



Digital Wallets

Executive Guide to Digital Wallets

A Comparative Analysis
of Models and Their
Business Potential



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Introduction

Digital wallets are without a doubt the foundation of the digital banking revolution. They have changed how we communicate with banks, pay for our daily necessities, and manage our financial assets in general. Digital wallets are now even more popular than credit cards: wallets' share of global POS transactions has jumped over **21%** YoY in 2021, comprising **28.6%** of global POS transactions. Card usage in e-commerce has also been increasingly shifting to e-wallets.

In recent years, digital wallets have evolved from being merely a payment tool to becoming significantly more versatile. We now use wallets to open accounts, obtain payment cards, send money to relatives, split bills, invest in stocks and crypto currencies, and use a variety of payment methods that were previously unavailable without the use of a digital wallet. What's more, wallets are a key enabler of financial inclusion as well as a tool for extending financial services beyond traditional banking institutions.¹

Disruption in payments is already happening. In fact, Accenture estimates that card-issuing banks that do not take a bold approach to payments innovation could lose out on **\$89** billion in revenue in the next three years.²

Who is This Whitepaper for?

This whitepaper is crafted for business and technical leaders in banking, Fintech and financial services, who aim to utilize the profitable market opportunities, presented by digital wallets, and are looking for in-depth, expert analysis on the types of e-wallets, use cases and business models available, to guide and inspire their strategic decisions.





Types of Digital Wallets

New Digital World



When classifying digital wallets, the payment mechanism used is one way they can be distinguished.

Card-based payment methods are used by certain digital wallets, in which the user enters their credit or debit card information into the wallet and utilises it to make payments.

Account-based payment methods are used by various digital wallets, in which the user connects their bank account or other financial account to the wallet and uses it to make payments straight from their account. A third type are **stored-value** account-based (SVA) methods where the user transacts from a prepaid virtual account.

Another way to distinguish digital wallets is through the ecosystem in which they function. Some digital wallets are NFC-enabled, which means they may be used to make payments at the point of sale by merely tapping the wallet against a dedicated **NFC** scanner. This is a simple and safe method of making payments since it eliminates the need to manually enter payment information. Other digital wallets are intended for use in **eCommerce** settings, where users may use the wallet to make online purchases through websites or mobile apps.

Aside from these aspects, digital wallets might also differ in terms of acceptance. Some digital wallets are part of a closed-loop system, which means they can only be used to make payments at businesses or places that are also members of the system. Often, closed-loop systems go hand-in-hand with **QR code** payments which aid the exchange of transaction information. Other digital wallets are open payment wallets, which means they may be used to pay at any merchant that accepts the wallet's payment mechanism.

Overall, what all digital wallets have in common is that they serve as a vehicle for the exchange of monetary value. They all provide an easy and safe way to handle and utilise your money digitally, whether they employ card-based, account-based, or SVA-based payment methods, work in NFC-enabled or eCommerce context, or are part of a closed-loop or open payment system.

Why Holding Monetary Value is an Important Aspect to be Considered?

It is essential to understand how digital wallets can interact with monetary value, since this may be a critical milestone in determining the business model of the underlying company strategy. This will undoubtedly set the legislative requirements for the wallet operator's licensing, as well as affect the business plan and level of interoperability with other parties. When deciding whether to invest in a digital wallet, these factors must be carefully considered.

The Three Main Types of Digital Wallets

In this regard, we are defining three main types of digital wallets, based on the method in which they interact with monetary value:

1

Stored-value account wallet

Paying with funds stored in the digital wallet application

2

Bank-managed wallet

Paying with payment methods issued by a single bank, which operates the digital wallet

3

Open banking wallet

Center point of an Open Banking solution, connecting numerous banks into a unified user interface

The objective of this whitepaper is to provide an overview of the various aspects of the potential interactions that the above digital wallet models have with monetary value:



What advantages each model has to provide for companies who operate wallets?



Which organizations is each wallet model suitable for?



What are the most important use cases that can be supported by the various models?

