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Real-time payments and implications of the COVID-19 pandemic This article outlines the current state of real-time payments deployments in the United States and how the COVID-19 pandemic is influencing the real-time payments transformation, use cases, and ecosystem participants.

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The real need COVID-19 emphasized the urgency of real-time payments adoption

The COVID-19 pandemic showed us why and how real-time payments can make a difference in the payments ecosystem and instantly help to solve many personal and professional needs.

Access to immediate funds has become paramount for consumers and businesses for basic sustenance and from a continuity standpoint. Timeliness of payment disbursements, such as social security, unemployment benefits, government assistance, and other financial aid, has become a major concern among those who depend on them. Recent (prepandemic) research¹ shows that more than 75% of working Americans who struggle to pay their bills would opt for instant payments if offered the choice. Given the urgency created by the pandemic, converting a check into available funds immediately is critical.

Recently, there have been several instances where a real-time payments mechanism could have made a difference in resolving challenges pertaining to money movement in the new era of social distancing. For instance, while disbursing stimulus checks to millions of Americans as part of the CARES Act,² the Treasury Department faced issues such as verifying the intended recipients of the payment, preventing fraud, and getting the money to recipients quickly. The first round of stimulus payments were made through direct deposits (ACH) to an individual's bank account or by paper checks in the mail. An activated, ubiquitous real-time payments ecosystem would have facilitated an effective payments distribution process with

the ability to electronically "push payments" to recipients' bank or digital wallets instantly, securely, and contactlessly.

The coronavirus outbreak is also prompting second thoughts for consumers and businesses around the use of cash.

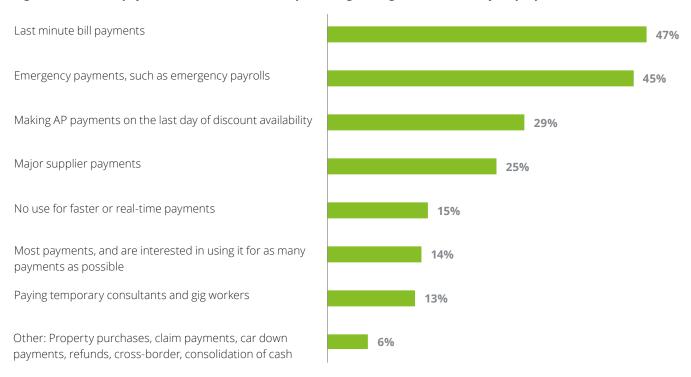
Although there is no evidence that physical currency increases the chance of contracting the disease, the World Health Organization has advised people to use contactless payments to reduce the potential risk of transmission.³ A growing number of businesses and individuals worldwide have instituted measures to limit using banknotes in fear that physical

currency, handled by tens of thousands of people, could be a potential vector for this disease. For instance, a nonprofit bookstore in the midwest asked its customers to refrain from using cash for payments. Food delivery services, and many similar businesses, have instituted "no-contact" deliveries and have either stopped accepting cash as a payment option or are actively discouraging it. And in countries such as Austria, which was among the first to reopen consumer-facing establishments such as restaurants and bars, the cash volumes haven't bounced back to pre-COVID-19 levels.4 This could be an indicator of a shift in the consumer mindset and different hygiene

practices becoming the norm.

Even without the crisis, real-time payments already address numerous established needs (see figure 1). For example, one of the most prevalent use cases amid COVID-19 is supporting the gig economy workers who would receive payments instantly for their services instead of having to wait for 14-day payout periods. Real-time payments hold immense potential to serve underbanked societies in areas where bank branches may not exist. For corporate clients, real-time payments offer a range of benefits, including faster processing, immediate settlement, and the ability to send and

Figure 1. Real-time payments use cases (based on percentage of organizations surveyed, prepandemic)



Source: 2019 AFP® Electronic Payments Survey Report

receive data-rich payments messages, which can help with automating time-consuming elements of payments processing. For banks, real-time payments can help find efficiencies with least-cost routing and help with fraud checks by enabling multifactor authentication and targeted scanning. Real-time payments can open the door to a wealth of value-added services, driving transactions and thus banks' revenue. Real-time payments hold the potential to altogether transform payments from a

commoditized service into a key, strategic service with implications across the value chain of industries. And to leverage that change, financial institutions (FIs) have started viewing payments with greater focus on the more extensive business and value-based setting inside which any payment transaction happens rather than simply as the settlement of an exchange.

