RETAIL PAYMENTS LANDSCAPE IN EUROPE

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ABSTRACT: *In recent years, the retail payments landscape in Europe has undergone significant transformation due to technological advancements, regulatory changes and evolving consumer preferences. The rise of digital technology has accelerated the development of non-cash payment systems, with several non-cash methods gaining popularity for their convenience and efficiency. This paper aims to provide insights into a major initiative of the European Union in the payments sector: the SEPA project. The Single Euro Payments Area (SEPA) is a geographic region that includes European countries and it is designed to create a harmonized and integrated market for euro payments. SEPA eliminates distinctions between national and cross-border transactions within the Eurozone. The primary goal of SEPA is to ensure that participants have the same basic conditions, rights and obligations, regardless of whether transactions are domestic or cross-border.*

KEY WORDS: *non-cash payments, retail payments, SEPA, instant payments.*

JEL CLASSIFICATIONS: *G20, G21, E42.*

1. INTRODUCTION

In recent years, the payments industry has experienced significant changes due to several factors, including regulatory initiatives, trade agreements, international relations, the growth of e-commerce, technological advancements, the rise of digital wallets and mobile payment solutions, shifts in consumer behavior and cross-border payments. However, as the world moves towards cashless societies, it's important to note that the pace and scope of this transition differ across countries and regions. In Europe, many countries have made significant progress in adopting digital and electronic payment methods, but there are still several where cash is widely used.

According to research by Merchant Machine, Bulgaria and Romania are the most cash-reliant countries in Europe, as cultural and structural barriers persist despite ongoing efforts to encourage digital payments.

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Rank	Country	People with internet access	Credit card owners	No. of ATMs (per 100,000 adults)	Cash-based payments	Unbanked population
1	Bulgaria	70%	14%	91	74	28
2	Romania	78%	12%	63	9	42
3	Greece	78%	12%	64	54	14
4	Ukraine	75%	27%	94	2	37
5	Portugal	78%	34%	165	13	8
6	Czech Republic	81%	25%	57	36	19
7	Hungary	85%	13%	60	6	25
8	Slovakia	90%	22%	63	32	16
9	Poland	83%	17%	68	5	13
10	Italy	70%	43%	90	4	5

Source: Alex Rolfe, Which Countries Are Most Reliant on Cash and Which Are Least Reliant, August 11, 2022, https://www.paymentscardsandmobile.com/which-countries-are-most-reliant-on-cash-and-which-are-least-reliant/

Figure 1. Top 10 European countries reliant on cash in 2022

Rank	Country	People with internet access	Credit card owners	No. of ATMs (per 100,000 adults)	Cash-based payments	Unbanked population
1	Norway	97%	71%	32	2%	0%
2	Finland	92%	63%	37	2%	0%
3	New Zealand	92%	61%	54	2%	1%
4	Hong Kong	92%	65%	52	4%	5%
5	Sweden	95%	45%	28	1%	0%
6	Denmark	97%	45%	43	1%	0%
7	Switzerland	94%	66%	94	2%	2%
8	UK	95%	65%	99	1%	3%
9	Singapore	92%	49%	54	1%	2%
10	Netherlands	91%	39%	36	4%	0%

Source: Alex Rolfe, Which Countries Are Most Reliant on Cash and Which Are Least Reliant, August 11, 2022, https://www.paymentscardsandmobile.com/which-countries-are-most-reliant-on-cash-and-which-are-least-reliant/

Figure 2. Top 10 countries closest to a cashless society in 2022

In contrast, Norway and Finland are among the least cash-dependent countries in Europe, along with Sweden, Denmark and Switzerland. These nations have widely adopted digital payment systems, making cash transactions increasingly rare. The transition to a cashless society in these countries is supported by strong digital payment infrastructures, such as mobile apps, contactless cards and online banking. Consequently, consumers in these countries tend to prefer the convenience and security of electronic transactions over using physical cash.

Since Merchant Machine's 2021 analysis of cash-reliant countries, there have been further changes in payment methods worldwide. The technological revolution and accelerated adoption of digital solutions have significantly transformed payment management, resulting in a decline in cash payments. This shift to non-cash payments is driven by several interconnected factors, including technological innovations, changing consumer behaviours, a growing importance of convenience and security in financial transactions and increased acceptance of digital solutions.