To summarise, a digital wallet and its associated monetary value are inherently linked, and it is critical to have a solid grasp of the ramifications of this relationship before deciding on the optimal digital wallet solution.

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Stored-Value Account Wallet

General Overview

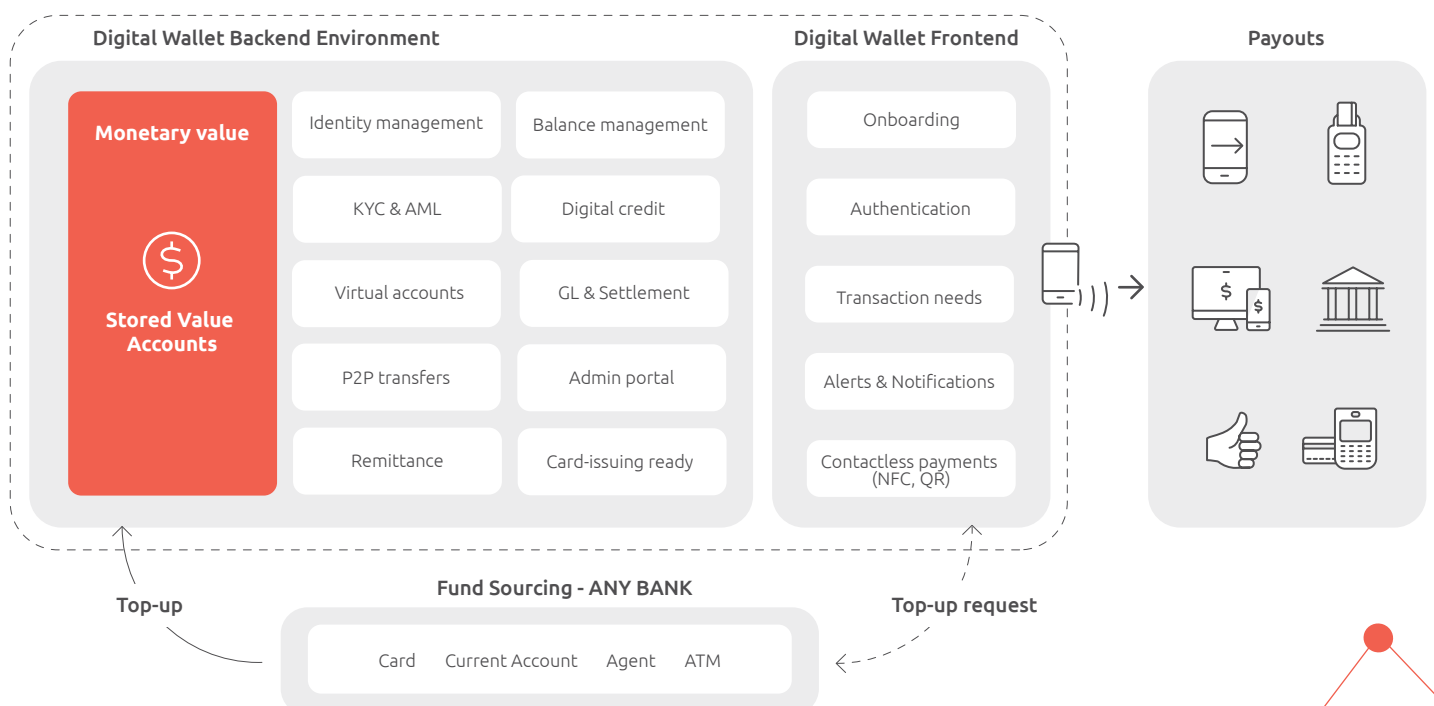
The number of stored value wallets in use is expected to reach 4.8 billion by the end of 2025.³

 **Stored-value (SVA) digital wallets let you store electronic money and pay for goods and services using a prepaid virtual account.**

SVA wallets' primary selling point is the ease with which a virtual money account is issued and then topped up with real-world currency. Customers' funds are kept in a wallet account until they are ready to be used. SVA wallet operators have full authority over all aspects of the client relationship and all aspects of wallet operations, as well as a large ecosystem in which to develop value-added services and collaborations. In addition, SVA accounts can be held in the wallet ledger, outside of traditional core banking systems, to reduce both costs and risk.