Given the rapidly evolving payments landscape and customer expectations in the prepandemic world, Fls were looking at payments modernization as the lever to gear up for \$6 trillion (projected value)¹ of global contactless transactions by 2024. COVID-19 infused incremental pressure and special focus for providing instant, contactless electronic payments, accelerating the buildout and adoption of real-time payments.



Growing market options

The real-time payments competition is growing in real time

The real-time payments space had been gaining significant traction over the years prior to the start of the pandemic. Across the globe today, 40 countries have real-time payments solutions in place, and more than half a dozen countries have announced their plans to go live before 2023 (see figure 2).

Real-time payments in the United States are in the fast lane, with significant year-over-year growth of 69%. We are witnessing incumbent payments networks adding incremental features, fintechs launching customer-facing apps, and new real-time payment rails being conceptualized and developed to address the projected volume and demand for real-time payments in the next five to 10 years (see figure 3).

Figure 2. Global timeline and key drivers for real-time payments adoption

| Japan: 1973 | Mexico: 2004 | Sweden: 2012 | Spain: 2016 | Australia: 2018 |
|-------------------------|--|------------------|---------------------|---------------------|
| Iceland: 2001 | South Africa: 2006 | Norway: 2013 | Thailand: 2016 | France: 2018 |
| Republic of Korea: 2001 | Israel: 2007 | Turkey: 2013 | Finland: 2017 | Hong Kong: 2018 |
| UAE: 2001 | United Kingdom: 2008 | Denmark: 2014 | Germany: 2017 | Malaysia: 2018 |
| Ghana: 2002 | China: 2010 | Italy: 2014 | Latvia: 2017 | Belgium: 2019 |
| Brazil: 2002 | India: 2010 | Singapore: 2014 | Kenya: 2017 | Colombia: 2019 |
| Chile: 2002 | Nigeria: 2011 | Bahrain: 2015 | Switzerland: 2017 | Netherlands: 201 |
| Taiwan: 2002 | Poland: 2012 | Bangledesh: 2015 | United States: 2017 | Hungary: 2020 |
| | | | | Canada: 2022 |
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Increasing customer demand

Customer demand for quick payments is driving the need for improving the existing payment rails with real-time settlement

Growing regulatory push

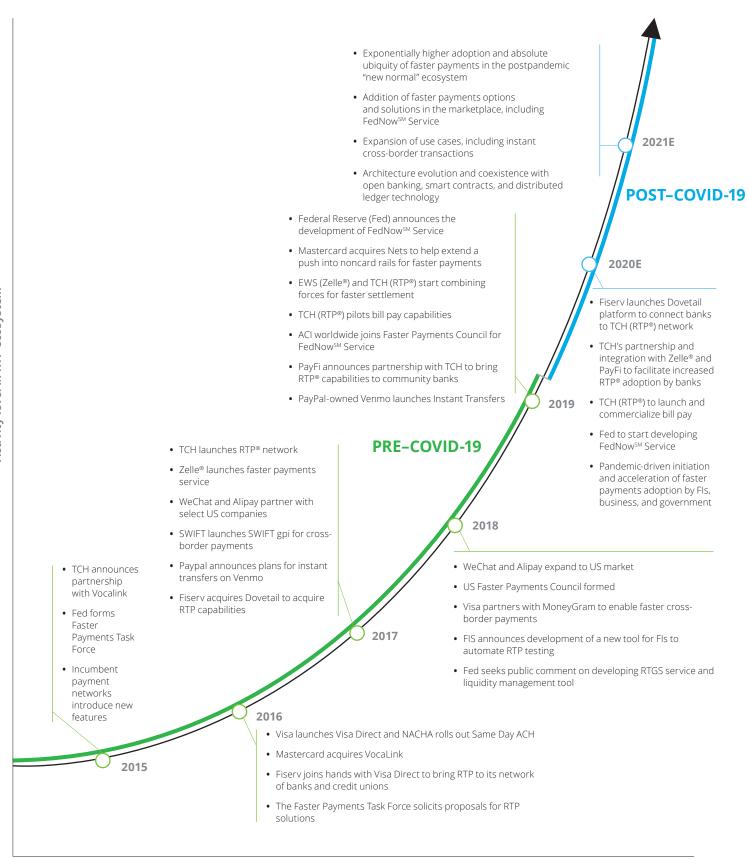
Global regulatory initiatives are significantly driving innovation with the development of new, faster payment schemes

