



**CENTRAL BANK**  
OF THE REPUBLIC OF AZERBAIJAN

## DIGITAL PAYMENTS REPORT

# 2022

February  
2023

**PAYMENT SYSTEMS AND SETTLEMENTS DEPARTMENT**

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## 1. EXECUTIVE SUMMARY

Nowadays interest in technology-based innovations in financial services is expanding rapidly. While we encountered topics, like fintechs, crypto assets, big data, artificial intelligence, 'machine learning' just as pilot projects several years ago, they form the basis of successful projects under way now. At the same time, interest in innovative solutions is being supported by considerable investments. No wonder that, \$700B worth funds were invested in financial technologies globally in 2018-2021 aided by over 17000 transactions over the period. In particular, fintechs are more active in payment services. According to the study conducted by the McKinsey & Company, one of the international think tanks, income generated from global payment services in 2021 yoy increased by 11% to \$2.1T.

The Central Bank supports and guides the development of the market along with being a regulator. Expansion of the cashless payment environment in the country, application of innovative payment solutions and acceleration of the formation of the cashless society constitute one of the key activity directions of the Central Bank. To attain the targets the Central Bank developed and launched the '**Digital Payments Strategy for 2021-2023**' in 2021.

In 2022 the Central Bank continued the implementation of the projects provided for in the 'Digital Payments Strategy of the Central Bank of the Republic of Azerbaijan for 2021-2023'. As part of the Strategy, the legislation was improved to expand cashless payments and make digital services accessible. Changes were made to the 'Regulations on opening, maintaining and closing bank accounts' to align remote bank account opening to market requirements and best practices. Hence, remote bank account opening was simplified and requirements on video identification were determined. To allow merchants applying innovative payment solutions the Cabinet of Ministers of the Republic of Azerbaijan with its Resolution No 192 dated 18 May 2022 approved draft changes on the 'Regulations on installation, use and application of POS-terminals in the Republic of Azerbaijan' prepared jointly with the State Tax Service under the Ministry of Economy of the Republic of Azerbaijan. Consequently, 'mPOS' solution, that allows accepting cashless payments with lower expenses, can be used by merchants with small turnover.

The Central Bank focused on expansion of co-operation with international card organizations and bringing innovative payment solutions to the country in 2022. The 'Google Pay' payment solution was activated in Azerbaijan in the reporting year to broaden the range of contactless payment solutions and apply innovative technologies at the initiative of the Central Bank and with the support of the banking sector and international card organizations. As of the end-period 11 banks joined the 'Google Pay' service; in 2022 AZN85.7M worth 4 million payments were made through this service. At the same time, total AZN658M worth 21.8 million payments were made in 11 banks that provide the 'Apple Pay' solution in the country.

Data formats under the ISO20022 to be applied in the National Payment System (NPS) infrastructure were developed and officially delivered to participants. Efforts completed to create a new version of the AZIPS hardware and software aligned to the ISO20022 resulting in the transition to the new platform. In 2022 14 participants of the NPS infrastructure completed transition of their internal information systems in the AZIPS to ISO20022.

207 million card operations were conducted over the Interbank Card Center, the core element of the card infrastructure of the country, the value of operations in the national currency amounted to AZN10.1B, while in a foreign currency to USD66.4M and EUR26.1M.

The capacity launched to enable contactless payments for fares in railway transportation was more widely used in 2022. Passengers made AZN472 thousand worth (550 thousand units) payments with contactless payment cards in the Absheron circular railway that provides fast passenger transportation between the cities of Baku and Sumgait.

As of end-2022 banks and the national operator of postal communication provided money transfers through 20 *faster money transfer systems*. Out of which 8 foreign money transfer systems operate within frames of co-operation with banks throughout the country, while other money transfer systems were established by local banks and the AzerPost LLC.

The Bank attached importance to cashless payment *literacy, awareness and promotion*. The Central Bank held many incentive and awareness events with international card organizations and related institutions to promote digital payments and shape cashless payment habits among the population. Over the year the Bank prepared and made public through its social network accounts question-answer features titled '*Countering frauds when using payment cards*' and '*Trends in digital payments*'.

The Bank analyzed the settlement flow between end users in the AZIPS in various banks in order to *assess the time spent on bank transfers* in payment systems. The analysis of randomly selected payment documents on all banks suggests that, settlements of payments submitted in a hard copy on issuer banks take on average over 2 hours, while on payments made with electronic banking services it takes on average 45 minutes.

