financial market infrastructures in the Republic of Moldova – year 2020

The value of the operations performed through the credit transfer initiated by the banks' clients amounted to 419.5 billion MDL, of which:

- 88.0% - in electronic format;
- 12.0 % - on paper.

3.2. Direct debit

Although the experience of some countries reveals that, direct debit can be a convenient and fast way to make periodic payments, this payment instrument is not popular among payment service users in the Republic of Moldova. During 2020, through direct debiting, 170.7 thousand transactions were made in the total amount of MDL 116.6 million. MDL, up by 30.6 percent and by 73.6 percent

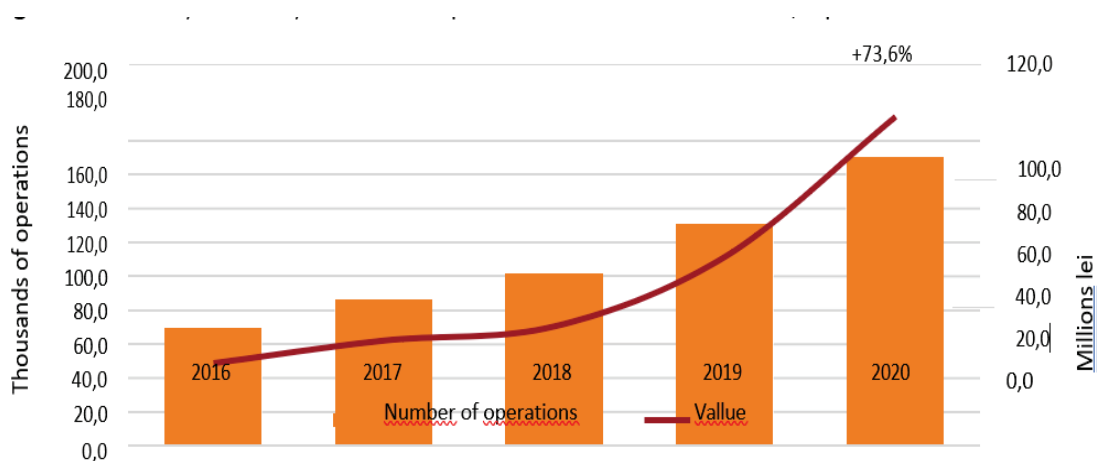


Figure 2. The evolution of transactions performed through direct debit, in the period 2016-2020

Source: NBM website - Report on the evolution of financial market infrastructures in the Republic of Moldova – year 2020

The total number of users of this tool at the end of 2020 was 14.4 thousand people, twice as much as the previous year. Most of them are individuals who use direct debit, mainly, for the payment of utilities.

3.3. Payment cards

The payment card saturation indicator in the Republic of Moldova reached the level of 0.8 at the end of 2020. Thus, according to this indicator, 4 out of 5 inhabitants of the Republic of Moldova hold a payment card. For comparison, at the end of 2019, the EU average was 1.7 cards per capita.

At the end of 2020, the number of cards in circulation issued by payment service providers in the country reached the amount of 2.18 million units

According to the technical solution, the proximity cards constituted 89.2 percent of the total number of cards issued during 2020 and 80.2 percent of the total share of cards in circulation.

Over the past four years, the number of proximity cards has increased by about 5 times, which has contributed to the gradual replacement of hybrid cards which, in turn, have previously substituted magnetic stripe cards.

Social cards are the category with the lowest share in the total of cards in circulation, but with the highest rate of active cards (80.1 percent of the total social cards in circulation). If initially, users perceived social cards as a tool for withdrawing cash from transfers of social benefits, gradually the trend of using social cards is increasingly taking shape in cashless payments. The share of cashless payments in the total number of transactions made with social cards increased in just 3 years from 44.9 percent in 2018 to 61.4 percent in 2020, thus approaching the general share of Non Cash Payments (NCP) to 73.2 percent.

