DIGITAL TECHNOLOGIES FOR THE CURRENT WORLD
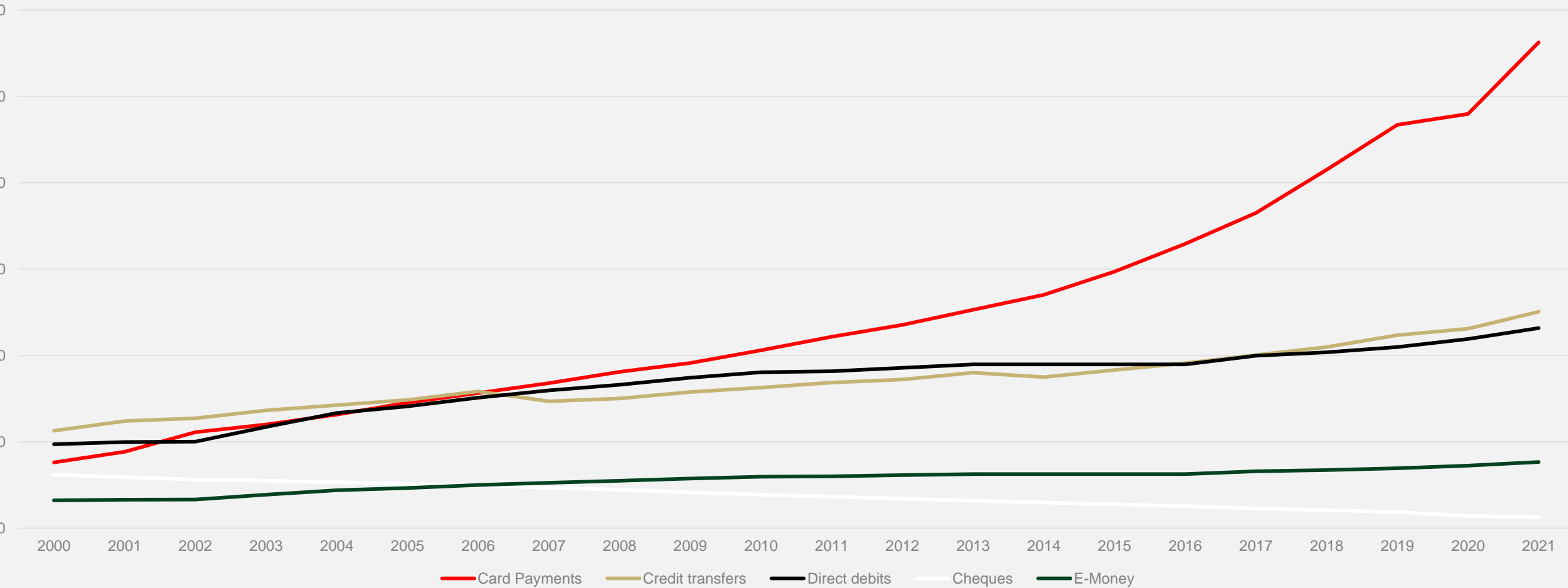
Lessons for cash

Miroslav Vichev, CEO

BORICA BANK SERVICES

PENETRATION OF CARD PAYMENTS FROM 2000 TO 2021

Use of the main payment services in the euro area
(number of transactions per year in billions)

Legend: Card Payments — Credit transfers — Direct debits — Cheques — E-Money

Source: ECB.
Note: Data have been partially estimated for periods prior to 2010, as methodological changes were implemented in previous years and some corresponding data are not available. The historical estimation done by the ECB ensures comparability of figures over the entire period.

