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Payments modernization: Balancing the risks and rewards



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## The grail is close

Businesses have been seeking the holy grail of payments modernization—and now they've almost reached it, they must get ready to handle it. In recent years, countries around the world have been moving to upgrade their aging legacy systems to enable faster payments processing, real-time settlement, and data-rich transactions. In 2016, Canada joined the mission with plans to build a new core clearing and settlement system, establish a real-time payments capability, enhance automated funds transfers, align with global regulatory standards, and modernize the requirements framework. The vision is to create a modern payments system that is fast, flexible, and secure to promote innovation and strengthen Canada's competitive position.

# The risks and rewards of real-time

The benefits of this initiative are considerable. With real-time payments, for instance, consumers can send and access funds as they need, businesses can improve their cash flow management, large enterprises can qualify for better terms of trade with their suppliers, and government agencies can rapidly disburse emergency relief funds.

Financial institutions stand to gain as well. A modern payments platform promises to do more than make payments easier and faster. It will also deliver more robust analytics, thereby providing financial institutions with greater insight into individual and organizational spending habits, enhancing their ability to improve capital and liquidity management, and positioning them to introduce more responsive products and services.

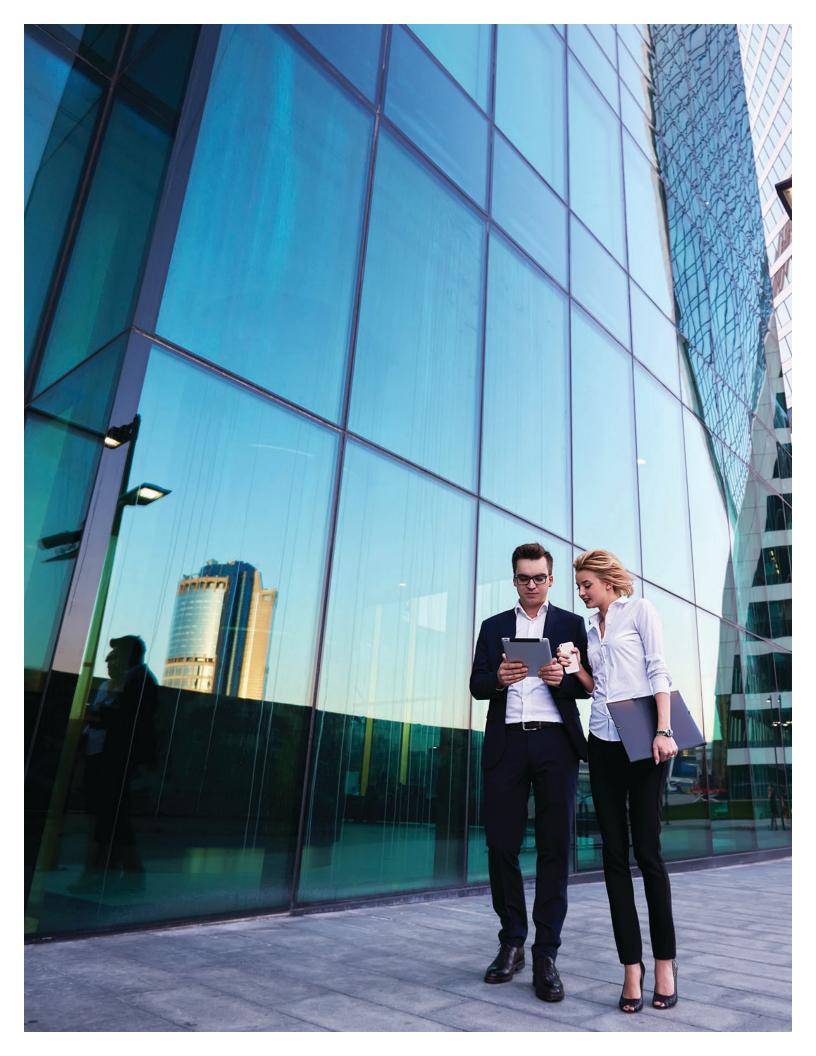
The only hitch? Payments modernization is not without its risks. Concerns that the industry, Payments Canada, and regulators will not be able to collectively execute the plan in Canada—due to its scale, scope, and speed—are raising a number of delivery

risks. For instance, competing priorities, skills shortages, and capacity constraints may prevent the industry from reaching the target state on time, potentially increasing costs and risks. Growing reliance on new technologies could complicate execution, particularly if they are not compatible with the systems that currently process critical payments. Aside from execution risk, this could lead to customer confusion, service disruptions, system failures, and widening gaps in risk management oversight.

