

DELIVERING PAYMENTS MODERNIZATION.

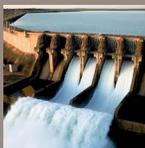


TOGETHER.

**WE WILL MAKE THE
CANADIAN ECONOMY
STRONGER IF WE
ALWAYS STRIVE TO
LEAD THE WORLD IN
WHAT WE DO.**

TABLE OF CONTENTS

Our Stories in 2019



Hydro-Québec powers forth on its payments modernization journey



Turning words into action on the journey to data-rich payments

About this Report

Message from Payments Canada Board of Directors Chair, Eileen Mercier

Message from Payments Canada President & CEO, Gerry Gaetz

Report from the Chair of the Member Advisory Council

Report from the Chair of the Stakeholder Advisory Council

Top Achievements for 2019

Who We Are

Our Mandate

Governance

Payments Canada Board of Directors

Executive Leadership Team

Member Advisory Council

Stakeholder Advisory Council

Management Discussion & Analysis

Modernize

Operate & Enhance

Clearing & Settlement System Statistics

Facilitate

Our People

Risk Management: Program & Governance

2019 Performance at a Glance

2020 Corporate Plan

Summary of Financial Operations

Financial Statements & Auditors Report



A review into the merits of open banking



Younger generations: a driving force in changing payments



New research shows curiosity about and investment potential in Bitcoin



A call for a global standard and certification for payment skills



The future is bright for mobile payments



Canadians rapidly adopting new payments channels



ABOUT THIS REPORT

Payments Canada's annual report, our public accountability publication, presents our financial and non-financial performance during the year. We believe this report provides a view into who we are, how we work and our unique role in Canada's economy, as it reflects upon our strategy, culture and business. Payments Canada also publishes a five-year corporate strategy and numerous research documents.

Payments Canada ensures that financial transactions in Canada are carried out safely and securely each day. We underpin the Canadian financial system and economy by owning and operating Canada's payment clearing and settlement infrastructure, including associated systems, bylaws, rules and standards.

We hope you learn more about our organization and our successes and challenges in 2019. Explore payments.ca to understand our ongoing work and follow us on [LinkedIn](#), [Twitter](#) and [Facebook](#). We invite you to subscribe to our stakeholder newsletter, [The Exchange](#), to keep up to date with Payments Canada's news, and also to [In Payments Today](#), a daily compilation of global payments news delivered to your inbox.



Eileen Mercier
Payments Canada Chair, Board of Directors

MESSAGE FROM PAYMENTS CANADA BOARD OF DIRECTORS CHAIR, EILEEN MERCIER

Collaboration was the clear theme of 2019 as Payments Canada continued to prepare for and implement new payments systems. Our members and other stakeholders demonstrated their commitment to the Modernization program, engaging enthusiastically and responding quickly to challenges as they arose.

Our progress with Modernization was made more urgent by the rapid evolution of payments around the world, with open banking becoming a new reality in Australia and the Federal Reserve announcing plans for a real-time payment and settlement service to support faster payments in the U.S. Data and privacy regulation got a boost in the European Union with the introduction of the General Data Protection Regulation (GDPR), and card networks moved into real-time payments through acquisition and partnership, among other developments.

The Society for Worldwide Interbank Financial Telecommunication (SWIFT) introduced a new level of uniformity to international payments when it released its first set of guidelines for financial institutions using the ISO 20022 payments messaging standard, requiring that all financial institutions be in a position to receive and process ISO payments using the ISO 20022 messaging standard by November 2021. The guidelines make it easier to ensure interoperability with domestic high-value payment processing when conducting cross-border transactions. Payments Canada responded to this announcement by accelerating the introduction of ISO 20022 in Lynx, our soon-to-be, new high-value system, which will allow Canadian financial institutions to meet SWIFT requirements. SWIFT also announced the rollout of a new API standard for the preauthorization of funds, paving the way for fundamental change in open banking-enabled financial services.

**MESSAGE FROM PAYMENTS
CANADA BOARD OF DIRECTORS
CHAIR, EILEEN MERCIER**

Canadian regulators showed their responsiveness to change in the drafting of a new Retail Payment Oversight Framework to regulate payments service providers in Canada. We expect this to be introduced into legislation as a part of the budget in Spring 2020. The Department of Finance's Advisory Committee on Open Banking also undertook extensive consultations with a view to furthering progress in this area in 2020.

We continued to reinforce our message of alignment between open banking, the Modernization initiative and the regulatory reforms being pursued in the retail payments services space. It is vital that Canada's payments systems and supporting regulations keep pace with the rapid technological innovation occurring in payments globally if we are to maintain and enhance Canada's competitiveness.

The Payments Canada board is fully engaged in driving this message home. In 2019 we welcomed **two new directors**: Kevin Patterson, Senior Executive Vice-President and Group Head, Technology and Operations, at CIBC and John Landry, Head of Citibank's Treasury and Trade Solutions (TTS) business in Canada. David Barnard and Susan Doniz were reappointed as independent directors.

The board undertook the critical project of recruiting a **new President and CEO** this year, settling on a choice that will ensure continuity of leadership at this pivotal time. Tracey Black, head of the Modernization program, will take the helm at Payments Canada in March 2020. She is a leader with a reputation for collaboration and with a deep understanding of the rapidly changing payments space, our organization and its role within it. I have full confidence that Tracey will take Payments Canada to the next level and the board looks forward to working with her and her management team.

I want to thank the members of Payments Canada's Member Advisory Council (MAC) and Stakeholder Advisory Council (SAC) for their support, continued guidance and the vital contributions they make to the organization's work. I want to also thank the board, including Dan Dickinson and Ernie Johannson both of whom left the board in 2019, in addition to our management team and the staff at Payments Canada for their hard work and dedication. Next year will present even more change, a challenge for which I believe we are well prepared as we enter this new decade.

On behalf of the board, I want to thank CEO Gerry Gaetz for his seven years of leadership during a time of complete transformation of the organization. He led Payments Canada through a major shift in governance and kick-started the Modernization initiative by building a team with the capability and strength to execute on our Vision. He has been instrumental in creating a culture of innovation that supports our goal of making the Canadian economy stronger by striving to lead the world in what we do. Gerry, we wish you all the best with your next chapter.

MESSAGE FROM PAYMENTS CANADA PRESIDENT & CEO, GERRY GAETZ

The rapid change witnessed in the payments landscape in 2019 shows no sign of slowing down in the decade to come. Payments Canada will remain a critical part of ensuring that the evolution of the payments industry continues.

Our work and accomplishments in 2019 served to reinforce the role we play as we reached the third stage of the four-stage Modernization program, an initiative that began in 2015. While there will always be challenges with complex undertakings that involve our members, stakeholder partners, regulators and technology vendors, we have made remarkable progress. With their strong collaboration and active participation, our vision is being realized.

Throughout the year, we continued our work with the Department of Finance to prioritize regulatory changes and alignment with Payments Canada's Modernization initiative, including to the Retail Payments Oversight Framework, changes to the Canadian Payments Act and the Department of Finance's consultation regarding open banking. We have highlighted the fact that the changes and alignments we have proposed will increase market competition and spur innovation as well as increase protection of Canada's systemically important payments infrastructure.

The payments marketplace was active, as we ushered in the launch of the [Paytech Association](#) and [20022 Labs](#). Our partnership with IBM and SIA came together to advance the schedule for Lynx. In addition, we accelerated the launch of Lynx, following the announcement of SWIFT's November 2021 deadline to receive and process ISO payments using the ISO 20022 messaging standard. This announcement created the opportunity for us, as an industry, to review the implementation plan for Lynx. As a result, we are able to turn on ISO capability two years earlier than anticipated.

We witnessed the highly successful outcome of the third automated funds transfer (AFT) exchange introduced a year earlier, and progressed our work with Interac on the Real-Time Rail (RTR).



Gerry Gaetz
Payments Canada President and CEO

**MESSAGE FROM PAYMENTS
CANADA PRESIDENT AND CEO,
GERRY GAETZ**

We maintained high standards for availability of our core payment systems and began an upgrade of the Automated Clearing Settlement System (ACSS). We strengthened our risk, finance and HR functions and launched new offerings, the most notable of which include an application programming interface ([API developer portal](#)) for faster, easier access to the data and functionality of our services; and an optional online [Payments File Validation Service \(PFVS\)](#) for our members that supports industry-wide migration to the global ISO 20022 payment messaging standard.

Enterprise risk management continued to be a focus this year, including planning for the changes that come with payments Modernization. An independent assessment of our capabilities was undertaken, as well as a roadmap to completion.

