01 Let Canada

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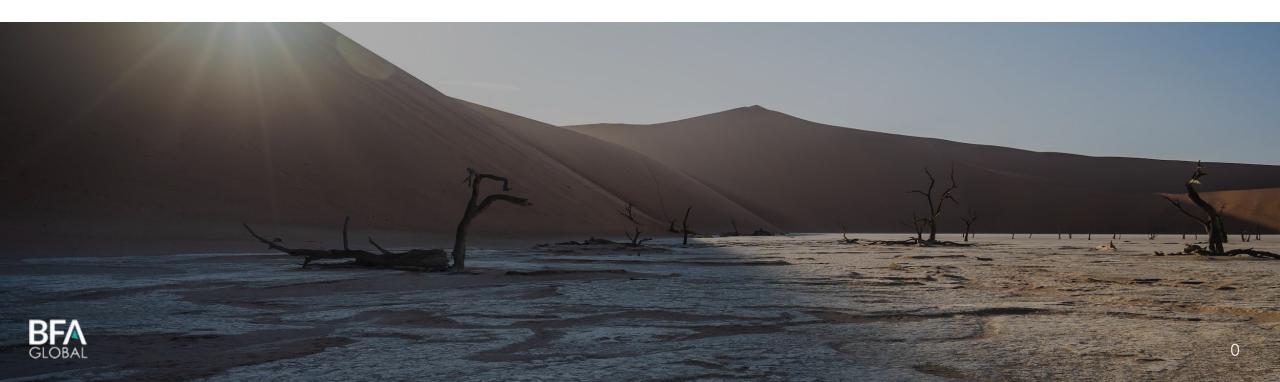




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STATUS

Country summary: Canada 🛂

Country group

HIC

% adults with a financial account 100%

ACCOUNT TO ACCOUNT R/T:				
Name of scheme/s	Interac e-Transfer service (proprietary solution)	Real-Time Rail (RTR) (National payments system)		
Date of launch	2002	Upcoming 2023		
Scheme manager	Interac Corp (Private entity)	Payments Canada (PSMB)		
Switch operator	Interac Corp owned by banks, credit unions, caisses populaires, payment processors and merchants	Payments Canada (PSMB)		
% financial accounts included in scheme	>300 banks and credit unions	Banks, credit unions with provision to add other payment providers in future		

Highlights from country:

- Industry led initiatives, one led by a private cooperative association the other led by a regulator mandated payment system authority and operator with wider representation
- In the absence of the envisioned national real-time payments (RTR), a proprietary solution has filled the gap for instant payments and managed to achieve significant scale and a dominant position in peer-to-peer payments
- RTR is meant to fill the gaps of Interac e-transfer while leveraging the success the later has achieved
- However, based on expert feedback, the road to achieving the RTR has been slow, it will have taken 7 years to actualize the vision set out in 2016. Based on sources, there has been pushback and dragging of feet by the banking sector which currently owns Interac e-transfer.

INTEROPERABILITY JOURNEY:

- The Canadian Payments Association (CPA) was established by an Act of Parliament in 1980. It is thought to be the first PSMB (Payment System Management Body).
- In 1984, Canada's major financial institutions created a cooperative venture, Interac Association, to give Canadians broader access to their money through a single shared card payment and ATM network.
- The 1996 review led to expanding membership in Canada Payments Association (CPA) to increase potential for competition, innovation and end-user benefits.
- Ministry of Finance 2010 review was the foundation for critical payment system changes including recommending modernization to facilitate fast payments.
- Aug 2015, CPA embarked on an ambitious modernization program, rebranding to Payments Canada in 2016, and releasing a common vision which identified 8 key need, one of which was: Faster payment options
- Sep 2020, Payments Canada sought feedback on policy proposals for the Real-Time Rail set to launch in 2023.
- Alongside the above developments, Interac e-transfer was launched in 2002 but really picked up more than 10 years later. In 2020 BOC designated it as a prominent payment system bringing it under the banks oversight for the first time. At the time it averaged 55.4 mil transactions per month.



GLOBAL

cv role

Calibrating the role of public sector in IO



Funding & implementation role

In setup and beyond	0: None	1: Participate/ co-fund 2. Incubate c		nly 3: Sole fund		
0: Endorse						
1: Catalyze 1Encouragea	Real-Time Rail (RTR)	 Payments Canada seems to be at the forefront of the implementation. 		At this level, regulator applies moral suasion but takes no direct action		
2: Catalyze 2 -Actively convene & participate		 Bank of Canada has collaborated in studies but has not been heavily involved in establishing the 		Regulator also takes direct steps, such as studies, convening or threats		
3: Mandate		scheme but is involved when there is a deadlock, and observes in the meetings		Mandate could include 1 or more of: Required connection to central switch Required participation in a scheme Method and/or level of interparty fees set		
Oversee	Interac e-Transfer	Minister of Finance has provided various reviews that have guided the industry into action		Typical role may be oversight, but this may not apply to non-prominent non-prominent Retail Payment Systems		



Country Interoperability summary frame

Industry led initiatives (one led by a PSMB the other led by a private company)

A2A or CICO		PUBLIC POLICY ROLE IN INCEPTION				PUBLIC ROLE IN IMPLEMENTATION				
		0. Endorse	1. Catalyze 1	2. Catalyze 2	3. Mandate	None	0. None	1. Co-fund	2. Incubate	3. Fund and own
	0. Uncertain /too early		Real-Time Rail (RTR)				Real-Time Rail (RTR)			
O U T C	1. Below expectations									
O M E	2. In line with expectations									
	3. Above expectations					Interac e-Transfer	Interac e-Transfer			

Interac is by far the most popular online money-transfer service in Canada, with around three-quarters of Canadians using the service every month, according to Interac. In 2020, the network facilitated more than 760 million transactions, amounting to more than 20 transactions for every Canadian. Interac e-transfer network is expected to improve because of RTR, but broader innovation on the RTR platform, outside of the Interac network, is uncertain.



