



A MASTERCARD MARKET INTELLIGENCE REPORT

# Real-time payments

Modernizing bank account-based payments





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# Executive summary

Real-time payments (RTP) became a reality in the U.S. on November 13, 2017, when The Clearing House, a payments consortium of 25 banks and various technology companies, launched a new payments system designed and powered by Vocalink, a Mastercard company.

RTP represents the modernization of bank account-based payments and serves as the first new payment system in the U.S. in over 40 years.

**When compared to legacy bank transfers, RTP offers added benefits such as enhanced data and messaging capabilities, increased security and real-time funds availability.**

The emphasis on data and messaging capabilities, in addition to real-time settlement, has positioned the U.S. RTP system as the most advanced system in the world.

Real-time payment systems offer significant benefits to all stakeholders in the ecosystem. To realize the advantages and tremendous opportunities that remain unlocked in the U.S., banks are urged to participate in the shift away from legacy systems early.

This report will provide an overview of the real-time payments system in the U.S., the associated benefits, opportunities and implications, and the recommended path forward for banks.





# Global needs have triggered the worldwide reform of payments

All major developed countries and many developing countries have adopted real-time payment systems.

Although new in the U.S., real-time payment systems exist across the globe. More than 20 countries worldwide now live with instant payment system infrastructures including the U.K., Thailand, and Singapore, with 12 more countries expected to be live by 2020\*.

The introduction of real-time payments is often triggered by regulatory pressure (e.g., U.K., Mexico, Switzerland); however, this is not a universal truth across all live markets. The key catalysts of change have been the need to improve efficiency, respond to technological innovations, reduce systemic risk and market demand.

## SIX MARKET FACTORS DRIVING CHANGE\*:



\*Statistics based on a survey of 120 organizations

Source: Payment Systems Worldwide, Outcomes of the Global Payments System Survey 2010, World Bank



# RTP addresses the needs and expectations of modern commerce in a robust way

RTP offers ubiquity, speed of payment, extensive data exchange, real-time messaging, and 24/7/365 availability. With such capabilities, real-time payments can help improve cash flow, operational efficiencies, customer engagement, data transparency and accuracy.



## Consumers

- 24/7/365
- "Zero" friction payments
- Security from anytime emergency payments



## Corporates

- Efficiency e-invoicing and billing
- Improved liquidity management
- Optimized working capital management



## Government

- Anytime, traceable, emergency benefit payments
- Increased tax revenue from GDP growth
- Global harmonization



## The Economy

- Increased velocity of money
- GDP growth from higher payment volumes
- Market efficiency from competition



## Society

- Reduction of crime and security issues related to cash handling
- Reduced systemic risks (e.g., fraud, AML)
- 24/7 service culture



# The U.S. RTP system is the first new payment system in the U.S. in 40+ years

Technology pioneered by Vocalink, a Mastercard® company, powers the real-time payment infrastructure and rails operated by The Clearing House (TCH)

## The foundation for a safer, smarter, faster digital payment system.

Other payment rails suffer from limitations on data, settlement timing and security, and are not always on. However, the modernity of RTP addresses the demands of the digital age with its instant funds availability, 24/7 always-on service, emphasis on security, data, dynamic messaging and global interoperability.