2. OBJECTIVES AND METHODOLOGY

We carried out a comprehensive descriptive study to highlight a key EU initiative in the payments sector: the SEPA project. This research aims to provide a clear understanding of SEPA's goals, which include creating a unified payment system that simplifies euro transactions among member countries. The study examines the challenges and opportunities SEPA has faced since it started and assesses its impact on the changing landscape of European payments. Additionally, this analysis offers insights into the factors affecting the broader adoption and use of instant payments within the European financial ecosystem, including Romania’s financial landscape.

3. THEORETICAL FRAMEWORK

The introduction of the Euro currency also led to a unified payment solution for Eurozone countries. This solution was designed to meet the European Central Bank's monetary policy requirements and integrate with each country's national payment systems. This system is known as TARGET (Trans-European Automated Real-time Gross-settlement Express Transfer). Its purpose is to facilitate real-time, gross-based payments between European central banks, regardless of national systems and to reduce the risk of non-payment to nearly zero. The initial TARGET system was launched in 1995 by the European Monetary Institute, which later became the European Central Bank. It became operational in January 1999, supported by the central banks of Eurozone countries and their credit institutions. TARGET was eventually replaced by TARGET2, a centralized real-time gross settlement (RTGS) system. TARGET2 became operational on November 19, 2007, providing a harmonized level of services based on an integrated IT infrastructure.

While TARGET2 facilitates the real-time gross settlement of high-value euro transactions, the net settlement of low-value euro payments is handled by the ***SEPA (Single Euro Payments Area) system***. The speed of retail payments has become more important with recent technological advances. Initiatives like the Single Euro Payments

Area (SEPA) aim to create a unified market for euro payments, simplifying and reducing the cost of cross-border transactions within the Eurozone. SEPA plays a crucial role in the European retail payments landscape by harmonizing electronic euro payments across member countries. It includes standardized payment methods like SEPA Credit Transfers (SCT) and SEPA Direct Debits (SDD) for both domestic and cross-border payments.

SEPA was created to make the European economy more competitive, transparent, and integrated. By standardizing payments, reducing cross-border barriers and promoting innovation, SEPA aims to improve the quality, efficiency and affordability of euro payments across the region. The Single Euro Payments Area is a region where domestic and cross-border euro payments are treated the same. Customers are able to make and receive euro payments within Europe with the same security, speed and efficiency as in their own country, using one account and standardized tools for credit transfers, direct debits, and card payments.

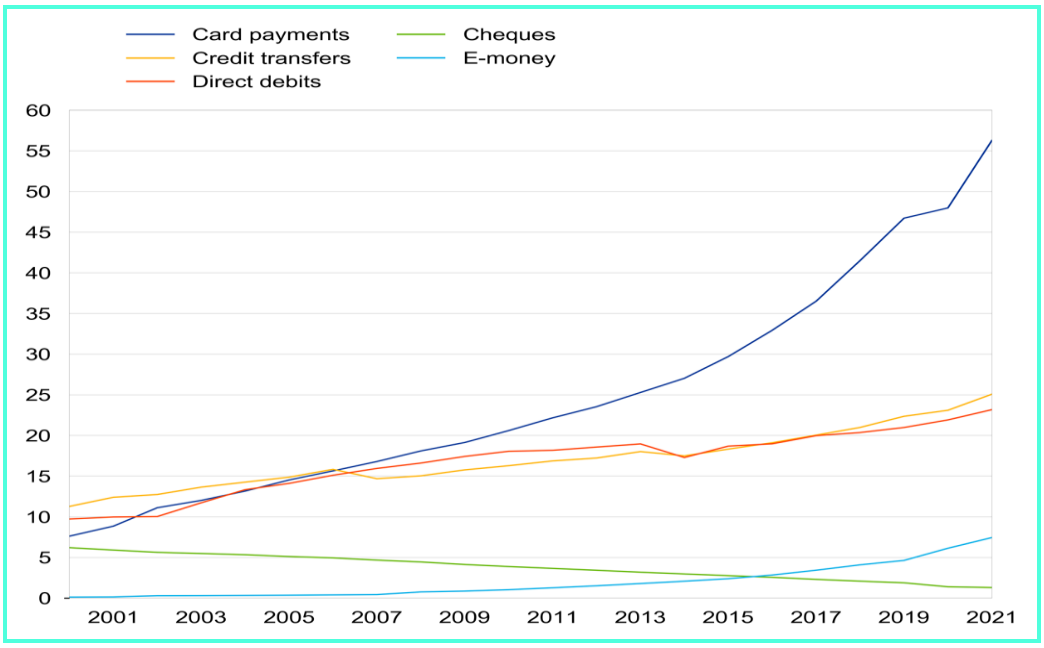
SEPA is an EU project to create a single market for *non-urgent, small-value euro payments*. It eliminates differences between national and cross-border payments, treating all euro payments in the euro area as domestic. SEPA aims to reduce settlement times and costs, while enhancing services for consumers and boosting competition in the financial sector. SEPA includes a common payments area for 36 European countries, comprising all 27 EU member states and EFTA countries: Iceland, Liechtenstein, Norway, and Switzerland. It also includes Andorra, Monaco, San Marino, and Vatican City (Asel et al., 2022). This area serves 520 million citizens and processes over 122 billion electronic payments annually. Within SEPA, individuals and businesses can use the same payment instruments - credit transfers, direct debits and cards - when making euro payments in Europe as they do in their home countries.