We made significant strides internationally, including the development of a much-needed International Education Certification program for payments professionals together with our partners: Nacha, the Payments Association of South Africa, the Australian Payments Network, and the Dutch Payment Association. More will be announced at the next Payments Canada SUMMIT, an event that builds on a very successful 2019 with record attendance, reinforcing the SUMMIT as Canada's premier payments conference.

Our significant successes in 2019 were accomplished with the invaluable strategic oversight and guidance of our board of directors and the outstanding collaboration of our members, working groups, advisory councils, stakeholders, regulators and international partners. Thank you for your dedication and commitment to the work of Payments Canada and our collective payments ecosystem.

Most importantly, I want to thank the Payments Canada team. Your tenacity, skill and enthusiasm are always evident as you participate in this transformative time in the payments landscape.

As I round out my journey at Payments Canada, I am proud of the organization we have become. We have reformed our governance structure, are leading a massive Modernization initiative and have transformed an organization, giving it the culture, structure and capability required to finish the journey and look to the future.

There is much for the ecosystem to look forward to as our new leadership takes Payments Canada to the next level. I will be watching closely - and celebrating your success.

REPORT FROM THE CHAIR OF THE MEMBER ADVISORY COUNCIL

The Member Advisory Council (MAC) is a 20-person council codified in the Canadian Payments Act. MAC serves as a consultative and engagement forum for system participants who are also members of Payments Canada.

The members are highly engaged and represent significant commitments from their respective organizations to support the modernization agenda through extensive resourcing and thought leadership.



Christine Hunter
Member Advisory Council Chair

This is an unprecedented time of change and a notably exciting era for payments professionals across the ecosystem and around the globe; Canada is well-positioned, has a lot to be proud of and must remain globally competitive. Payments Canada's Modernization roadmap is complementary to and represents a portion of members' focus on payments innovation while ensuring trust and efficiency for Canadians. Thoughtful coordination to enable benefits for consumers and businesses, sound risk management and regulatory compliance have been top-of-mind in MAC forum discussions. Significant positive momentum was achieved in 2019, resulting in greater clarity and confidence in the path ahead.

Members continue to recognize the impactful and sometimes challenging role Payments Canada plays in ensuring multiple stakeholders' needs are met. These stakeholders include regulators; small, large and global financial institutions; vendors and suppliers; payments networks; and end-users from consumers to large corporates. Given the need to stage the Modernization journey to drive focus and mitigate risk, key priorities of Lynx and RTR clearly remained while pulling forward ISO 20022 migration plans. Lynx will modernize our high-value clearing and settlement system (LVTS) with a new risk model consistent with PFMI standards which are critically important to maintaining safety and soundness for the Canadian economy; in addition, Lynx will support MT – MX translation in support of the global roll-out of ISO 20022. The development of a Real-Time Rail for Canada is a priority to drive innovation and ISO 20022 adoption domestically.

Over the past year, MAC has played a critical role in supporting a new Modernization program governance model to drive progress and transparency while regaining some focus on near-term opportunities and risk mitigation. Collaboration between members and stakeholders with regulators increased this year to improve on communications, ensure a common understanding of opportunities and potential issues and ultimately to drive to solutions supported by all parties. This collaboration led to a robust roadmap for the Lynx deployment in 2021 in line with global developments. Following

a stability period for Lynx, Canada's RTR enabling ISO 20022, account-based commercial single credit transfer payments will be enabled. The Lynx plan is being finalized and appropriately balances domestic and international needs, leading to a more ambitious schedule than originally anticipated. Contingencies and testing strategies are under development and will be critical to the roll-out of Lynx.

The member community has appreciated the efforts around a forward-looking program health check to ensure that we are jointly setup to crystalize and deliver on the vision for Canada. While members have contributed to early value in 2018/2019, with AFT third exchange for Western Canada and ACSS collateral and reporting changes, much of the program execution lies ahead and carries substantial risk to members and the Canadian economy that must be mitigated. We are pleased to contribute to a maturing, integrated risk culture and look forward to further alignment on risk identification and mitigation plans. In the year ahead, members are keen to engage in extensive policy, rules and technology coordination like never seen before within the scope of Payments Canada's modernization and beyond, especially as it pertains to the RTR.

In closing, as we continue to support Payments Canada in its initiatives to underpin the Canadian financial system and economy, we look forward to another year of providing counsel and advice while executing on our commitments to make Canada stronger.

REPORT FROM THE CHAIR OF THE STAKEHOLDER ADVISORY COUNCIL

Looking back, 2019 proved to be significantly transitional in terms of payments modernization, Stakeholder Advisory Council (SAC) and Payments Canada.



David Chance
Stakeholder Advisory Council Chair

The pivot of the Real-Time Rail (RTR), with the suspension of the definition work to allow time for the reevaluation of the goals for instant payments and the cadence for when they would be delivered, marked the beginning of the year. The pivot created the need for smaller, task-led teams to work together to drive the requirements process, leading to better cooperation between SAC, MAC and Payments Canada. Work on Lynx continued and the capacity of the Lynx team and MAC included the global adoption of a new messaging standard part way through the implementation and within the original rollout schedule. Finally, the year ended with a new chair of SAC and the announcement of a new President and CEO of Payments Canada in 2020.

Throughout 2019, SAC continued to support Payments Canada's modernization process, advocating for and actively supporting modernization initiatives to provide Canada's payment users and wider market with a competitive, innovative, cohesive and safer payments ecosystem.

SAC is still concerned at the lack of progress to date in Modernization in general, as Canada continues to fall further behind other countries. In particular,

SAC's concerns relate to the adoption of enriched and extended data (through the adoption of the international ISO 20022 data sets), especially in the batch AFT solution, considering that it is paramount, as highlighted by the majority stakeholders, and clearly identified in the corporate interview activity completed in the first half of 2019.

While SAC welcomed the pivot taken for the provision of instant payments for Canada – RTR – SAC continues to have concerns around the dates for implementation of the RTR; the proposed operational and solution proposition; the potential to create a truly competitive environment; and the lack of clarity around the scope and availability of the new clearing and settlement capability required to support risk-free instant payments.

SAC has welcomed the closer working relationships with Payments Canada and MAC, especially around its inclusion in the following:

- rules frameworks,
- Industry Steering Committee (ISC),
- RTR working groups, and
- request for payment working group.

SAC has also been an active participant in core policy initiatives, particularly Rule E5, and while the majority of SAC support these changes, there is still concern from those members representing consumer groups about the potential for fraudulent activity.

While a closer working relationship within the Payments Canada framework is beneficial, SAC would like to stress the importance of the Department of Finance, the Bank of Canada

and government users not only supporting, but also being seen as influencers of, payments modernization. As such, SAC would like to extend its relationships with these parties in the coming year.

For 2020, SAC will continue to advocate for the needs of payments users in Canada, specifically in areas such as access to the payments systems (including non-banks) in ways that do not adversely add risk to the ecosystem; enriched and enhanced data streams between users; focused conversation and contextual interaction flows, such as request for payment; and overlay services that allow payments systems to be used in innovative ways. SAC will continue to provide counsel, advice and direction for the public policy elements of the rollout of payments modernization.

SAC will continue to act as the voice of the stakeholders, acting as the representatives of all of Canada's payments users, whether traditionally banked users or those currently excluded from electronically-based payments, thus ensuring innovation and competition is placed at the heart of discussions.

As we reflect on the previous decade, I would like to thank both Brent and Gerry for bringing clarity and focus to the modernization of payments in Canada and for the great strides they have made in the path towards modernization. It is up to Tracey, Christine and me, and the teams that we represent, to continue driving the modernization of Canada's payments systems, and setting ambitious goals to ensure that Canada has a world leading payments environment that includes all, provides competition and fosters innovation.

TOP ACHIEVEMENTS FOR 2019

IN 2019, PAYMENTS CANADA CLEARED AND SETTLED MORE THAN 8.3 BILLION TRANSACTIONS, TOTTALLING \$55 TRILLION, OR \$218 BILLION EACH BUSINESS DAY

DELIVERED on Modernization progress, specifically surrounding [Lynx](#), where we advanced timelines to leverage the Swift ISO 20022 deadline and solidified [strong industry partnerships](#), along with progress on Real-Time Rail with our members and partners.

FACILITATED an enhanced and more collaborative member and stakeholder engagement experience through a number of efforts including strong alignment across the industry. We grew the [SUMMIT](#), our annual payments conference, embarked on new initiatives, such as [20022 Labs](#), and strengthened partnerships/partners, including a [new chair to the Stakeholder Advisory Council](#).

