Arkwright

EUROPEAN MOBILE PAYMENTS REPORT 2024

STATUS QUO OF THE INDUSTRY LANDSCAPE, SUCCESS FACTORS AND FUTURE SCENARIOS



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EUROPEAN MOBILE PAYMENTS REPORT 2024 Status quo of the industry landscape, success factors and future scenarios

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Management Summary

Across virtually

the entire periphery
of Europe and
Switzerland banks
have successfully
established

Across virt
Eastern Europanks banks have
practices"
solutions.

fast-growing

"best practices"

The European mobile payments landscape exhibits significant fragmentation, driven by rivalry among international digital wallets, local mobile payment solutions, and overarching initiatives like the European Payments Initiative (EPI). Our analysis reveals a landscape characterized by steady growth and intense competition, as well as showing early signs of the next stage of maturity.

Across virtually the entire periphery of Europe (Nordics, Eastern Europe, and the Iberian Peninsula) and Switzerland, banks have successfully established fast-growing "best practices" with high penetration and usage of mobile payment solutions.

But there is a strong impetus among players to achieve scale across multiple countries in the region. For example, wero, the newly established EPI digital wallet solution, is multicountry by design, initially targeting Benelux, France, and Germany. At the same time, some national solutions are pursuing organic/inorganic paths to capture new markets and set cross-border standards.

Looking forward, it remains highly uncertain whether any local methods — or the EPI for that matter — will emerge as a multi-country or even European champion in the long run. Within the context of predicting what the 2030 European mobile payment landscape will look like, there are three possible scenarios:

- Single European solution: The emergence of a dominant European mobile payment method likely led by the EPI, subject to decisive political backing and adequate financing.
- 2. Multi-country clusters: Cross-regional clusters formed through the expansion and consolidation of existing systems, supported by technical harmonization and interoperability, e.g., through industry alliances such as the European Mobile Payment Systems Association (EMPSA).

3. Continued fragmentation: Persistent fragmentation with numerous local options and bank-specific apps, with international wallets and payment schemes remaining the common solutions throughout the region.

Banks, merchants, and investors should monitor changes in payers' preferences and the overall landscape to spot and capture value-creating opportunities, especially as the relevance of mobile payments and banking continues to rise.

Additionally, our analysis highlights the overarching success factors derived from local best practices. Amongst others, success factors include: comprehensive coverage across all value transfer channels (point-of-sale, ecommerce, peer-to-peer (P2P)); a favourable market environment with limited alternatives; strong collaboration among local banks; and an evolution from P2P to retail payments.

We view these success factors largely as a conditio sine qua non (essential condition) and believe they should serve as a benchmark for all positioning decisions.

Introduction

As a result, the mobile payments sector has become highly competitive, attracting a wide array of participants each vying to reach a critical mass or even establish a standard in certain markets or segments

Over the past two decades, the role and evolution of mobile payment systems in Europe has been the subject of ongoing debate and expanding activity. The adoption and integration of mobile payments has accelerated significantly in recent years, capturing the interest of individuals, businesses, and policymakers alike.

Several factors have contributed to this surge in adoption: the proliferation of smartphones, an increased reliance on digital technology, and the impacts of the Covid-19 pandemic.

Additionally, mobile interfaces have become critically important for banks and retailers. In this context, mobile payments facilitate daily customer interactions, potentially enhancing the customer experience (CX) and fostering loyalty. As a result, the mobile payments sector has become highly competitive, attracting a wide array of participants each vying to reach a critical mass or even establish a standard in certain markets or segments¹.

This has led to a diverse market in Europe, characterized by a mix of domestic and international mobile payment options. In our analysis we identified nearly 80 initiatives, which can be categorized into three main groups:

 Major global wallets: Services such as Apple Pay, Google Wallet, WeChat Pay, and PayPal are present in most European markets, owing their success in outstanding CX and digital integration. Additionally, global branding, regulatory adaptability, and strong partnerships enabled market expansion and continued growth.