Interac e-Transfer service: Features and Economics

Interac e-Transfer service (proprietary solution)					
Year launched:	2002				
Objective:	To generate revenue				
Speed of posting to accounts:	According to Interac, transfers are almost instant, but can take <30 minutes depending on your bank or credit union. Interac is NOT a payment system but a messaging system and does NOT in itself clear or settle any flow of payments. So while the payments message might be provided instantly, the clearing is not instant.				
Maximum value:	An anticipated upgrade in 2021 will increase transfer limits				
Operating hours:	24/7/365				
Store of value:	Bank accounts and credit union accounts				
Channels:	Online or mobile banking of any participating financial institution				
Usecases:	P2P, P2B, B2B				
Additional features:	Autodeposit (2017) Request to pay (2017), Scheduled payments, Alias addressing: mobile number or email, Bulk payables (2015) and receivables/ Bulk Request Money capability (2020), International remittance through Mastercard® and Western Union® collaboration (2019).				
Consumer fees:	It's free to receive and deposit an Interac e-Transfer. Sending costs between USD 0.5-1.50 at most banks and credit unions, but may be included as part of your monthly banking fee (RBC, CIBC. Nova Scotia, Vancity, SCU, 2021).				



Real-Time Rail (RTR): Features and Economics

Real-Time Rail (RTR) (National payments system)				
Year launched:	Upcoming, 2023			
Objective:	Part of Canada's payments modernization <u>program</u> to raise the country's financial ecosystem to a modern global standard and best meet the needs of Canadians.			
Speed of posting to accounts:	Instant			
Maximum value:	Unknown, but the 2016 vision called for: ISO 20022, Alias addressing- e-mail address, mobile number or even social media handle, API integration, cross-border integration.			
Operating hours:	24/7/365 (<u>Payments Canada 2020</u>)			
Store of value:	Bank account and wallets			
Channels:	Mobile banking app, Internet banking			
Usecases:	P2P, P2B others to be confirmed			
Additional features:	API integration, ISO 20022			
Consumer fees:	Unknown			





Real-Time-Rail (RTR): Stipulated Objectives



STIPULATED OBJECTIVES:

- Bring instant payments under the governance of Payments Canada.
 Interac e-Transfer had recently been designated as a prominent payments system and hence had come under the auspice of Bank of Canada but it still operated outside the realms of Payments Canada unlike other key payment platforms.
- Close a gap on some of the features Interac did not have:
 - Adoption of ISO20022 compared to current proprietary messaging standard to achieve payments data richness
 - Align with PFMI standard for prominent systems: same day settlement rather than the deferred net settlement as volumes and value recorded are significant and growing
 - Achieve higher transaction limits as the current low limits deter business usecases
- Foster innovation by reviewing participation eligibility and pricing with the aim of fostering inclusion with any FSP in Canada that wants to leverage instant payment rails.



"To have a real time data rich affordable infrastructure that is widely accessible as base for innovation" **- Paytech**

"It will be fully interoperable so that any FSP that does not want to or cannot join Interac as a member, can still facilitate the sending or receiving of an instant payment to and from any bank that is an Interac member. The set pricing for use of the system should be fair and based on cost of use since Payments Canada (PC) is not a profit institution" -Payments Canada

"The fact that Interac has a dominant position in Canadian payments space, building a separate system was probably not viable in a small market like Canada. In reality it was about, how can PC could provide governance (to RTR) and enhance functionality that leveraged and enhanced what Interac already provided. Interac is a good product, met certain needs but was not industrial grade, hence roadmap proposal that Canada an RTR. The fact that interac has a dominant position in Canadian market place meant that building a separate system was probably not viable in a small market like Canada. - Payments expert



Real-Time-Rail (RTR): Background



RTR came out of Payments Canada 2016 vision statement as a response to address concerns raised in the Ministry of Finance 2010 payments system but it is yet to be actualized.

- The 2016 Payments Canada vision established 8 priority payment industry needs that needed to be addressed through RTR and other modernization initiatives.
- If RTR is launched in 2023 in accordance with the new timeline, it will have taken over 7 years to actualize the vision set out in 2016 and over 13 years to act on concerns first raised in the Ministry of Finance 2010 review.
- Stakeholders attributed delays to the following reasons among others:
 - The sheer amount of effort that is expected of the financial institutions for modernization generally.
 - Significant payment initiatives going on concurrently Replacement of the high value system, Lynx has been the top
 priority systemic importance, critical for executing monetary policy. The previous system was end of life with RTR
 being the next priority.
 - It took time to figure out the best approach for the solution design. Previously intended to do everything via Interac before realising it would not be the best solution on its own.
 - Competitive landscape is of key importance hence there was need to ensure that shareholders of Interac were not gaining an unfair advantage - spent a lot of time negotiating certain agreements with Interac to make sure that was not going to be the case.
 - When PC governance was changed in 2016 there was a bit of disconnect. Banks started to view PC with distrust and hostility which slowed down progress.