DELIVERED on core business and made great progress across our service offerings, from initiatives to support [ISO 20022](#) to [API development](#) to addressing the rising [payments knowledge gap](#) through international collaborative efforts. We also welcomed new leaders - from [finance](#) to [research](#) - as we improved our internal services.

SYSTEMS AVAILABILITY RATE



ACSS Availability Rate



LVTS Availability Rate



CSN Availability Rate

OUR STORIES IN 2019

Hydro-Québec is market leading when it comes to payments modernization. Payments Canada caught up with Michel Lechasseur, Cash and Financial Services Manager to talk about preparing to take advantage of modern payments, and how they see ISO 20022 - a global messaging standard that allows more data to travel with electronic payments - playing a critical role in the journey.

HYDRO-QUEBEC POWERS FORTH ON ITS PAYMENTS MODERNIZATION JOURNEY

Hydro-Québec is upgrading its own systems in preparation for payments Modernization. Can you tell me more about that?

We started preparing for payments Modernization by getting a clear understanding of our processes and identifying where improvements could be made. We then created a dedicated project team to focus on the identified improvement opportunities. To kick things off, we became a corporate user of SWIFT messaging to improve upon the efficiency of our treasury operations, supporting our overall approach to modern payments.

Outside of these activities we also consulted with internal and external advisors on how to adapt our technology for higher efficiency. We continue to rely on Payments Canada as a significant source of information to help shape our vision for the future.

That requires an investment of course. How did you present the importance of these improvements to your Chief Financial Officer?

Our goal is to move away from costly manual processes, towards more electronic payments. When we analyzed our payments a few years ago, we estimated that 40 per cent of our payments at the time were made electronically, and 60 per cent were a mix of manual processes and banking platforms. We're now in the process of quickly moving towards our target goal of 90 per cent electronic payments.

Modernization will be cost effective long term, which was an important aspect to present to our Chief Financial Officer, while keeping ISO 20022 at the centre of our reflection. We showcased to our Chief Financial Officer the need to adapt our processes in order to be compatible with new standards.

Published: January 28, 2019

WHO WE ARE

The Canadian economy depends on the exchange of billions of dollars each day. Payments Canada is responsible for the clearing and settlement infrastructure, processes and rules vital to those transactions.

We are responsible for supporting a vibrant economy by helping to meet the payment needs of consumers and businesses and by empowering a new era of modern payments. We provide Canada's national payments systems. Our Large Value Transfer System (LVTS) enables financial institutions and their customers to send large payments securely, and our Automated Clearing Settlement System (ACSS) is where the vast majority of day-to-day Canadian commerce is cleared by financial institution participants.

OUR CORE PURPOSE, VISION & VALUES

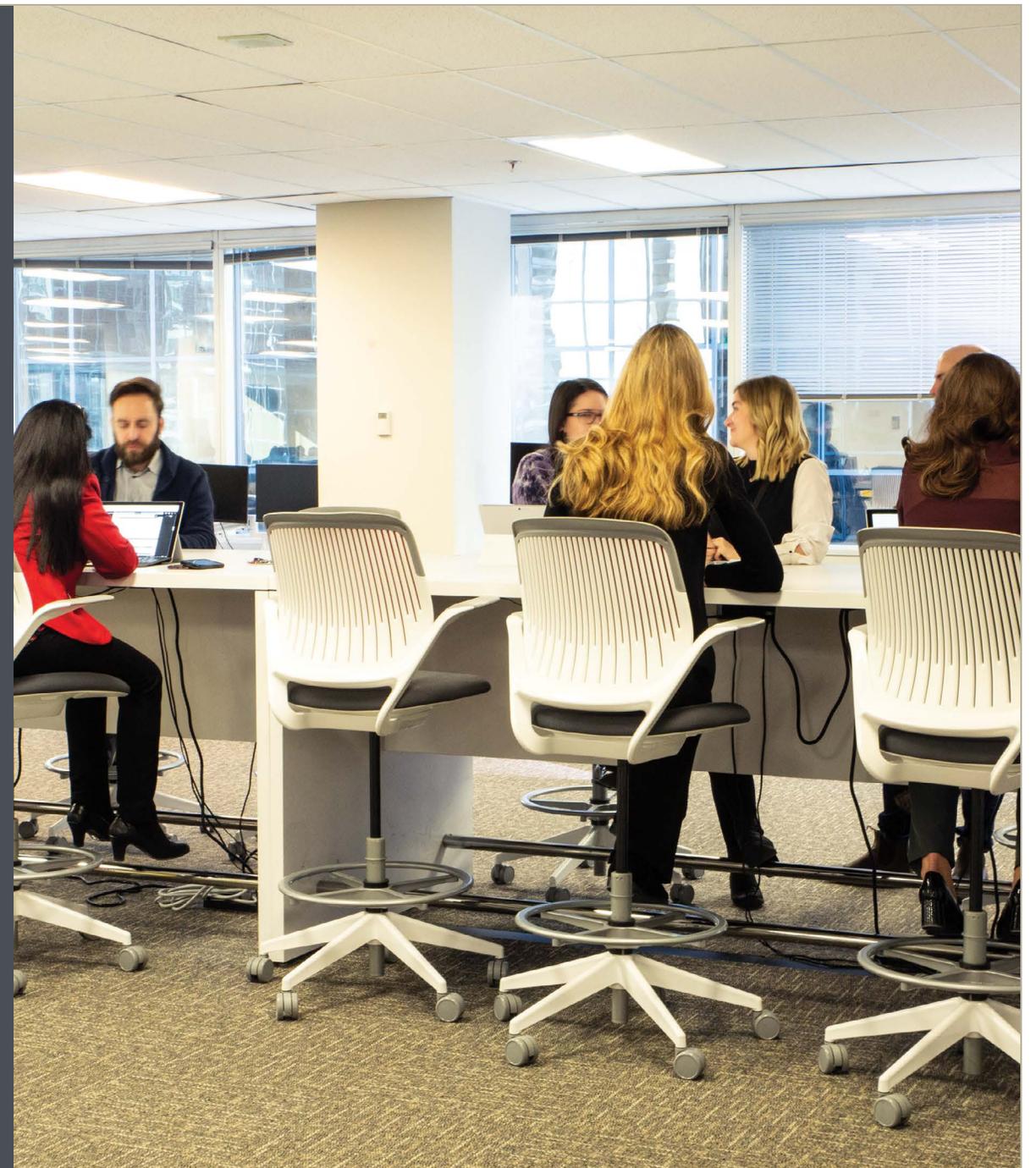
Payments Canada's core purpose, vision and values guide the investments and priorities of the organization in this plan.

CORE PURPOSE

We underpin the Canadian financial system and economy by providing safe, efficient and effective clearing and settlement of payments.

VISION

We will make the Canadian economy stronger if we always strive to lead the world in what we do.



OUR VALUES

THINK BIG & ACT RESPONSIBLY

Thinking big means seeing things differently, applying our creativity to challenges and questioning assumptions before solving problems.

As a public-purpose organization, we act responsibly in the best interests of all Canadians while also serving our participants and stakeholders.