There's a good reason why SVA wallets have become synonymous for peer-to-peer (P2P) transfers and remittance services: They are the quickest, cheapest, and most hassle-free way for people to transfer and receive money digitally. However, to compare an SVA digital wallet to a simple money transfer app is to vastly understate the potential of this innovative payment method.

Managed By Wallet Operator



4

Stored-Value Account Wallet

The Advantages of the SVA Wallet

1 Low-cost, low-KYC customer acquisition

provide quick access to financial services

2 Independence

maintain full control over the customer lifecycle and product management - customer, product, pricing, channel, budget

3 Innovation edge

go at your own speed while creating a commercially viable product

4 Scalability

expanding your business is never an "if" but a "when" with SVA digital wallets.

5 Cost-effectiveness

interactions between users of the same system are virtually costless and instant

6 Partnership-ready ecosystem

with an API-driven environment in place, building products in partnership with other providers is a breeze

License to Operate

In order to operate Stored-value accounts, wallet operators often need a financial regulatory license for issuing electronic money. For example, in Europe this is the Electronic Money Issuer (EMI) license that allows a company to issue electronic money in the form of e-wallets, prepaid cards, or other electronic payment instruments. Electronic money, also known as e-money, is a digital representation of a monetary value that is stored electronically and can be used to make payments for goods or services.

Powerful Use Cases

Wallet-to-Wallet P2P

Wallet users may send and receive funds instantaneously inside the wallet ecosystem.

QR payments

QR codes are among the easiest and most convenient ways to transfer data and make purchases in-store. Any company can profit from implementing QR codes because of the value chain advantages of closed-loop payments.

Push/Pull payments

The SVA wallet ecosystem can conveniently leverage push or pull payments to peers or even merchants to offer innovative wallet driven features.

Remittance

It is fast, easy, and convenient to send money to friends and family using an SVA wallet.

Split payments

Another non-traditional form of payment that has been widely available because of SVA wallets. A wallet's ability to allow users to divide up bills among themselves is already a necessary feature.

Financial inclusion

As a digital wallet can onboard customers with minimal data even offline, and has functionality to interface with agency banking solutions, it has the potential to greatly accelerate financial inclusion in certain regions.

NFC payments

In-store mobile payments using NFC have become the standard because of their speed, ease of use, and safety. Any OEM (Apple Pay, Google Pay, etc.) or proprietary solution with NFC, may be used with an SVA wallet, or the wallet can be converted into a proprietary NFC-enabled version.

Card payments

To facilitate card payments both online and in-person, the SVA wallet ecosystem may be simply integrated with any card issuing solution, thus tying a physical or virtual card to a digital account.

Businesses Under Impact

Fintechs

Those in the financial technology industry that are searching for a streamlined and expedited entry into the market.

Digital banks/Neobanks

SVA Wallet is the first step toward a completely digital future in banking by providing an easily accessible integrated solution to launch essential financial services and products in a digital format.

Money remittance services

For many countries, money transfers from citizens working abroad are a lifeline for the economy.

Telcos/MNOs

Any MNO may use a digital SVA wallet as a foot in the door to the financial services business.

Debit/Credit card programs

Every company eager to benefit from their own card program should investigate the possibility of implementing it with a digital wallet.

Closed-loop systems

A digital wallet can be the cornerstone of a strategy based on customer loyalty, desire, and exclusivity.

