While commerce is changing, banking is becoming more real time.

Real time payments is just around the corner...

While RTP is a new capability for the U.S., numerous countries already have real-time retail payments systems. The European Payments Board has agreed on “the need for at least one pan-European instant payment solution”.
Industry Behavior

Reasons driving RTP varies globally: P2P stands at the heart of most of Europe’s RTP initiatives currently in the works, some systems have been developed in response to strong third-party competition, and others have been developed to combat geopolitical forces, hyperinflation, and low financial inclusion.

The RTP scheme in the UK owes a lot of its success to the highly collaborative nature amongst their regulatory bodies, banks, and corporates, a learning that has heavily influenced the progressive RTP solution planning in Australia.

However in the U.S., RTP efforts have been somewhat fragmented, with a lower level of hand-in-hand coordination between banks and their corporate customers, and without the motivating force of regulation to spur change rapidly.

The methods employed for Clearing and Settlement vary widely across global jurisdictions, and is expected to continue to do so in the future as regulatory pressures, technological investments, risk appetites, and end user-demand will all weigh differently into the direction each of these jurisdictions take.
In Mexico, the RTP system is managed by the central bank of Mexico itself and has taken a firm stance on bank participation, liquidity, and operations to ensure safety and efficiency for consumers.

\[ \sim 100\% \text{ of all federal government payments processed by SPEI}^{16} \]

In Australia, significant bank participation stemmed a critical mass of planned 90% DDA coverage\(^{17}\).

In the U.K., a regulatory impetus forced banks’ hands in response to a report on competition in banking, and growth was spurred further by inclusion of state benefits, wages, salaries, and transportation transactions.

15% Increase in Faster Payments transactions in both 2015 and 2016\(^{18}\). 

\[ \sim 100\% \text{ of all federal government payments processed by SPEI}^{16} \]
International Next-Gen Success Characteristics

**Extensibility**
Easily configurable workflows, extensible message set, and scalable capacity – are all factors that will support innovation via Value Added Services

**Data Enabled**
Each payment can carry significantly more data, in a standardized format - enabling the transmission of remittance data along with a payment as a value-added service, improving match rates, reconciliations and data analysis.

**Request for Payment**
Request for Payment messaging will enable payees to electronically request funds transfers from their payer, and carry details such as invoice numbers, destination account details.

**Global Interoperability**
The future of RTP may likely be beyond just domestic payments, as new competitors are entering the cross border payments market, addressing delayed funds availability, fee transparency, and complex processing.

**Directory Service**
This industry-wide tool allows for payments to be addressed using cell phone numbers and email addresses. These can be used in both consumer and corporate applications.

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Can multiple payment workflows be configured?
Does it have the capability and capacity to grow to become the primary retail payments system in the US?

Is the solution based on a standardized data rich messaging format?
Is there a roadmap for adopting global RTP payment message frameworks?

Can the Request for Payment message be addressed to the payer using the Directory Service?
Is the resulting payment message linked to the original Request for Payment?

Does the solution allow for Request for Payment messaging?
Does the solution have flexibility to potentially operate within a future global payment mechanism?

Does the vendor have operational experience in operating or maintaining a PII database (e.g. porting records between bank owners)?

Is the vendor closely tied to the global payments community, and involved in global RTP message development?
Lessons Learned

Build once

Solutions that are built and subsequently retrofitted over long periods of time have a history of increased cost, lack of integration, and higher complexity. Ensure that the solution is capable and flexible enough to cater for all current and future needs.

Ideate with corporate customers early

While consumer products may become table stakes, corporates see value in many of the features of a new RTP solution. Early Product Ideation Programs that engage with corporate customer feedback groups to understand their pain points and needs will help define revenue driving products. This program will also prepare customers for the expected technology, operational, and end-customer behavior changes.

Allow for flexibility and innovation

Solutions that allow configuration are more capable of meeting future needs. This includes support for value added services, configurable payment workflows, addition of new message types, and configurable settlement windows.

Look at the end to end business transaction

In today’s customer transaction experiences, the actual payment is a friction or pain point. The most successful products eliminate this friction point, and embed themselves in the broader ‘business transaction’ – allowing providers to explore new customer opportunities.
Global RTP Myth Buster

RTP is only a consumer facing product

The most successful RTP providers have targeted corporate customers – enhancing existing products to improve existing payment processes and customer experiences (e.g. reconciliations), as well as introducing new products that take advantage of the new solution capabilities (e.g. property sales).

Real time payments is only about ‘speed’

As some of the world’s earlier RTP implementations are learning now, RTP is about more than just faster payments. It’s about 24x7 availability, data-rich messaging, directory services – all enablers to providing improved customer experiences across broader business transactions.

There is no positive P&L outcome for the banks

While industry-wide payments modernization isn’t cheap, there certainly are opportunities to generate revenue from new or improved payment products that are positioned as value added services. There is also significant opportunity for internal cost reductions (system / operations / process rationalization, improved STP, and fraud / risk reduction).

All existing payment revenues will be cannibalized

Evidence from UK and industry forecasts from Australia both suggest there is little to no cannibalization of existing transactional revenues. In addition, some UK banks improved their bottom line by substituting higher cost payment types / channels with lower cost RTP.