BE AMBITIOUS & RAISE THE TEAM

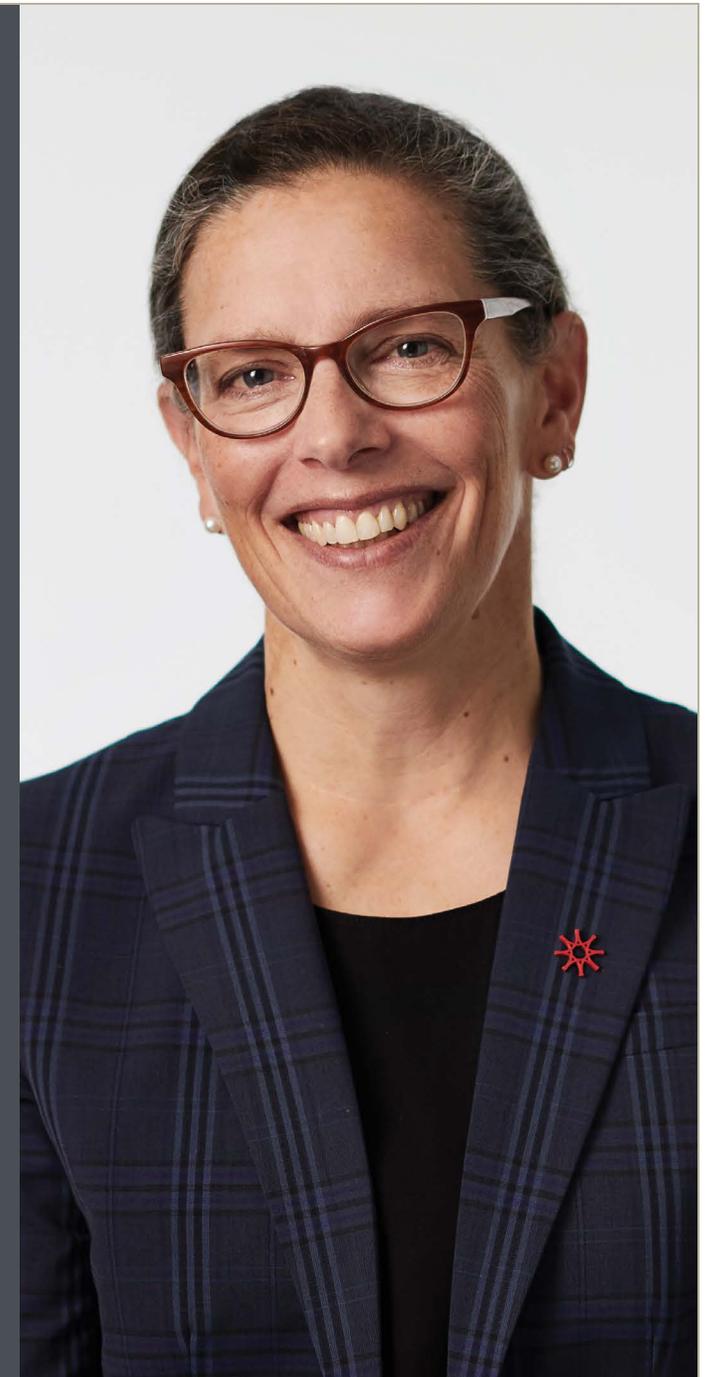
It's important to push ourselves to take on challenges and achieve, to constantly learn and grow, to target greatness and work hard to get there.

Ambition is most powerful when it makes everyone around us better. We are a team of teams. We love what we do and are at our best when we're having fun.

KEEP MOMENTUM & BE RIGOROUS

Decisions need to be rooted in diligence, but must also be made. We must show persistent and prudent progress and deliver on what we say.

We will make smart choices through research, individual learning, keen focus and a passion for performance.



OUR STORIES IN 2019

ISO 2022 - the global messaging standard that allows rich data to travel with electronic payments - plays a foundational role in Canada's payments Modernization initiative as well as similar initiatives around the world. Central to unlocking the potential of this standard is wide market adoption - it's the network effect.

TURNING WORDS INTO ACTION ON THE JOURNEY TO DATA-RICH PAYMENTS

Mike Sigal is passionate about this subject. A partner at [500 Startups Fintech Fund](#), Co-Founder of [Upside Partners](#) and the creator of [SWIFT's Innotribe Challenge](#), Mike's latest venture, 2022 Labs, is all about bringing together a global community of financial institutions, corporations, vendors, investors and fintechs to demonstrate, experiment and validate the benefits of ISO 2022 adoption. We had the chance to chat with him about this exciting project.

2022 Labs sounds like an experiment in action. What is it and why is it important?

While many organizations around the world have shown support for ISO 2022, meaningful adoption still needs to happen. To foster and accelerate adoption, we need to move from talking about 'what is ISO 2022' to answering key questions that influence adoption like 'what can ISO 2022 do for my business,' 'how and when will I see financial returns' and 'where do I find the qualified resources that will reduce the risk on my investments.'

Published: March 29, 2019

2022 Labs is a non-profit, global, educational resource aimed at supporting all stakeholders in the market. For the demand side, such as corporations and financial institutions that need to invest in modernizing their systems, the resource will be a cost effective and time efficient way to source answers to key questions that drive adoption and investment strategies. For the supply side, such as infrastructure and software providers, startups, consulting firms, and even individual professionals, the intent is to offer them an open platform to accelerate their returns on market education and customer development investments. And, for policy makers, the goal is to provide an effective new way for them to engage stakeholders across the market to gain input on trends shaping the ecosystem, such as open banking.

OUR MANDATE

Our legislated mandate, as set out in the Canadian Payments Act, includes the following objectives:

- A. Establish and operate national systems for the clearing and settlement of payments and other arrangements for the making or exchange of payments.
- B. Facilitate the interaction of its clearing and settlement systems and related arrangements with other systems or arrangements involved in the exchange, clearing or settlement of payments.
- C. Facilitate the development of new payment methods and technologies.

In fulfilling its mandate, Payments Canada has the public policy objective of promoting the efficiency, safety and soundness of its clearing and settlement systems and taking into account the interests of users.

OUR STRATEGY

We are well on our way to realizing our Vision of a thoroughly modernized payments infrastructure that will benefit all Canadians. To fulfill our vision and deliver on our mandate, Payments Canada follows and implements a [five-year corporate plan](#). In 2019, this included three long-term desired outcomes:

1. MODERNIZE

Modernize the core payments systems, including the policies, rules, standards and technology infrastructure.

2. OPERATE & ENHANCE

Strengthen management and overall performance in the key areas of payments systems resilience, and operational excellence.

3. FACILITATE

Actively engage with payments system players to understand, inform and leverage market forces.

HOW WE WORK TOGETHER

Through formalized processes and regular interactions, we work with financial institutions, the federal government, the Bank of Canada, our national stakeholders and international counterparts to provide and improve payment clearing and settlement systems in Canada.

MEMBERSHIP

Membership in Payments Canada includes the Bank of Canada, domestic banks, and authorized foreign banks. Other deposit-taking institutions (credit union centrals, trust and loan companies, and provincial savings offices) have been eligible for membership since 1980. The amendments to the CP Act in 2001 opened membership to life insurance companies, securities dealers, and money market mutual funds, among others. Payments Canada is funded by its membership, which stood at 111 at the end of 2019.

OUR STORIES IN 2019

Would open banking provide meaningful benefits and improve outcomes for Canadians? In what ways? Open banking would provide benefits for Canadians, especially if implemented and aligned with payments system Modernization and the legislative initiatives that are already underway.

- Open Banking Submission Letter

A REVIEW INTO THE MERITS OF OPEN BANKING

As an organization at the heart of Canada's thriving payments ecosystem, Payments Canada is working to modernize our national payments system to provide a platform that helps drive innovation and provides Canadians with convenient, safe, and efficient payment options. This includes examining trends shaping the payments landscape around the world, such as open banking.

In January 2019, the Department of Finance published a consultation paper, entitled [*A Review into the Merits of Open Banking*](#) outlining the opportunities that open banking presents for Canadians, but also the risks and complexities that need to be considered.

Payments Canada responded to this consultation detailing ways in which the Department could create a strong and safe base for the private sector to compete and innovate for the benefit of all Canadians, and maintain our global competitiveness in financial services.

Payments Canada is pleased to be a part of the Department of Finance's exploration into open banking, and we look forward to helping shape a regulatory environment that will continue to position Canada as an international leader.

Published: March 7, 2019

GOVERNANCE

PAYMENTS CANADA BOARD OF DIRECTORS

Under the leadership of Eileen Mercier, the 13-director board¹ is charged with directing and managing the affairs of the organization with a focus on strategic and policy matters.

In 2019, the board welcomed two new directors with a diverse range of expertise: John Landry, Canada Country Head Treasury and Trade Solutions, Citibank Canada and Kevin Patterson, SEVP and Group Head, Technology and Operations, CIBC. We also welcomed back David Barnard and Susan Doniz for a second term as independent directors.

The board said goodbye to Ernie Johannson, Group Head, U.S. Personal and Business Banking for the Bank of Montreal and Dan Dickinson, Chief Digital Officer for Equitable Bank.

The board receives advice and counsel from the Payments Canada Stakeholder Advisory Council and the Member Advisory Council.

¹ The nominating committee (which is charged with the responsibility of confirming the independence of the independent directors) has confirmed the independence of those directors.