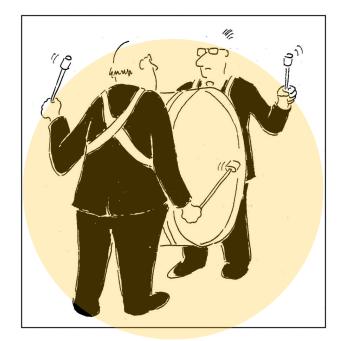


Real-Time-Rail (RTR): Role of Regulator



Various regulatory actors played a critical role in mobilizing industry players to form a PSMB, through research and consultation to create an inclusive environment and institute critical changes for facilitating innovation as the industry evolves

- Canada Payments Association (CPA now known as Payments Canada) was set up in 1980 by an Act
 of Parliament to get everyone together not just banks, but some deposit taking institutions that did not
 have access to the payment system that the banks were operating. CPA had a mandate to:
 "establish and operate a national clearings and settlement system and to plan the evolution of the
 national payments system.
 - The first proposal for an association that included all payment providers in Canada dates back to the 1964 Royal Commission (an official Government inquiry into a matter of national concern) on Banking and Finance, (a.k.a the Porter Commission). As noted by the Bank of Canada, the commission considered it inequitable for the banks alone to run the payment clearing system that other non-bank payment providers had to utilize to serve Canadians.
 - o In 1976, the government put out a White Paper on banking legislation that established many of the key characteristics of the CPA.
 - The CPA Act was proclaimed on 1 December 1980, the federal government established a
 mechanism for addressing the need for equitable competition in the provision of payments
 services in a rapidly changing environment requiring major investments in computers and
 telecommunications devices.
 - The need to move to electronic payments facilitated through computers and telecommunications devices had been highlighted in The Government of Canada's 1975 Blue Book which was jointly presented by the Minister of Finance and the Minister of Communications.
- The 1996 review led to expanding membership in Canada Payments Association (CPA), adding three new classes: life insurance companies, securities dealers, and money market mutual funds under the 2001 regulations of the Canadian Payments Act. The greater breadth held the potential for increased competition, better service to the users of payment services, and enhanced innovation.



From Different Drummers: Banking and Politics in Canada by Robert MacIntosh



Real-Time-Rail (RTR): Role of Regulator



More recent reforms in the industry payment system management body to promote competitiveness and innovation were also driven by payment regulators through research and consultation

- The Minister of Finance announced the **formation of the Task Force for the Payments System Review** in June 2010 to help guide the evolution of the payments system in Canada.
- The task force identified concerns with the regulatory framework, governance and the functionality of the payments system in Canada. As a follow up:
 - The Minister began **a review of payments system raised concerns in 2012** to ensure the continued safety and soundness of the payments system, spur innovation and promote the consideration of users (See more here).
 - The Department of Finance, in collaboration with the Bank of Canada, begun conducting reviews which included consideration of related developments in other countries and consultations with key stakeholders.
 - Some of the reviews also included collaborating with The Canadian Payments Association (CPA) e.g in
 outlining the most critical issues to investigate and to improve the payment system to best meet the needs of
 Canadians (see more here) and examining global payment modernization trends (see more here).



Real-Time-Rail (RTR): Role of Regulator



Regulator created a foundation upon which the industry was to lead the implementation of RTR but actualization has been slow

The Ministry of Finance 2010 review was the foundation for the following critical payment system changes:

- Changes to the Governance structure of the Canadian Payments Association to improve the ability to collaborate among stakeholders, including users and traditional or emerging payment service providers.
- **Enhanced role for Ministry of Finance**. A new accountability framework required CPA to have greater accountability to the Minister of Finance to improve achievement of public policy objectives. In addition to approval or non-approval of CPA's rules and bylaws, MF was granted expanded power to issue a directive in any situation if it is in the public interest and also require an annual CPA five-year corporate plan for review.
- New regulatory framework to provide comprehensive oversight of the payments industry. This led to:
 - The federal government amending the Payment Clearing and Settlement Act (PCSA) in 2014 to give the Bank of Canada the additional responsibility to designate and oversee <u>prominent payment systems</u>. Systems while not systemically important, have the potential to pose payments system risk.
 - Framework for national retail payment systems that called for oversight that is proportional to the risks. The federal government introduced the Retail Payment Activities Act (RPAA) on April 30, 2021 in response to a consultation paper published by the Department of Finance in 2015 and 2017.
- CPA's multi-year payments system infrastructure modernization project started in 2015 to improve functionality to better meet the needs of users and promote efficiencies for all stakeholders. CPA's approach to modernization was centred on research and significant industry consultation. This led to:
 - A shared industry vision in April 2016. The vision statement called for 'instant' and 'always on' experiences and, in many cases, near real-time, data-rich payments. Ability to route payments using readily available information, to receive notifications that describe payment status, and to be able to initiate and receive payments 24/7/365.
 - Research with the Bank of Canada that highlighted a global trend towards faster payments following an examination of modernization initiatives across 27 jurisdictions (June 2016).
 - Establishing real-time capability (i.e., Real-Time Rail, or RTR) was highlighted as one of five Payments Canada's Roadmap Initiatives in 2016. The RTR is now set to launch in 2023 following a couple of delays.

BFAGLOBAL

Interac e-Transfer (proprietary solution)



OBJECTIVE & BACKGROUND:

- Interac e-Transfers, formerly known as CertaPay Email Money Transfers, was developed in 2001 by CertaPay Inc. an Internet-based payment solutions developer formed in 2002. It was shortly sold off to Interac Association.
- The banks
 viewed it as an
 additional
 product line that
 would also drive
 use of online
 banking.
- Interac Association is a cooperative venture originally created by Canada's large banks in 1984 to give Canadians broader access to their money through a single shared network. It started out as an ATM roll out network to make it cost effective to serve a small population across a large footprint. Products: Interac® Debit ABM withdrawals, Chip and PIN, and contactless payments.
- Stakeholders noted that the motive for the association resulted from Canada being a large country with few banks. As a result, interoperability was essential for fewer FSPs. They needed to collaborate with the payments members to offer services that were national in scope as providing national infrastructure individually would be impossible.