¹ In this report, our focus is on open mobile payment solutions that possess the potential to establish a local standard. Consequently, we have omitted merchant-owned shopping apps with payment functionalities, closed-loop solutions or nascent open banking initiatives from our analysis.

- 2. Domestic mobile payment systems: The domestic mobile payment landscape in Europe comprises over 45 distinct solutions (see Figure 1), each with its own regional footprint, functional set-up, and owners. Remarkably, several domestic solutions have experienced rapid expansion, with some reporting a user penetration exceeding 75% in 2022, achieving near-universal presence in their respective market. In this segment, we can observe the first signs of an increasing maturity, including multi-country expansions and merger and acquisition (M&A) activities.
- 3. Region-wide European initiatives: Projects such as the EPI, the digital euro, and EMPSA aim to meet European political requirements by establishing viable competitors to international payment schemes on a European level.

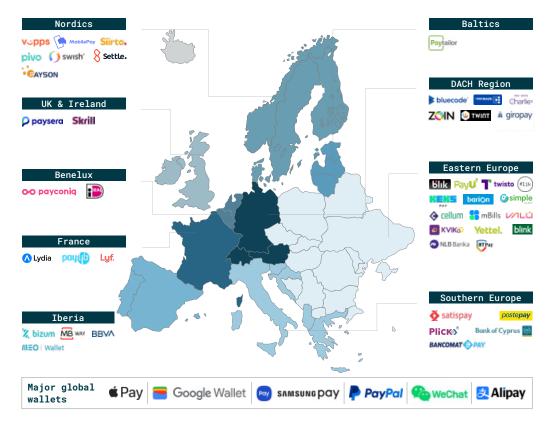


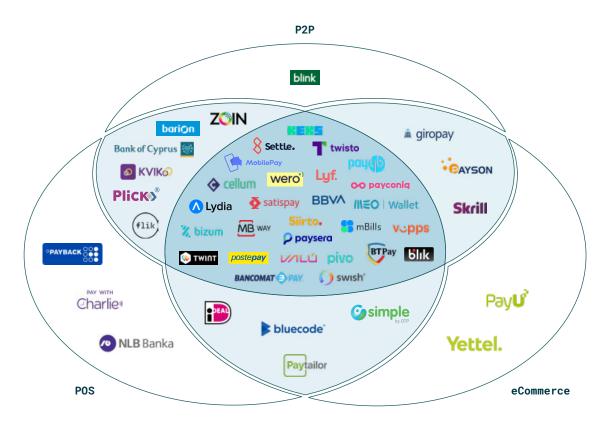
Figure 1: Domestic and global European mobile payment solutions non-exhaustive

This whitepaper provides an overview of Europe's domestic mobile payments landscape, analysing current trends, key success factors of best practices, and forecasting the competitive dynamics up to 2030. It aims to equip stakeholders with the knowledge to navigate the evolving mobile payment landscape on a national and regional level, and monitor the critical strategic drivers in the market.

European mobile payments landscape

Exploring the fragmented European mobile payments landscape reveals a dynamic competitive landscape made up of domestic and regional players, established international players, with the addition of potentially emerging region-wide initiatives.

An in-depth analysis of domestic solutions in Europe and the success factors of selected best practices is complemented by a focus on two pivotal developments: the introduction of the EPI and the expansion strategies of European players.



 $^{^{\}ast}\,\mbox{The}$ expected launch of EPI's wero is mid-2024.

Fig. 2: European mobile payment solutions by features non-exhaustive

European domestic solutions and best practices

Out of 46 domestic European solutions analysed, almost 60% (27 solutions) offer all three common payment features: P2P, ecommerce and point-of-sale (POS) (see Figure 2 for a map of solutions by feature). Most of the prominent solutions like Swish (Sweden), BLIK (Poland) and TWINT (Switzerland) have expanded to cover the three use cases, leading to the working hypothesis that having all three is a key success factor.