General Overview

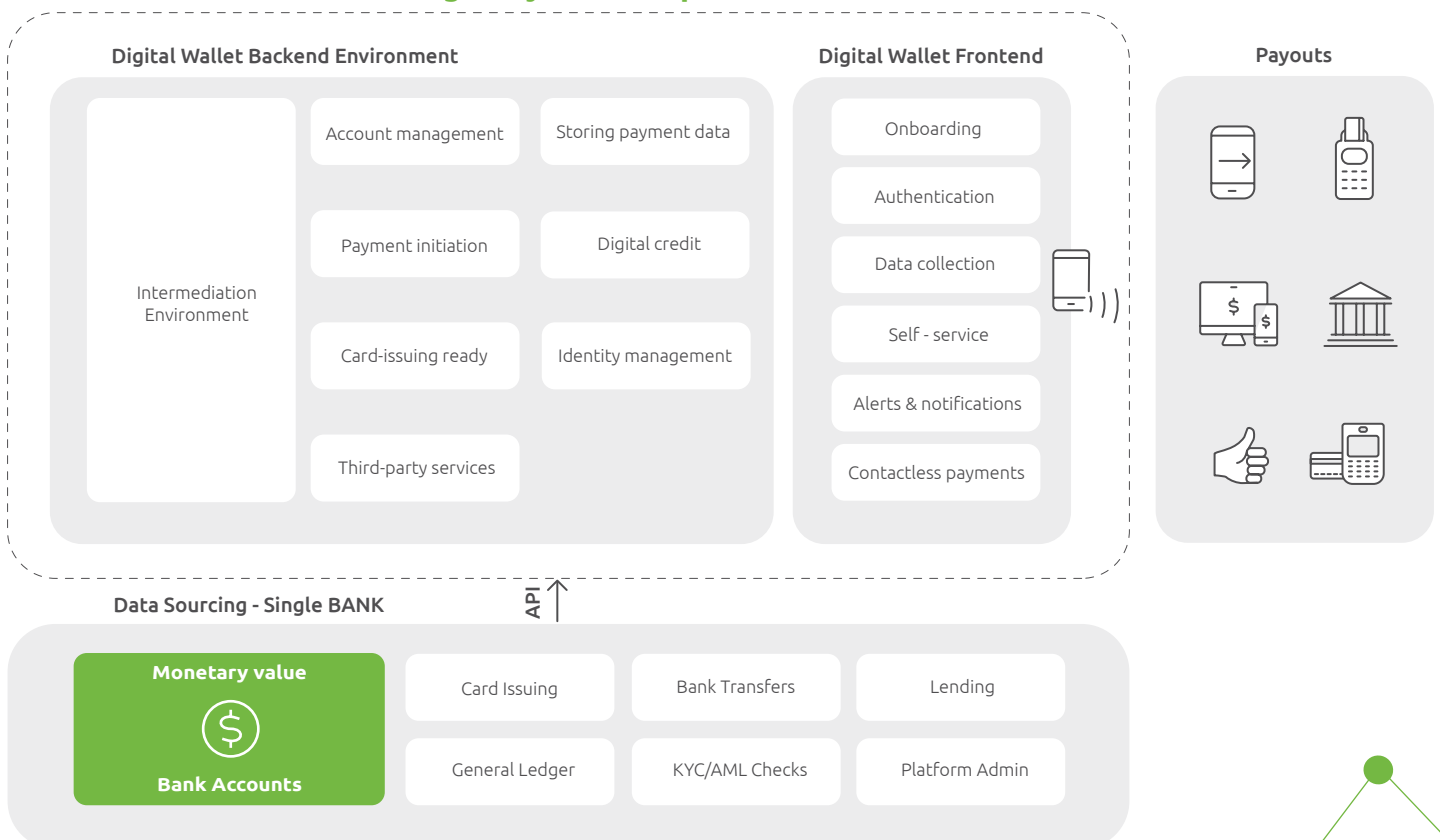
A2A adoption is rapidly increasing, with 10% using the method at least five times a month.²

 **The convenience and flexibility of bank-managed wallets facilitate interactions with the bank and give banks the needed competitive edge.**

In times of economic uncertainty and rising customer expectations, banks have the upper hand over Fintechs and big tech: customer trust in traditional financial institutions². This is why bank-managed wallets offer high potential for banks. This type of wallet is owned and maintained by a bank and typically connects to a user's bank account to enable online payments and money transfers. Additional services offered can be the ability to track spending, collect prizes, or get tailored offers. Traditional banks are encountering significant issues in keeping up with the most recent technologically-driven financial solutions, owing to outdated core platforms and obsolete legacy technologies.