"E-mail payments expand what Web banking customers can do online. Right now, consumers can view their accounts, transfer funds between accounts at the same bank and pay bills to businesses. With CertaPay, consumers can send money to and receive money from anyone with an e-mail address. It will be the service that encourages more Canadians to bank online."

(Chuck Hounsell, senior vice president, TD Canada Trust as reported in IE, 2001)



Interac e-Transfer: Role of Regulator



Regulatory intervention resulted in Interac's dominance, but constrained its ability and motivation to innovate...

The competitions regulator intervened to curb dominance:

- By 1996, Interac association had become a dominant payment processor in the market. The competitions bureau stepped in to keep the banks and financial institutions backing Interac from abusing the dominance through The June 1996 Consent Decree which mandated Interac Association to:
 - open up membership on the acquirer side with wider representation being reflected in governance;
 - run on a cost-recovery basis only (utility);
 - focus on the core functions of debit and cash withdrawals business whose products included: Interac® Debit ABM withdrawals, Chip and PIN, and contactless payments;
 - which meant hiving off its development and research arm responsible for introducing Interac e-Transfer®, Interac Debit for online payments, mobile payment solutions and international services. The hived off business became Acxsys Corporation.
 - (See more details)

Consequently, Interac association had enjoyed a monopoly in the debit space since the mid-90s and this was further entrenched in 2010 through additional policy intervention:

- Interac debit card share of POS purchases (in terms of volume) surged upward until the early 2000s. By 1997, the transactions had reached the same level as Mastercard and VISA combined, from two-thirds in 1996. This was fuelled by the increasing supply of Interac Direct Payment terminals in retail establishments (Interac, 1997). As Interac Association was required to run on a cost recovery basis, fees for accepting debit cards are substantially lower for merchants than those of accepting Mastercard and Visa (CBC, 2009).
- However, credit card purchases as a share of POS purchases begun to rise in the early 2000 due to various interventions by Visa and Mastercard to become more competitive. Banks also preferred the interchange earned from facilitating Visa and Mastercard transactions compared to Interac's interchange rate set at zero (OECD, 2006).
- In Aug 2010, Code of Conduct for the Credit and Debit Card Industry in Canada, further entrenched the dominant position of Interac in the domestic debit card market at the POS. The code was effected by the Department of Finance after the competitions Bureau ruled that Mastercard's and Visa's practices to break into the debit space by placing their payment applications onto Interac cards were not open and transparent. Among others, the code stipulated that: "A card may not have applications from more than one network to process each type of domestic transaction, such as point-of-sale, Internet, telephone, etc."



Interac e-Transfer: Role of Regulator



Regulatory intervention resulted in Interac's dominance, but constrained its ability and motivation to innovate

Although policy intervention resulted in Interac having a dominant position in the debit payment space, the imposed cost recovery model meant that Interac could not invest in new services and raise working capital (Verdict, 2010)

- Following two failed attempts to proposition the competitions bureau to overturn the 1996 consent order, the bureau cleared the path for Interac's consolidation in 2013. However, this did not take place until 2018 due to internal stakeholder debate.
- Following the amalgamation of Acxsys and Interac Association to create a single for-profit corporation called **Interac Corp** in Feb 2018, which promised agile governance under a single board, enhanced funding for innovation through slightly increased fees, and a chance to increase competitiveness internationally (The Globe and Mail, 2018).
- Although Acxsys, which ran e-transfers, was actually not under the constraining cost recovery model, Interac implied that the constraints had far reaching impact even on innovation in Acxsys:

"Our company will no longer be constrained by a complex organizational structure, which means we can be more flexible, nimble and timely in how we invest in our products, partnerships and people (Interac, 2018)."

Interac's dominant position may have also made the banks and financial institutions backing Interac less motivated to innovate:

- Some stakeholders noted that although Interac e-transfers existed since the 2000s, there had not been much change in the product for a long time. Most of the change to increase its functionality such as auto-deposit and request to pay came about starting 2017. This may have been a reaction to the announced establishment of RTR to close the gap on some of the features e-transfer lacked and enabling wider participation and competition on the instant payments space.
- It was noted that financial service providers may not have been incentivised to innovate and improve e-transfer as it competed with their more profitable alternatives such as gains from merchant discount rates on cards:

"Interac e-Transfer may not be a big money maker. It is only recently that it has started to improve to cater for business usecases. Big financial service providers have not wanted to innovate as big business clients can send through more expensive alternatives [e.g wire]. - Non-bank player interview"



How Real-Time Rail (RTR) will work: Infrastructure



Infrastructure aims to balance achieving high volumes upon launch, and capacity for other schemes or players to compete with Interac in future.

- RTR has two solution providers which is unique compared to other markets. They include:
 - Interac messaging exchange solution: The message exchange solution provided by Interac
 will allow Payments Canada members participating in the RTR to send and receive RTR payment
 messages. The partnership will leverage Interac's existing infrastructure in Canada's payment
 ecosystem and its existing connectivity to nearly 300 financial institutions.
 - Vocalink clearing and settlement solution for real time payments. To enable the clearing and settlement of funds in real-time, the exchange solution will interface with the clearing and settlement solution being provided by Mastercard's Vocalink. The system will also manage all the associated payments, and be connected to the central bank for reporting and checking/tracking of the payment capacity, manage funding defunding of the settlement account etc.
 - Payments Canada, in 2022, picked **Tata Consultancy Services (TCS)** as the integration lead to take accountability for the overall system integration and management.
- Interac is both a vendor and user of the solution. Interac is responsible for building and hosting the solution, as well as providing their overlay as a service to the market. Interac will control who participates in their own scheme, they can set their own rules as long as they do not conflict with Payment Canada's parameters.
- Other FSPs can join RTR exchange outside of the Interac network. API access will be provided to such, and rules frameworks are being set up to accommodate wider participation.
- **Payments Canada will operate and manage** the system, as per its mandate to manage and operate all national clearing and settlement systems while serving as the scheme manager responsible for setting rules, compliance, dispute process.
- **Payments Canada also owns and operates settlement infrastructure**: Large Value Transfer System (LVTS) which was launched on February 4, 1999.