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2004 2008 2012 2015

BACS  
Check  
Faster Payments  
CHAPS
Impacts Considerations Overview

<table>
<thead>
<tr>
<th>Systems Consolidation</th>
<th>Consolidate multiple systems performing similar functions and leverage enterprise services. Leverage existing systems where possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment Validations</td>
<td>Perform standard payments validations as early in the process as possible, preferably in the origination channel as available (e.g. fraud, funds check)</td>
</tr>
<tr>
<td>High Availability</td>
<td>Provide 24/7/365 payments origination, funds checks, and receipt capabilities including sanctions, fraud and AML</td>
</tr>
<tr>
<td>High Performance</td>
<td>Support fast clearing (i.e. ~5 seconds) for high volume of transactions, on STP basis with potential data enrichment</td>
</tr>
<tr>
<td>High Scalability</td>
<td>Develop solution with scalability to support potentially rapidly increasing volume</td>
</tr>
<tr>
<td>Alias Lookups</td>
<td>Banks may need to interface with centralized alias directories to address real-time payments</td>
</tr>
</tbody>
</table>

24x7 Operations

The ability for funds to be transferred immediately and at any time of day creates new 24x7 requirements for the customer support team

Fraud & KYC

Irrevocable and immediate funds availability means banks will need to consider, enhanced KYC / customer authentication and fraud profiling options

Cost Reduction Opportunities

1. System simplification & rationalization
2. Improved STP & reduced reconciliations
3. Process and operations modernization and consolidation
4. Payment type substitution for higher margin and lower cost options
5. Fraud and risk reductions from safer RTP
6. Corporate customer benefits and cost reductions

RTP is a catalyst to begin to move towards a common payments platform across all channels

Investing strategically to ultimately rationalize the back-end technology and operations infrastructure, potentially as part of a digital strategy and an omni-channel strategy:
Messaging Capability Around The Globe

What is happening around the world?
- Multiple RTP message schemes in use including ISO 20022, ISO 8583, and domestic variants
- Global Real-time Payments Group
- U.K. FPS retrofitting ISO 20022
- U.S. evolution to ISO 20022 for domestic and international wires (2020 rollout)

Why is standardization important?
- Cross-industry momentum to develop consistent technology and processes
- Processing efficiency, consistent rich data carriage, and agile orchestration
- Interoperability and cross-system integrity
- Agility to meet evolving regulatory and business needs, aiding new product ideation and innovation

How is ISO 20022 different from ACH formats?
- ISO 20022 is XML based, is more human-readable, and carries descriptive tags for data fields that can make them easier to understand and process
- ISO 20022 data fields do not have fixed field length restrictions, eliminating arbitrary truncation causing STP interruptions

What is ISO 20022?
- International financial messaging framework, covering the entire life cycle of messages
- Harmonizes processes, messages, and terminology, enabling a common “language” for financial communication
- Uses eXtensible Mark-up Language (XML)

What is the data enhancement opportunity?
- Reconciliation automation for banks and corporate customers alike
- Invoicing and bill payment
- Supply chain management
- Taxes and financial accounting

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## Customer impacts

### System Simplification
- There are opportunities to decommission payment systems over time and rationalize infrastructure
- Also expect to reduce system maintenance and license costs
- Benefits can be realized across both CAPEX and OPEX costs

### Improved STP
- Improved STP means reducing re-work / reconciliations and therefore reducing operational costs
- More electronic/digital customer initiation drives customers to lower operational cost p/unit txn instruments

### Process and Operations Improvements
- Modernizing and consolidating processes and technology can lead to significant cost savings
- For example, the digitization of checks resulted in reduced operational and processing costs significantly

### Payment Type Substitution
- Banks can improve their bottom line by substituting higher cost payment types / channels with lower cost RTP.
- Even in the case of reduced revenue earnings, reduced costs may often be greater – leading to an overall better profit margin (e.g. certain wire txns)
- In these situations, banks may choose to default all txns to RTP

### Corporate Customer Benefits
- As more transactions are migrated to electronic payment methods, and enhanced data enables STP and reconciliation in customer ERPs – customers will experience reduced reconciliation costs and reduced operational costs
- The real-time nature of funds will also enable greater cash flow control, and the ability to offer more effective credit terms incentives to customers

### Fraud and Risk Reduction
- Substitution of high-risk payment types (cash, check) to RTP presents lower risk of fraud occurrence while delivering same or better experience
- The implementation of RTP can be the catalyst for developing more enhanced fraud and risk detection mechanisms, which can be supported by enhanced data carriage in payment messages
Bank Settlement Mechanisms

Settlement, while an important part of the payment process, isn’t a critical element to enable real-time payments for the end user. How settlement has been approached thus far has largely been a function of incumbent technology, geopolitical interests, and subjectivity as to what is “fast enough” for end users. With the U.S. economy largely stable, we see the fundamental questions remaining subjective:

“Would most end users be satisfied with a handful of settlement windows per day?”

“How do settlement window restrictions impact bank liquidity and counterparty risk?”

“Where on this spectrum should a U.S. real-time payments system reside?”

1x per day  3x per day  6x per day  Every 5 min  Continuous

1x per day  3x per day  6x per day  Every 5 min  Continuous

24/7 settlement availability  Settlement limited to standard business hours