PENETRATION OF ELECTRONIC CHANNELS FROM 2000 TO 2021

Credit transfers by channel
(number of transactions per year in billions)
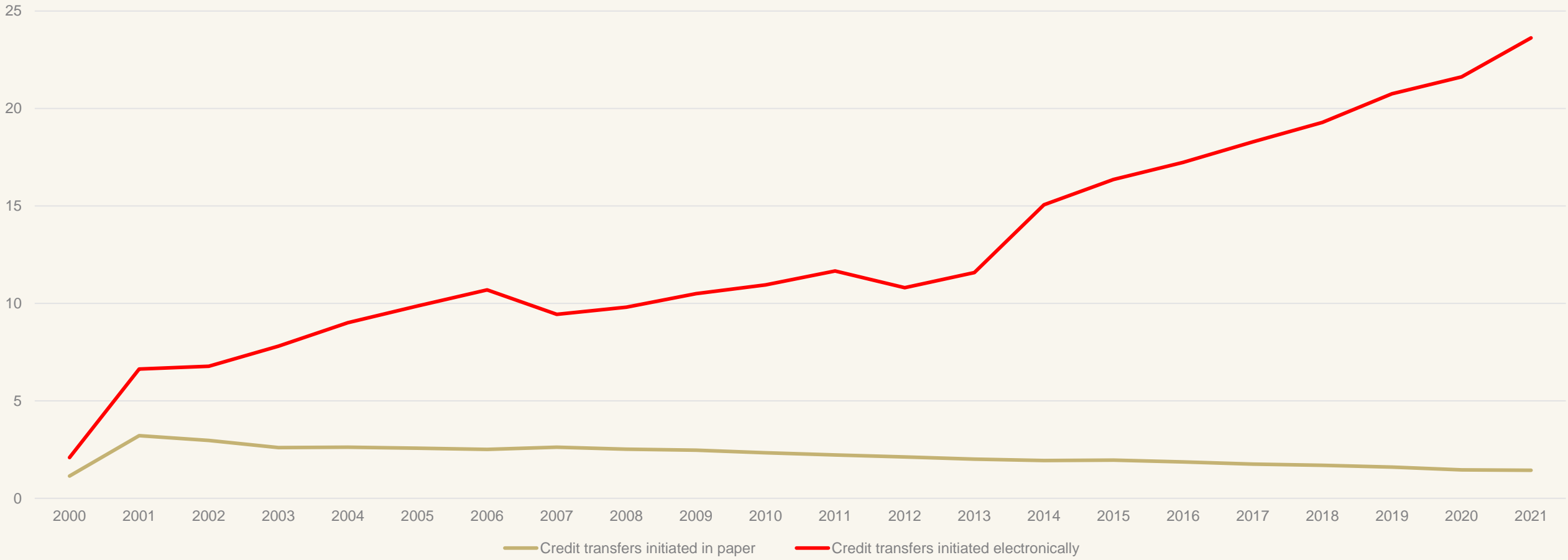
Credit transfers initiated in paper — Credit transfers initiated electronically

Source: ECB.
Note: Data have been partially estimated for periods prior to 2010, as methodological changes were implemented in previous years and some corresponding data are not available. The historical estimation done by the ECB ensures comparability of figures over the entire period.
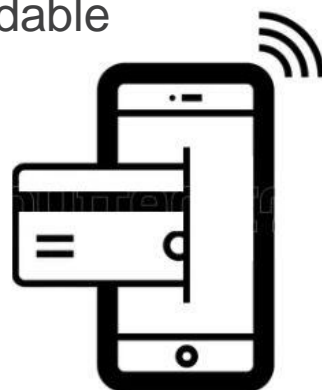
CARD PERSONALIZATION EVOLUTION AND TRENDS

DATA ENCODING

Mag stripe cards – cardholder data is stored on magnetic ribbon

Chip cards (EMV) – cardholder data is stored in the chip

Contactless chip cards – cardholder data is stored in the chip and is readable Contactless (NFC)

Virtual (tokenized) cards – cardholder data is stored in software wallet on mobile device

**ePIN Distribution** – via SMS or/and app

PHYSICAL PERSONALIZATION

Emboss printing – embossed card can be used on card imprinter

Indent printing – restricting the usage to magstripe and chip (on imprinter)

Ribbon

"Flat card" trend

UV durable printing on card – allows vertical and reversed card designs

Laser engraving – personalization of metal, polycarbonate and wooden cards
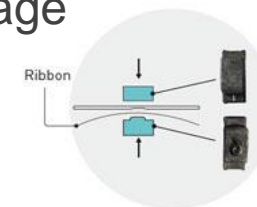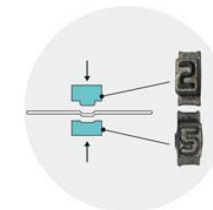
POS PAYMENTS EVOLUTION AND TRENDS

SoftwarePOS – Enter amount > Tap to Phone > Receive e-receipt > Process transaction

Contactless POS – Enter amount > Tap the card > Sign the receipt > Automatic processing of transaction

Magstripe POS – Enter amount > Slide card > Sign the receipt > Automatic processing of transaction