Most of the prominent solutions like Swish, BLIK and TWINT have expanded to cover the three use cases, leading to the working hypothesis that having all three is a key success factor

Notably, some like Bluecode (Austria) and iDeal (Netherlands) specialized as business-to-consumer platforms, a decision often rooted in a commercial focus. Furthermore, many solutions incorporate additional functionalities, including voucher redemption, bill splitting, and social features like chat or sharing videos and pictures in a social media-like environments.

Looking at the European mobile payments landscape, there have been some notable, fast-growing cases, as shown in Figure 3. Through a combination of value proposition, marketing and commercial strategies, and market characteristics, these mobile solutions are achieving both high adoption and high usage in their market.

Solution	Country of origin	Mkt penetration ¹⁾	Ratio to card- transactions ²⁾
% bizum	£.	48%	9%
blik		35%	15%
MB WAY		43%	17%
MobilePay	##	62%	14%
oo payconiq		57%	9%
satispay		6%	7%
swish°	-	78%	23%
W TWINT	+	57%	12%
v≎pps	#	78%	11%

 $^{^{\}mbox{\scriptsize 1)}}$ Number of users in relation to home market population.

Fig. 3: Overview of selected European best practices

²⁾ Ratio of mobile payment transactions to payment card transactions approximation to determine the relevance of the solutions in the payment mix (account-to-account (A2A) payments not considered).

The solutions have benefited from a defined growth trajectory, with a CAGR of 52 %, increasing from 0.7 bn to 5.3 bn transactions between 2017 and 2022

We define these as "best practices" based on their commercial performance: a critical mass of adoption > 35% of the total potential user pool in their market; and a number of transactions equivalent to >5% of the number of card transactions in their market. These are indicators of their relevance within their respective market landscapes².

Satispay is an exception to this rule. Despite a relatively low market penetration (6%), it shows a relatively high utilization, which leads to the working hypothesis that it has a value proposition that makes it a payment solution of choice by its users.

By pooling their transaction volumes, the solutions have benefited from a defined growth trajectory, with a compound annual growth rate (CAGR) of 52%, increasing from 0.7 billion transactions to 5.3 billion transactions between 2017 and 2022, as illustrated in Figure 4.

Remarkably, this CAGR surpasses that of European card transactions, which stood at 9% within the same timeframe³. Additionally, except for Satispay, all featured mobile payment solutions are either owned by, or receive support from, banking institutions within their markets.

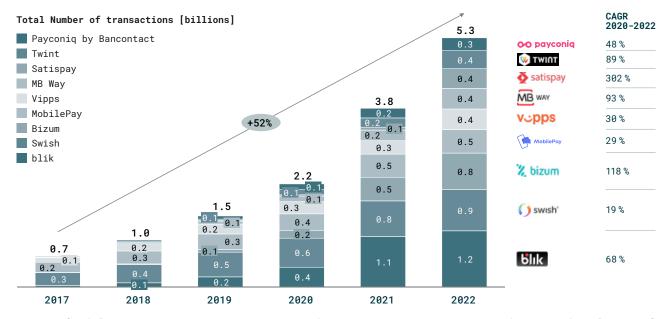


Fig. 4: Growth of selected European best practices

 $^{^2}$ Ratio of mobile payment transactions to payment card transactions – approximation to determine the relevance of the solutions in the payment mix (A2A payments not considered).

³ ECB Data Portal, "Number of card payments in the EU area 2017-2022".

Expert interviews with Bizum, BLIK and vipps MobilePay

FERNANDO R.FERRER

Bizum | Business Development Director



况 bizum

What are the key success factors for the growth of a mobile payment solution?

Security: Bizum is integrated into the banking apps, leveraging the high-security standards which apply in the industry while not having to share data with third parties.

Reliability: Real-time transfers are the backbone of our service, enabling settlement in seconds and providing certainty of the payment while ensuring the payer's identity by phone number link.