Globally compatible & interoperable

Real-time messaging & transparency

Data passed with the payment

Irrevocable and backed by enhanced security

24/7 always-on service

Instant funds availability



# Given its data and messaging functionality, the U.S. RTP system is the most advanced in the world

## Innovation is unlocked through data and messaging standards

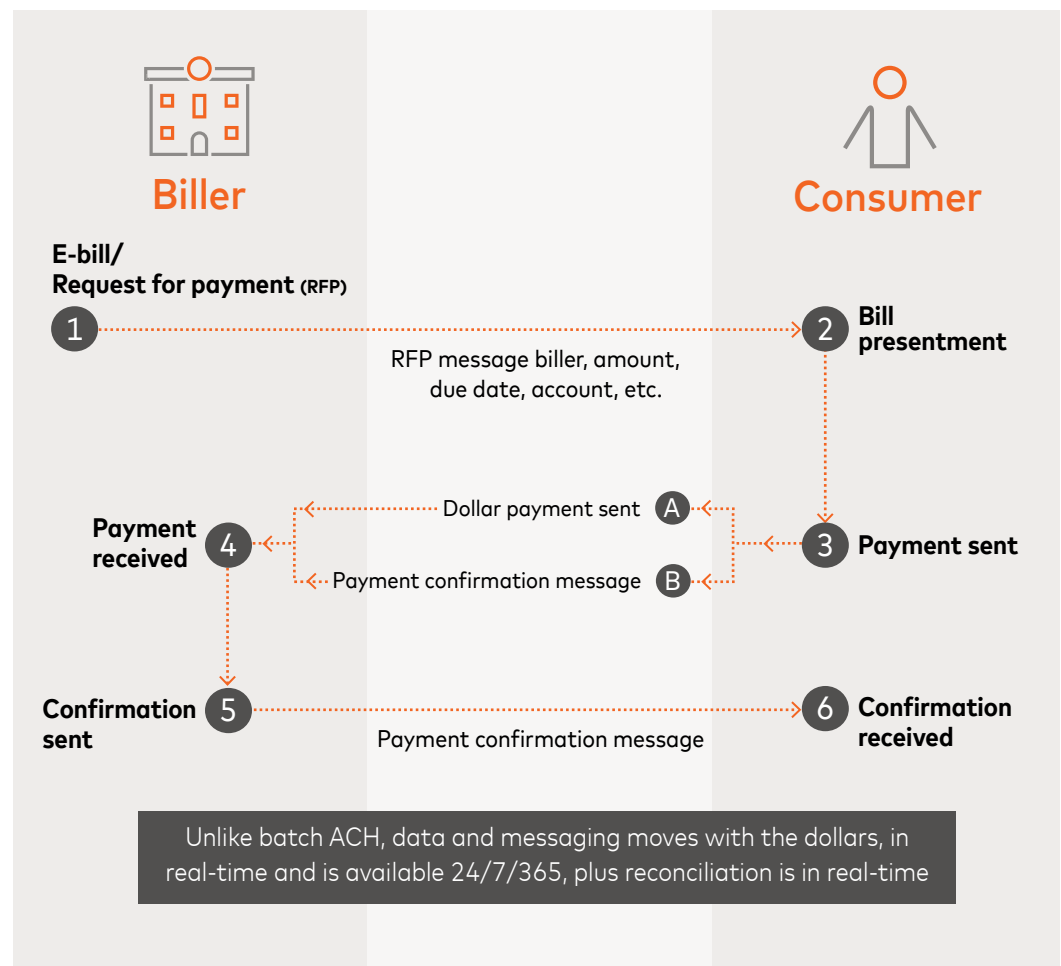
Unlike other markets, the real-time payment system in the U.S. has a strong emphasis on data and messaging. With the adoption of ISO 20022, there are several message types supported. ISO 20022 is an international framework that enables a real-time, common language for global financial communications across debtors, creditors, and their financial institutions.

While it's easy to see speed as a key benefit, the richer value of RTP lies in its robust data and messaging capabilities that far exceed earlier payment methods. When real-time payments are made, there is so much more data that can be attached to the transactions, including remittance data. By coupling data with the transaction, there is an abundance of data and insights, which can help to improve business performance, enhance operational efficiencies, monitor fraud and manage risks. With such robust data and messaging functionality, banks are not only able to offer their customers a real time settlement option, but are able to innovate around customer pain points and inefficiencies.

### RTP messaging types:

- **Credit transfer:** Basic multipurpose payment message including remittance information
- **Request for payment:** To support e-invoice or e-billing
- **Payment acknowledgement by receiver:** Real-time status messages from the receiver to the sender regarding payment disposition
- **Request for information and response:** Receiver requests additional information about a payment
- **Remittance advice:** Extensive remittance detail is included in addition to the credit transfer message