Card imprinter – manually Placing the card > Placing paper > Sliding bar over > Client signs the paper > Enter transaction manually in back office
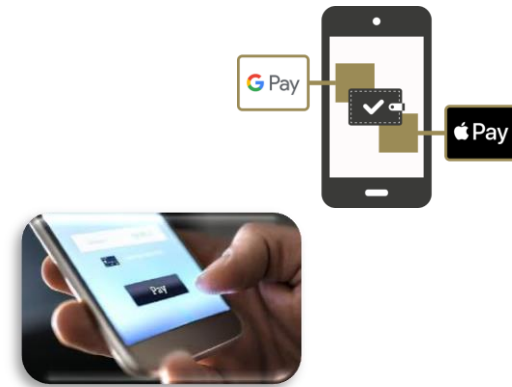
TRENDS OF E-COMMERCE CARD PAYMENTS
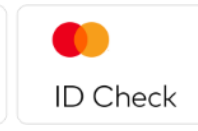
More secure

o Based on PSD2 and Regulatory Technical Standards

o Requirements for SCA / Two-factor authentication

o From 3DS v.1.0.2 to EMV 3DS

Without friction

o From passwords to biometric authentication and frictionless transactions

More flexible

o From desktop and laptop to mobile payments and digital wallets

Focused on long-term relationship

o From single transaction to Credential on File and Recurring payments
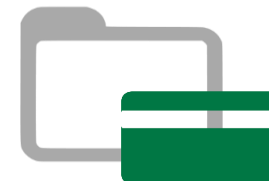
INSTANT
PAYMENTS

SEPA INSTANT CREDIT TRANSFER SCHEME

SEPA Instant Credit Transfer (SCT Inst) heralds a new era in payments. Payments are no exception to an increasingly digital and immediate society.

Consumers expect ever easier and faster services. The SCT Inst. scheme delivers these by enabling pan-European credit transfers with the funds made available on the account in less than ten seconds.

It works for credit transfers made in euro, up to a maximum amount of 100,000 euros per transaction.
The money is available in the account of the payee within ten seconds.
All adhering scheme participants have to be technically capable to process the SCT Inst transactions on a 24/7/365 basis.

SEPA Instant Credit Transfer illustrated
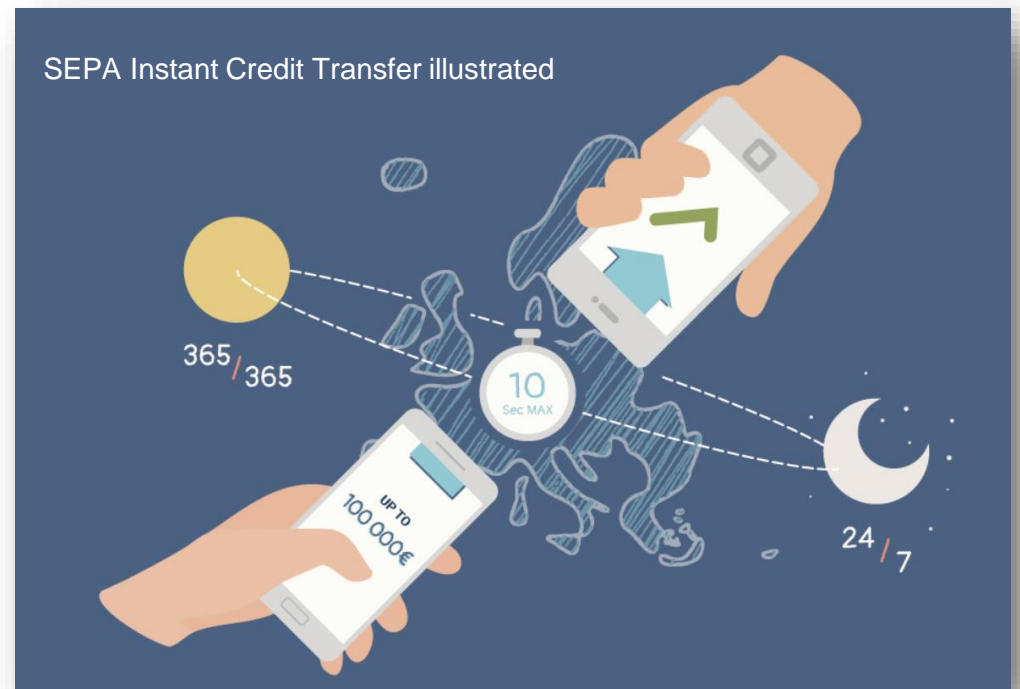
SCT INST GROWTH SINCE ITS LAUNCH

NUMBER OF SCT INST SCHEME PARTICIPANTS

2,313

from **29** COUNTRIES

- At least 1 SCT Inst participant and a majority of payment accounts in the country
- At least 1 SCT Inst participant but no majority of payment accounts in the country
- Readiness date: 24 June 2023
- No SCT Inst scheme participants in the country

2 313

PAYMENT SERVICE PROVIDERS
HAVE ALREADY JOINED THE SCHEME

60%

OF EUROPEAN PSPS

71%

PSPS IN THE EURO AREA

INSTANT PAYMENTS IN EUROPE

As of Q4 2022 around 14% of all euro credit transfers in the EU were processed as instant payments