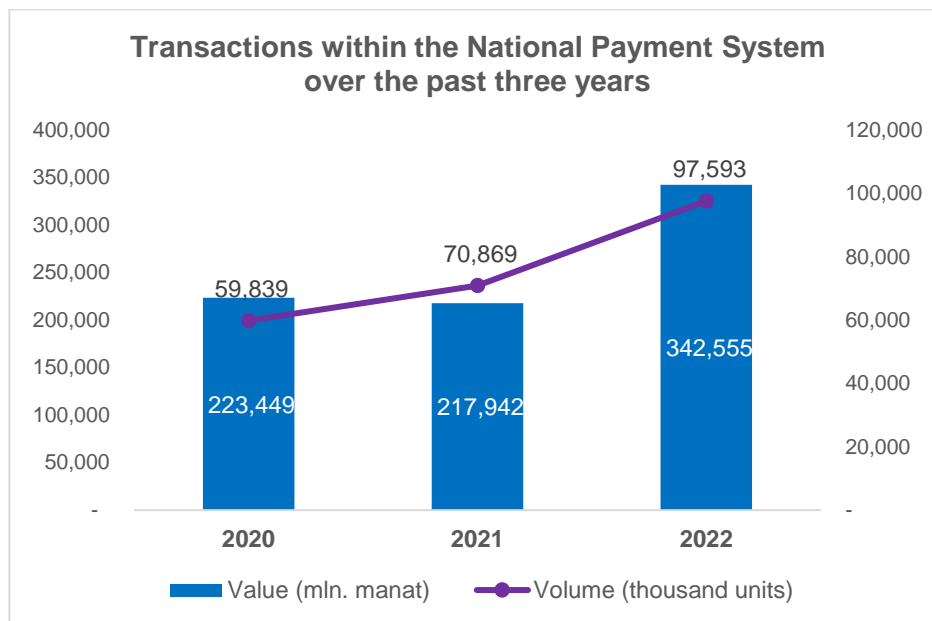
## 2. PAYMENT SYSTEM INDICATORS

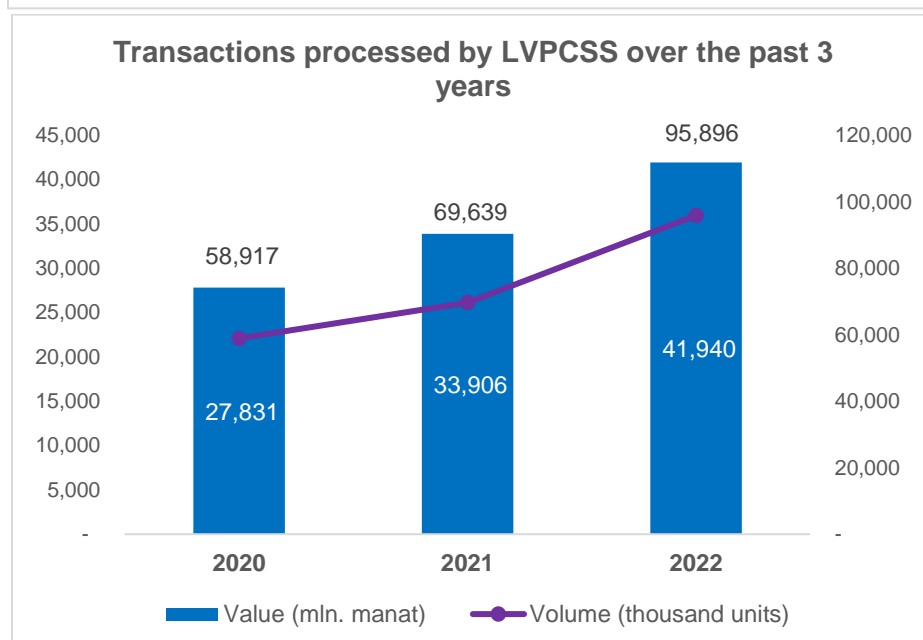
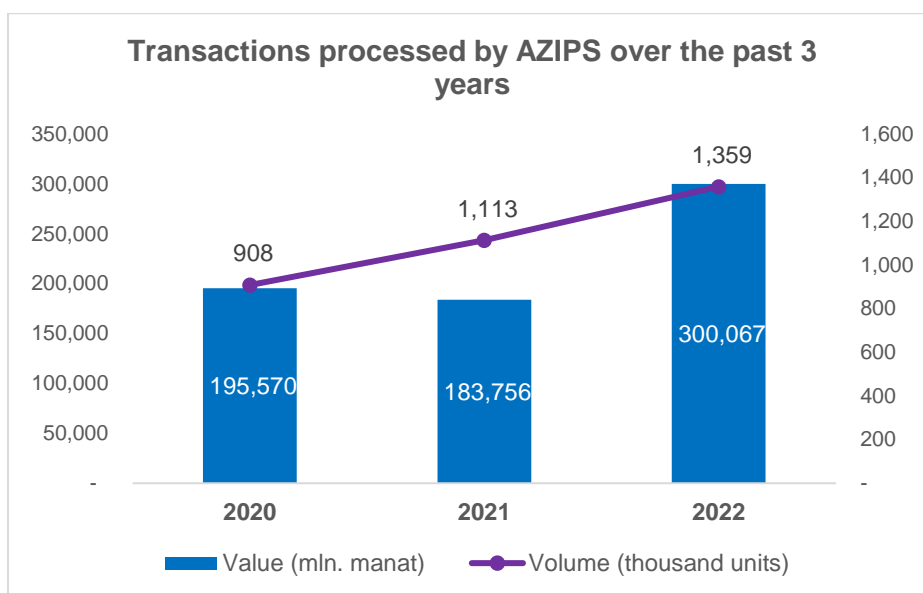
### 2.1. National Payment System indicators

In 2022 total value of transactions through the NPS (AZIPS, LVPCSS, and IPS) amounted to AZN343B (97.6 mln units). The number of payments on large and instant payments in the *Real Time Gross Settlement System* (AZIPS) was 1.4 mln. units (AZN300.1B), while the number of small and reiterating payments on the *Low Value Payments Clearing and Settlement System* (LVPCSS) was 95.9 mln. units (AZN41.9M). The number of operations in the NPS was 337.3 thousand units (AZN549.6M).

The value of transactions yoy increased by 63.3% in the AZIPS, by 23.7% in the LVPCSS, and by 2 times on the NPS.

The number and value of transfers by commercial banks through the NPS yoy increased by 37.9% and 56.3% respectively.





**Breakdown of payment operations through the National Payment System on participants**

| NPS participants                                  | 2021         | 2022         | Up/down (%) |
|---|--------------|--------------|-------------|
| <b>Number of payments (<i>thousand units</i>)</b> |              |              |             |
| <b>AZIPS</b>                                      | <b>1,114</b> | <b>1,359</b> | <b>22%</b>  |
| Central Bank                                      | 11           | 14           | 27%         |
| Commercial banks                                  | 783          | 1019         | 30%         |
| Other participants <sup>1</sup>                   | 320          | 326          | 2%          |

<sup>1</sup> Other participants on the AZIPS mean the State Treasury Agency, the National Depository Center, the Agricredit NBCI.

