

Reinventing Transaction Banking

A white paper for banks and their customers



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The biggest driver of the changing payments landscape is the effect technology has had on end-user expectations. In an age where a consumer can send and receive an email within seconds, shop for anything online, and stream music and movies anytime, the instant experience has become the norm. Waiting a day or more for a payment to arrive in a bank account feels like an antiquated concept, which can help explain the popularity of PayPal and other closed-loop payment systems that offer an instant experience within its borders. These evolving expectations are held by corporates as well. With businesses of all sizes buying and selling products from abroad, waiting days for a payment and relying on multiple banks to process it (and take a fee) does not match the pace and transparency of other aspects of business.

As the speed of technology and increased automation enables people and businesses to do more, ease of use becomes paramount. A business that expands its product offerings or opens operations in a new country suddenly has to manage a more complex web of regulations, business requirements, and banking relationships. It can be easy to lose sight of business goals amidst so much complexity. Having a consolidated view of these relationships on an easy-to-use platform can greatly simplify a corporate's business and banking relationships. As technology enables more connections around the world, simplifying these relationships becomes a necessity.

Meeting these end-user expectations requires changes to payments infrastructure both at the interbank level and within individual banks. Most legacy interbank payment systems went live decades ago when processing an electronic payment in 1-2 business days was acceptable. Moreover, these legacy systems (be they an RTGS system operated by a central bank or an ACH or card switch operated by a central payments processor) still tend to operate

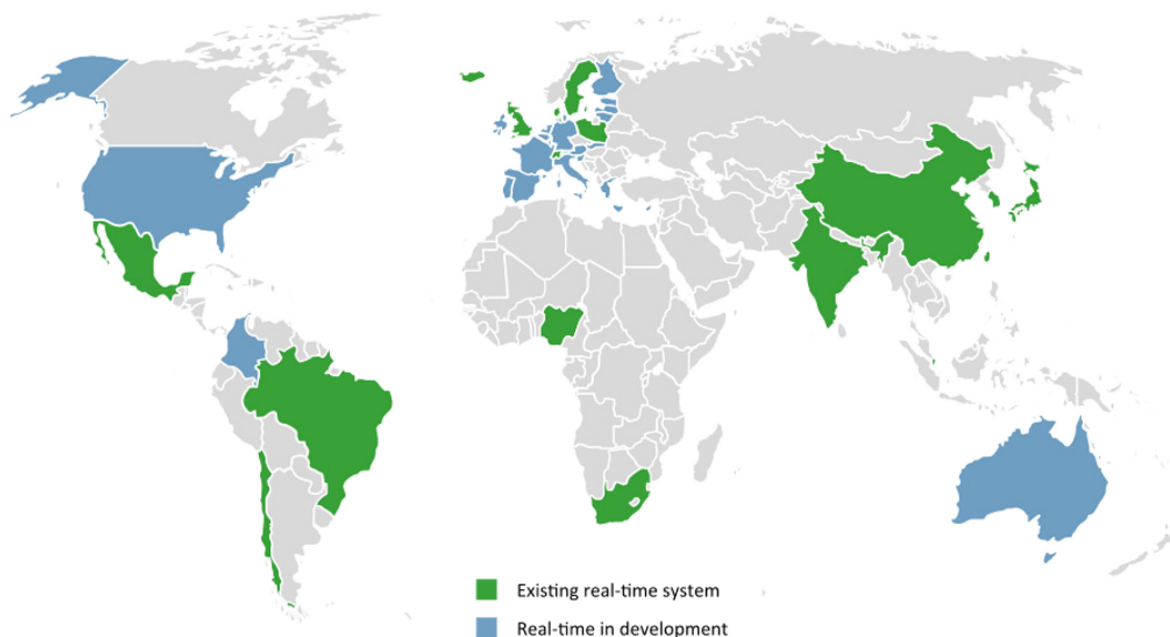
according to traditional banking business hours, which means that no processing takes place during nights or weekends. In a 24/7 instant world, this is sorely in need of an update.