"Interac has a really successful near realtime market solution that we want to take advantage of.

We want guaranteed volumes from the beginning. All their transactions will migrate on our platform from day 1, we won't struggle from day 1 to achieve or grow volumes like most instant payment systems.

However, Interac also does not have a clearing and settlement solution for real time payments, so after looking at that we went through formal RFP process to have another provider to provide the clearing and settlement part of the system. - Payments Canada interview



How Real-Time Rail (RTR) will work: Business Model



Cost recovery model that does not discriminate based on volumes is expected

 As previously noted, one of the key objectives for RTR is to foster innovation by reviewing participation eligibility and pricing. Various non-banks we spoke to highlighted that the current Interac pricing model disadvantages small players:

- By the time of interview, PC was still working on the pricing model. However, stakeholders (non-banks, scheme manager, regulators) speculated the following pricing model:
 - Participants will only be charged enough to recover the cost of building and running the system as PC is not a for profit institution
 - Cost per transaction will be a firm principle Cost have to be fairly allocated, no volume discounts
 - It will entirely be up to FIs what they charge their customers

 However, a few raised concerns that the use of multiple infrastructure providers may ultimately result in increased costs of instant payments:



"Interac pricing is not public anywhere but the notion is that the bigger you are the cheaper the pricing. If me and large banks are fighting for the same customer, they can give e-transfer for free while smaller players like me pay 56 cents and have to charge a fee to recoup as we do not have other products we can bury the cost in" - non-bank player interview

"Interac volume based pricing translates to 7x difference between lowest and highest" - **non-bank player interview**



"Use of multiple solution providers will likely complicate the project implementation and add extra costs. It is similar to what happened when they appointed SIA as the RTGS (Lynx) application provider, whilst appointing IBM as the system integrator" -

Payments consultant



Real-Time-Rail (RTR): Scheme Oversight



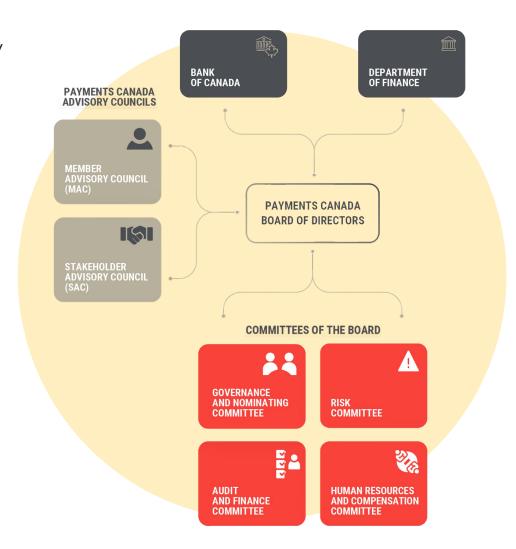
Scheme manager: Payments Canada formerly known as Canadian Payments Association

Established by an Act of Parliament in 1980 as a regulated public-purpose organization, with a mandate to "establish and operate a national clearings and settlement system and to plan the evolution of the national payments system." It was a mechanism for addressing the need for equitable competition in the provision of payments services in a rapidly changing environment requiring major investments.

Overseer/ regulator:

Payments Canada reports to both Bank of Canada and Department of Finance.

- The <u>Payment Clearing and Settlement Act</u> assigns the **Bank of Canada responsibility for overseeing automated clearing and settlement systems** for the purpose of <u>controlling systemic risk or payments system risk</u>.
- The <u>Canadian Payments Act</u> also designates **oversight**responsibilities to the Minister of Finance to improve achievement of
 public policy objectives. Ministry of Finance has the authority to
 review and disallow new or amended payment rules, and issue
 directives to make, amend or repeal by-laws, rules or standards with
 the aim of improving the achievement of public policy objectives.





Real-Time-Rail (RTR): Scheme Governance



Scheme manager: Payments Canada formerly known as Canadian Payments Association

Payments Canada governance framework:

As previously noted, the Ministry of Finance 2010 review triggered the change to a largely independent board of directors from majority financial institution representation to improve the ability to collaborate among stakeholders, including users and traditional or emerging payment service providers. This was effected in 2015 following a review of the Canadian Payments Act which proposed the following governance structures:

- The <u>board</u> comprises 12-elected directors charged with governing and managing the affairs of the organization with a focus on strategic and policy matters. They are made up of a **majority (7) of independent directors**, augmented with (5) member representatives.
- Payments Canada works through the following councils that advise the Board:
 - Member Advisory Council (MAC): <u>A 20-person council representing the diversity of the system members (mandatory/eligible)</u>.
 The Council's mandate, set out in the legislation, is to provide counsel and advice to the Board.
 - Stakeholder Advisory Council (SAC):
 - SAC was established in 1996, and was formalized in the Canadian Payments Act in 2001.
 - The SAC provides advice to the Board of Directors and also identifies issues that might concern payments system users and service providers, and suggests how they could be addressed.
 - It has a maximum of 20 members representing the views of their broad stakeholder base, including consumers, businesses, retailers, and governments, as well as related service providers such as Google, Facebook and Wise.
 - In addition, SAC representatives have the opportunity to serve on other Payments Canada committees.
- Rules all have to be approved by the board following a consultation process. Depending on the significance of the rules, PC can
 consult with the advisory councils groups or more broadly with membership or even publically.