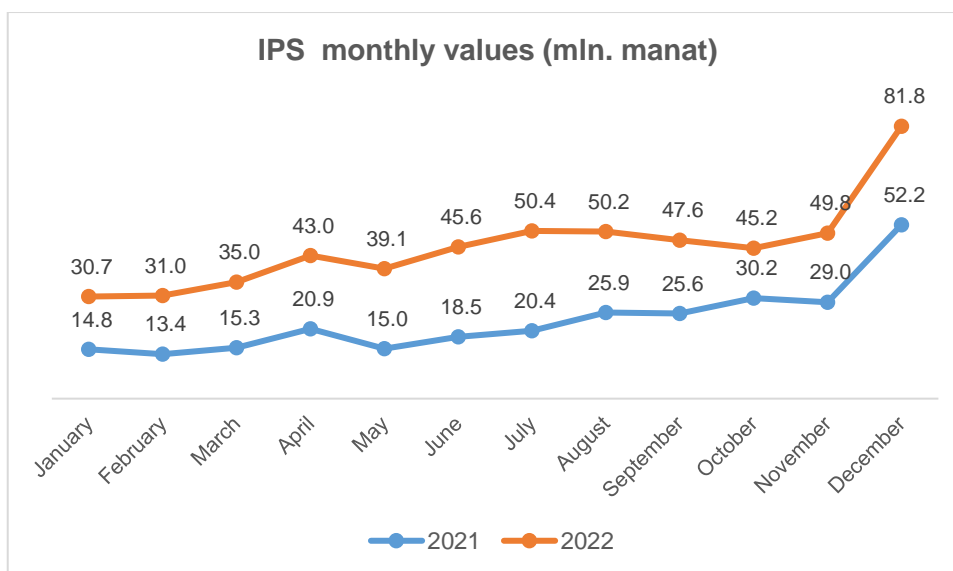
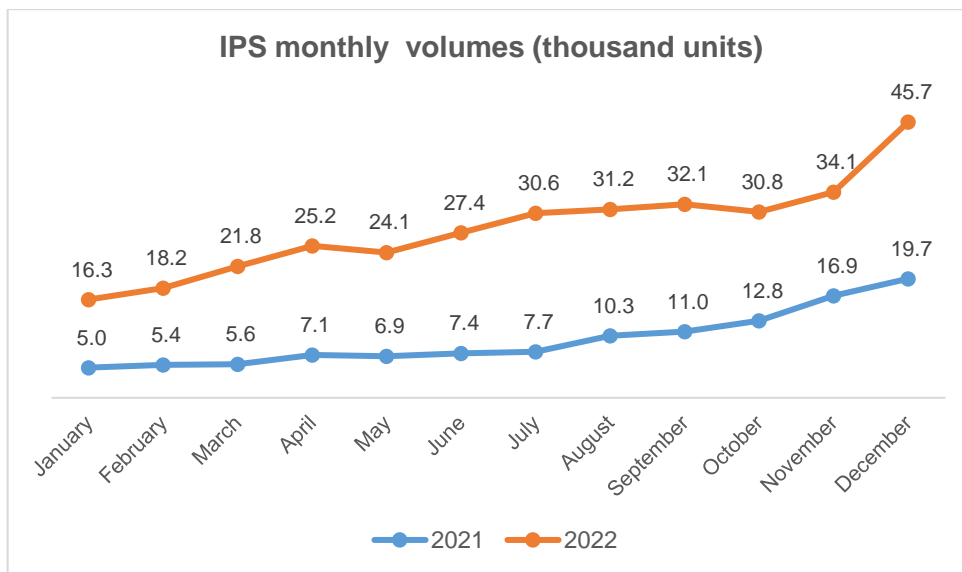
|  |                |                |                  |
|--|----------------|----------------|------------------|
| <b>LVPCSS</b>                            | <b>69,638</b>  | <b>95,895</b>  | <b>38%</b>       |
| Central Bank                             | 56             | 62             | 11%              |
| Commercial banks                         | 69,221         | 95,476         | 38%              |
| Other participants <sup>2</sup>          | 361            | 357            | -1%              |
| <b>IPS</b>                               | <b>116</b>     | <b>338</b>     | <b>2.9 times</b> |
| <b>Value of payments (million manat)</b> |                |                |                  |
| <b>AZIPS</b>                             | <b>183,756</b> | <b>300,067</b> | <b>63%</b>       |
| Central Bank                             | 31,213         | 70,984         | 127%             |
| Commercial banks                         | 116,416        | 191,070        | 64%              |
| Other participants                       | 36,127         | 38,013         | 5%               |
| <b>LVPCSS</b>                            | <b>33,905</b>  | <b>41,941</b>  | <b>24%</b>       |
| Central Bank                             | 977            | 822            | -16%             |
| Commercial banks                         | 27,307         | 33,599         | 24%              |
| Other participants                       | 5,621          | 7,520          | 12%              |
| <b>IPS</b>                               | <b>281</b>     | <b>549</b>     | <b>95%</b>       |

## 2.2. Instant Payments System indicators

The Central Bank continued efforts to broaden the scope and functionalities of the 24/7 Instant Payments System (NPS), a new component of the NPS. 24 banks, the AzerPost LLC, the State Treasury Agency of the Ministry of Finance and the Mortgage and Credit Guarantee Fund were integrated to the IPS, that allows settlements between individuals and legal entities, as well as public institutions over bank accounts through simplified indicators (PIN, TIN, mobile number, e-mail) as of the end-period. To support measures on expansion of the IPS scope, and create favorable conditions for participating banks and the national operator of postal communication to stimulate individuals to use opportunities of the system the Central Bank decided not to charge service fees from participating organizations for the use of the system for QR code payments and transfers by individuals (excluding individuals engaged in entrepreneurial activity).

The number of payments in the IPS yoy increased by 2.9 times and the value by 2 times in 2022.