BOARD OF DIRECTORS:

1. **Eileen Mercier**
(Chair)
2. **Gerry Gaetz**
(President & CEO)
3. **Malcolm Knight**
(Deputy Chair)
4. **David Barnard**
5. **François Desjardins**
6. **Susan Doniz**
7. **Garry Foster**
8. **Lib Gibson**
9. **Mike Henry**
10. **John Landry**
11. **Kevin Patterson**
12. **Ramesh Siromani**
13. **Doug Steiner**

BOARD OF DIRECTORS

ELECTED UNTIL ANNUAL MEETING OF MEMBERS 2020



Doug Steiner
Independent Director



Garry Foster
Independent Director



Ramesh Siromani
Senior Vice President, Strategy & Transformation, Royal Bank of Canada



François Desjardins
President and CEO, Laurentian Bank and Chair of Board, B2B Bank

ELECTED UNTIL ANNUAL MEETING OF MEMBERS 2021



Eileen Mercier (Chair)
Independent Director



Malcolm Knight (Deputy Chair)
Independent Director



Lib Gibson
Independent Director



Mike Henry
Executive Vice President and Chief Data Officer, Scotiabank

ELECTED UNTIL ANNUAL MEETING OF MEMBERS 2022



David Barnard
Independent Director



Susan Doniz
Independent Director



John Landry
Canada Country Head Treasury and Trade Solutions, Citibank Canada



Kevin Patterson
SEVP and Group Head, Technology and Operations, CIBC

BOARD COMMITTEES

There are five board committees with mandates to carry out specific functions to support the Payments Canada Board of Directors.

1

RISK COMMITTEE OF THE WHOLE

The Risk Committee is a committee of the whole board and assists the board in fulfilling its responsibilities in relation to several crucial functions: risk management oversight, including oversight over Payments Canada's Enterprise Risk Management Policy and risk appetite statement.

2

AUDIT AND FINANCE COMMITTEE

The Audit and Finance Committee assists the board in fulfilling its responsibilities in relation to several crucial functions: financial monitoring and audits; and financial planning, including oversight of budget development. This committee may also oversee projects as delegated by the board.

2019 MEMBERSHIP

Garry Foster, Chair
John Landry
Malcolm Knight
Eileen Mercier (ex officio)
Doug Steiner

3

GOVERNANCE AND NOMINATING COMMITTEE

The Governance and Nominating Committee assists the board in fulfilling its responsibilities in relation to governance (oversight of board performance effectiveness, governance policies and guidelines, and compliance); code of conduct and standards of behaviour for board and management; director nomination and qualification; board succession planning; board orientation and continuing education; and evaluation of board committees as a whole.

2019 MEMBERSHIP

David Barnard, Chair
François Desjardins
Garry Foster
Malcolm Knight
Eileen Mercier (ex officio)
Ramesh Siromani

4

HUMAN RESOURCES AND COMPENSATION COMMITTEE

The Human Resources and Compensation Committee assists the board in fulfilling its responsibilities in the evaluation and compensation of the president and CEO; its review of the CEO's evaluation of senior management; and its review of employee benefits and pension plans, human resources policies, and management succession planning.

2019 MEMBERSHIP

Susan Doniz, Chair
Lib Gibson
Mike Henry
Eileen Mercier (ex officio)
Kevin Patterson

5

TECHNOLOGY AND MODERNIZATION COMMITTEE

The Technology and Modernization Committee assists the board in fulfilling its responsibilities in reviewing strategies for technology, Modernization and related areas, including resilience and cyber security; monitoring the performance of technology throughout Payments Canada and its contribution towards Payments Canada's business and strategic objectives; identifying, monitoring and evaluating existing and emerging technology issues and trends that may affect Payments Canada's strategic plan; and monitoring technology-related risks and Payments Canada's plans and efforts to manage those risks.

2019 MEMBERSHIP

Lib Gibson, Chair
David Barnard
François Desjardins
Susan Doniz
Mike Henry
John Landry
Eileen Mercier (ex officio)
Kevin Patterson
Ramesh Siromani
Doug Steiner

BOARD & COMMITTEE ATTENDANCE

JANUARY TO JUNE 2019

(before annual meeting of members)

MEMBER	MEMBER SINCE	BOARD	AFC	GNC	HRCC	TMC	RISK
Number of meetings		3	2	3	3	4	3
Director attendance							
E. Mercier – Chair	Jul-15	3	2	3	3	4	3
M. Knight – Deputy Chair	Jul-15	3	2	3	n/a	n/a	3
D. Barnard	May-16	3	n/a	3	n/a	4	3
F. Desjardins	Jun-17	3	n/a	2	n/a	3	3
D. Dickinson	May-16	3	n/a	n/a	3	4	3
S. Doniz	May-16	3	n/a	n/a	3	4	3
G. Foster	Jun-17	3	2	3	n/a	n/a	3
G. Gaetz	Jul-15	3	n/a	n/a	n/a	n/a	3
L. Gibson	Jul-15	3	n/a	n/a	3	4	3
M. Henry	Jun-18	3	n/a	n/a	3	2	3
E. Johannson	Jun-17	3	2	2	n/a	n/a	3
R. Siromani	Oct-20	3	n/a	n/a	n/a	4	3
D. Steiner	Jul-15	3	2	n/a	n/a	4	3

Note: Since board committees meet at least one day before the board meetings, the attendance is for meetings up to and including the June meetings.

JUNE TO DECEMBER 2019

(following annual meeting of members)

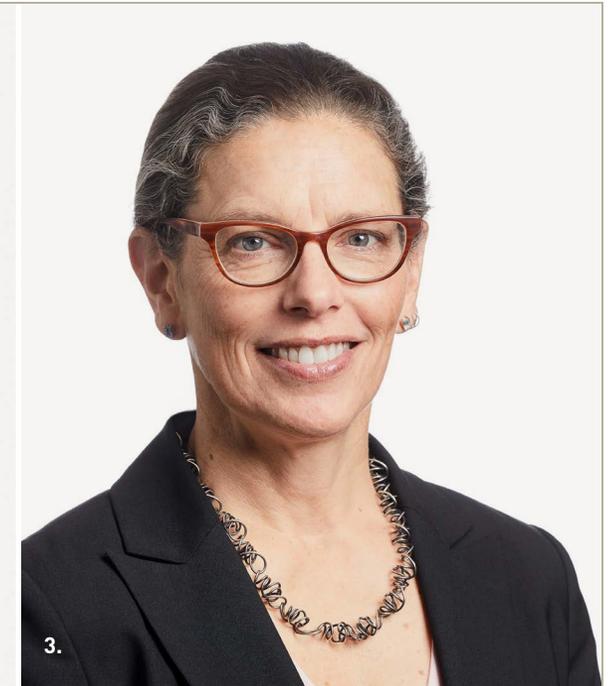
MEMBER	MEMBER SINCE	BOARD	AFC	GNC	HRCC	TMC	RISK
Number of meetings		2	2	2	3	2	2
Director attendance							
E. Mercier – Chair	Jul-15	2	2	2	3	2	2
M. Knight – Deputy Chair	Jul-15	2	2	2	n/a	n/a	2
D. Barnard	May-16	2	n/a	2	n/a	2	2
F. Desjardins	Jun-17	2	n/a	2	n/a	2	2
S. Doniz	May-16	2	n/a	n/a	3	1	2
G. Foster	Jun-17	2	2	2	n/a	n/a	2
G. Gaetz	Jul-15	2	n/a	n/a	n/a	n/a	2
L. Gibson	Jul-15	2	n/a	n/a	3	2	2
M. Henry	Jun-18	2	n/a	n/a	3	1	2
J. Landry	Jun-19	2	2	n/a	n/a	2	2
K. Patterson	Jun-19	1	n/a	n/a	3	2	1
R. Siromani	Oct-18	2	n/a	2	n/a	2	2
D. Steiner	Jul-15	2	2	n/a	n/a	1	2

Note: Since board committees meet at least one day before the board meetings, the attendance above is for meetings after June.

EXECUTIVE LEADERSHIP TEAM

Our Executive Leadership Team provides strategic direction, leadership and oversight to Payments Canada. Learn more about our Executive Team by visiting payments.ca.

1. **Gerry Gaetz**
President and Chief Executive Officer
2. **Anne Butler**
Chief Legal Officer and Head of Policy and Research
3. **Tracey Black**
Executive Director, Modernization
4. **Peter Dodic**
Chief Risk Officer
5. **Andrew McCormack**
Chief Information Officer
6. **Pamela Steer**
Chief Financial Officer



MEMBER ADVISORY COUNCIL

Our 20-person Member Advisory Council is mandated in the Canadian Payments Act as a consultative and engagement forum for our members who are system participants. The Member Advisory Council provides advice to the board on our clearing and settlement systems; the way they interact with other systems in the exchange, clearing or settlement of payments; and in the development of new payments technologies.