Other new risks abound as the industry works to reach the initiative's target state. These risks include the potential inability of banks to measure how much incremental risk they will incur because of possible

increased fraudulent activity, additional cybersecurity exposure, and higher collateral requirements. Together, these risks create challenges for financial institutions to maintain the safety and soundness of the financial system, particularly in the early stages of implementation when the risks of system disruption and potential data loss are likely to be highest.

Although the full implementation of payments modernization remains a moving target, it's prime time for financial institutions to think through how they plan to address this new risk landscape.



## Responding strategically

While Canada's financial institutions tend to be at the leading edge of fraud management, some of their practices and processes will need to change to circumvent the heightened risk of fraud created by real-time payments. To reduce the threat, banks may want to:

- Introduce real-time fraud detection and prevention capabilities using advanced analytics to identify fraudulent patterns as they arise.
- Strengthen authentication procedures. In the UK, for instance, two-factor authentication was not sufficient to curb fraud. However, the introduction of biometric authentication saw a 24 percent decrease in malware and remote attacks.<sup>2</sup>
- Protect all channels and payment types equally. In the UK, heightened online authentication simply streamed criminals to alternative—and less protected channels, such as call centres. To avoid this displacement of fraud attempts, high-level security should prevail across all channels and payment types.
- Monitor both outgoing and incoming payments. Careful identification of payment recipients can reduce the incidence of fraud. Similarly, by monitoring incoming payments, banks may be able to identify anomalies or unusual behaviour, such as mule accounts being used to flush out money.
- Enhance cybersecurity systems to prevent cyber criminals from using advanced tools to attack systems or insert malicious code into a transaction's rich message field.

## Will fraud flourish?

One of the greatest concerns surrounding the introduction of real-time payments is the heightened risk of fraud—a risk that is all too real.

When the UK launched its Faster Payments system in 2008, fraud losses from online banking rose by almost 300 percent—from £22.6M in 2007 to £59.7M in 2009.¹ The irony is that some of the key benefits of real-time payments are also its main weaknesses, such as:

#### Speed

Real-time payment systems allow transaction completion in less than five seconds. While a boon for consumers, this gives banks scant time to conduct fulsome fraud monitoring.

### Irrevocability

With Lynx and RTR, payment transfers between Canadian financial institutions become irrevocable once they are authorized. Although this feature protects banks from potential defaults, it also prevents them from recalling or revoking transfers that may subsequently be called into question.

### Proxy identifiers

To meet evolving customer needs, Canada's new payments infrastructure proposes to use an expanded pool of proxies—such as mobile IDs, emails, and phone numbers—to identify customers and enable them to make payments. While this will deliver unprecedented payment flexibility, it also presents a morass of security concerns and increases the potential pool of fraud victims.

### · Higher transaction limits

Daily Interac e-transfer limits currently sit at \$3,000, but that is set to change. With payments modernization, daily transaction limits may start at \$10,000 and potentially reach—or even exceed—\$100,000.

By presenting cyber criminals with more lucrative opportunities for fraud, these higher limits may lead to higher losses.

#### • Data-rich transactions

Many Canadian businesses currently struggle to process payments efficiently. To close this gap, Payments Canada is proposing to introduce a global messaging standard with expanded memo capability. These data-rich transactions will enable businesses to better match customer payments to invoices, oversee their collections, predict cash flows, and track cross-border payments. On the flip side, however, they also increase the risk of exposure to malware, which could be embedded in payment attachments or links.

## The implications for treasury operations

The new platforms and requirements that will enable fast fund transfers and more efficient settlement are set to take a toll on the treasury operations of banks.