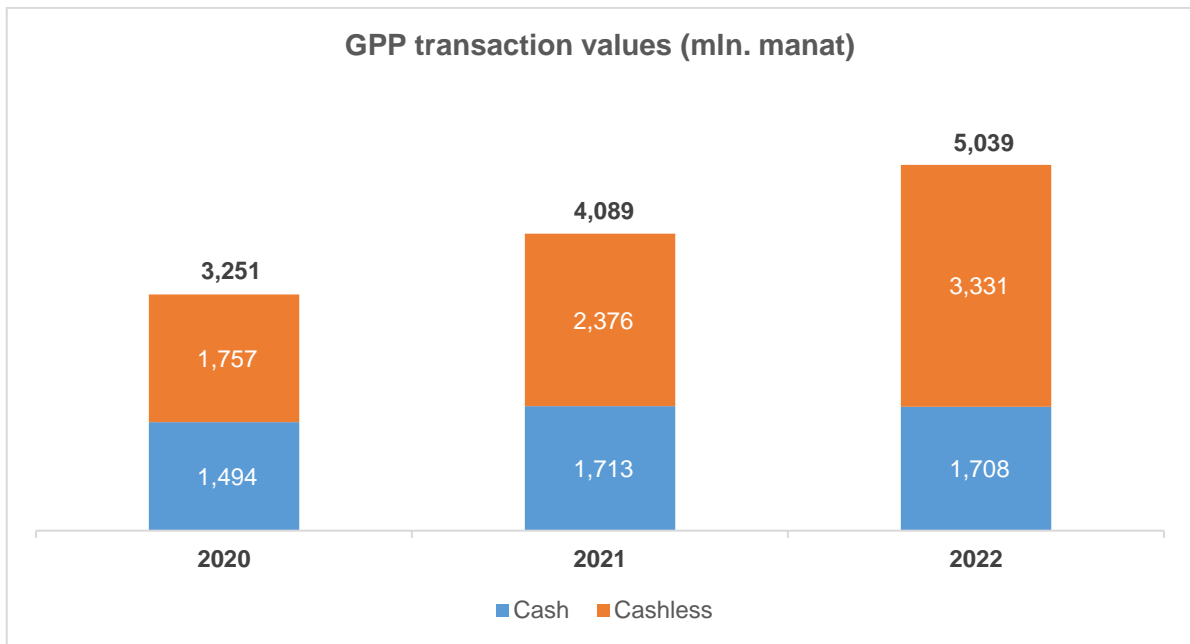
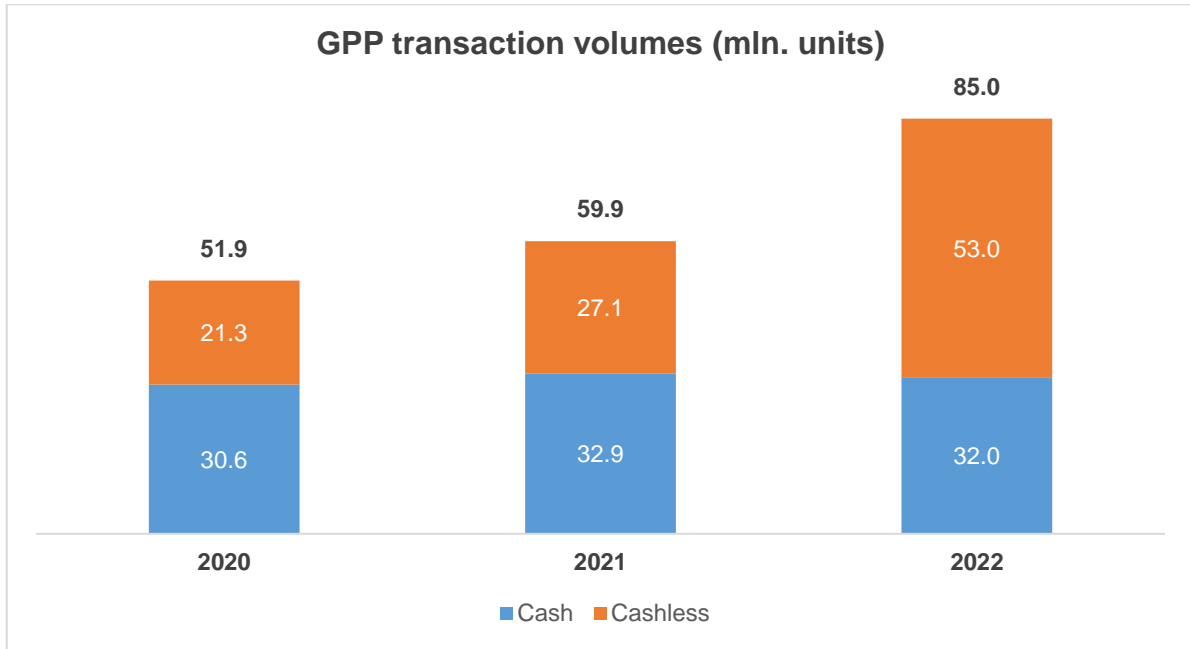
<sup>2</sup> Other participants on the LVPCSS mean the Mortgage and Credit Guarantee Fund, the State Treasury Agency and the Agricredit NBCI.



### 2.3. Government Payment Portal indicators

Efforts continued to expand the coverage of the Government Payment Portal (GPP). As of end-2022 11 central executive authorities, the State Social Protection Fund under the Ministry of Labor and Social Protection of the Population, the State Tax Service under the Ministry of Economy, the State Service on Labor Issues under the Ministry of Economy, 4 utility entities, 5 landline and mobile operators, 122 judicial authorities over the ‘Electronic Court’ portal, 19 insurance companies through the Compulsory Insurance Bureau, the Deposit Insurance Fund, the Mortgage and Credit Guarantee Fund, the Intellectual Property Agency, the State Agency on Mandatory Health Insurance, the Baku Transportation Agency, the National Certification Services Center, the State Examination Center and over 100 higher and secondary special education institutions, 1438 municipalities were integrated to the GPP. Currently, payments over 1100 services are collected on the institutions integrated to the GPP.