APPOINTED UNTIL JULY 2019

Bank of Montreal	Sharon Haward-Laird
CIBC	John Cowan
Central 1	Sue Whitney
Credit Union of Central Alberta	Michael Devlin
Exchange Bank of Canada	Stephen Fitzpatrick
JPMorgan Chase, National Association	Matthew Parker-Jones
Peoples Trust Company	John Pals

APPOINTED UNTIL JULY 2021

Alberta Treasury Bank	Ryan Rabin
Bank of Canada	Carol Brigham
Canadian Western Bank	Vlad Ahmad
HSBC	Jennifer Ogdon
La fédération des caisses Desjardins du Québec	Patrice Dagenais
National Bank of Canada	Patrice Roy
Royal Bank of Canada	Lisa Lansdowne-Higgins

APPOINTED UNTIL JULY 2022

Citibank Canada	vacant
Coast Capital	Nancy McNeill
Equitable Bank	Dan Dickinson
Scotiabank	Dougal Middleton
TD Bank Group	Christine Hunter
Wells Fargo	Sean Goldrick
Peoples Trust Company	John Pals

MAC MEMBERSHIP & 2019 MEETING ATTENDANCE

Council members are appointed through a process involving a nominating committee and approved by the board. While named representatives are expected to attend all council meetings, if a named representative is unable to attend a meeting, alternates may be permitted on an exception basis but for not more than one third of council meetings.

2019 PAST MEMBERS

MEMBER	MEETINGS ATTENDED (OR DELEGATE)	NAMED REPRESENTATIVE
Bank of America	4/4	Greg Szak
Citibank Canada	4/4	John Landry
Concerta Financial Services Association	1/4	Brian Guillemin

* indicates that the previously named representative changed during the year.

MEMBER	MEETINGS ATTENDED (OR DELEGATE)	NAMED REPRESENTATIVE
Alberta Treasury Bank	6/6	Ryan Rabin *John Tarnowski
Bank of Canada	6/6	Carol Brigham
Bank of Montreal	6/6	Sharon Haward-Laird
CIBC	6/6	John Cowan
Canadian Western Bank	2/6	Vlad Ahmad
Central 1	6/6	Sue Whitney *Steve Faust
Citibank Canada	6/6	John Davis *John Landry
Coast Capital	2/2	Nancy McNeill
Credit Union of Central Alberta	4/6	Michael Devlin
Equitable Bank	2/2	Dan Dickinson
Exchange Bank of Canada	5/6	Stephen Fitzpatrick
HSBC	6/6	Jennifer Ogdon
JPMorgan Chase, National Association	6/6	Matthew Parker-Jones
La fédération des caisses Desjardins du Québec	6/6	Patrice Dagenais
National Bank of Canada	6/6	Patrice Roy
Peoples Trust Company	6/6	John Pals
Royal Bank of Canada	6/6	Lisa Lansdowne-Higgins
Scotiabank	6/6	Dougal Middleton *Rania Llewellyn
TD Bank Group	6/6	Christine Hunter
Wells Fargo	2/2	Sean Goldrick

* indicates that the previously named representative changed during the year.

STAKEHOLDER ADVISORY COUNCIL

The Stakeholder Advisory Council (SAC) provides advice to our Board of Directors on payment, clearing, and settlement matters. SAC members contribute input on proposed initiatives, including by-laws, policy statements and rules that affect third parties. They also identify issues that might concern payments system users and service providers, and suggest how they could be addressed.

APPOINTED UNTIL MARCH 31, 2020

ADP Canada	Bill Piggot
Canadian Federation of Independent Business	Monique Moreau
Consumer Council of Canada	Don Mercer
Ministry of Finance, Government of BC	Jean Hope
PayPal Canada	Katja Lehr
Western Union	Felipe Buckup

APPOINTED UNTIL MARCH 31, 2021

Canadian Depository for Securities Ltd.	John McKenzie
Canadian Life and Health Insurance Association	Brent Mizzen
Fiserv	David Chance
Hydro Québec	Michel Lechasseur
Option Consommateurs	Alexandre Plourde
Receiver General for Canada, PSPC	Céline Chartier
Symcor	Donna Kinoshita

APPOINTED UNTIL MARCH 31, 2022

Fintech Growth Syndicate	Sue Britton
Google Payments	Erika Peterson
Intact Financial Corporation	Ilinca Vetra
Paybright	Wayne Pommen
Transferwise	Andrew Boyajian

Payments Canada Board of Directors Representatives	Ramesh Siromani
Department of Finance Canada Observer	Julie Trépanier

SAC MEMBERSHIP & 2019 MEETING ATTENDANCE

Council members are appointed through a process involving a Nominating Committee and approved by the board in consultation with the Minister of Finance. While named representatives are expected to attend all council meetings, if a named representative is unable to attend a meeting, alternates may be permitted on an exception basis but for not more than one third of council meetings.

2019 PAST STAKEHOLDERS

MEMBER	MEETINGS ATTENDED (OR DELEGATE)	NAMED REPRESENTATIVE
FI.SPAN	1/1	Lisa Shields
MasterCard	0/1	Iain McLean
nanoPay	1/1	Laurence Cook
Retail Council of Canada	0/1	Karl Littler
Wawanesa Insurance	1/1	Brenda Gibson

* indicates that the previously named representative changed during the year.

STAKEHOLDER	MEETINGS ATTENDED (OR DELEGATE)	NAMED REPRESENTATIVE
ADP Canada	5/5	Bill Piggot
Canadian Depository for Securities Ltd.	3/5	John McKenzie
Canadian Federation of Independent Business	3/5	Vacant * Monique Moreau
Canadian Life and Health Insurance Association	5/5	Brent Mizzen
Consumer Council of Canada	4/5	Don Mercer
Fintech Growth Syndicate	3/4	Sue Britton
Fiserv	5/5	David Chance
Google Payments	2/4	Erika Peterson
Hydro Québec	5/5	Michel Lechasseur
Intact Financial Corporation	4/4	Ilinca Vetra
Ministry of Finance, Government of BC	5/5	Jean Hope
Option Consommateurs	5/5	Alexandre Plourde
Paybright	3/4	Wayne Pommen
PayPal Canada	4/5	Katja Lehr
Receiver General, PSPC	5/5	Céline Chartier
Symcor	3/4	Donna Kinoshita
Transferwise	4/4	Andrew Boyajian
Western Union	3/5	Felipe Buckup
Payments Canada Board Member	5/5	Ramesh Siromani

OUR STORIES IN 2019

“We need a system that can set the platform for innovation, while maintaining the high security and resiliency standards Canada is known for.”

- Gerry Gaetz, President and CEO of Payments Canada

YOUNGER GENERATIONS: A DRIVING FORCE IN CHANGING PAYMENTS

The way we pay is changing dramatically, with new technology and demographics driving much of this change. From the use of automatic and invisible payments to the popularity of apps for tracking spending, a new study released today by Payments Canada reveals that Millennials and Gen Z yearn for easier, more convenient options to meet their changing purchase and lifestyle patterns.

These payment preferences should strike a chord with Canadian businesses. The 18-34 age group is more likely to choose an online retailer based on how easy it is to checkout (73 per cent compared to 58 per cent average). Nearly half say they are more likely to make a spontaneous purchase because their payment data is stored within an app or online. And they prefer to use ride hailing apps rather than

a taxi because the payment process is simpler (50 per cent compared to 29 per cent average).

When it comes to cash, it seems the legacy payment option may soon be behind us - a quarter (25 per cent) of Canadians 18-34 say they have stopped using cash for low price purchases (compared to 17 per cent of all Canadians). And 70 per cent say they are willing to move away from cash in favour of other forms of payment (compared to 62 per cent of all Canadians). Most notably, 42 per cent of Canadians use cash less than four times per month, compared to 20 per cent in 2018. For Canadians aged 18-34 this decrease in cash use is even more significant: 53 per cent use cash less than four times per month compared to 20 per cent in 2018.

Published: May 9, 2019

MANAGEMENT DISCUSSION & ANALYSIS

MODERNIZE

MOVING FORWARD TOGETHER

Payments Canada is leading an industry-wide program to [modernize our national payments systems](#). Strong industry alignment and a readiness for implementation have combined to form the strongest year of Modernization progress to date. We have our members, our ecosystem partners and our dedicated team to thank for this.

We believe that Modernization is an accelerator for our economy. Our [Modernization Vision](#) is for a fast, flexible and secure payments system that promotes innovation - by being more open and accessible - and strengthens Canada's competitive position. To support transparency and alignment, we publish an annual summary of progress that reflects revised timelines and milestones reached. The most recent is our [2019 Modernization Roadmap Update](#) and we encourage you to dive deeper to gain a clearer understanding of the scale and complexity of foundational program elements.