While the latter continue to fulfil their purpose, conventional banking platforms are unable to meet consumer demands for speed and flexibility. Bank-managed wallets are often utilised by banks to facilitate their digital transition, giving them a competitive edge in establishing themselves on par with challenger banks. Furthermore, the digital wallet ecosystem offers much-needed orchestration capabilities to traditional banking systems, allowing for the deployment of digital solutions and self-service.

Managed By Wallet Operator



The Advantages of the Bank-Managed Wallet

1

Digital first

The end-to-end fully digital user experience becomes a reality

2

Streamlined business processes

An essential component of every sustainable enterprise is cutting-edge automation

3

Improved UX/UI

There's no denying that the wallet has the potential to provide a unique and exciting interaction for its users

4

Efficient investment

Greater savings can be realised by retrofitting existing CBS systems with digital wallet functionality

5

Further reach

Through the use of digital wallets, banks can increase their presence in previously unimaginable markets or locations

6

Speed

Critical to the success of any bank is rapid product availability and customer onboarding

License to Operate

Licensing regulations for bank-managed wallets may differ per jurisdiction: From the position that the wallet may utilise a banking license and no further licensing is necessary, to the point where the wallet may be required to operate under a "Payment Institution" license, depending on the features it will employ.

Powerful Use Cases

Digital identification & onboarding

For a bank to expand, the use of digital wallets, which allow for simple, remote, and hassle-free user acquisition, is crucial.

Instant card issuing

Digital wallets are the first point of interaction for card issuance because of their capacity to perform remote client identification. This paves the way for the fast transmission of card credentials and reduces the time to first transaction from days to minutes.

Remote account opening

It seems like everyone would want to be able to open an account without leaving their house.

Self-service

For the operator of the digital wallet, self-service operations and services distributed over the wallets can be a game-changer in terms of cost reduction.

Digital lending

Digital wallets provide a huge opportunity for the lending industry since they can streamline time-consuming procedures like data collection and credit scoring.

Digital authentication

Authenticating consumers at every time and point of engagement with the bank is a crucial function that can be simply implemented via a digital wallet.



Businesses Under Impact

Incumbent banks

When it comes to steering a bank's digital transformation, a digital wallet can serve as the windsack.

Financial institutions

Financial services will never be the same after adding a digital wallet into the picture

Credit unions

As a means of collecting and processing data for credit scoring and maintaining contact with members, digital wallets may become indispensable.