Individual banks have their own IT issues that can hinder them from fulfilling consumer and business expectations. Banks' IT infrastructures have developed as payments have, with specific silos for different payment types (ACH, wires, cards, cheques, RTGS, cross-border, etc.) using technology that lacks the capacity to deal with the flow of data modern IT systems can handle. This leads to complicated internal processes and it complicates corporate payments by forcing businesses to adapt their treasury operations to their banks' internal structures.

These forces are finally leading to change, both within individual banks and in the interbank space. Almost 20 countries around the world have implemented real-time payment systems to enable instant transfers between banks. These real-time systems typically use modern technology, IT architectures, and data standards capable of extensive remittance information and global interoperability. The United States and Canada are following this trend, and both countries are in the process of developing real-time infrastructures. The development of real-time payment systems is one way that banks can help meet the needs of their customers. But as interbank infrastructures evolve, banks will need to modify or supplement their internal IT systems to take full advantage of the speed, reliability, ease of use, and security that modern payment systems (and payment habits) require.

Real-time payment systems around the world

Adoption is growing in many regions



Trends affecting the payments market

The evolution of payment systems and end-user expectations has led to a number of trends that shape how payment systems are developed, implemented, and used. Expectations of an instant experience by end-users has resulted in the development of real-time payments, which in turn leads banks and regulators to focus on faster settlement of payment obligations. The use of ISO 20022 has become a key factor in payment system development, as has the expansion of access to payment systems (and the parallel need to ensure security). Third-party processors have also increased in importance, often targeting niche business areas. Banks and corporates have also looked to outsource aspects of their payments business, which has coincided with the rise of the software as a service (SaaS) model. Lastly, the use of alternative payments, although not yet widespread, has grown enough to be an attractive option for corporates and banks.

Real-time posting and settlement

The trend toward real-time payments began well before the recent development of real-time

interbank payment systems in a number of countries. Debit/credit cards have given consumers a real-time experience at the point-of-sale for decades, and the development of PayPal and similar closed-loop systems have done the same for e-commerce. The ability to send and receive a payment between two bank accounts within seconds is the next step in the development of real-time payments, and an increasing number of countries have or are developing real-time infrastructures to enable this. In the past decade alone, the UK, Poland, Sweden, Denmark, Nigeria, South Africa, Singapore, Mexico and others have implemented real-time payment systems alongside legacy infrastructures to enable consumers and businesses to instantly transfer and receive payments with immediate availability of funds. A number of countries, most notably the United States and Canada, are currently undergoing payment system modernization projects aimed at updating data standards (in Canada, which is moving to ISO 20022 for low- and high-value payments) and at developing real-time payment systems to meet market needs and enable future innovation (in the case of the United States).

But as the speed of payment processing and posting increases, there is a simultaneous need to ensure the security of these payments and the stability of the payment system as a whole. As such, banks and regulators have recognized the need to modify settlement speed and/or settlement guarantee practices. But the vast majority of real-time systems around the world do not settle in real-time, as most settlement systems are not open 24/7 and real-time settlement is often deemed to place too large a liquidity burden on banks. In order to control settlement risk while providing real-time posting, some countries have added settlement cycles (as in Denmark). In other countries such as Poland and Sweden, settlement of real-time transactions occurs in pre-funded shadow accounts that are funded using liquidity forecasting algorithms. In between, there is a range of settlement guarantee mechanisms that help control risk between settlement windows to ensure the overall stability of the payment system while offering real-time payments to end-users.

The rise of ISO 20022

Many of the real-time systems developed over the past decade, as well as a few legacy bulk payment systems, have chosen to use the ISO 20022 data standard for payments messaging. ISO 20022 is a modern, XML-based data standard that can be used for a number of business areas (payments, securities, trade finance, foreign exchange, cards, corporate-to-bank messaging) as well as for internal processes such as cash management. This has made it particularly attractive to banks because it can help them rationalize their internal and external data standards and help to “translate” between different standards in various countries. ISO 20022’s flexibility also sets banks up for future innovation without the need to implement a new data standard.