Real-Time-Rail (RTR): Scheme Membership



Payments Canada membership:

Payments Canada is **funded by its membership**. There were approximately 111 participating financial institutions (member) at the end of 2020 **comprised of**:

- Mandatory
 Members (a
 duty required
 by the
 Canadian
 Payments Act
 being: Bank of
 Canada and all
 chartered
 banks
 operating in
 Canada), and
- Non-Mandatory or Eligible Members being: Trust and loan companies, Credit union centrals, Federations of caisses populaires and other deposit-taking institutions, Life insurance companies, and Securities dealers & money.
- Broader membership following updated regulation:
 - Retail Payment Activities Act (RPAA) on April 30, 2021 allows fintechs and other entities that perform electronic payment functions, such as payment processors, digital wallets, etc to directly access the national payment clearing rails. However, only currently eligible members are likely to be included in RTR when it goes live since the Act is yet to be effected through associated regulation by then.
 - The Department of Finance Canada is leading the development of regulations for this supervisory program with support from the Bank to help clarify the details of the legislation. Once the Act comes into force, the Bank will supervise payment service providers.

How Real-Time Rail (RTR) will work: Competition & Innovation





Interac e-transfer network is expected to improve because of RTR, but broader innovation outside of the Interac network is uncertain.

Interac e-transfer:

- By far the most popular online money-transfer service in Canada, with around three-quarters of Canadians using the service every month, according to Interac. In 2020, the network facilitated more than 760 million transactions. amounting to more than 20 transactions for every Canadian. After seeing a jump in online e-Transfer transactions during the pandemic, the Bank of Canada designated the network a prominent payment system last summer, subject to additional government oversight, reflecting its importance to the country's payments landscape.
- Expected to improve because of RTR and the consolidation of Acxsys and Interac association into one entity.

RTR:

- Promises to: (i) Bring instant payments under the governance of Payments Canada. (ii) Closing some functionality gaps present in Interac e-transfer option, and (ii) fostering inclusion to any FSP in Canada that wants to leverage instant payment rails by reviewing participation eligibility and pricing with the aim of promoting innovation.
- However, stakeholders expect RTR to fall short:
 - Providing the envisioned functionalities at launch, coupled with a delayed launch could complicate the fintechs' efforts to leverage the rails to build payment products that rival Interac, curtailing innovation.
 - The delays will give Interac e-transfers more time to undertake upgrades and thus close its own gaps ahead of the RTR launch, and the fact that some important features like 'Request to Pay' and 'Proxy Addressing' might not launch with the first version of the Real-Time Rail will put new entrants to payments outside of the interac e-transfer network at a disadvantage as the value proposition to users will be weaker:



"On paper two options exist but in practice only one exists for the user. In a world where RTR will be a glorified calculator but Interac have all the bells and whistles, the overall benefits won't be so much...Paytechs that do not position themselves as being too independent from their banking partners will benefit to the extent that Interac improves because of RTR." -

PayTechs of Canada

Source: BFA interviews (2021)

How Real-Time Rail (RTR) will work: Competition & Innovation





Interac e-transfer network is expected to improve because of RTR, but broader innovation outside of the Interac network is uncertain.

RTR:

 Interac is a system providing the rails as well as scheme competing on the rails which will make it difficult to gain ground unless the paytechs looking to leverage RTR rails are
(i) aligned to their bank partners or (ii) aim to solve a specific usecase.

For example:

- One of the paytechs is building an experience layer on Interac e-transfer for bill payment through one of the features offered on Interac-etransfer.
- The paytech partnered with a small bank that's part of the Interac e-transfer network. A major bank may not want to cannibalize visa and master interchange.



"Interac is a system and scheme, also competing higher up the stack. It will be a tough road to get competition happening higher up the stack. We remain hopeful that Payments Canada, open banking and regulatory reform will facilitate competition but we have to be realistic about where new player can come in rather than challenging Interac." - Paytech





Why interoperability? Is interoperability necessary for full financial inclusion?



How Canada dealt with financial inclusion: Canada had done well in providing financial access by the time Interac e-Transfer was launched

- A 1998 review of Future of the Canadian Financial Services Sector resulted in provisions requiring access to low-fee account features and access to basic banking services account - based on the fact that economy was becoming more and more digital and without access to a bank account it would become difficult for people to engage in the new economy.
- An Act to establish the Financial Consumer Agency of Canada (FCAC) and to amend certain other Acts relating to financial institutions 2001 <u>followed</u>. FCAC is is responsible for enforcing the above regulations, which attempt to widen access by making the rules for obtaining a basic personal bank account clear and straightforward.
- Banks were given the opportunity to address the issue of the unbanked voluntarily before the introduction of regulations. Eight banks signed a Memorandum of Understanding (76) (MOU76) with the Government pledging to offer low-cost accounts to their customers.
- As a result there are small pockets of people that are underserved and another team works on that. Access to bank account is about 98% - through federal institution or provisional deposit taking institution.
- Around the time Interac e-transfer was launched, only <u>four per cent</u> of adults (18+) in Canada did not have a bank account.





What are the effective policy levers for achieving interoperability success?



The policy makers have historically been very interventionist in the wider payments space, with mixed results:



 From early days, the involvement of the Ministry of Finance, Bank of Canada and federal government through industry reviews when concerns arise, recommendations for solving evident issues, and ultimately amendment of laws geared to providing a favourable environment for Payments Canada, which represents the industry, to action the different recommendations.