Article name	Year 2020		Year 2019		Evolution in dynamics 2020 / 2019
	number of units	structure %	number of units	structure %	%
Number of cards in circulation at the end of the analyzed period - total	2 182 076	100%	2 012 566	100%	8,4%
a) Issued under the system:					
card issued under "Visa International" trademarks	1 157 583	53,0%	1 052 648	52,3%	10,0%
card issued under "MasterCard WorldWide" trademarks	1 021 182	46,8%	954 485	47,4%	7,0%
card issued under "American Express" trademarks	3 311	0,2%	5 433	0,3%	-39,1%
b) by source:					
debit card	2 132 707	97,7%	1 968 003	97,8%	8,4%
credit card	49 369	2,3%	44 563	2,2%	10,8%
c) by "conditions of issue" feature					
personalized card, issued based on salary projects	961 321	44,1%	979 507	48,7%	-1,9%
personalized card, issued based on social projects	395 033	18,1%	396 471	19,7%	-0,4%
personalized card, issued in general conditions	765 287	35,1%	598 628	29,7%	27,8%
personalized card *	60 435	2,8%	37 960	1,9%	59,2%
prepaid card	0	0,0%	0	0,0%	0,0%
d) by the type of technical solution					
proximity card (contactless)	1 748 825	80,1%	1 392 338	69,2%	25,6%
hybrid card	428 492	19,6%	610 757	30,3%	-29,8%
magnetic stripe card	2 580	0,1%	7 025	0,3%	-63,3%
virtual card	2 179	0,1%	2 446	0,1%	-10,9%
e) by cardholder type					
personal card	2 164 607	99,2%	1 999 146	99,3%	8,3%
Business card	17 469	0,8%	13 420	0,7%	30,2%
f) by level of use					
active card **	1 324 843	60,7%	1 227 675	61,0%	7,9%
salary	649 476	67,6%	633 127	64,6%	2,6%
social	316 442	80,1%	294 561	74,3%	7,4%
general	334 517	43,7%	279 109	46,6%	19,9%
personalized	24 408	40,4%	20 878	55,0%	16,9%
Inactive card	857 233	39,3%	784 891	39,0%	9,2%

Figure 3. The evolution of transactions performed through direct debit, in the period 2016-2020
 Source: NBM website - Report on the evolution of financial market infrastructures in the Republic of Moldova – year 2020

In 2020, cash withdrawal operations constituted 38.6 percent out of the total number of operations performed with social cards, but these represented 80.0 percent of the total operations performed. While the number of cash withdrawals has remained roughly constant over the past 3 years, the number of cashless payments has increased 2.2 times.

In 2020, NCP made with the cards issued in the Republic of Moldova amounted to 70.3 bn. payments of 21.8 bn MDL. These operations increased by 38.0 percent in number and 26.5 percent in value compared to the previous year. At the same time, their share constituted 73.2 percent of the total number of operations performed and 28.8 percent of the total value.

The number and value of domestic cashless payments maintain a steady upward trend throughout the analysis period. For 2020, there was an increase of 56.3 percent in number and 54.6 percent in value compared to 2019, respectively.

The increase in the value of cash withdrawals is correlated with the increase in cash in circulation.

In 2020, were made 11.0 million transactions worth 4.8 ml. MDL with payment cards issued by payment service providers from the Republic of Moldova., through e-commerce platforms both in the country and abroad, a number that has registered a slight evolution during the last year. , 75.6 percent of the total number of payments were made on e-commerce platforms offered by payment service providers abroad, which denotes the appetite of users to use e-commerce according to the size and diversity of the available acceptance network.

Indicatori			2020	2019	Evolution	Nr. per 1000 inhabitants	
						RM	EU average**
Special devices	Self-serve terminals	ATM	1120	1137	-1,5%	0,4	0,8
	POS terminals	located at merchants	21 234	18 057	17,6%	9,0	32,7
		including contactless	18 383	13 393	37,3%		
		located at banks	2 493	2 460	1,3%		
		including contactless	438	422	▲ 3,8%		
e-commerce platforms*		525	408	▲ 28,7%	n/a	n/a	
Total:			25 372	22 062	▲ 15,0%		

Figure 4. Acceptance Network in the Republic of Moldova¹

Source: NBM website - Report on the evolution of financial market infrastructures in the Republic of Moldova – year 2020.