Source: EACHA Payment Forum, 10 May 2023
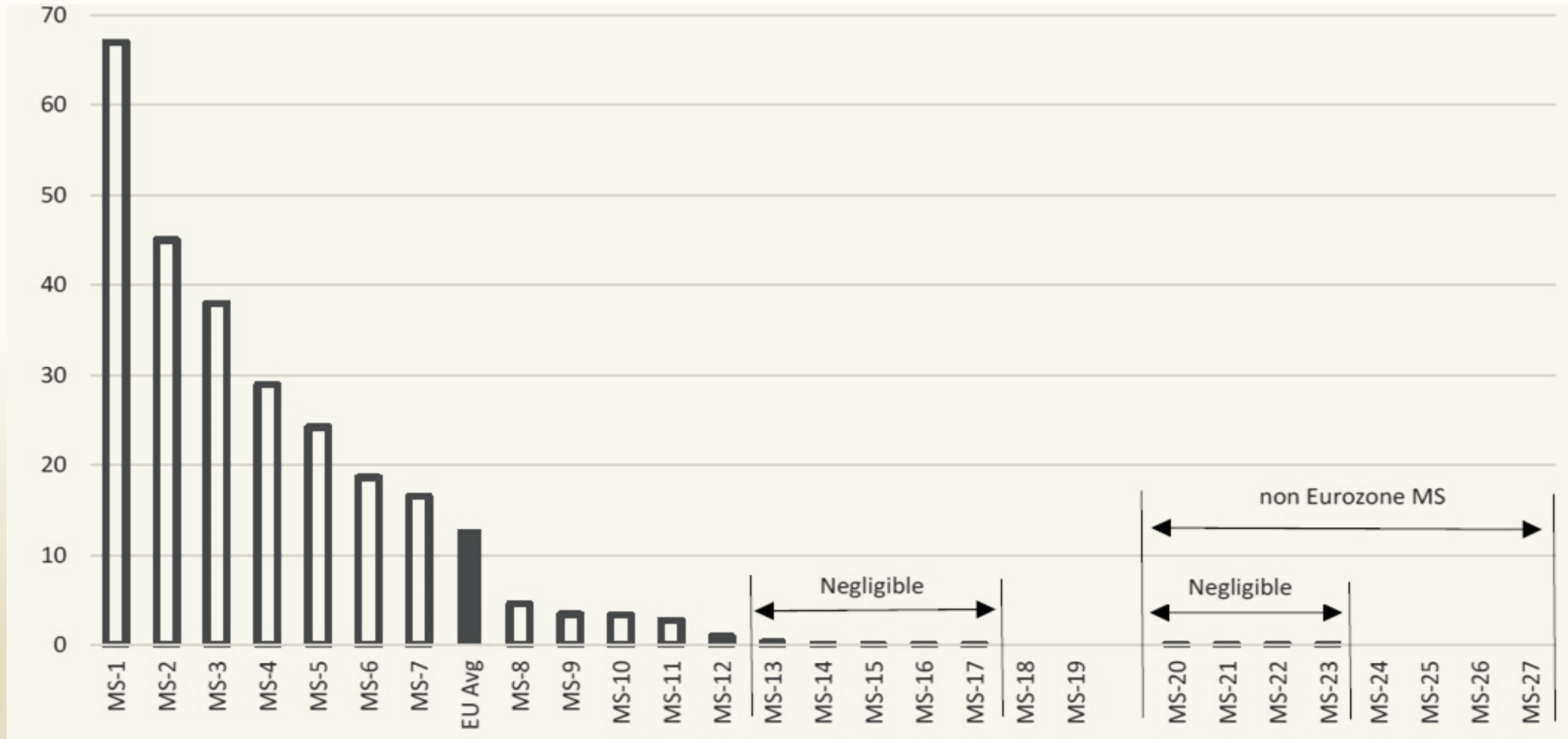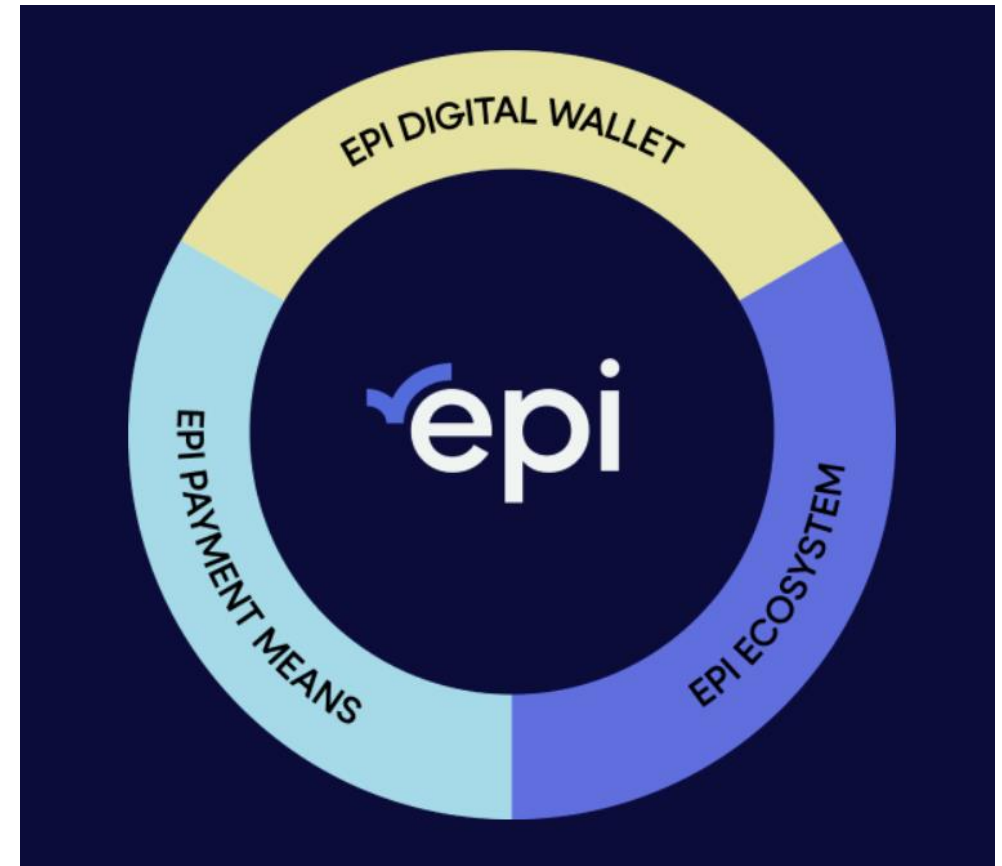
EPI Digital wallet solution