Improving market infrastructure

The use of ISO standards is recognized as a key element to enable real-time exchange of structured information

Source: Deloitte analysis

Figure 3. Evolution of the US real-time payments ecosystem



Approaches to real-time payments continue to evolve. Figure 4 shows a comparison of some attributes and use cases served by a set of commonly used real-time payments solutions in the US marketplace as of June 2020. These diverse, real-time solutions are owned, designed, or operated in different ways. They can all post the funds in the recipient's account in real time, but not all of them can settle the funds immediately behind the scene. Regardless of being available 24/7,

they sometimes use different clearing and settlement mechanisms and networks with their own set of rules around refutability, use-case-driven transaction limits, and accessibility. What's even more interesting is that these solutions are not yet fully aligned on common payments messaging standards (not all of them use ISO 20022)⁷ and governance models. There is a need for and value in diversity when it comes to real-time payments solutions given the size of the

US marketplace when compared with other global markets; it's not realistic to expect a single solution that can meet everyone's needs for real-time money movement.

The table below is intended neither to be an exhaustive comparative analysis nor endorse any specific solution. Organizations should make decisions based on their own business priorities, requirements, and use cases.

Figure 4. Comparison of selected real-time payments solutions in the United States

Source: Deloitte analysis

| | TCH RTP® | Visa Direct | Mastercard Send | Venmo | Zelle® | FedNowsM |
|------------------------------|---|--|--|---|--|--|
| Funds posting | Real-time | Real-time | Real-time | Real-time | Real-time | Real-time |
| Settlement timing | Immediate | Same or next business day | Same or next business day | 30 minutes | End of current or next business day; based on ACH schedule | Immediate |
| Launch state | Active | Active | Active | Active | Active | Planned for 2023 and 2024 |
| Clearing mechanism | RTP® | Card network | Debit card network | RTP® | ACH network, debit card network | Enhanced FedLine network |
| Availability | 24*7*365 | 24*7*365 | 24*7*365 | 24*7*365 | 24*7*365 | 24*7*365 |
| Refutability | No | Yes Chargebacks permitted | Yes Chargebacks permitted | No | No | Unknown |
| Payment type | Push | Push | Push | Push | Push | Push |
| Transaction limits | \$100,000 | P2P: \$10,000 Disbursements: \$50,000 | P2P: \$10,000 A2A: \$25,000 B2C: \$50,000 | P2P: \$3,000/txn \$20,000/week | Depends on PSPs | \$25,000 |
| Accessibility | Individual or business with a bank account | Individual or business with a Visa-branded card | Individual or business with a Mastercard- branded card | Individual or business with a bank account or Visa/Mastercard debit- cards | Individual or business with a bank account | Individual or business with a bank account |
| Messaging standards | ISO 20022 | ISO 8583 | ISO 8583 | ISO 20022 | Proprietary, NACHA, debit card | ISO 20022 |
| Cross-border transactions | No | Yes | Yes | No | No | No |
| Primary governance | RTP operating rules, RTP participation rules | Card agreements, service level agreements | Card agreements, service level agreements | Card agreements, service level agreements | Zelle® operating rules | Unknown |
| Use cases | G2C, B2B, B2C, P2P, C2M, M2C | G2C, B2C, P2P, C2M, M2C | G2C, B2C, P2P, C2M, M2C | P2P, C2M | B2C, P2P, C2M | G2C, B2C, P2P, C2M, M2C |

P2P: Peer-to-peer

G2C: Government-to-consumer

B2C: Business-to-consumer

C2M: Consumer-to-merchant

M2C: Merchant-to-consumer

The current real-time payments ecosystem consists of not just multiple real-time payments networks, but also technology enablers. With the varied transaction limits and messaging standards, FIs, in some cases, may need to invest in a real-time native payments hub that can connect to global real-time schemes and other digital payments while being ready for new standards like ISO 20022 to support the creation of data-rich services. Technology enablers (such as payments processors and

software providers) can facilitate real-time payments implementation developing custom solutions for Fls to integrate with the real-time payment networks' platform. Thus, these enablers can support Fls in their fast-track payments modernization and thereby accelerate Fls' real-time payments adoption.