For corporates, ISO 20022’s rich remittance data is a huge benefit. Many legacy data standards only offer tens of characters of data, which can lead to major problems with payments reconciliation and traceability. ISO 20022 has the capacity for unlimited remittance data, with the use of additional optional fields available in countries that set a limit on ISO

20022 remittance data. Add to this the possibility for global interoperability between the growing number of countries adopting the standard, and it is no wonder why ISO 20022 has become an increasingly popular messaging standard for real-time payments.

The Canadian payments industry has already decided to adopt ISO 20022 across multiple systems, covering low-value, high-value, and business-to-business payments messaging. This will have the benefit of rationalizing data standards across these systems (replacing three separate legacy standards) and achieving compliance with other modern international payment systems. Perhaps the biggest benefit for Canadian banks and end users (particularly businesses) will be the increase in remittance data that ISO 20022 will bring. In turn, this will greatly improve payments reconciliation and traceability, and could help enable the future development of a faster payment system for low-value payments in Canada.

In the United States, the move to ISO 20022 is taking its first steps with the development of a real-time payments infrastructure. A 2014 external business case assessment tendered by the Federal Reserve, NACHA, The Clearing House, and other stakeholders deemed no overarching industry-wide business case to move to ISO 20022, although it did detail strategic reasons to move to ISO 20022, including global adoption of the standard, interoperability, rich remittance data, and cost savings and processing efficiency. As the Fed has spearheaded efforts to modernize the US payment system, the adoption of ISO 20022 is seen as a key pillar for improving the speed, efficiency and security of US payment systems. The Clearing House has since announced the development of a real-time payment system by 2017. The infrastructure will be built together with UK payments processor VocaLink, and will run on ISO 20022. UK payments processor VocaLink, and will run on ISO 20022.

Alternative payments

Distributed ledger technology, sometimes referred to as the blockchain, has the potential to impact the financial services sector similar to how the Internet has changed media and entertainment. This alternative payment model uses encryption over the Internet to send value, not just messages, between parties in real time regardless of location. Banks have begun exploring the possibilities these alternative payments can provide in areas such as correspondent banking, where the use of distributed ledger technology can enable two banks to send and receive value in real time across the globe.

Maintaining security while opening up access

Keeping up with the pace of technological change is difficult for many banks, particularly for large banks. But this is not the case for smaller non-banks and fintech companies, which offer niche payment and cash management products and services targeted at a specific market segment.

As these non-bank payment providers proliferate, authorities in some countries have decided to bring them under existing regulatory regimes or create new regulations to ensure the overall safety of the payment system while leaving space for innovation. In some cases, this involves allowing non-banks to participate directly in payment systems. In Brazil, non-bank payment providers can now hold settlement accounts at the central bank and in the EU, non-banks will be able to directly access their customers' bank accounts to provide information or initiate payments when the updated Payment Services Directive (PSD2) goes into force in 2017. By

giving non-banks access to payment systems that were previously confined to financial institutions, countries can attempt to spur competition and innovation in payment services while ensuring the overall security of payment systems for participants and end-users.

Outsourcing and software as a service

Some of these fintech companies target their products and services to banks, which in turn have come to see partnering as a white label solution to meeting market demands. This trend of outsourcing has been around for a while, but in recent years the outsourcing model has begun to change with the advent of cloud computing and the software as a service (SaaS) model.

This model is also highly scalable, allowing banks and corporates to pay as they grow without needing to worry about large-scale system and software upgrades as their business expands. SaaS also has the advantage of converting capital expenditure into operating expenditure, which eases budgets and allows banks and corporates to focus on their core business. While there are some security concerns (the element of trust in the third party is crucial here), many banks and corporates are moving to this model for aspects of their business or, in some cases, their entire back office.

Understanding bank and corporate needs

The trends outlined above are changing the payments industry. Some of them actively seek to help banks and corporates meet these challenges, while others result in new challenges. Both corporates and banks have to overcome these issues to meet customer expectations. The following section will explore some of the challenges these two market segments face.