At the epicenter of EPI's offering is digital wallet product. The customer-centric, easy to use app will facilitate payments from and to any of a customer's eligible bank accounts with a higher degree of transparency and control than is currently available. In time, the app could hold other payment methods issued by third parties too, as well as facilitating the wide range of other services that EPI will integrate into the payment flow. These added-value services could in the future include bank funded buy-now-pay-later, e-ID or merchants' loyalty programs. The digital wallet will be a separate consumer-facing brand which is currently in development.

EPI Payment means

EPI is building a flexible and secure payment scheme allowing existing instant account to account payment infrastructures to be used in a wider range of use cases. The payment applications will extend and be enhanced over time. Customers will be able to use any of their eligible bank accounts to pay instantly, securely and with ease.

EPI Ecosystem

EPI is acting as the bridge between a multitude of parties in the complex payment landscape. Technically speaking, EPI will therefore be an open 4-corner scheme.

PREFUNDED SETTLEMENT

BORICA introduced prefunded settlement in BISERA6 for both instant payments and standard credit transfers in BGN, which significantly accelerated the payment process.

BORICA is about to implement the mechanism for Continuous Gross Settlement (CGS) in TARGET on a prefunded model and for SEPA payments through BISERA7-EUR, which will improve service levels for end users as well.

EXTREMELY STABLE AND SECURE SETTLEMENT PROCESS

Ensures secure settlement for the receiving institution to make the funds immediately available to the recipient's account

Credit risk between participants is eliminated because transactions are executed only within the limits set by a given participant

At no time does the operator take possession of the funds set aside by the participants - they are kept in a special account in Bulgarian National Bank