SEPA was implemented through a multi-stage process designed to standardize and enhance electronic payments across Europe, consisting of three stages: development, implementation, and migration. By early 2011, the Single European Payments Area (SEPA) was fully operational, creating a euro zone where electronic payments are treated as domestic transactions. Consequently, the distinction between national and inter-European payment areas has been eliminated (Maixe-Altes & Mourelle, 2016). The final deadline for migrating to SEPA for credit transfers and direct debits was February 1, 2014. By this date, all payment service providers in the Eurozone were required to fully adopt SEPA payment schemes for euro-denominated transactions.

4. EUROZONE PAYMENT LANDSCAPE

Since the launch of the first SEPA payment method in 2008, the Eurozone payment landscape has changed significantly. The euro value of SEPA payments has grown rapidly, indicating increased adoption of these standardized payment methods by both businesses and consumers. Consequently, SEPA payments now dominate the Eurozone payment environment, representing a large share of the total payment volume.

In 2021, non-cash payments in the euro area rose by 12.5% from the previous year, reaching a total of 114.2 billion transactions. The value of these non-cash payments also saw a significant increase, climbing by 18.6% to €197.0 trillion in 2021 compared to the prior year (European Central Bank, 2022).



Source: ECB, Payments statistics for 2021, Press release 22 July 2022, https://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/ComunicadosBCE/NotasInformativas BCE/22/presbce2022_95en.pdf

Figure 3. Use of the main payment services in the Euro area (number of transactions per year in billions)

The table below shows that cards are the most commonly used payment method for everyday transactions, while credit transfers lead in value, highlighting different usage contexts. E-money and cards are favored for low-value transactions, averaging below €100, which reflects the rising trend of electronic micropayments. Cheques represent a small portion of transactions, indicating a declining reliance on this traditional method in favor of digital alternatives. Credit transfers accounted for the highest transaction value at €184 trillion, representing 93% of the total value transferred. Direct debits were the next largest method, making up 4% of the total, followed by card payments, which contributed 2% (Mithouard, 2022).

The significant increase in non-cash payments in the euro area in recent years reflects ongoing trends in payment digitization and the rising adoption of electronic and digital payment methods. Data indicates a shift towards electronic and card-based payments for every day, lower-value transactions, while credit transfers continue to be essential for high-value transactions across the Eurozone.

Table 1. Non-cash payments in the Eurozone in 2021

Payment methods	Number of payments (in Billion)	Share	Value of payments (in Trillion Euros)	Share	Value/ payment (in Euros)
Credit transfers	25.1	22%	184.2	93%	7,350
Direct Debits	23.2	20%	7.3	4%	316
Cards	54.8	49%	3.3	2%	60
E-money	5.8	5%	0.3	<1%	51
Cheque	1.3	1%	1.4	1%	1,101
Others	4.1	3%	0.4	<1%	96
Total	**114.2**	**100%**	**197.0**	**100%**	**1,725**

Source: European Central Bank Statistical Database, 2021

This evolution highlights the success of SEPA in enabling efficient and cost-effective cross-border transactions, promoting greater financial integration within the Eurozone. Today, SEPA payments are not only a preferred choice for euro-denominated transactions but also a key driver of economic activity in the region.

Regardless of whether a payment is made as a credit transfer (SEPA credit transfer) or as a direct debit (SEPA direct debit), the time it takes to reach the recipient can vary. In the euro area, only the so-called ***SEPA Instant Payments*** are processed in real time. *Instant payments* (IP) began to emerge globally in the early 2000s.