General Overview

60% of consumers want a single app which tracks payments.²

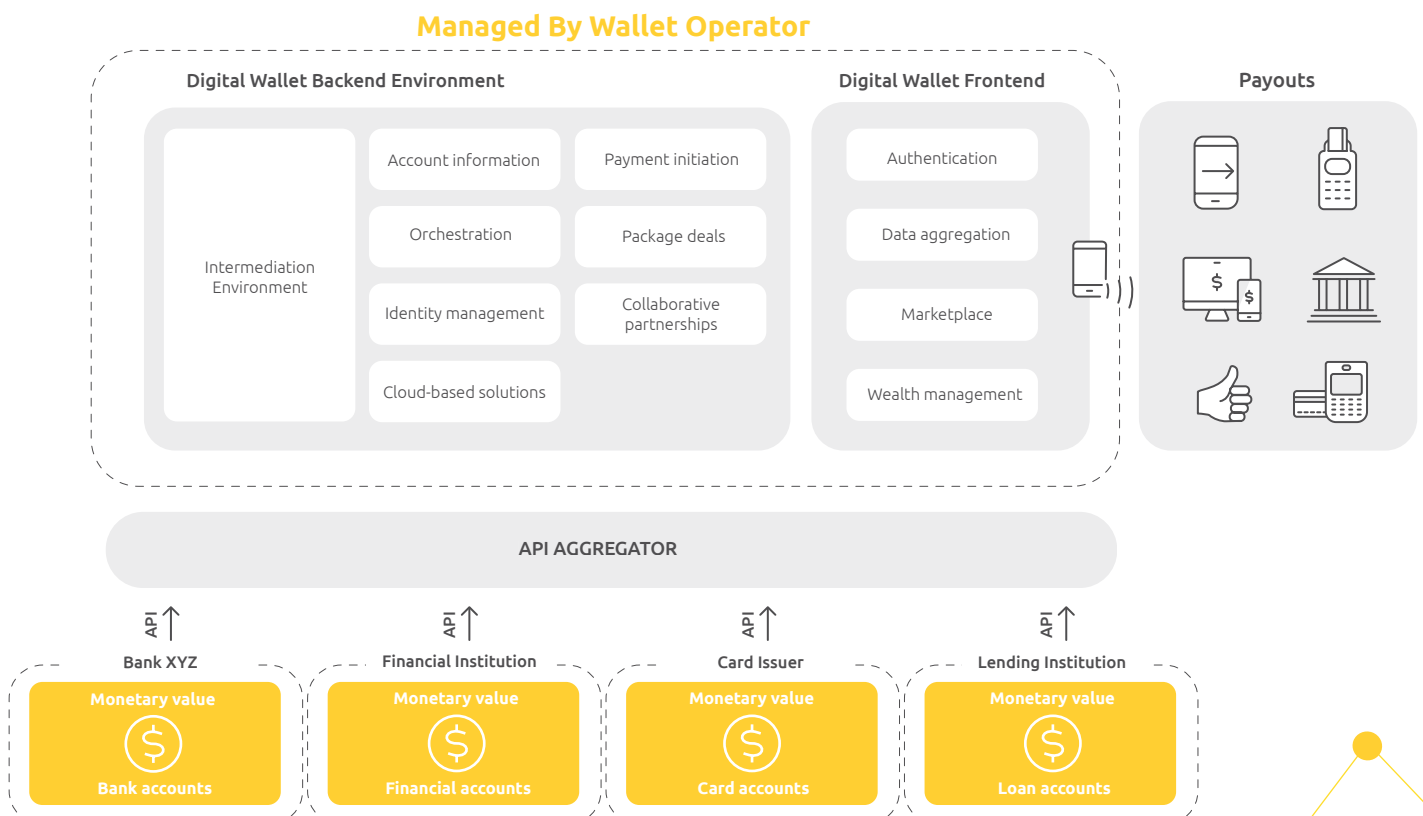
 **The orchestrators of financial products & services will reign in the open banking/open finance ecosystem.**

The initial impetus for the digital wallet revolution was the ability to make instantaneous payments and remittances, however these uses have now been substantially superseded. Now, many people see digital wallets as the first step toward an open banking culture.

An open banking wallet is a type of digital wallet that is connected through open banking APIs, allowing users to access their financial data and accounts, and to make payments or transfers using open banking services. Open banking wallets may be offered by banks or other financial institutions, or by third-party providers that have access to open banking APIs.

Licensing restrictions are often associated with access to open banking APIs. In the open banking ecosystem, wallet operators are frequently used as intermediaries, also known as Third Party Providers (TPP). Consequently, given the business approach wallet operators would pursue, TPPs may need to have different licenses.

Because of their digital nature, digital wallets are rapidly becoming the focal point of open banking systems and the anchor for interoperability principles involving the transfer of funds. To facilitate the development of a new quick, efficient, and region-agnostic payment system, digital wallets hold the variables that can drive its implementation.



6

Open Banking Wallet

The Advantages of the Open Banking Wallet

1

Open banking lever

The keys to maximising open banking advantages lie with digital wallets

2

Digital identity

Digital wallets enable the creation of a solid digital identity, allowing consumers to safely and simply communicate their identification information

3

Frictionless authentication

Open banking relies heavily on authentication, and digital wallets make it possible to have a safe and convenient banking experience leveraging Strong Customer Authentication (SCA)

4

Interoperability

There has been significant progress in standardising Open Banking processes, and digital wallets appear to be the key to unlocking true synergies across geographies.