There is no discrimination - the procedure is open and fair for all participants

INSTANT PAYMENTS PENETRATION IN BULGARIA

Share in % of Instant Payments in BISERA6

- Number of Bulk Payments
- Number of Instant Payments
- %
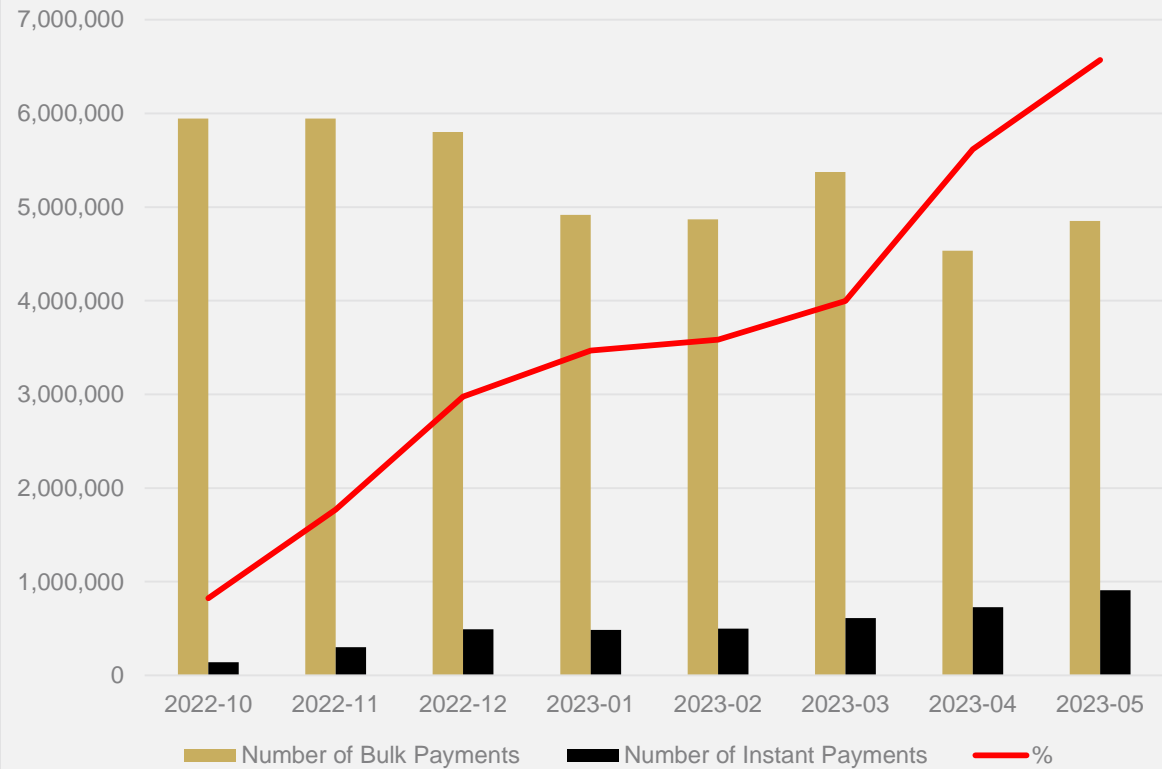
Statistics Instant Translations

139,596
300,619
492,734
487,348
498,299
613,590
727,763
910,491

- Number of InstantPayments
- Amount of InstantPayments

MISSION & STRATEGY
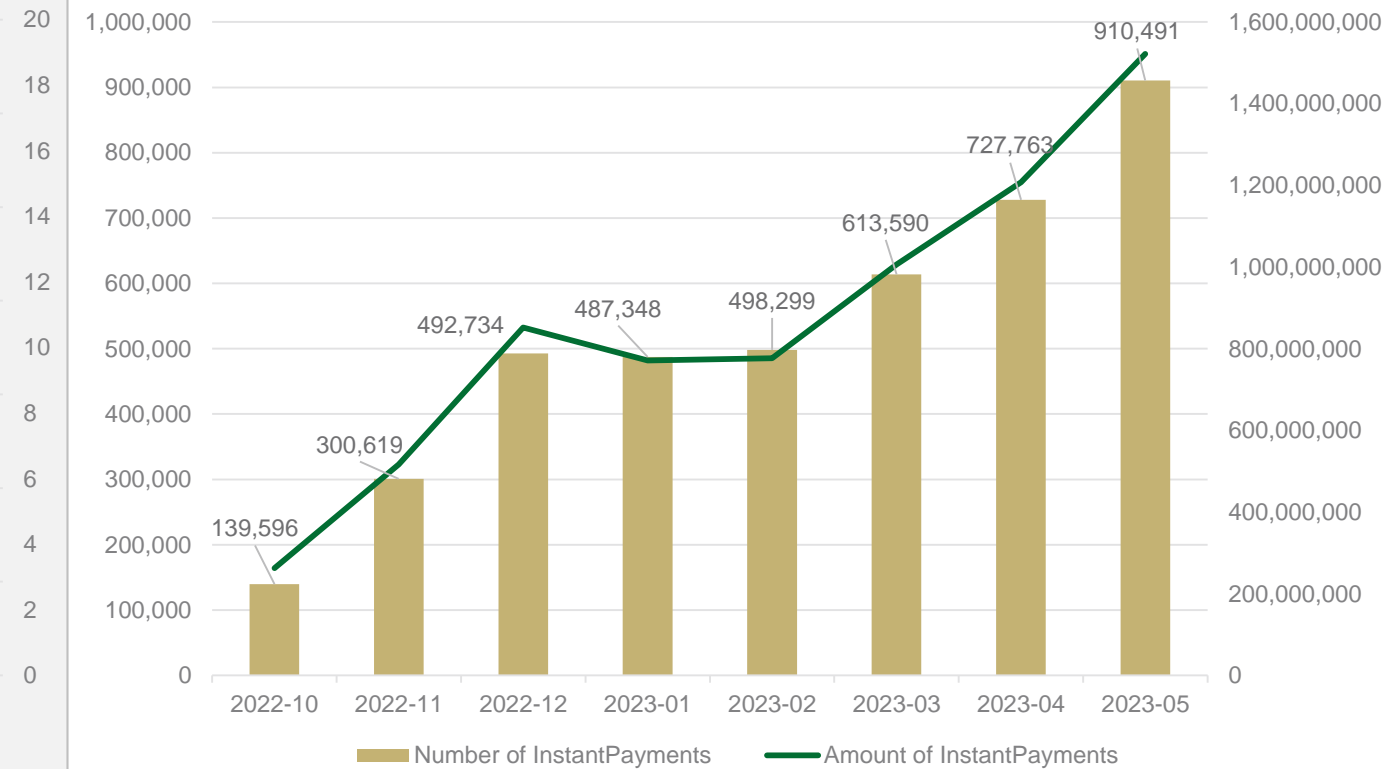
Migration from CASH and PAPER to DIGITAL