READYING THE LYNX HIGH-VALUE PAYMENTS SYSTEM

Lynx leapt to the fore in 2019. We selected [IBM Canada as the lead technology partner](#) to provide combined hosting and system integration services for Canada's new high-value payments system, including oversight of SIA (the application provider for Lynx) and of daily operations. Lynx will be released in two phases, as planned, with both releases launching ahead of our original plan: the first phase advancing from the fall to spring of 2021 and the second release advancing by two years (from 2023 to 2021), a definite win-win for our payments ecosystem. For further details on this progress, please see the [Modernization Delivery Roadmap 2019 Update](#).

REAL-TIME RAIL REFOCUS

The [Real-Time Rail \(RTR\)](#) will enable consumers and businesses to send and receive payments immediately and securely 24/7/365. This net new system will lower settlement risk and support broadening access to new payments system participants.

Our original plan for the RTR launch consisted of multiple releases, with the first in 2020 and future releases to deliver additional functionality. In 2019, following further consultations with key industry partners, we determined that a single release in 2022 that follows the launch of Lynx is a more efficient implementation approach and is aligned to the planned legislative changes to enable broader access. The RTR will now incorporate account-number-based routing and the ISO 20022 message standard at launch. Our [Modernization Delivery Roadmap 2019 Update](#) provides further details on this and all Modernization progress.

RETAIL BATCH PAYMENTS ENHANCEMENTS

The retail system, known formally as the [Automated Clearing and Settlement System \(ACSS\)](#), processes about 28 million transactions each business day. 2019 built on enhancements made in 2018 from a [new credit risk model](#) and [improvements to Automated Funds Transfer \(AFT\)](#) to [seeking feedback from the broader ecosystem](#). We also made progress on broadening access to the ACSS with a draft by-law amendment stipulating the removal of the 0.5 per cent minimum volume requirement due to come into effect in 2020.

To understand the benefits Modernization can bring to Canadian businesses and consumers, explore our [case studies](#).

OPERATE & ENHANCE

In 2019 we continued to focus on ensuring the safety and reliability of current systems while building the internal capabilities required when new, modern payments systems come online.

INCREASED ORGANIZATIONAL CAPABILITIES

As the demands that Modernization places upon Payments Canada increase, our organizational capabilities continue to expand. 2019 saw major improvements in people management metrics as well as organizational competitiveness, thanks to the maturation of our human resources strategy and new senior positions added in Risk, Research and Executive.

ADVANCES IN SERVICE OFFERINGS

We made major strides in risk management in 2019. We ratcheted up our risk rating and reporting to more comprehensively identify and manage risks, completed risk assessments of critical payments infrastructure and developed the initial version of the Lynx Financial Risk Framework.

Our technology team made great advancements in 2019, with the development of a certification process designed for new members connecting to payments systems, improved process management maturity, the establishment of a centre of excellence, the continued transition of corporate systems to a cloud environment, and the formation of a data analytics and business intelligence practice. Two noteworthy technical advances that we piloted in 2018 became official offerings in 2019: a new application programming interface [\[API\] developer portal](#), complete with initial APIs; and an online [Payments File Validation Service](#) that enables real-time editing and online validation of test payment data against the requirements of ISO 20022—an efficient way to ensure that payment files are correctly formatted.

PAYMENTS SYSTEMS RESILIENCE

To meet our obligations to members, regulators and the Canadian public, our payments systems must operate seamlessly. We continue to support and upgrade our current systems - the [Large Value Transfer System \(LVTS\)](#) and the [Automated Clearing Settlement System \(ACSS\)](#) - in parallel with the Modernization program.

In 2019, we undertook a refresh for the ACSS. We focused on enhancements to reduce system risk by means of an ACSS technology refresh, addressing regulatory requirements and strengthening alignment with global risk management practices. A refreshed ACSS will support existing functionalities and business processes while introducing new and efficient capabilities.

CLEARING & SETTLEMENT SYSTEM STATISTICS

In 2019, Payments Canada systems cleared approximately 8.3 billion payments (an average of 32.9 million payments per business day) worth a total value of \$55.1 trillion (or \$218.5 billion on average per business day). See below for the details from our [Automated Clearing Settlement System \(ACSS\)](#) and our [Large Value Transfer System \(LVTS\)](#).

AUTOMATED CLEARING SETTLEMENT SYSTEM

The ACSS is the system through which the vast majority of Payments Canada payment items (both paper-based and electronic) are cleared through various [payment streams](#).

ACSS volume and value continued to grow in 2019, increasing by four per cent in volume and by three per cent in value since 2018. Since 2014, ACSS volumes and values have increased by 22 per cent and 17 per cent, respectively.

Figure 2, below, illustrates the breakdown of the streams in the ACSS. Of interest, point-of-service (POS) debit transactions accounted for the majority of payments in the ACSS by volume (63 per cent), followed by Automated Funds Transfers (AFT) credits and debits (12 per cent each).

In 2019, AFT payments (pre-authorized debits and direct deposits) collectively continued to maintain the largest share of value (51 per cent), followed by cheques (39 per cent) (**Figure 3**).

Figure 1:
ACSS 2019 STATISTICS

TOTAL VOLUME

8.3
BILLION ITEMS

DAILY AVERAGE
VOLUME

32.9
MILLION

TOTAL VALUE

\$7.3
TRILLION

DAILY AVERAGE
VALUE

\$28.9
BILLION

MANAGEMENT DISCUSSION
& ANALYSIS

Figure 2:
SHARE OF ACSS VOLUME

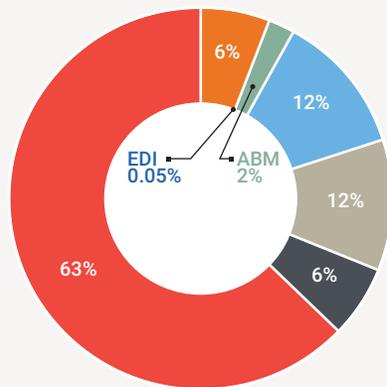
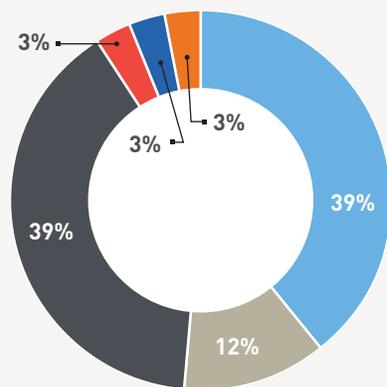


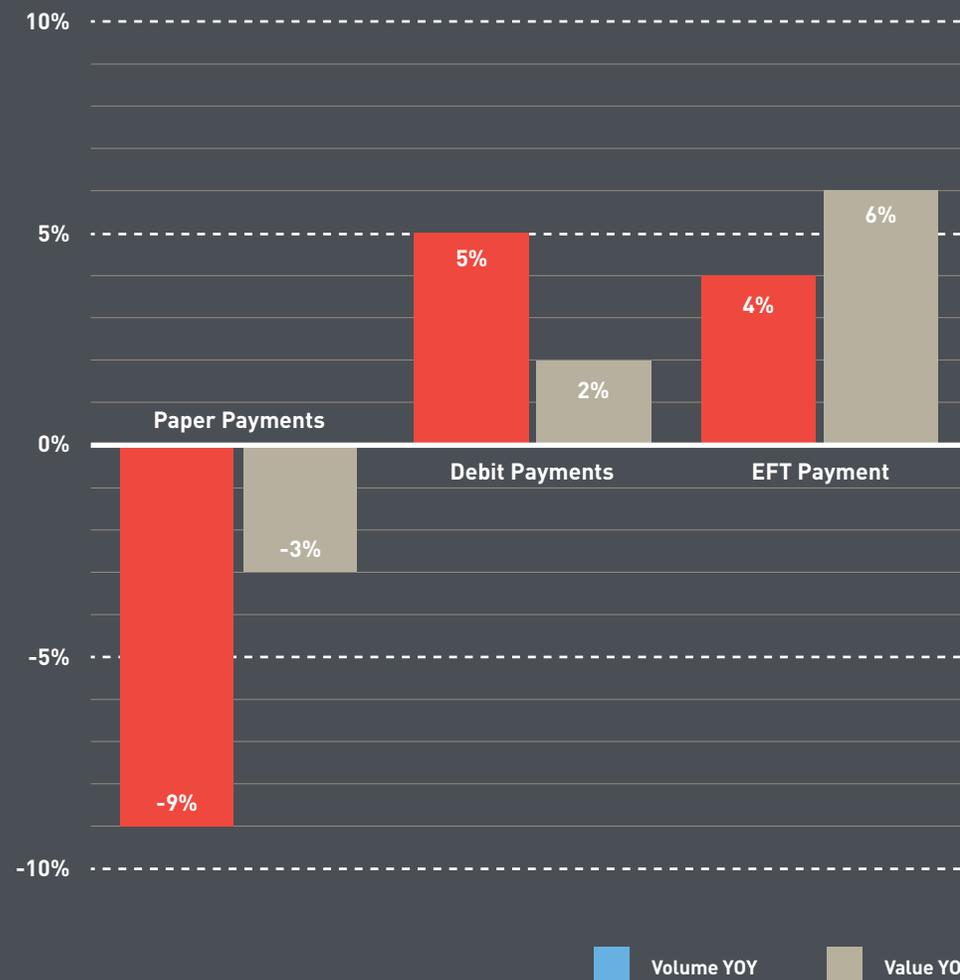
Figure 3:
SHARE OF ACSS VALUE



- AFT Credits
- AFT Debits
- Cheque and Paper
- Point of Service - Debit
- Electronic Remittances
- Shared ABM Networks
- EDI

Electronic methods of payment continued to rise year-over-year, while paper-based payments continued to decline (see Figure 4). Learn more about [payment methods and trends in Canada](#).