Convenience: Mobile phone number as an identifier, the number of use cases (P2P, ecommerce, in-store), the network effect, the user experience, and the easy activation process are all of friction reducing factors increasing opportunities for Bizum to become a true part of consumers' daily lives. Today, consumers all around Spain are referring to "do a Bizum" as common term for a P2P transaction.

Are wallets from BigTechs and EPI rather competitors or possible partners for bankowned mobile payment methods?

We consider BigTech and EPI more as partners rather than as competitors. The increase of digitization precipitated by the big tech companies has helped shape the payment ecosystem and its attractiveness to consumers. There is a lot of room for cooperation, .. this would be of great benefit to consumers, who appreciate having different solutions at their disposal to choose from at any moment.

Where will the mobile payment landscape in Europe be in five years? Perceivable consolidation or still predominantly fragmented with different solutions per country?

In the past five years, many of the existing mobile payment solutions have become mature. In the following five years, the less mature ones (in terms of sustainable business model or scalability) will eventually drop out of the picture or be acquired by the stronger players. .. but first interoperability would need to prove .. the value of pan-European solutions accordingly.

MAGDALENA KUBISA

BLIK | Business Development Director





What are the key success factors for the growth of a mobile payment method?

The key success factor for the development of mobile payment methods is a significantly improved UX, which means providing users with the ability to intuitively make payments using mobile devices. Another factor is technology that not only speeds up transactions but also significantly reduces costs and enables high scalability, including cross-border. Another important factor is the evolution of regulations [implying] financial and digital security for consumers.

Who do you primarily see as competitor – operating system payment platforms, other mobile payment methods, cards, or cash?

Digitization has always been crucial for us and we have aimed to reduce the use of cash, especially when it can be replaced by a secure and convenient payment method like BLIK. We can consider card organizations and other payment methods as our competitors, but we believe that everyone in the market has the potential to find their share

Where will the mobile payment landscape in Europe be in five years' time? Will there be consolidation, or will it still be predominantly fragmented with different solutions per country?

The era of market fragmentation in Europe's payment sector is drawing to a close and we can anticipate a shift toward consolidation in the near future, centred on a handful of widely accepted and user-centric solutions. While this consolidation may not necessarily result in a singular system spanning the entire continent, it is clear that the market will be primarily influenced by tools that possess the most substantial potential for expanding regionally.

SIRPA NORDLUND

Vipps MobilePay | Head of Retail



vيpps

What are the key success factors for the growth of a mobile payment solution?

People need to really love using the payment method. They need to feel the value, the simplicity, and the effortlessness when using the app. There has to be something special, almost extraordinarily useful, and a touch of delight in using it. Once those are in place, the business will follow: merchants, organisations, entrepreneurs, and charities. Secondly, the business model needs to be well thought through and executed with dilingence.

Where will the mobile payment landscape in Europe be in five years' time? Will there be consolidation, or will it still be predominantly fragmented with different solutions per country?

We believe the market will be partially consolidated by 2029. Maybe there will one dominant regional wallet in Northern Europe and another one in Southern Europe. Vipps MobilePay has kicked off the journey to conquer the most digitized region on the continent [the Nordics].

What are the biggest challenges when entering new markets?

First, attracting users and getting them onboarded, making them change their habits, and encouraging them to love the new solution. This is crucial: the new entrant needs to focus on the problems it can solve and do it better than any other existing solution. It is also a challenge to recruit to the business if there are no users. And since payments is a volume game, it makes future wallet consolidation or collaboration almost an imperative.

Second, regulation is similar across the European Union, which significantly removes entry barriers. However, the different business models can cause challenges: the more established a local wallet is, the more difficult, costly, and time consuming it will be to change the way people prefer to pay.