License to Operate

Open banking standards vary across the globe. For example, in Europe, PSD2-regulated TPPs are able to access customer accounts and perform transactions on behalf of customers with the respective open banking license: account information service providers (AISPs) and payment initiation service providers (PISPs), each with its own set of licensing requirements.⁵

6

Open Banking Wallet

Powerful Use Cases

Super App

A composable digital ecosystem, centered around the customer, wherein open banking and banking-as-a-service (BaaS) capabilities serve as key enablers.

Account information services

Open banking is all about customers sharing and managing financial data while also benefiting from enhanced security, real-time identification, and enhanced fraud detection. And it's all done using a digital wallet app for customer convenience.

Payment initiation

These days, the driving force behind any and all creative financial disruption is the desire to make payments as easy and painless as possible. What better way to kick off a financial transaction than with a digital wallet?

6

Open Banking Wallet

Businesses Under Impact

Banking-as-a-service

Banks providing a full range of white-labelled functionalities in order for Fintech and other partners to create their own customer-facing bank offerings built on the open API infrastructure.

Aggregators

Open banking's neural network is being constructed in the forefront by aggregators.

Marketplaces

Embedded finance is on the rise, therefore it's time to consider how a digital wallet may serve as a customer-centric hub.

Partnership platforms

To provide their customers with a wider selection of services, banks actively seek out Fintech partners that provide solutions that are complementary to their own.

Key Takeaways

1 **Stored-value (SVA) digital wallets** are a strategic option to consider when you target paying with stored monetary funds, kept in an independent, flexible system that enables alternative, low-cost financial services. Offers high potential for:



- **Fintechs**
- **Digital banks/Neobanks**
- **Money remittance services**
- **Telcos/MNOs**
- **Debit/Credit card programs**
- **Closed-loop systems**

2 **Bank-managed** wallets are a strategic option to consider when you target paying and operating directly with your bank-issued products. Offers high potential for:



- **Incumbent banks**
- **Financial institutions**
- **Credit unions**

3 **Open banking** wallets are a strategic option to consider when you target accessing banking information and initiating payments from multiple financial service providers. Offers high potential for:



- **Banking-as-a-service**
- **Aggregators**
- **Marketplaces**
- **Partnership platforms**

4 A digital wallet can be the stepping stone to fulfilling the various business models in your **digital strategy**. This is why considering a **partner with extensive expert knowledge** in the field is critical.



Position for Success with Software Group's Digital Wallet Platform

Drive your innovative digital strategy with a proven digital wallet platform - a one-stop-shop solution for any business model:

→ Fast time-to-market

→ Full spectrum of payments & banking capabilities

→ Enterprise-grade

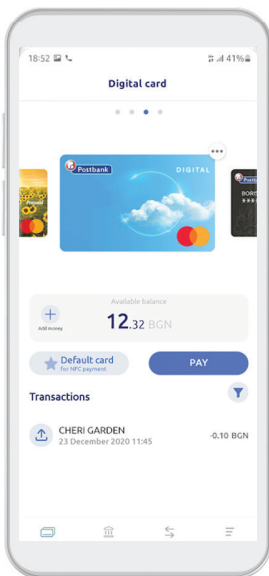
→ Flexible wallet models

→ Open APIs & ecosystem readiness

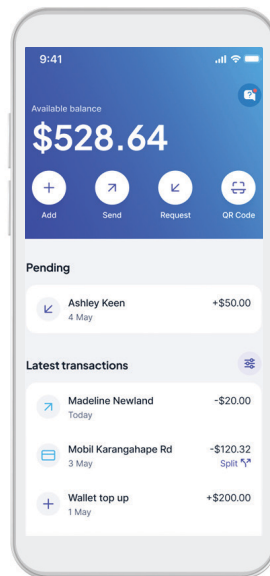
→ Future-proof digital path based on a platform

Where innovation leads, success follows.