Payments Canada was the promotion of competition in the payments space and to establish payments system that evolve over time to stay up to date and meet the needs of Canadians. There have been various ratifications to make Payments Canada more inclusive over time but the Banking sector still emerges dominant.



has instituted various mandates to curb dominance and abuse by the banking sector by splitting Interac
Association into two and requiring that operation be on a cost recovery basis.

Results: The efforts resulted in further establishing the dominance of Interac association card payments, an association that is majorly owned by Canada's banks in a market that could have been dominated by foreign card networks like Visa and Mastercard. Although this may come across as a positive factor where 'sovereignty' is concerned, it is argued that the mandates resulted in reduced innovation in payments.



What are the effective policy levers for achieving interoperability success?



The policy makers have played no role to a lightly interventionist role in the establishment of interoperable instant payment schemes resulting in slow progress and compromised outcomes.

The policy makers have had no involvement in establishment of Interac e-transfer:

- Interac e-transfer has been remarkably successful with no involvement from the regulator. In fact, it was only recently that Interac e-Transfer ® came under BOC's oversights following its designation as a prominent payment system in 2020 under the Payment Clearing and Settlement Act. By then it had facilitated over 486 million transactions, totalling \$169 billion in the 2019 fiscal year.
- Result: Although Interac e-transfer is effective in reach and use, it had some notable gaps that RTR is meant to resolve, particularly fostering broader inclusion of a broader set of payment providers to achieve higher levels of competition and innovation than currently experienced.

In the establishment of RTR, the policy makers have played a lightly interventionist role by employing moral suasion and creating a supportive regulatory environment to foster the attainment of public interest objectives as industry leads implementation:

- When it come to implementation of RTR, the regulators have had the following contribution:
 - The modernization of recommendations that resulted in RTR being highlighted as one of the five Payments Canada's Roadmap Initiatives in 2016. This emerged from recommendations that followed the Ministry of Finance review which aimed at guiding the evolution of the payments system in Canada.
 - The Bank of Canada and the Department of Finance participate in working groups as observers. PC also provides them an update each week on what is happening in the programme.
 - To enable broader access into RTR by a wide variety of payment providers in future, the federal government introduced the Retail Payment Activities Act (RPAA).
 - The PC has on a few occasions leveraged the regulator to resolve deadlocks which they do through moral suasion (unusual for them to mandate).

Result: Progress towards achieving RTR has been slow. If launched in 2023 as envisioned, it will have taken over 7 years to actualize the vision set out in 2016 and over 13 years to act on concerns first raised in the Ministry of Finance 2010 review. Furthermore, there are concerns that even when RTR is launched other providers will still not be at a level playing field to compete with Interac e-transfer and those that innovate will still be reliant on banks to do so. This is attributed to the delays which will have given Interac e-transfer enough time to build out its value proposition, and dropping of critical RTR features that were to be present at launch.



When should the foundation/ policy makers advocate for interoperability - from the beginning or let it evolve over time?



Canada's policy makers have advocated for interoperability from early days yet outcomes are still wanting, suggesting that the type of levers employed are critical to success

- In some sense the regulatory environment and emergence of a national instant payment solution driven by Canadian FSPs paints success. However, one of the challenges to achieving greater innovation and inclusive participation, could be that the interoperability agenda is highly driven by the industry and primarily traditional players.
 - Entrenched traditional players may lack the agility that Fintech players have when it comes to innovation, and they may also have conflicting
 agendas that may slow down industry progress such as being responsible for business lines that compete with Interac e-transfers and
 facilitating card payments under international networks that yield a higher return.
- Progress has been made to include a wider set of players and enable them to leverage the national rails but such **efforts are unlikely to yield the desired success speedily**. For instance although the governance of PC changed to include independent directors and wider set of stakeholders in the decision making structures:
 - Banks still have to be satisfied despite being the minority as five or six of them represent 80% of the market base. As a result, the voices of small players may get heard but not get translated into decisions
 - Retail Payment Activities Act (RPAA) on April 30, 2021 allows paytechs etc to directly access the national payment clearing rails. However, only currently eligible members are likely to be included in RTR when it goes live since the Act is yet to be effected through associated regulation by then.
- Canada's policy makers have over time provided guidance and a conducive regulatory environment to push the market towards inclusive participation and innovation. However, there has been little evidence of heavier involvement by the regulator in the form of providing carrots and sticks, facilitation of discussions, or active participation in discussion to ensure the industry moves speedily to achieve the set public policy objectives. This is particularly so in the instant payment space where the policy makers have played a limited role for a long time and only recently begun to provide oversight for Interac e-transfer and intervene in deadlocks experienced in the implementation of RTR.
- Perhaps, greater involvement may have been more successful, although it important to note that **mandates employed in the cards space yielded mixed results hence involvement that is too prescriptive should not be the target**.



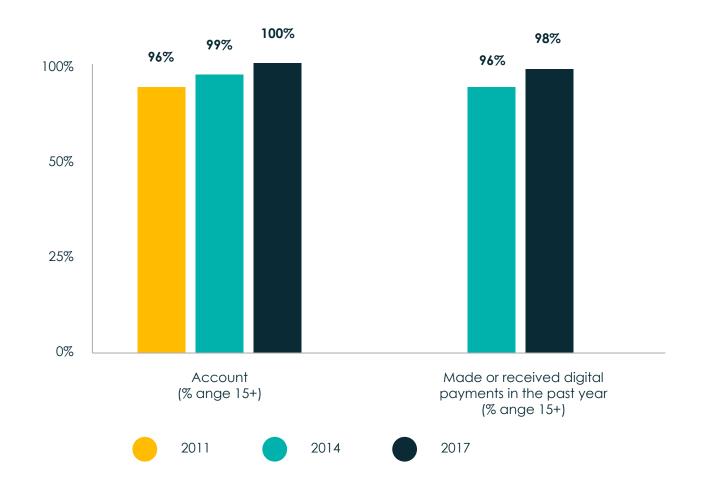
"One of the big challenges in Canada, causing major delays, is the desire of regulators (Dept of Finance, Bank of Canada), supported by Payments Canada wishing to modernise the NPS, while very powerful banks used their influence to delay and/or steer solutions which served their own commercial and control interests - without sufficient intervention by the regulators to limit those tactics to achieve outcomes that are more in the broader national interest." - Payments expert