Crisis or no crisis, real-time payments transformation has already begun in the marketplace. The competitive landscape is being redefined by the evolution of

new solutions provided by FIs and the development of strategic alliances that cut across traditional sectoral boundaries. All things considered, we imagine that the post–COVID-19 real-time payments ecosystem might include globally integrated clearing-settlement frameworks and open platform channels that offer maximum customer access, adaptability, and comfort.

Accelerating adoption amid the pandemic

The growing pre-pandemic market options alone were set to speed up adoption of real-time payments in the United States, up from an 8.9% share of volume in 2019 to an expected 20.9% in 2024.8 The US real-time payments transaction volume is projected to increase from \$734 million in 2019 to \$4.2 billion by 2024 at a 42.1% CAGR over the next five years.8 Combined with the pressures brought on by the pandemic, we are likely to see incremental growth caused by a pressing need to reduce dependence on traditional payments mechanisms and fast-track the transition to a contemporary, digital, and contactless payments ecosystem. Now is the time to innovate and embrace the seismic shift while the crisis continues to unfold.9 Organizations should consider the following structural and process changes around real-time payments:

There may be a need to create a stronger supply chain. Describing Businesses want greater assurances that their supply chains are secure, resilient, virus-free, and safe. The trade-off might be an opportunity where suppliers being paid in real time, and goods tracked end-to-end in the supply chain could position payments companies as the backbone in this new paradigm. Fls will be keen to support this B2B use case with a real-time payments offering, along with, an advanced blockchain solution to track the shipment of goods.

There will be a major push to accelerate **digital offerings.**¹¹ New digital capabilities around lending and credit are going to be the new normal. Additionally, the importance of providing traditionally under- and unbanked citizens access to the financial system so they can receive much-needed funds and benefits has been amplified. Fls will be asked to accelerate the development of their capabilities on these fronts because executives now know the options available to provide a more seamless customer experience. Now is the time to not just double down on the online and mobile channels, but also triple down in the areas of real-time payments-based infrastructure and digital money offerings.

The consumer payments value proposition is shifting from traditional payments to real-time payments.

While the data suggests¹² that the growth in real-time payments goes hand-in-hand with growth in other payment methods (as we are still seeing growth in cards), we should consider the likelihood of a black swan event where speed and certainty of payments is overriding any other pattern or parameter driving innovation. As a result, merchants and businesses will start creating incremental incentives to drive that shift.

There is an opportunity to develop new value-added services as a competitive differentiator. With more than half of real-time payments revenues coming from the digital overlay services or value-added services (e.g. fraud analytics, directory services, tokenization, and access services), real-time payments represent a significantly different business model than traditional payments models such as card networks.

Effective digital identity practices are more vital to businesses than ever.

There is a potential to shift toward next-gen digital identity solutions¹³ for presenting a compelling first contact point to customers, protecting sensitive data, and enabling secure real-time payments transactions. Next-gen digital identity solutions will not only provide businesses with a unified, borderless, and inclusive experience, but will also provide them with greater control and trust over their payments data and the organizations with which they interact.

The full-scale, real-time payments adoption is likely a matter of time, and the real question facing Fls is what this means for their product strategy and, ultimately, their customers. The customer expectations around speed, ease, convenience, and security of payments are increasing, despite or even stimulated by the COVID-19 crisis, meaning Fls must either deliver on real-time or risk damaging both their revenues and reputation.

What's next?

Fls have access to a growing number of real-time payments solutions and integration options in the market, and they need to make a choice that best meets their needs and presents an opportunity to maintain or improve competitive advantage.

There are several strategic questions that can help an FI embark on the journey to leverage real-time payments disruption to hold off or get ahead of the competition:

- Which real-time payments solution works best for Fls?
- What are the key challenges that FIs will face while adopting real-time payments?
- How would FIs address migration to RTP solutions via acquisitions, partnership with fintechs, and vendor white-label solutions?
- How would FIs customize current product offerings to align with the real-time payments solution?

Identifying core strengths, developing and realigning the existing product road map, examining settlement business rules, evaluating offerings with an eye for supporting multiple solutions, and building a complementary set of capabilities for value-added services will be vital for FIs' success in the changing payments landscape.

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