Challenges for corporates

One of the major challenges corporate treasurers face when using a product or service offered by their bank(s) is that these solutions are often a bank-specific one-size-fits-all affair that reflects the bank's own internal structures more than that of their corporate customers. Most corporate treasurers do not understand why they need to send separate files in for credit transfers, direct debits, cheques, wires, international payments, etc. Corporates need to have an overview of all payables and receivables, and how many of these are pending or have been received. A bank that reflects its own internal silos (in which different payment types are often kept separate) in a product or service for a corporate customer is adding a layer of complexity that is not necessary, and that may force a corporate treasurer to waste precious time and resources. Corporates are increasingly demanding a centralized portal that allows for seamless automation of payments, regardless of which bank(s) they choose.

Corporates also need scalable solutions that will not hinder their core business and growth. Businesses need to keep up with the pace of change, which means using the latest versions of ERP and other software. If a bank offers a solution that uses outdated hardware or software, it may not be adequate for meeting the needs of its corporate customers. Businesses also need to be able to upgrade to a new solution quickly if their business grows. Growth can be rapid as a business develops new products or enters new markets, and they cannot be wed to a solution that is designed for a smaller company or a company with a purely domestic presence. Corporates need solutions that use the latest software and are flexible enough to allow for upgrades as their business grows.

The final challenge faced by many corporate customers is IT implementation. Even if a solution is highly scalable, flexible, and uses the latest technology, it will not be of much use if it takes 6-12 months to incorporate into their back office. Solutions must be capable of being implemented quickly and efficiently so that a corporate can dedicate time and resources to its core business and to growth. Spending a year or more implementing, validating, and testing a solution before being able to benefit from it will lead many corporate customers to look elsewhere. Fintech companies offering easily configurable solutions in a SaaS model, coupled with expertise in onboarding, can help ensure rapid implementation.

Challenges for banks

In addition to the ever-evolving challenge of meeting the expectations of their corporate customers, banks face their own challenges as payments technology evolves. As the globalization of business continues, banks need to offer solutions that allow corporates to service their banking needs across multiple banks in multiple countries servicing multiple supply chains at different speeds. Banks are also searching for ways to protect legacy investment and avoid the operational risk of a large-scale IT overhaul. And as always, banks must do all of this while complying with a host of changing regulations.

Many corporates have relationships with various banks in different countries. The more global a business' scope is, the more complicated its banking relationships become. In order to meet the needs of their corporate customers, banks need to offer solutions that are flexible enough to give businesses a view of their liquidity across multiple banks. Offering a solution that only gives visibility of a single financial institution is not enough, as a corporate treasurer would have to manage multiple solutions and spend time and effort trying to rationalize this information in one place. Banks need to offer flexible solutions for corporates to help them retain and attract new business customers.

Another challenge faced by banks is how to protect legacy investment and reduce operational risk in IT systems. There is no doubt that many banks' IT infrastructure could use an overhaul. Modern data standards, a reduction in silos, and a move from monolithic to component architectures are just a few of the major changes that could benefit both banks and their customers. But while many bankers would agree with this, many of them also recognize that an enormous amount of time, money, and resources went into developing internal IT, and that this investment cannot just be wiped away overnight. Add to this the inherent operational risk involved in wholesale IT overhaul, and banks are left in a difficult situation. Many banks look instead to payment hubs that can help bridge the gap between legacy IT and modern architectures. These hubs allow them to renovate legacy infrastructures by bridging between silos, making them compatible with modern IT standards, increasing remittance information, and enabling flexible solutions that meet customer needs while protecting legacy investment and avoiding operational risk. Payment hubs developed by a team with expertise in both legacy and modern payment infrastructures and products are best suited for meeting these needs.