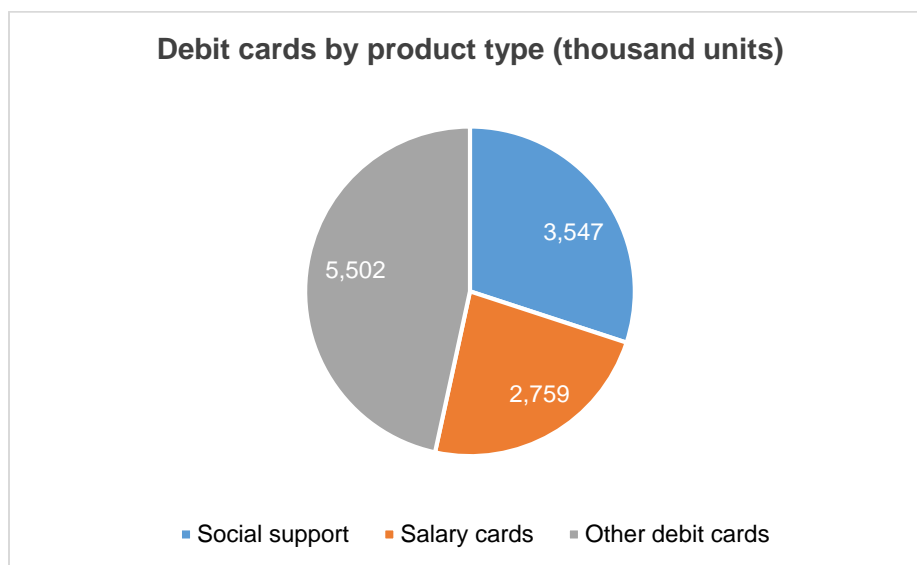
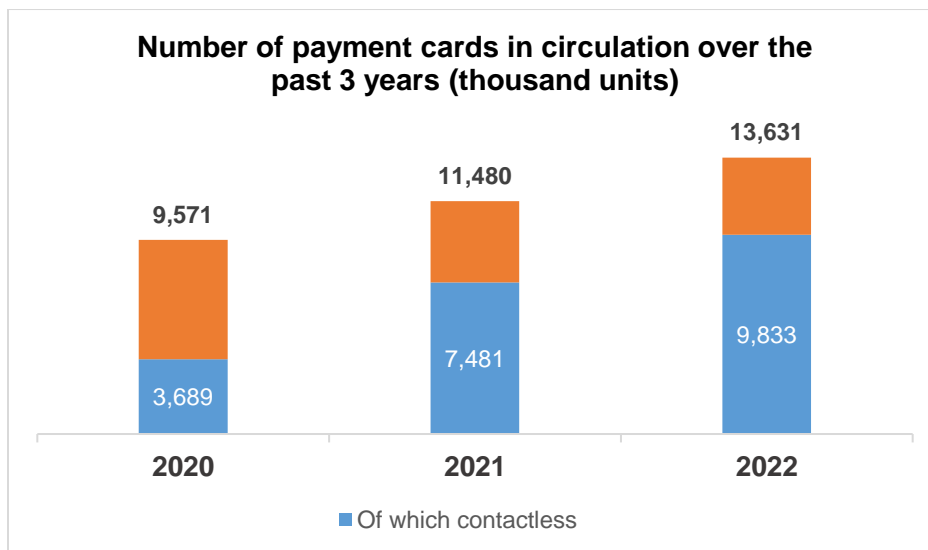
The number of operations yoy increased by 42% to 85 mln. units, while the value yoy increased by 23% to AZN5B. Cashless operations account for 62% of total operations in terms of number and 66% in terms of value.



### 3. PAYMENT CARD INDICATORS\*

#### 3.1. Indicators on the use of payment cards

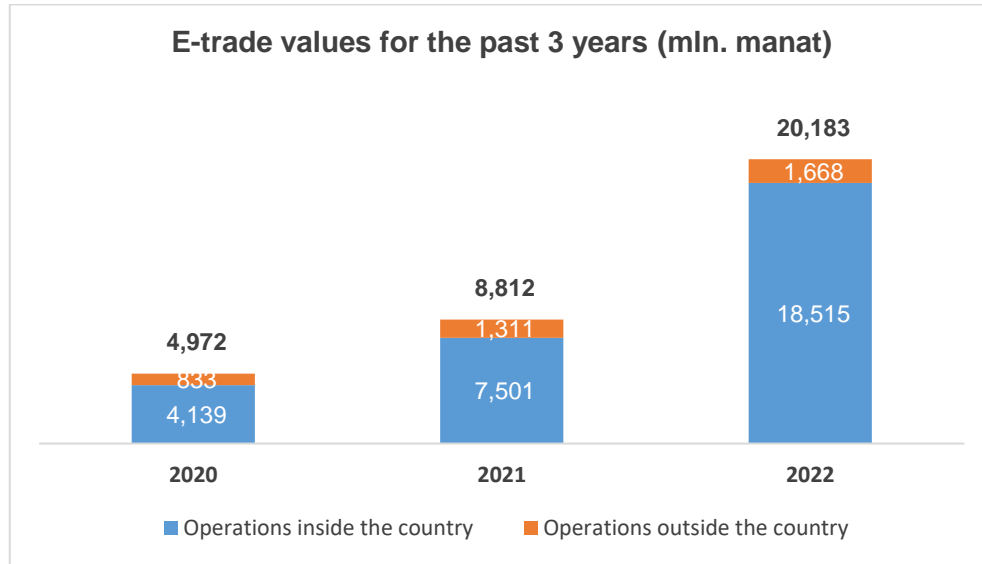
Bankcards are used as the main payment instrument in cashless payments in the country. In 2022 the value of cashless payments hiked dramatically, the use of contactless payments, electronic commerce expanded. As of 01.01.2023 the number of payment cards in circulation was 13.6 mln. units (yoy up by 19%), out of which 72% support contactless payments (yoy up by 31%). Debit cards accounted for 87% (11.8 mln. units) and credit cards for 13% (1.8 mln. units) of total payment cards.