Account payments

blink

Instant Payments

Parking

P2P to mobile number

Government

Ticketing

Vending

R2P E-Commerce

Donation

NFC and other in-app pymnts
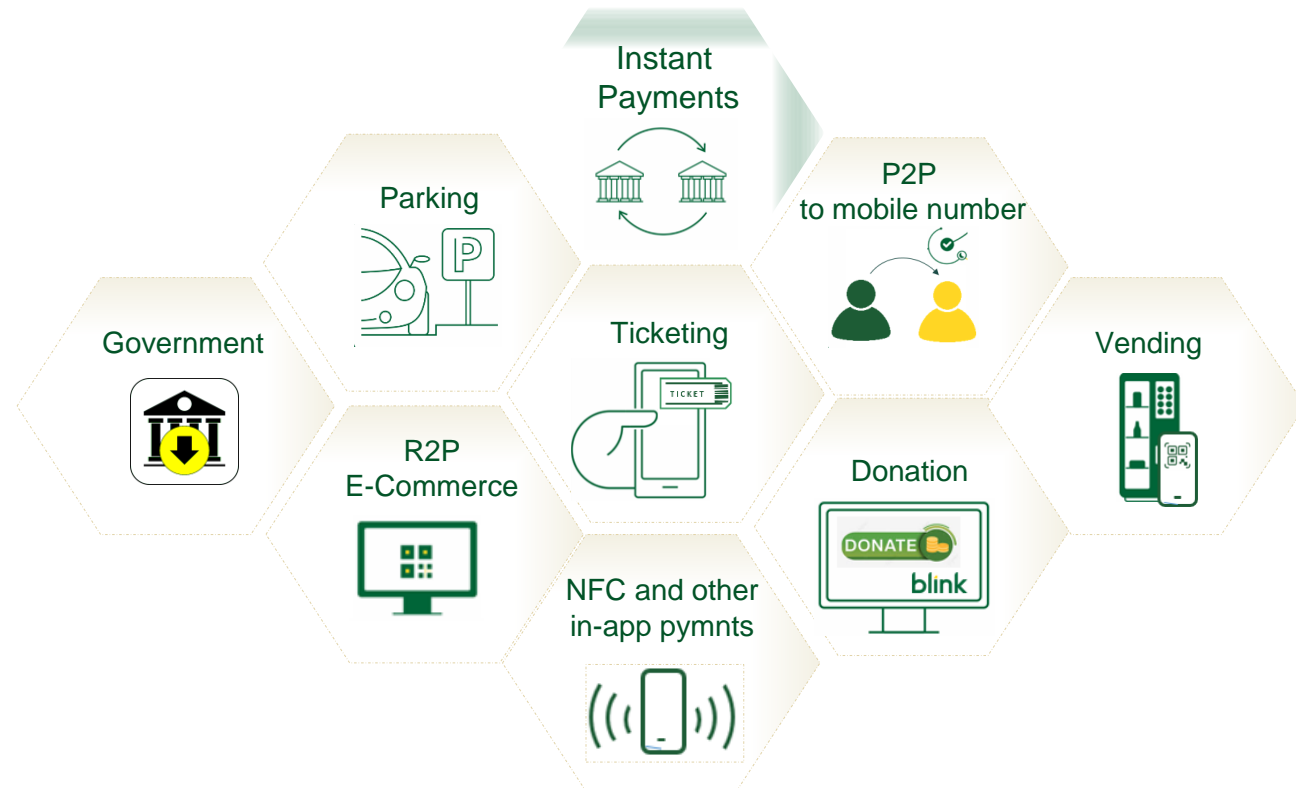
MARKET COVERAGE AND DEVEPMENT