Success factors

The analysis of successful solutions reveals a number of common characteristics that can be assumed, at least as a working hypothesis, as key success factors. These are illustrated in Figure 5. Their combination is pivotal to the high adoption rates in European best practices:

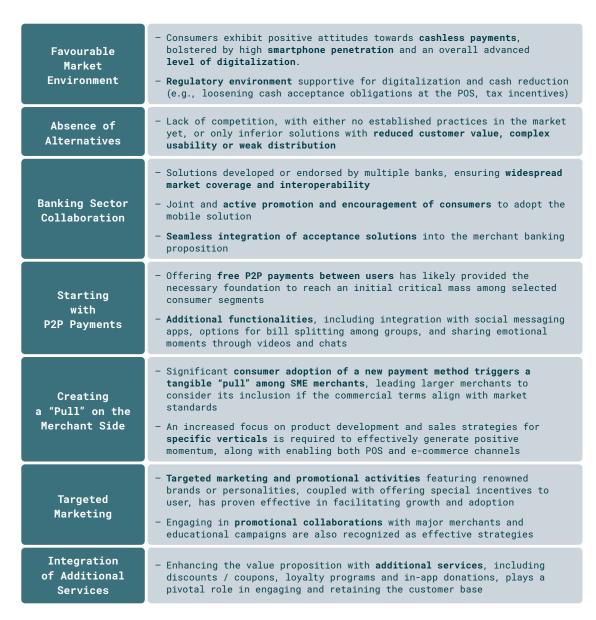


Fig. 5: Success factors of European fast-growing mobile payment solutions (non-exhaustive)

The new regional player: EPI

The current iteration of the EPI has gathered renewed momentum with the addition of ABN Amro, Rabobank, and Belfius, as well as DZ Bank re-joining the initiative. Supporting organizations now cover a significant swathe of Europe, as shown in Figure 6, with the EPI targeting central European countries to roll out its mobile wallet "wero".

In contrast to previous Single Euro Payments Area solution attempts, the EPI is progressing towards pilot transactions. A first achievement recorded during this challenging "regional ambition" journey was the successful execution of transactions between Groupe BPCE and Sparkasse Elbe-Elster in December 2023, in anticipation of a planned commercial launch in mid-2024.



Fig. 6: Current EPI members and their headquarter countries (non-exhaustive)

However, the EPI still faces substantial hurdles, particularly in extending its reach to European markets in which there is already a widely accepted local mobile payment solution.

The current iteration of the EPI has gathered renewed momentum with the addition of ABN Amro, Rabobank, and Belfius, as well as DZ Bank re-joining the initiative"

It remains to be seen whether the EPI will grow and achieve its objectives — both commercially and politically. Our analysis points to three factors that are necessary to be able to maintain momentum:

- Political support: Steady and growing government backing, underscoring the continued European political ambition of establishing a regional solution.
- 2. Economic incentives for banks: Offering banks a way to safeguard interchange revenues, positioning them advantageously against less financially attractive A2A-based mobile payment solutions.
- 3. Investment lock-in effect: Investments into the EPI's acquisition of iDeal and Payconiq resulting in a lock-in effect among existing shareholders, driving continued support in the initial launch markets.

In building a native European mobile payment solution, the digital euro might become a relevant step as well. However, its public launch is not anticipated until at least 2028. Additionally, the digital euro is expected to serve as an alternative to fiat currency and a complement to deposit accounts, rather than acting as a mobile payment system in its own right.

Expansion and consolidation

In search of commercial success and regional dominance, there is an increasing drive to expand cross border and to gain scale through M&A. A variety of organic and inorganic developments have been taking place in recent years, as illustrated in Figure 7. Some of the key relevant regional expansion milestones include:

There is an increasing drive to expand cross border and to gain scale through M&A

- The merger between Vipps and MobilePay in November 2022 aimed to consolidate mobile payment services in the Nordics, leveraging Vipps's platform for scale and investment pooling.
- BLIK's acquisition of Viamo in August 2022 marked the former's entry into Slovakia, part of a broader strategy to expand in the euro area and bolster its regional presence.
- EPI's acquisition of iDeal and Payconiq is seen as an initial step toward a unified mobile wallet brand across Europe.
- Satispay has expanded organically from Italy, entering France, Germany, and Luxembourg, with the aim to be Europe's top payment tool.
- BLIK has entered the Romanian market, reflecting its objective to expand into Central and Eastern European countries.