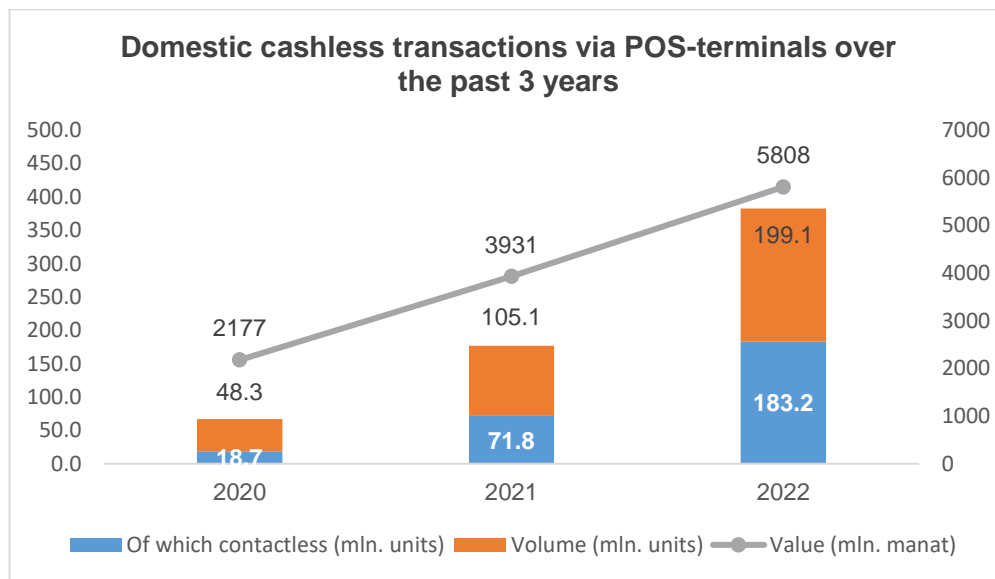
\* including the service network of the AzerPost LLC

Total value of domestic payment card operations yoy increased by 56% to AZN56.4B, and the value of cashless payments yoy increased by 2.1 times to AZN24.4B in 2022. The weight of cashless settlements in domestic payment card operations yoy increased by 11.4% to 43.2%.

Electronic commerce account for major part of cashless payments with domestic payment cards. In 2022 the number of electronic commerce operations increased by 2.4 times to 261 mln. units, while the value increased by 2.5 times to AZN18.5B.

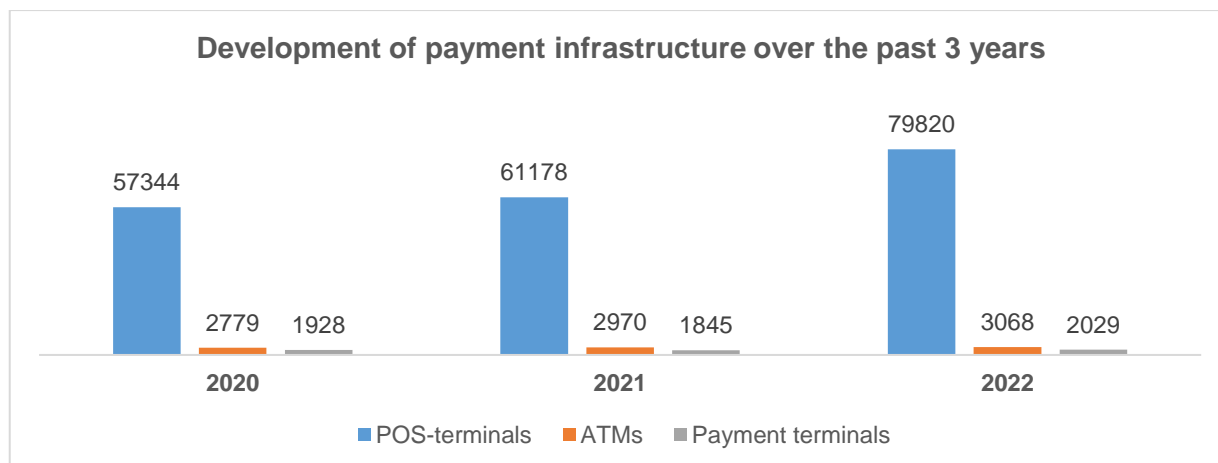


In 2022 cashless operations with POS-terminals at merchants yoy increased by 89.4% to 199 mln. units, while their value increased by 47.7% to AZN5.8B. The number of contactless payments with POS-terminals yoy increased by 2.6 times to 183.2 mln. units and the value increased by 2 times to AZN4.9B.



### 3.2. Card infrastructure indicators

The card infrastructure of the country has been following a positive trend both in Baku and large cities and in regions over recent years. As of 01.01.2023 the number of ATMs installed throughout the country was 3068, POS-terminals 79820, and payment terminals 2029 units.



The number of ATMs increased by 3.3% across the country and by 6.6% in regions.

#### ATM location across economic regions as of end-2022

| Economic regions    | total        | Of which   |                             |             |                  |
|---------------------|--------------|------------|-----------------------------|-------------|------------------|
|                     |              | cash-in    | Foreign exchange ATMs (CNP) | Recycle ATM | Contactless ATMs |
| Baku                | 1 591        | 299        | 215                         | 303         | 356              |
| Nakhchivan          | 125          | 2          | 1                           | 5           | 5                |
| Absheron-Khizi      | 212          | 26         | 11                          | 19          | 36               |
| Mountainous Shirvan | 53           | 1          | 1                           | 3           | 2                |
| Ganja-Dashkesen     | 163          | 18         | 8                           | 15          | 11               |
| Garabag             | 108          | 2          | 2                           | 5           | 3                |
| Gazakh-Tovuz        | 127          | 5          | 5                           | 10          | 4                |
| Guba-Khachmaz       | 111          | 9          | 2                           | 9           | 7                |
| Lankaran-Astara     | 109          | 3          | 2                           | 5           | 3                |
| Central Aran        | 142          | 3          | 2                           | 6           | 4                |
| Mil-Mugan           | 82           | 1          | 0                           | 0           | 0                |
| Shaki-Zagatala      | 138          | 8          | 5                           | 6           | 6                |
| East Zangazur       | 8            | 0          | 0                           | 1           | 0                |
| Shirvan-Salyan      | 99           | 4          | 3                           | 6           | 4                |
| <b>TOTAL</b>        | <b>3 068</b> | <b>381</b> | <b>257</b>                  | <b>393</b>  | <b>441</b>       |