The final challenge for banks is one that will never go away: regulatory compliance. This is an important

issue for banks because regulation is always changing. Once a bank complies with one law (and develops the necessary institutional practices and structures to ensure compliance throughout the entire organization), a regulator may come along and add new stipulations or entirely new regulations. Examples include raising the mandatory level of capital a bank has to hold or increasing KYC/AML requirements in light of real or perceived threats. Consumer protection and transparency are other aims that regulators tackle, as evidenced by the Banking Secrecy Act in the United States or the Dodd-Frank Wall Street Reform and Consumer Protection Act, which has new transparency requirements for banks sending international payments. Banks need to be able to adapt as laws change, and any solution they offer their customers must also evolve along with these ever-changing regulations. Achieving this is an organizational, business, and technological challenge that every bank must meet, as regulatory compliance is one of the core competencies and competitive advantages of banks. Indeed, the fact that banks are so tightly regulated leads them to be seen as trusted institutions for payments and other financial services by both consumers and corporates. Banks can and should play to this strength when developing and offering payment services to all customer segments.

Meeting the needs of banks and corporates

The preceding section examined some of the challenges banks and corporates face in the payments space. The following will explore how these challenges can be overcome through the use of modern payment platforms that can serve both banks and corporates. By partnering with third-party solution providers, both banks and corporates can overcome complexity, quickly respond to market and customer needs, and "future proof" to ensure that meeting forthcoming challenges will not require wholesale change or operational risk.

Meeting corporate and bank challenges

Corporate challenges

- Multiple banking relationships
- Lack of centralized information
- Business growth can outpace existing solutions
- Lengthy onboarding process

Technological solutions

- Multi-bank
- Consolidated interface
- Easy onboarding
- Liquidity efficiency
- Scalability

Bank challenges

- Meeting corporate expectations
- Protecting legacy investment
- Maintaining operational security and stability
- Complying with changing regulations

Technological solutions

- Modern functionality without IT overhaul
- Compliance with regulatory demands in multiple countries
- Reduces operational risk
- Meets customer needs
- Time to market

A single solution to meet complex needs

There are many different options out there for banks looking for a payments hub to help manage internal complexity and keep up with market and customer expectations. Likewise, there is a raft of ERP solutions available for corporate treasurers trying to consolidate information from different banks in different countries. What is less common are solutions that can handle both bank and corporate needs at the same time.

Having one product that serves both corporates and banks has a number of advantages. First, it can provide a direct link between a bank and their corporate customer's ERP solution. This enables seamless automation of payments from a centralized portal with real-time cash visibility across payment types, data standards, urgency rates, countries, etc. Enabling corporates to simply drag and drop payments from one consolidated dashboard without having to pre-sort based on payment type, data standard, urgency, or country would offer a unique user experience that ensures simplicity, visibility, and regulatory compliance.

As the payments industry changes and customer expectations evolve, banks must make a choice about their futures. Essentially, they can either modernize or be left in the dust by competitors. A key enabler of modernization is pursuing targeted partnerships with outside vendors. Technology enables collaboration with third parties, and protecting legacy investment and avoiding operational risk while meeting customer needs are strong reasons to consider third party collaboration. Any bank looking to partner with a third party should look for a team that has expertise in both legacy and modern payment practices. A third party that is too focused on legacy infrastructures may not be able to provide the solutions expected in today's market. And partnering with a vendor that is only focused on the "next big thing" may result in too wide a gap between the modern third-party solution and the current reality of a bank's back office. Having a team with expertise in both legacy and modern solutions should be a key characteristic a bank looks for in a third party. By using a modern information portal, banks can meet current challenges, make their customers happy, and prepare themselves for future innovation.

Benefits for banks and corporates

A modern portal for payments information and initiation provides many benefits for both banks and corporates. Banks get to offer a rich solution that meets corporate customer needs, protects legacy investment, is SWIFT compatible, and complies with regulation in a number of countries. Corporates have the advantage of using a single platform that is tailored to their needs and not banks' internal IT, is multi-bank, features quick onboarding, and is highly scalable, and can easily be integrated into any ERP or back-office solution, allowing corporates to focus on their core business and not worry about payments IT.

Corporate benefits

Corporates need a solution that lets them have a consolidated view of all of their banking relationships and the status of all upcoming, pending, and completed payments. Such a solution must be multi-bank and cover all payment instruments in all countries/currencies across all of the business' accounts. Few providers have a centralized portal showing all of a corporate's often complex payment relationships that makes it easy to send payments, view pending or rejected payments, and queue payments according to urgency, value, destination, etc. Conceivably, they would also value additional features such as cash forecasting to help corporate treasurers plan ahead and use liquidity as efficiently as possible – and retain this functionality even across multiple banks.