The indicator reflecting the number of cashless payments per capita is constantly increasing. If in 2015, on average, each inhabitant of the Republic of Moldova received 3 non-cash payments per year, in 2020 this indicator reflects 26 non-cash payments.

Contactless terminals registered the most important growth rate compared to the same period of last year, as an indicator of the efforts of the commercial points to increase comfort and efficiency in payment for customers.

With the limitation of physical access to the trading points during 2020 and the increase in the need to shop in the online environment, the number of e-commerce platforms increased by 28.7 percent, reaching the figure of 525 platforms at the end of 2020.

In the last 5 years, the indicator reflecting the number of POS terminals per thousand inhabitants has improved. Thus, if in 2015, per thousand inhabitants of the Republic of Moldova there were only 4 POS terminals, in 2020 this indicator reached the value of 9 terminal POS per thousand inhabitants.

4. CONCLUSION

Therefore, we can conclude that the corona virus epidemic not only transforms the way consumers buy, but also the way they pay for their purchases. In this context, the use of digital and contactless payment methods has increased against the background of the COVID-19 outbreak. Contactless cards are the top payment methods used as a result of this change, as consumers use less cash and make more purchases online. As a result, the payments market has undergone a rapid transformation due to the need to develop new payment technologies and solutions.

¹ * software solution that allows the acceptance of payment cards in the online environment

** - for 2019

Digital payments, once a convenience, have become a necessity in these times. With a majority of the sectors that contribute to digital payments still in a state of flux, it is still too early to ascertain the long-term impact of COVID-19 on digital payments.

With economic growth expected to be severely hit, the financial outlook of the digital payments sector is no different and will follow a similar trajectory, at least in the short term. But the industry's stability and potential for innovation will play an invaluable role in rebooting the economy in the new normal.

The effects of COVID-19 during the pandemic period and the latest developments have conditioned the emergence of important challenges in terms of the development of the payments market and the increasing use of non-cash payment instruments. Thus, the stability and innovation potential of the digital payments industry will play an invaluable role in restarting the economy in the new normal

REFERENCES

- Aker, J., Boumniel, R., McClelland A. and Tierney N. (2016). Payment Mechanism and Anti-Poverty Programs: Evidence from a Mobile Money Cash Transfer Experiment in Niger. *Economic Development and Cultural Change*.
- BNM. Report on the evolution of financial market infrastructures in the Republic of Moldova – year 2020. [online]: <http://www.bnm.md/ro/content/raportul-privind-evolutia-infrastructurilor-pietei-financiare-din-republica-moldova-pentru>.
- Law on Payment Services and Electronic Money no. 114 of 18.05.2012. Published: in the *Official Monitor of the Republic of Moldova* no.193-197/661 of 14.09.2012.
- Mas, I., and Mayer C. (2012). Savings as Forward Payments: Innovations on Mobile Money Platforms. *Oxford University*.
- Matthias L., Dumitru P., Ricardo G. (2020). The limited use of non-cash payments in Moldova: *Diagnosis and policy options*.
- Mbiti, Isaac M., and David Weil (2011). Mobile Banking: The Impact of M-Pesa in Kenya. National Bureau of Economic Research, Cambridge, MA. *NBER Working Paper no. w17129*.
- McKenzie, D (2012). Beyond Baseline and Follow-Up: The Case for More T in Experiments. *Journal of Development Economics* 99, no. 2:210–21.
- Penicaud, C. (2013). State of the Industry: Results from the 2012 Global Mobile Money Adoption Survey. *GSMA, London*.
- Research And Markets," e-Commerce & Online Payment Trends Amid COVID-19 - Present Effect and Future Implications of the Pandemic" [online]. Disponibil: <http://https://www.prnewswire.com/news-releases/e-commerce--online-payment-trends-amid-covid-19---present-effect-and-future-implications-of-the-pandemic-301065454.html>.
- UNESCO. (2012). Education for All Global Monitoring. [online]: Report. <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/efareport/statistics/>.