### ATM operations across regions in 2022

| Economic regions    | Number of operations<br>(mln. units) | Value of operations<br>(mln. manat) |
|---------------------|--------------------------------------|-------------------------------------|
| Baku                | 75.0                                 | 17,858                              |
| Nakhchivan          | 2.9                                  | 719                                 |
| Absheron-Khizi      | 7.0                                  | 1,613                               |
| Mountainous Shirvan | 2.0                                  | 464                                 |
| Ganja-Dashkesen     | 7.2                                  | 1,698                               |
| Garabag             | 5.0                                  | 1,217                               |
| Gazakh-Tovuz        | 4.8                                  | 1,269                               |
| Guba-Khachmaz       | 3.6                                  | 845                                 |
| Lankaran-Astara     | 5.0                                  | 1,216                               |
| Central Aran        | 5.8                                  | 1,274                               |
| Mil-Mugan           | 3.7                                  | 857                                 |
| Shaki-Zagatala      | 4.3                                  | 1,084                               |
| East Zangazur       | 0.1                                  | 15                                  |
| Shirvan-Salyan      | 4.2                                  | 997                                 |
| <b>TOTAL</b>        | <b>130.5</b>                         | <b>31,127</b>                       |

As of 01.01.2023 the number of POS-terminals in circulation yoy increased by 30.5% to 79820 units. The number of contactless POS-terminals increased by 58.5% to 69599 units. 87.2% of total POS-terminals support contactless payments. The number of POS-terminals installed in retail trade, catering and service entities in regions increased by 5029 (25.2%), and the number of POS-terminals that support contactless payments increased by 9318 (88.6%).

### Location of POS-terminals across economic regions as of end-2022

| Economic regions    | Total  | in retail trade,<br>catering and service<br>entities | out of which<br>contactless POS-<br>terminals |
|---------------------|--------|--|---|
| Baku                | 53 820 | 52 602   | 48 537  |
| Nakhchivan          | 1 794  | 1 763  | 1 032   |
| Absheron-Khizi      | 4 210  | 4 082  | 3 785   |
| Mountainous Shirvan | 927    | 883  | 843   |
| Ganja-Dashkesen     | 2 777  | 2 635  | 2 426   |
| Garabag             | 1 442  | 1 366  | 1 152   |
| Gazakh-Tovuz        | 2 611  | 2 516  | 1 438   |
| Guba-Khachmaz       | 2 438  | 2 342  | 1 999   |

|                 |               |               |               |
|-----------------|---------------|---------------|---------------|
| Lankaran-Astara | 1 554         | 1 440         | 1 387         |
| Central Aran    | 1 898         | 1 796         | 1 732         |
| Mil-Mugan       | 724           | 676           | 644           |
| Shaki-Zagatala  | 2 970         | 2 873         | 2 374         |
| East Zangazur   | 18            | 13            | 13            |
| Shirvan-Salyan  | 2 637         | 2 564         | 1 011         |
| <b>TOTAL</b>    | <b>79 820</b> | <b>77 551</b> | <b>68 373</b> |

#### POS-terminal operations across regions in 2022

| Economic regions    | Number of operations<br>(mln. units) | Value of operations<br>(mln. manat) |
|---------------------|--------------------------------------|-------------------------------------|
| Baku                | 162.4                                | 6,508                               |
| Nakhchivan          | 1.1                                  | 81                                  |
| Absheron-Khizi      | 16.1                                 | 407                                 |
| Mountainous Shirvan | 3.3                                  | 57                                  |
| Ganja-Dashkesen     | 5.4                                  | 215                                 |
| Garabag             | 1.1                                  | 64                                  |
| Gazakh-Tovuz        | 1.9                                  | 85                                  |
| Guba-Khachmaz       | 2.9                                  | 146                                 |
| Lankaran-Astara     | 1.9                                  | 88                                  |
| Central Aran        | 2.8                                  | 98                                  |
| Mil-Mugan           | 0.8                                  | 36                                  |
| Shaki-Zagatala      | 2.4                                  | 115                                 |
| East Zangazur       | 0.0                                  | 0.3                                 |
| Shirvan-Salyan      | 1.4                                  | 60                                  |
| <b>TOTAL</b>        | <b>203.5</b>                         | <b>7,962</b>                        |

As of end-2022 the number of payment terminals installed by banks yoy increased by 10% to 2029 units. The number of payment terminals installed in Baku increased by 15.2% and those located in regions increased by 4.3%.

**Payment terminal location across regions as of end-2022**

| <b>Economic regions</b> | <b>Total</b> | <b>those that accept payments with cards</b> |
|-------------------------|--------------|--|
| Baku                    | 1 106        | 219  |
| Nakhchivan              | 127          | 12   |
| Absheron-Khizi          | 132          | 17   |
| Mountainous Shirvan     | 46           | 4  |
| Ganja-Dashkesen         | 84           | 12   |
| Garabag                 | 53           | 13   |
| Gazakh-Tovuz            | 54           | 8  |
| Guba-Khachmaz           | 94           | 13   |
| Lankaran-Astara         | 71           | 6  |
| Central Aran            | 79           | 13   |
| Mil-Mugan               | 38           | 8  |
| Shaki-Zagatala          | 81           | 14   |
| East Zangazur           | 1            | 1  |
| Shirvan-Salyan          | 63           | 8  |
| <b>TOTAL</b>            | <b>2 029</b> | <b>348</b>                                   |