33 Payment Service Providers

Value Added Partnership Services — Low value payments

VAPS

Stage 1

2022-2023

blink
Instant payments via PSP channels

Over 95% reachability till 01.04.2023

Stage 2

2023

P2P
with Mobile Lookup

Parking zones

Over 70% reachability till 31.12.2023

Private parking Events Donations

Stage 3

2024

Vending Self-service

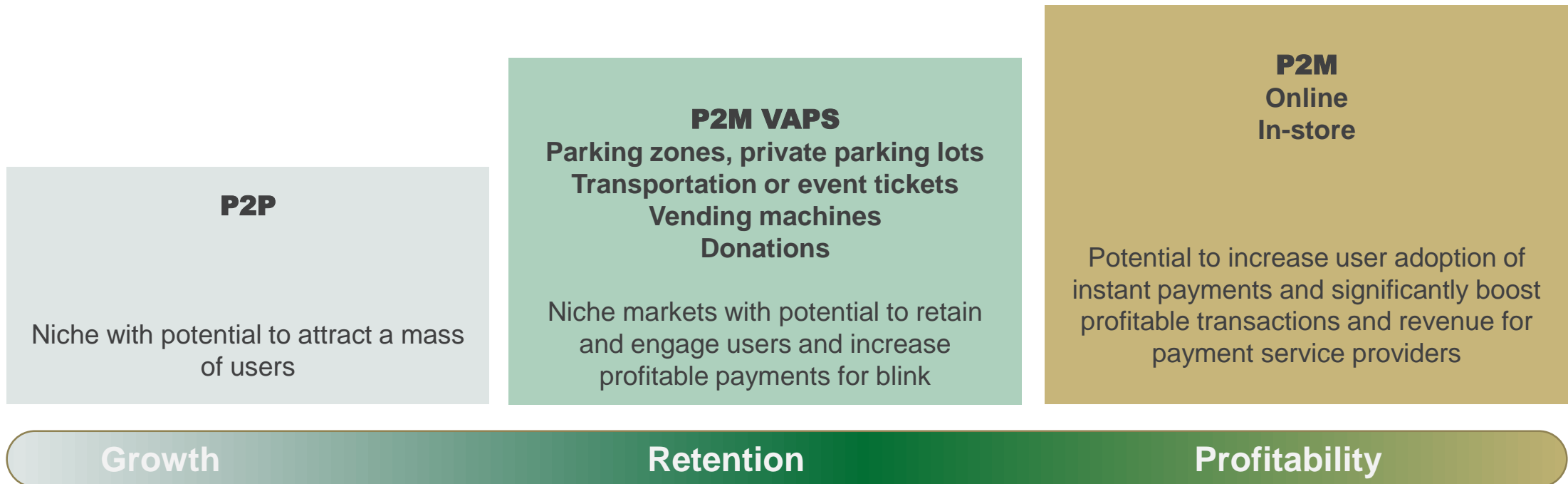**R2P Online E-Commerce**

Budget payments

Stage 4

2024-2025

In-store

UNLEASHING THE FULL POTENTIAL OF INSTANT PAYMENTS

o Our primary focus is on the P2P service to mobile numbers, aiming **to rapidly attract a substantial user base** and acquaint them with the convenience of blink instant payments.

o After successfully building a robust user community on blink, our next stride is **to captivate and retain users** by enticing aggregators and low-value service providers. This strategic move will cover niches where cash transactions prevail, such as hourly parking (blue and green zones), transportation tickets, events, self-service vending machines, donations, and more.

o Having paved the way for underserved sectors and merchants lacking POS devices, our ambition is to entice online merchants and physical retailers. This initiative will **booster the usage of blink among users**, further expanding its reach and impact.

P2P	**P2M VAPS** **Parking zones, private parking lots** **Transportation or event tickets** **Vending machines** **Donations**	**P2M** **Online** **In-store**
Niche with potential to attract a mass of users	Niche markets with potential to retain and engage users and increase profitable payments for blink	Potential to increase user adoption of instant payments and significantly boost profitable transactions and revenue for payment service providers

Growth	Retention	Profitability

Thank you!

BORICA
BANK SERVICES