Specifically, financial institutions will need:

### Significant increases in collateral requirements

Once Lynx replaces the existing Large Value Transfer System (LVTS)—a shift currently scheduled for 2020—high-value inter-bank transfers will need to be settled in real time and fully collateralized. Similarly, once the Settlement Optimization Engine (SOE) replaces the Automated Clearing and Settlement System (ACSS), participants completing the same-day settlement of lower-batch value and retail payments will need to pledge enough collateral to cover the default of the largest participant. At the same time, the Bank of Canada plans to withdraw its residual guarantee. Taken together, these changes will require banks to vastly increase their intraday liquidity reserves.

### A new approach to intraday liquidity management

As the payments modernization initiative rolls out, financial institutions will need to manage intraday liquidity in near real time. For instance, the introduction of Real-Time Rail (RTR)—currently scheduled for 2019—will require banks to simultaneously exchange and settle payments in real time. Lynx will also require real-time gross settlement (RTGS) among financial

institutions. The result? Greater strain on intraday liquidity monitoring and collateral management. To ensure continuous visibility into their liquidity positions, banks will need to revisit their models and consider the impact of implementing Liquidity Saving Mechanisms (LSMs), which queue payments, group them, and use algorithms to find other matching payments so offsetting amounts can be validated against available liquidity while still settling the gross amount of each payment.

### • Data and technology upgrades

Although faster and data-rich payments will deliver countless advantages, they will also tax legacy intraday liquidity measurement and monitoring systems. Too often, silos still exist between organizational cash, liquidity, and collateral systems. Simply stated, the data and technology solutions that most banks rely on today may not deliver the visibility they need to properly monitor their collateral portfolios or intraday liquidity positions. In some instances, financial institutions rely on methods that may be outdated or ill-suited for an age of real-time payments. To respond to the increased data flows that will result from real-time transactions, organizations will need to adopt more sophisticated data systems.

### Responding strategically

As Canada's payments modernization initiative progresses, financial institutions will need to take steps to mitigate emerging risks. By acting now, they could likely realize cost savings that will be harder to gain as implementation deadlines get closer. Although no universal solution exists, banks may want to:

- Enhance collateral management to improve collateral monitoring, reduce financial risk, and streamline their systems in a way that optimizes compliance with the Lynx, SOE, and RTR collateralization requirements.
- Assess and revise intraday liquidity models to gain active visibility into liquidity reserves, improve their liquidity forecasting, and adopt appropriate liquidity saving mechanisms.
- Review existing technology system capabilities to pinpoint potential gaps and identify any upgrades needed to meet the added monitoring and reporting requirements introduced by payments modernization.
- Analyze now new collateral and liquidity processes may affect regulatory compliance by altering financial ratios (e.g., OSFI's Liquidity Coverage Ratio).

## Take the time to plan now

The key will be to approach payments modernization as an opportunity.

Payments modernization promises to confer significant advantages to the Canadian economy. The reduced use of cheques alone could result in savings of up to \$4.5 billion over five years—and that's just for starters.<sup>3</sup> Yet, along with these benefits come new risks, ranging from increased collateral requirements, greater strain on liquidity models, and the need for technology upgrades to elevated threats of fraud and cyberattack.

Even if the move to a new payments infrastructure is delayed, financial institutions should now be working to determine how payments modernization will affect their risk profiles and develop a prioritized list of actions to respond. The key will be to approach payments modernization not simply as a compliance exercise, but also as an opportunity to strengthen risk models, optimize liquidity and payment processes, and improve customer satisfaction through the adoption of more robust and secure technologies and systems.



### Contacts



Andre Romanovskiy
Partner, Risk Advisory
aromanovskiy@deloitte.ca
Tel: 416-601-5288



Paul Lech
Partner, Risk Advisory
plech@deloitte.ca
Tel: 416-643-8037



Jas Anand Senior Manager, Risk Advisory jasanandx@deloitte.ca Tel: 416-601-5865

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Designed and produced by the Deloitte Design Studio, Canada. 18-5786T