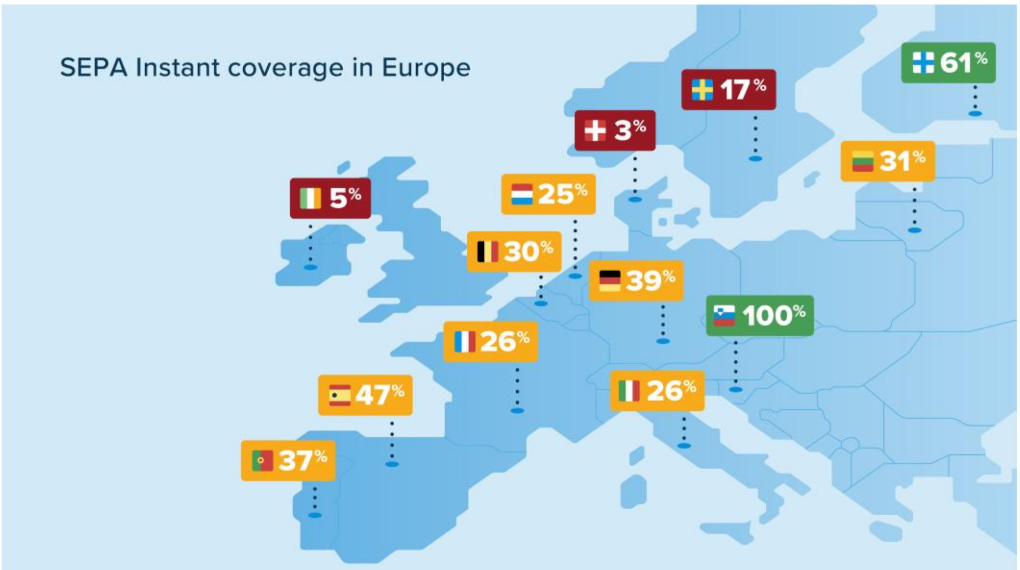
In Europe, account-to-account (A2A) instant payments are supported by SEPA Instant Credit Transfer (SCT Inst), allowing euro transfers to be completed within seconds across the Single Euro Payments Area (SEPA), covering 36 European countries. In Europe, instant payments first emerged in the United Kingdom in 2008, followed by Sweden and Poland in 2012, and Denmark in 2014. These countries developed their domestic instant payment systems to enable faster and more efficient fund transfers.

A2A instant payments allow funds to be transferred directly from one bank account to another in real time, bypassing intermediaries like card networks. This payment method is gaining popularity worldwide, as it provides a faster, more efficient, and often more cost-effective alternative to traditional payment methods such as checks, wire transfers and even card payments. A2A payments are commonly used for personal transactions, business payments and e-commerce.

The SEPA Instant Credit Transfer (SCT Instant) scheme was launched in November 2017 at the initiative of the European Union, marking a significant advancement in the Eurozone. It provides a unified framework for instant credit transfers across SEPA countries. The Instant Payment (IP) system is an innovative payment method designed for quick cross-border transfers within the Single Euro Payments Area.

The adoption and implementation of instant payments are evolving worldwide, with many countries and regions developing their own instant payment systems to address the increasing demand for faster and more convenient payment services.

The coverage of SEPA Instant payments varies significantly across EU member states, with some countries achieving nearly complete adoption while others lag behind. For example, Slovenia has reached 100% coverage, with all banks offering SEPA Instant payments alongside regular credit transfers as of April 2022, making it a leader in instant payment adoption within the SEPA framework. In contrast, Denmark has only achieved a mere 3% coverage for SEPA Instant payments (Cazacu, 2022). This discrepancy highlights the differing levels of readiness and integration of instant payment solutions among member states. Factors influencing this variation include the availability of technological infrastructure, regulatory environments and the willingness of financial institutions to adopt and promote instant payment services.