Ease and speed of implementation (within days/weeks instead of months) are also essential. This reduces operational risk and allows corporates to reap the benefits of the solution as quickly as possible. Increasingly, corporates are moving away from software licensing and toward hosted solutions (SaaS). This openness allows corporates to control how they use the software and can further simplify their business planning. By using the SaaS model, they just pay a fee and ensure that they will have the newest software without having to purchase upgrades. SaaS also eases customer onboarding by eliminating the need to implement major hardware or software changes in order to improve existing capabilities or add new functionality.

Scalability is another essential feature of any corporate solution. As a business grows, corporate treasurers have even more to do. Keeping track of incoming and outgoing payments, forecasting future liquidity needs, and identifying new opportunities are all essential. Having to change solution providers due to new technology or increased payment volumes would take valuable time and resources from business development.

Benefits for banks

The main focus for any bank should be on keeping their customers happy. By offering a flexible, scalable, and simplified solution to corporates, banks can satisfy their current customers' needs while attracting new customers. Being able to offer services such as cash forecasting and provide the solution according to the SaaS model further enhances the value proposition to corporates.

Regulatory compliance is also a key factor in third-party payment solutions. A modern solution must fulfill vital regulatory needs and follow global industry-leading standards such as SWIFT MT and ISO 20022. It is also important to support many different formats in key markets such as Canada, the United States, and SEPA. Industry expertise, deep regulatory knowledge, and promotion of industry standards and initiatives are hallmarks of a successful solution for banks.

Banks that use third-party solutions can meet market and customer expectations without overhauling their internal IT infrastructure. This allows them to protect legacy investment while offering products and services that would not be possible on legacy platforms. Many banks have spent decades developing their IT, devoting innumerable time and resources to stay at the forefront of technology. But the pace of change is too great, and even small banks have trouble staying up-to-date while doing all of the “basics” like regulatory compliance and customer service.

Third-party solutions allow banks to bridge this gap and make use of modern standards, hardware, and practices without undertaking the risky and expensive proposition of wholesale internal IT replacement. This enables banks to make their customers happy while maintaining the stability of legacy platforms and business practices.

Conclusion

The payment needs of end users are changing more rapidly than bank IT processes and product offerings. Corporates are increasingly demanding instant payments functionality that is always available, easy to use, multi-bank, and highly scalable. Banks’ main concern is meeting their customers’ needs, but regulatory compliance and protecting legacy investments are also paramount. Modern portals that can be used by both banks and corporates are an effective way

to help corporates focus on their core business while allowing banks to meet corporate customer expectations without overhauling IT or risk running afoul of regulations. As payments evolve, businesses and banks must evolve as well. Solutions that meet customer expectations of speed, security, reliability, and ease of use while meeting regulatory and investment needs will be key to enabling the future of payments.

About Expertus

Expertus is a global leader in innovative payments and treasury solutions. Through its unique SaaS model, it offers an enhanced customer experience to corporates and financial institutions. Based on ISO 20022 model, Expertus multi-bank global treasury system includes cash pooling, forecasting, risk and liquidity management allowing corporates to centralize the management of all their bank accounts on one single platform. Always evolving to meet the market needs, Expertus solutions allow customers to benefit from faster and real-time payments initiatives including the blockchain technology.

Easy to integrate with any ERP system, it enables banks to take full advantage of the latest trends and technologies allowing the flexibility needed for time to market solutions answering the evolving need of treasurers.

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About Lipis Advisors

Lipis Advisors is a leading strategy consultancy specializing in the payment sector. Lipis Advisors are experts on payment systems, services, and strategy, as well as the underlying technologies that support payment infrastructures. Lipis Advisors advises on all forms of payments, including ACH payments, real-time payments, card payments, cheques, mobile payments, online payments, and RTGS/wire payments. To learn more about Lipis Advisors, please visit www.lipis.net.

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