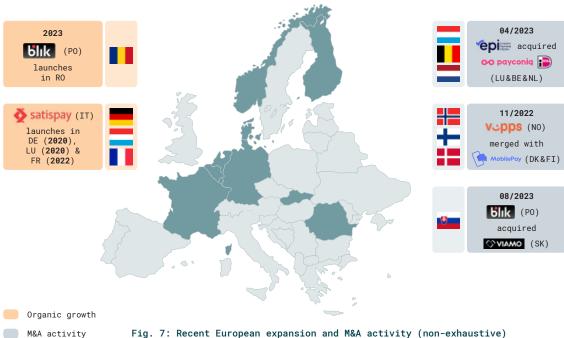


Fig. 7: Recent European expansion and M&A activity (non-exhaustive)

Additionally, there are two cross-border and cross-solution alliances aiming to establish interoperability between mobile payment systems:

- The Mobile Wallet Collaboration, established in June 2019 by six European wallets and Alipay, aims to standardize QR-code formats as a lever to maximize user acceptance. However, there has been a notable lack of progress since its announcement, leading to speculation about its current state.
- EMPSA, also established in 2019, is focused on interoperability across different systems. It has expanded its membership to 12 participants to date. A highlight was the successful interoperability tests between Bancomat Pay (Italy), TWINT, and Bluecode in 2022, proving the potential of the association's collaborative approach.



¹⁾ After their acquisition by EPI, iDeal has already withdrawn its membership, while Payconiq is expected to follow.

Fig. 8: Overview of the European Mobile Payment Systems Association membership

Although progress towards interoperability among domestic solutions is beneficial, critics believe these efforts might not be enough to create a unified and strong European system, and may even play a role in maintaining the current fragmentation.

However, considering the notable differences in technology, rules, and strategic shareholder priorities, interoperability may be a fallback option and common denominator for a harmonized European payment landscape should consolidation or technical integration not happen in the foreseeable future.

Outlook and scenarios

Consequently, banks, merchants, and industry investors must closely monitor developments and look for indicators signalling a shift towards one of these outcomes

Looking ahead to the future of mobile payments in Europe through 2030, there is still a significant amount of uncertainty — as well as a variety of possible outcomes. The outcomes will be shaped by M&A and commercial cross-border expansion, as well as, potentially, collaboration.

The respective scenarios range from a single European solution to multi-country clusters to continued fragmentation. These scenarios are illustrated in Figure 9, with each showing a different degree of consolidation versus fragmentation potential.

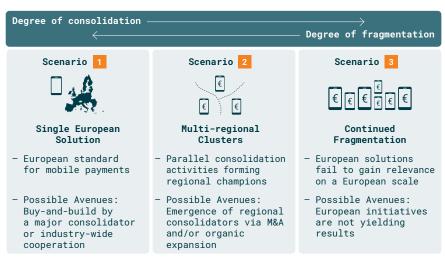


Fig. 9: Possible scenarios up to 2030

1 Single European solution

A unified European mobile payment standard, potentially arising from market consolidation, industry cooperation, or regulatory action. Central to this is the success of a unifying solution achieving either interoperability or commercial success as a dominant regional solution, with the pre-requisites of sustained regulatory support, sufficient funding, and a competitive value proposition that rivals existing and international alternatives. A favourable economic model, e.g. interchange-like, is also deemed necessary under this scenario.

Multi-country clusters

The second scenario anticipates a degree of market consolidation, leading to the rise of subregional champions operating across small groups of countries. These entities are expected to capture a significant share of mobile payment transactions within their respective subregions. Regional clusters may be based on proximity, for example the Nordics (Scandinavian and Baltic countries), Eastern Europe (e.g., Poland, Slovakia, Romania, Hungary, Czech Republic), Central Europe (e.g., DACH, France, Benelux), and Western and Southern Europe (e.g., Spain, Portugal, Italy). This scenario may lead to universal European payment acceptance subject to the achievement of interoperability across subregional solutions.