**Operations in self-service terminals across regions in 2022**

| <b>Economic regions</b> | <b>Number of operations (thousand units)</b> | <b>Value of operations (mln. manat)</b> |
|-------------------------|--|---|
| Baku                    | 6,088  | 650.9                                   |
| Nakhchivan              | 78   | 28.2                                    |
| Absheron-Khizi          | 1124   | 80.1                                    |
| Mountainous Shirvan     | 219  | 10.3                                    |
| Ganja-Dashkesen         | 368  | 74.9                                    |
| Garabag                 | 230  | 28.8                                    |
| Gazakh-Tovuz            | 188  | 29.6                                    |
| Guba-Khachmaz           | 791  | 41.3                                    |
| Lankaran-Astara         | 185  | 13.2                                    |
| Central Aran            | 549  | 33.0                                    |
| Mil-Mugan               | 92   | 2.2                                     |
| Shaki-Zagatala          | 366  | 16.9                                    |
| East Zangazur           | 0  | 0.0                                     |
| Shirvan-Salyan          | 286  | 19.7                                    |
| <b>TOTAL</b>            | <b>10,563</b>                                | <b>1,029</b>                            |

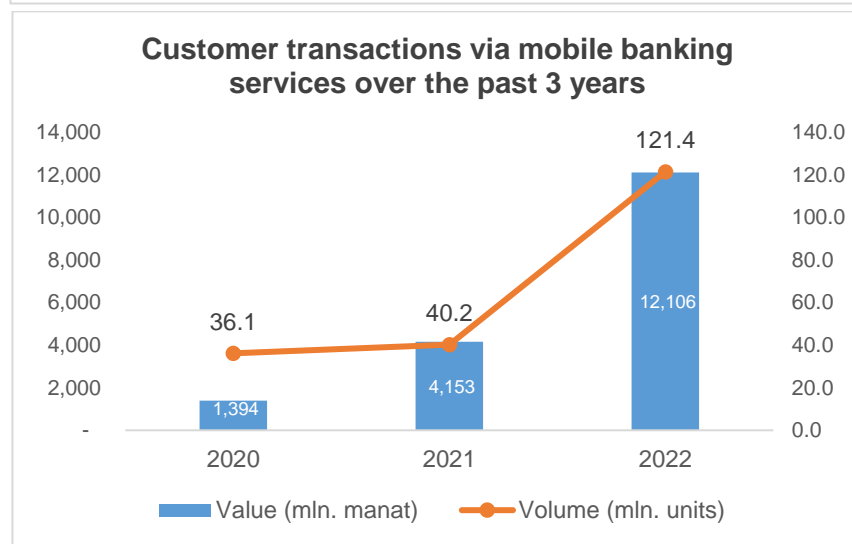
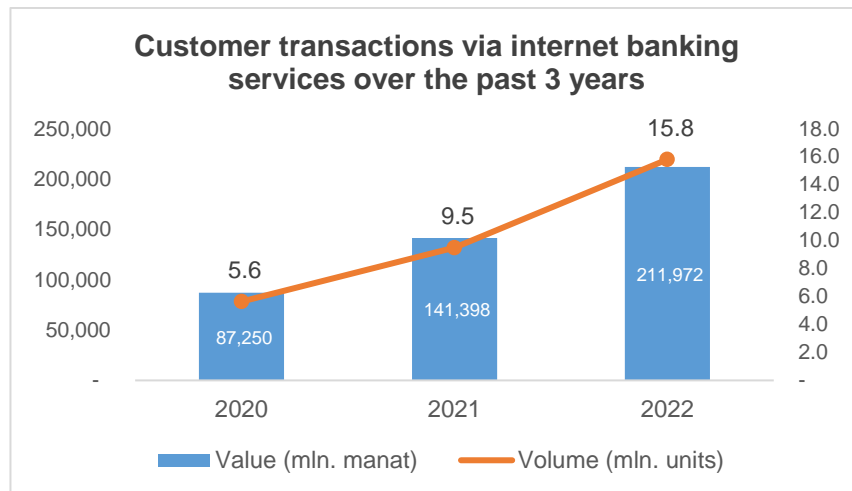
#### 4. DIGITAL BANKING INDICATORS

Nowadays digital banking is rapidly replacing traditional banking services. The main reason for lower reliance of people on traditional banking is the convenient and easy availability of digital banking services without wasting time and waiting in long queues.

There is a positive trend in the development of digital banking in Azerbaijan too, one of main challenges of modern times. As of 01.01.2023 all banks operating in the country, including the AzerPost LLC provide Internet banking. 21 banks are providing mobile banking services.

In 2022 total number of transfers from current accounts of bank customers in hard copy and through digital banking was 187.4 mln units, while the value made AZN318.4B. 73% (137.4 mln. units) of transfers in terms of number and 77% (AZN244B) in terms of value were conducted through digital banking.

In 2022 the value of customer transfers through Internet banking yoy increased by 50% to AZN212B, while the value of customer transfers through mobile banking tripled to AZN12.1B.



## **5. TARGETS FOR 2023**

In 2023 the Central Bank will continue efforts on the following directions in accordance with the 'Digital Payments Strategy of the Central Bank of the Republic of Azerbaijan for 2021-2023':

- 1. Improve the digital payments legislation and introduce innovative solutions;**
- 2. Expand the coverage of the digital payments infrastructure;**
- 3. Formulate risk-based regulation and oversight framework of the payment ecosystem;**
- 4. Increase digital payments inclusion and provide universal access to remote banking services;**
- 5. Raise financial awareness, promote active use of digital payment services by businesses and the population.**

At the same time, the Central Bank targets to increase the weight of electronic banking in customer transfers from current accounts to 85%, the total market share of cards that support contactless payments to 75%, and the weight of cashless circulation in domestic operations to 48% in 2023 in accordance with the said Strategy and requirements of nowadays.