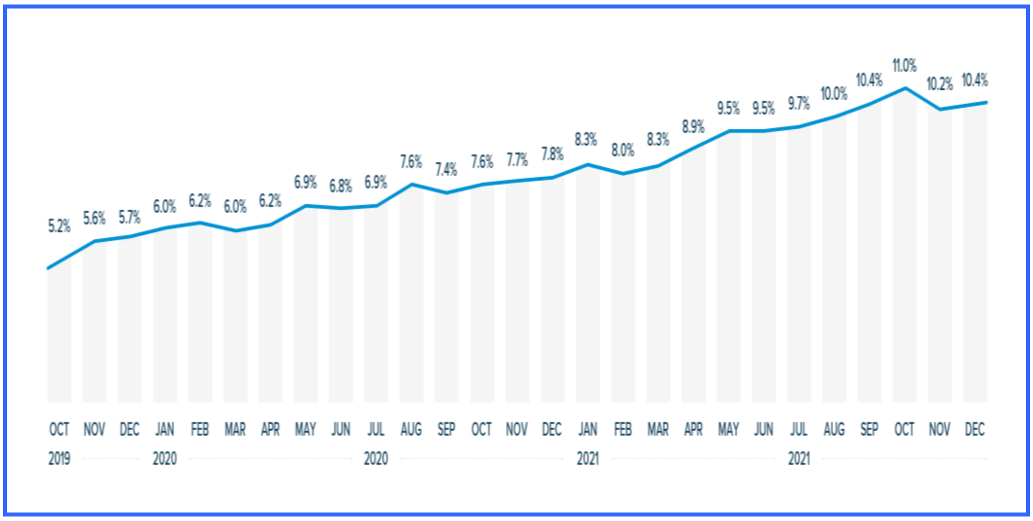
Source: Cazacu, A. (2022) Open Banking: Why SEPA Instant Payments Need a Nudge, TrueLayer, https://truelayer.com/blog/product/open-banking-why-sepa-instant-payments-need-a-nudge/

Figure 4. SEPA Instant coverage in Europe

Examining the differences in SEPA Instant payment adoption among member states provides insights into the broader implications for the European payments landscape. Countries like Slovenia, with comprehensive coverage, demonstrate the advantages of a well-coordinated approach to implementing instant payments, leading to improved financial efficiency and customer satisfaction. Conversely, nations with lower adoption rates, such as Denmark, may need to address specific challenges to boost the uptake of SEPA Instant payment and fully realize its potential benefits.

The following figure illustrates the adoption and usage of instant payments within the broader context of credit transfers in the Single Euro Payments Area

(SEPA). Although the current percentage of 13.8% in October 2022 is relatively low, the upward trend signals a notable shift towards increased acceptance and awareness of the benefits associated with instant payments among users.



Source: ECB, https://www.ecb.europa.eu/paym/integration/retail/instant_payments/

Figure 5. SEPA Instant transactions (% of total SEPA credit transfers)

As more banks and financial institutions integrate instant payment solutions into their services, users are more likely to encounter and use these options. Enhanced marketing efforts by financial institutions are crucial in educating customers about the functionalities and benefits of instant payments. Additionally, growing public awareness and demand for faster transaction methods are expected to lead to a greater adoption of instant payments in the near future. This gradual increase indicates that both consumers and businesses are beginning to recognize the advantages of these payment methods, including the ability to complete transactions almost instantly, improved convenience and better cash flow management.

5. RECENT TRENDS IN THE ROMANIAN PAYMENT SYSTEM

The payments sector in Romania has been very dynamic in recent years, reflecting trends seen in other parts of Europe. Romania is undergoing a digital transformation in its payments sector. In 2005, the country's payment infrastructure underwent significant structural changes with the successful implementation of an electronic payment system and the gradual operationalization of its three components. Although relatively new, the Romanian payment system is comprehensive, robust, dynamic and continuously evolving. At the national level, the Romanian Banking Association (representing the national banking community within the European Payments Council and serving as the governance authority for the SEPA RON national payment schemes) coordinates the implementation of the SEPA project.

In Romania, the SEPA project is carried out according to the National Plan for SEPA Implementation and Migration. This plan outlines the national strategy adopted for implementing SEPA and the transition to new payment instruments. It details the organization of the SEPA project, including planning, project management and the commitments and timelines agreed upon by all parties involved in the migration process.

TransFonD, the Romanian company acting as a payment service provider, offers retail payment platforms to the banking community. These platforms enable banks to provide various payment services to consumers and businesses, ranging from traditional checks and paper payments (which are in evident decline) to direct debits and credit transfers in both RON and EURO. Since 2019, they have also included instant payments in the national currency. TransFonD operates the National Electronic Transfer System (SENT), the automated clearing house (ACH) responsible for processing interbank retail payments in Romania, specifically for low-value transactions.

TransFonD's strategy for developing payment services focuses on providing comprehensive clearing, settlement, reconciliation and message routing services using SEPA tools in euros before adopting the single currency. Along with credit institutions, TransFonD chose to adopt these standards for national currency payments as well, in anticipation of the switch to the euro. This approach aims to streamline banking payment processes by applying a single standard for both euro and national currency payments. As a result, TransFonD launched the SEPA Program, which aims to implement a SEPA-compliant clearing system according to the regulations set by the European Payments Council (EPC). This initiative will transform the existing infrastructure into a “Clearing and Settlement Mechanism” capable of processing both national currency and euro payments for Romanian banks.