Country context







Source: FINDEX 2017



Industry led initiative that has taken time be actualized



Dec 1980: The Canadian Payments
Association was established by an Act
of Parliament. It is though to be the first
PSMB. Its uniqueness lies in the fact
that this mandate has been entrusted,
not to a central government authority
or crown corporation, nor to a
regulated monopoly or oligopoly such
association of all types of interested
financial institutions.

Sep 2015: Research from the CPA and the Bank of Canada outlines the most critical issues the industry must investigate to improve the payment system to best meet the needs of Canadians.

June 2016: Canadian Payments Association becomes Payments Canada. A new name and visual

A new name and visual identity signals change for a modernizing organization and industry. Payments Canada & Bank of Canada research highlighting global trend towards faster payments across 27 modern payment systems was also published.

Canada selects
Mastercard's Vocalink
as the clearing and
settlement solution
provider for Canada's

Nov 2020: Payments

provider for Canada's new real-time payments system, the Real-Time Rail

2021: Payments Canada will launch a new high-value payment system, Lynx, in 2021, then a real-time payment system, the Real-Time Rail (RTR), in 2023.

Aug 2015 Canada Payments Association (CPA) embarked on an ambitious program to modernize Canada's payments systems to raise the country's financial ecosystem to a modern global standard.

Apr 2016: CPA uncovered a common vision for the Canadian Payments Ecosystem identifying 8 key needs being: Faster payment options,

Data-rich payments - ISO 20022, Easier payments - alias addressing, An adaptable platform for innovation, Cross-border convenience, Transaction transparency, Activity-based oversight and Open, risk-based access.

Dec 2020: Payments
Canada publishes
Modernization Delivery
Roadmap 2020.
Implementation to begin in
2021.

Sep 2020: Payments
Canada seeks feedback
on policy proposals for
Canada's Real-Time Rail.

2021: Payments Canada will launch a new high-value payment system, Lynx, in 2021, then a real-time payment system, the Real-Time Rail (RTR), in 2023.



A2A country timeline

Proprietary instant payments solution that has dramatically scaled

1984: Interac Association - A cooperative venture originally created by Canada's major financial institutions in 1984 to give Canadians broader access to their money through a single shared network. Products: Interac® Debit ABM withdrawals, Chip and PIN, and contactless payments.

Jan 2018: Interac Corp.
empowers Canadians to
transact digitally. With nearly
300 financial institutions
connected to our network,
Canadians choose Interac
products an average of 18
million times a day to pay and
exchange money. Apart from
Interac e-transfer, Interac also
offers Interac Debit card.

2018: The reorganization of Interac
Association and Acxsys Corporation into
Interac Corp. was completed in 2018,
bringing all Interac-branded products and
services together under one company. As a
single corporate entity, Interac Corp. is
better able to fund innovation, while at the
same time reducing certain business,
operating and legal complexities.
Historically, there had been two providers of
different Interac-branded products and
services.

Mar 2021: Payments Canada selects **Interac Corp.** as the exchange solution provider for Canada's RTR. This announcement follows a **selection** process that included participation from the Bank of Canada. The exchange solution provided by Interac will allow Payments Canada members participating in the RTR to send and receive RTR payment messages. The partnership will leverage Interac's existing infrastructure in Canada's payment ecosystem and its existing connectivity to nearly 300 financial institutions enabling it to support the rapid adoption of real-time payments in Canada.

1996 a consent order (for competitors to collaborate) issued by the Competition Bureau required that the eight financial institutions who architected the Interac association create Acxsys Corporation as a siloed entity to develop new business partnerships and services, while it focused on core functions of debit and cash withdrawals which it had to charge on a cost recovery basis. The two entities were to operate as separate islands with separate boards and fiscal years, unable to share capital.

2002: Acxsys Corp. the product development and research arm expanded its business to offer Interac e-Transfer®, Interac Debit for online payments, mobile payment solutions and international services.

October, 2021, Interac announced a strategic transaction to acquire the exclusive rights to SecureKey Technologies Inc. digital ID services for Canada. SecureKey is a leading digital ID and authentication provider that works with governments, financial institutions, and businesses to simplify consumer access to online services and applications.

Aug 2020: BOC designated Interac e-Transfer ® as a prominent payment system under the Payment Clearing and Settlement Act. This brought Bank oversight to this payment system, meaning it must adhere to the Bank's risk management standards, including having risk controls in place to ensure continued resilience. In the 2019 fiscal year, the Interac system facilitated over 486 million transactions, totalling \$169 billion.



Scheme: Outcomes

Real-Time Payments Volume and Its Share in Overall Non-Paper Based Transactions, 2015-25f











Share of Volumes by Payments Instrument



Source: ACI, 2021

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Name	Position	Organisation				
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Confidential	Director of Reserves Management	Department of Finance Canada				
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Participants						
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Payment experts	Payment experts					
Dr Brad Pragnell	Financial Services Expert	Independent				
Other Ecosystem Players						
Justin Ferrabee	Independent Director Former Chief Operating Officer	PayTechs of Canada, Payments Canada (Previous, org)				