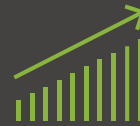
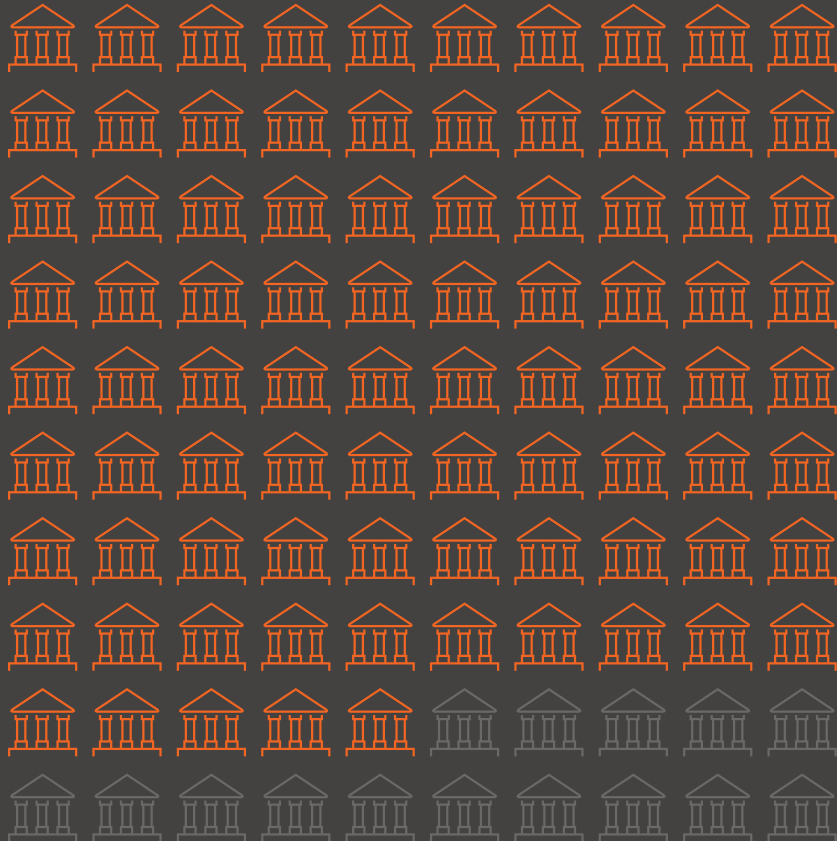
The most powerful messaging type is **request for payment (RFP)**. Once a biller has requested payment from a payer, the process of bill presentment, payment and confirmation is simplified through the RFP messaging





# RTP presents significant benefits for banks

**85%** of banks globally believe that real-time payments are the foundation for growth and new product enhancements



## REVENUE UPLIFT:

While RTP transaction fees boost revenue for banks, net interest income on certain associated lending products and cross-sell opportunities unlock further value



## COST SAVINGS:

RTP helps reduce cash and check usage while further reducing branch footfall as well as other cost efficiencies driven by automation of exception handling



## SYSTEMS MODERNIZATION:

Modernization required for RTP results in better ability to use data as well as increases in operational efficiency



## ANCILLARY BENEFITS:

Better responsiveness to customer needs and ability to build propositions around transactions





# Market impact

The launch of RTP in the U.S. will significantly disrupt the status quo as both a new payment rail and a new technology

## New payment rail:

Payment preference will likely shift away from check

Consumer and business payment preferences are shifting from checks toward account-based payments. Mastercard believes RTP will help drive this change.

2016 ACH share of B2B payments

32%

2020 ACH projected share of B2B payments

45%

## New technology: Innovation unlocked through messaging and data standards

### Flows



P2P

### Sample Use Case

- Mobile payment between friends and family members
- Settle RTPs from small traders (e.g., plumbing bill)
- Pay for services (e.g., babysitting)



C2B

- E-commerce
- M-commerce



Bill Pay

- Consumer billing + RTP + enhanced data for AR management
- JIT settlement of bills (e.g., credit card)
- Citizen tax payment to government



B2C

- Fast settlement of insurance claims
- Immediate loan availability
- Same-day payment of employee wages ("gig economy")
- Government payments to citizens



B2B

- Real-time invoice factoring and AP outsourcing
- Facilitation of instant discounts for invoices paid early
- Enable "anytime" payment of B2B payables

# Bank implications

While this market shift brings tremendous benefits, moving to RTP requires significant investment

## Value articulation

### **Help CXOs understand the value of RTP**

CXOs' buy-in is critical from the outset and early involvement of senior stakeholders helps ease barriers.

## Internal business case development

### **Create and guide RTP working group with business case development**

New value is created through being first to market, cross-selling and more attractive pricing.

## Implementation

### **Work with TCH, partners and RTP working group to design and plan rollout**

Consider platform development options, which have cost and operational implications. A scalable infrastructure is an important foundation.

## Use case proposition development

### **Engage customers and internal Product/Sales to define value-added use cases**

Greater value can be driven from corporate use cases versus other use cases.





# Bank recommendations

Banks are urged to proactively develop their own RTP strategy



## Organizational enablement

Establish RTP as a strategic priority and align management support and internal resources for successful execution



## Education and empowerment

Ensure your employees and customers are aware of RTP and the value of the new payment system



## Customer needs assessment

Take an outside-in approach to understand customer and payee needs to surface opportunities for RTP



## Use case development

Identify, prioritize and build out propositions for RTP use cases that create value for your customers and organization





For more information on real-time payments, contact your Mastercard account representative.



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