3 Continued fragmentation

The third scenario foresees a continued fragmented mobile payment landscape in Europe. While a few solutions may gain traction beyond their home markets, the cross-border reach of each domestic player will remain limited and there will be continued competition between multiple players in each market.

For example, this is currently the case in France and Italy with multiple players vying for market share. This fragmentation leaves substantial openings for international wallets and payment schemes to increase their foothold. This scenario would be the farthest away from the European Union's ambition to establish a European payment system.

Conclusion

Based on the presented findings, it is evident that the mobile payments landscape in Europe has entered a new phase, with two directions of development:

- Local mobile payment methods are achieving high usage and also increasing their efforts to expand within the region organically and/or to establish cross-regional standards thorough interlinking.
- In Central Europe, namely in Benelux, France, and Germany, the EPI is taking shape, supported by the political objective of creating an independent and pan-European payment solution.

Given this context, all three potential future scenarios are plausible at the current state of play. Each presents a possibly realistic direction of development, with a high degree of directional uncertainty making it difficult to develop any longer-term strategic plans.

Consequently, banks, merchants, and industry investors must closely monitor developments and look for indicators signalling a shift towards one of these outcomes.

Key indicators may include the increasing or decreasing momentum of the EPI or other defining domestic mobile payment methods, as well as their regional expansion. In addition, the impact of the opening of Apple's near-field communication interface to third party wallets in Europe needs to be watched, as well as measures by international wallets and schemes eyeing continued expansion in Europe.

Strategic positioning within the mobile payment landscape is crucial for all stakeholders, as mobile interactions directly impact revenue potentials and investment needs.

The right strategic positioning within the mobile payment landscape is crucial for all stakeholders, as mobile interactions directly impact revenue potentials and investment needs

Therefore:

- Banks should secure interchange revenues, safeguard the customer interface from Big Tech encroachment, and ensure high service usability.
- Merchants should not only align with customer preferences but also optimize their payment mix to enhance conversion rates and minimize costs.
- Investors should pinpoint growth opportunities early and make informed decisions grounded in a comprehensive market understanding and proven success factors.

Arkwright, with two decades of payments industry expertise and a keen analysis of market shifts, understands the importance of keeping a close eye on developments to effectively take strategic decisions.

We facilitate industry discussions, develop scenarios and work with industry players, as well as guide investment decisions and successful strategies by evaluating positioning and investment choices.

About Arkwright

We believe in pragmatism, meticulousness and deep knowledge of the industries in which we operate



Steven Jacob (Partner)



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Arkwright is a leading management consulting firm specializing in strategic advisory services for private corporations, NGOs, investors, and startups. Amongst a number of different industry-dedicated teams, our Digital, Payments, and Digital Banking practice is one of the most experienced globally, positioning Arkwright as a high-end digital financial services and payments specialist strategy boutique.

We serve a diverse clientele, including major financial institutions, central banks, technology providers, institutional investors, internet marketplaces, and media organizations. Arkwright leads and supports in developing digital strategies and transformations, leveraging our global case knowledge, proprietary methodologies, and the extensive hands-on experience of our consultants and industry experts.

We believe in pragmatism, meticulousness and deep knowledge of the industries in which we operate. At the heart of our mission is the development and implementation of enduring performance improvements and growth strategies, in partnership with our clients.

When we founded Arkwright in 1987, we did so with a strong belief that clients' sustained success requires deeper collaboration and a different working model than what we experienced at the time. This belief in deep-rooted, long-term partnerships has been central to our approach and growth. Today, Arkwright is an international consultancy with Nordic roots, operating globally from offices in Hamburg, Oslo, Stockholm, and London, and with additional presence in the Middle East and the US.