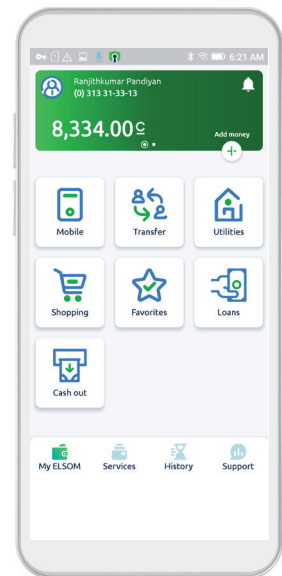
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Next-gen bank-managed wallet for Postbank



New Zealand's first digital wallet Dosh



Full Super App ecosystem with 500+ embedded services



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Vladislav is a Product Consultant at Software Group focusing on **digital payments**. His **expertise** stems from **20 years** of hands-on experience in retail banking, cards and digital payments, issuing and acquiring services, and **wallet solutions**. His interests span around **all types of innovative practices** and disruptive solutions shaping the future of the payment ecosystem.

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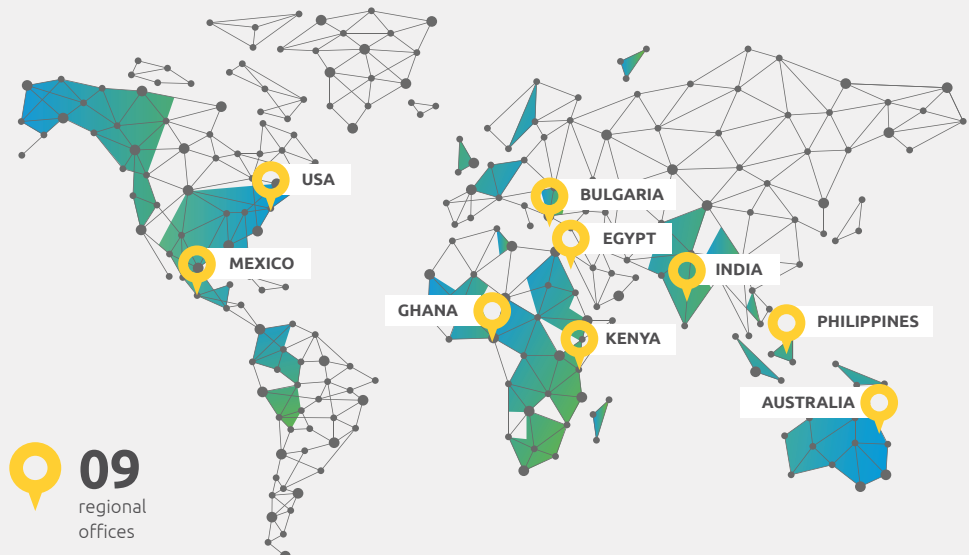
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Sources

- 1 <https://worldpay.globalpaymentsreport.com/en>
The Global Payments Report, FIS, Worldpay, 2022.
- 2 <https://www.accenture.com/us-en/insights/banking/payments-gets-personal-strategies-stay-relevant>
Payments gets personal—strategies to stay relevant, Accenture, 2022.
- 3 <https://www.paymentscardsandmobile.com/half-of-the-worlds-population-will-use-mobile-wallets-by-2025>
Half of the world's population will use mobile wallets by 2025, Alex Rolfe, Payments Industry Intelligence, 2022.
- 4 <https://em.bank/blog/Fintech/how-to-obtain-the-e-money-emi-license-in-europe/>
How to Obtain the E-Money EMI License in Europe?, European Merchant Bank, 2022.
- 5 https://www.ecb.europa.eu/paym/intro/mip-online/2018/html/1803_revisedpsd.en.html
The revised Payment Services Directive (PSD2) and the transition to stronger payments security, European Central Bank, 2018.

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