The program included three main projects (https://www.transfond.ro/):

- **SEPA-RON** (national currency payments in SEPA format) aims to establish a SEPA-compliant clearing system for RON payments. This includes adopting messaging standards for the SCT (SEPA Credit Transfer) and SDD (SEPA Direct Debit) schemes for RON interbank payments, implementing SEPA business rules, modifying the SENT application according to SEPA documentation and introducing an optional additional service within the SEPA Direct Debit scheme that features a centralized Mandate Management Registry (RUM). The first stage of SEPA-RON, completed in November 2012, implemented the processing and clearing functionality for SEPA Credit Transfers. The final stage, which involved the implementation of the SEPA Direct Debit scheme for RON payments, was completed and launched in April 2016.
- **SEPA-EUR** (Euro payments) aims to implement euro payment processing functionality in the SENT application, using SEPA standards with settlement in the TARGET2 system, which is the Eurosystem's real-time gross settlement (RTGS) system for euro payments. This project was successfully completed with the activation of EURO-SENT in December 2013.
- **SEPA DD** (SEPA Direct Debit) was launched on April 11, 2016, by TransFonD in partnership with the Romanian Banking Association. This service provides

processing for direct debit instruments in SEPA format (SEPA Direct Debit - SDD) for local currency payments, completing the modernization program for the Automatic Clearing House - SENT and fully preparing the central infrastructure for interbank retail payments. As a result, Romania became the first non-euro EU member country to fully implement SEPA standards for national currency payments.

Romania is the first non-Eurozone EU member country to fully adopt SEPA standards for payments (SCT and SCT Inst), including those in national currency. On April 22, 2019, the **Instant Payments System**, a component of SENT, was introduced, allowing money transfers between banks in less than 10 seconds. These payments can be made at any time, 24/7/365, with individual transaction amounts limited to under 50,000 lei. Banca Transilvania and CEC Bank were the first two credit institutions to offer this service, enhancing their portfolio of secure and fast payment options with this innovative, instant solution available 24/7.

Over three years after its launch, nine banks have adopted the new retail payment processing standard: Banca Transilvania (2019), CEC Bank (2019), Libra Internet Bank (2019), BCR (2020), Vista Bank (2021), Patria Bank (2021), Raiffeisen Bank (2022), BRD (2022) and Intesa Sanpaolo Bank (2022). To use instant payments, users do not need to purchase or install a dedicated application or register on a separate interface for instant payments. The only requirement to access instant payments is that the service must be offered by both the payer's bank and the payee's bank, primarily through mobile banking and internet banking platforms.

Currently, in Romania, only nine banks provide instant payment services in the national currency. Additionally, only one bank, Banca Transilvania, is expected to offer instant payments in euros starting next year.

6. CONCLUSIONS

SEPA is a significant initiative that demonstrates the EU's commitment to modernizing and harmonizing the payments landscape. Its goal is to create a uniform and standardized framework for euro-denominated payments across participating European countries. SEPA enables seamless processing of electronic payments, removing distinctions between domestic and cross-border transactions within the Eurozone. Customers from participating countries benefit from a more unified, efficient and cost-effective payment environment, enhancing financial integration and simplifying transactions for individuals and businesses alike.

The implementation of the SEPA Instant Credit Transfer (SCT Instant) in 2017 marked a milestone in the evolution of payments within the Eurozone by providing a standardized and unified framework for near-instantaneous fund transfers. This development aligns with SEPA's broader objectives of creating a more integrated and efficient payments environment across participating European countries.

Instant payments have become a crucial part of the financial ecosystem in Europe and worldwide. By integrating account-to-account (A2A) payments with open banking technology, businesses can offer their customers a seamless experience. This integration eliminates the need for intermediaries and the repetitive entry of card details. Instead, APIs (application programming interfaces) have established a financial infrastructure that can process both instant one-time payments and recurring transactions directly from desktop or mobile browsers and applications.

The shift toward instant payments represents a significant and transformative trend in the European payments industry, driven by customer expectations, technological advancements and regulatory changes. In the near future, as technology continues to evolve, the financial industry is expected to witness further innovations aimed at improving the speed and overall user experience in retail payments. Consequently, the global payments industry is on the verge of a major transformation, driven by the rapid adoption of account-to-account (A2A) instant payments, which offer a faster and more cost-effective alternative to traditional payment methods, reducing the high costs associated with card networks.

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