Figure 4:
ACSS GENERAL PAYMENT TYPES
YEAR-OVER-YEAR GROWTH



LARGE VALUE TRANSFER SYSTEM

The **LVTS** is an electronic wire system that facilitates the irrevocable transfer of payments in Canadian dollars across the country. LVTS payment volume continued to increase in 2019, a five per cent increase over 2018. At the same time, the value of LVTS payments increased by four per cent). Interestingly, as illustrated by Figure 6, the majority of LVTS transactions (around 63 per cent) are under \$50,000. Only about six per cent of LVTS transactions are over \$5 million.

Figure 6:
**LVTS SHARES BY
TRANSACTION SIZE**

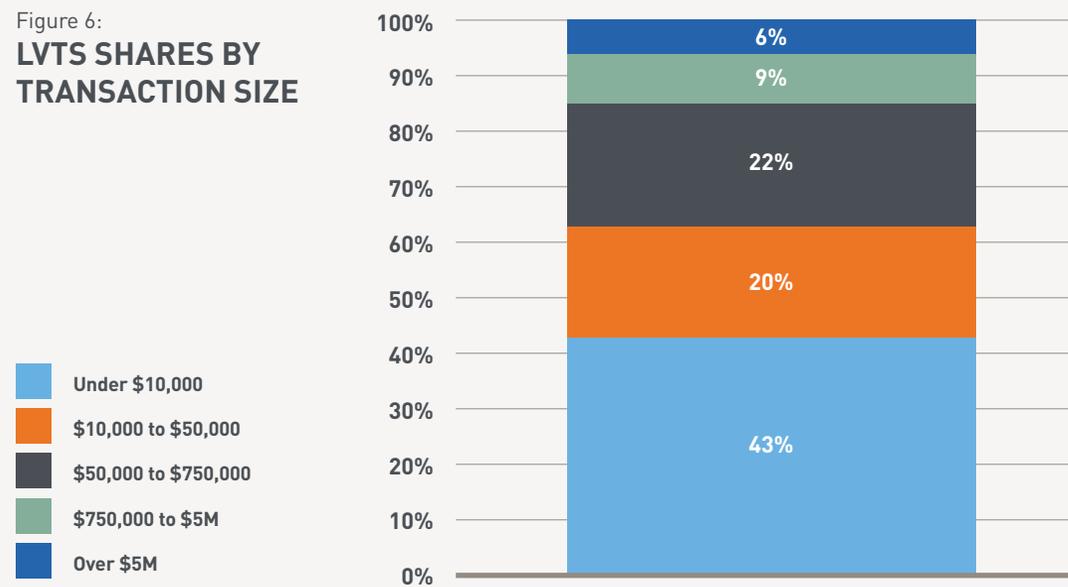


Figure 5:
LVTS 2019 STATISTICS

TOTAL VOLUME

9.99
MILLION

DAILY AVERAGE
VOLUME

39,658

TOTAL VALUE

\$47.7
TRILLION

DAILY AVERAGE
VALUE

\$189.1
BILLION

FACILITATE

A big part of our work revolves around leading and sharing the latest advances and thinking in payments, especially the ways in which they benefit our member financial institutions and key stakeholders.

As we prepared for the implementation of modernized systems in 2019, we felt a shift across the industry: a new sense of alignment and purpose.

This inspired us to continue our efforts to educate and connect the marketplace through research, insights and collaborative forums. From bringing [thought-leaders together](#) to supporting new partnerships with [Paytech](#) and [2022 Labs](#), our research and outreach efforts help our members, Canadian businesses and government organizations make more informed payments decisions. Payments Canada's staff were instrumental in continuing to build and maintain the confidence that members and stakeholders have in the organization. Based on the results of surveys we conducted on a regular basis, this objective was achieved consistently throughout 2019.

ADVANCING PAYMENTS RESEARCH & POLICY

We continued to balance our long-term research objectives with shorter, enhanced [market surveillance](#). Our [research insights](#) support strategic decision-making, and strengthen our ability to lead policy development and influence decision makers. We continued to modify [rules and standards](#) and provide [feedback to government consultation](#) processes that will potentially impact the payments ecosystem.

Our [case studies](#) explored how payments modernization could benefit Canadian businesses through discussions with a [specialty retailer, a global insurance company and a service provider](#). We also welcomed the opportunity to share [our own organizational insights](#). We conducted research to understand where payments are going, discussed challenges faced by [financial market infrastructures](#) and explored [drivers in bitcoin](#). These efforts led to more advanced stakeholder awareness, understanding and excitement for Modernization. We also worked to advance payments thinking nationally and internationally through our [Payments Perspectives](#) discussions.

Every year Payments Canada publishes the [Canadian Payments Methods and Trends Report](#), a pre-eminent source of payments statistics in Canada that analyzes the 21.1 billion payments transactions made in the past year. Highlights from the 2019 report show that Canadians have a strong demand for new payments channels, as demonstrated by an explosive growth of online transfers and the continued rise of mobile and online banking.



STAKEHOLDER ENGAGEMENT

Our stakeholder engagement strategy bore tremendous fruit in 2019, with a palpable new sense of alignment amongst stakeholders. Our engagement initiatives, such as the [Stakeholder Forum series](#), were exceptionally well-attended, inspiring, lively discussions surrounding the future state of payments and the benefits of Modernization. As in past years, the series involved the business community, universities, municipalities, hospitals and other organizations, as well as Canadian consumers.

Our [Stakeholder Advisory Council](#) added strength through diversity in 2019. New members represent organizations such as Canadian Tire, Fintech Growth Syndicate and Google Payments, with [David Chance from Fiserv](#) coming on as Chair. Added knowledge across all aspects of the payments landscape will help steer our [Stakeholder Advisory Council](#) through this important time as Payments Canada, along with countries around the world, modernizes our payments systems.

Canada's largest payments conference, [the SUMMIT](#), is where people who are passionate about payments come to understand Canada's role worldwide in the payments ecosystem, realize how payments transformation is impacting all of us and explore the future state of payments. With close to 2,000 attendees, The SUMMIT engaged [our stakeholders and the payments ecosystem at large](#) and resulted in another [record year](#). SUMMIT participants got to choose from 115 sessions and hear from more than [250 leaders](#) on topics from AI, mobile computing, data standards, open banking and other challenges and opportunities facing [Canada's payments industry](#).

GLOBAL PAYMENTS AND INTERNATIONAL COLLABORATION

Every year, we meet with our global counterparts - national payment associations - to exchange information and discuss internationally relevant opportunities and challenges. One such group is the International Council of Payment Association Chief Executives (ICPACE), which brings together chief executives from associations in Australia, Canada, United Kingdom, United States, Netherlands, New Zealand and South Africa. From a global perspective, the 2019 meeting in April discussed topics ranging from digital identification, open-banking and cyber security to fraud.

In addition, Payments Canada is a member of the International Retail Payment Systems Operators Group. The members meet twice a year to explore and share information on such topics as cross-border instant payments, experiences on adoption of real-time payments and information on how different payments systems are organized.

Payments Canada led discussions around the current demand for more experienced payments professionals capable of developing and maintaining payments system modernization and global interoperability. To address this demand and global knowledge gap, we have joined forces with Nacha, the Dutch Payments Association, the Payments Association of South Africa and the Australian Payments Network to develop an international payments education and certification program that is country agnostic, with the goal of delivering an integrated and advanced understanding of the industry. The certification program is targeted to launch in 2020.



OUR STORIES IN 2019

Payments Canada and CorbinPartners Inc published *The Bitcoin Sentiment Tracker*, new research that explores Canadians' perceptions and attitudes towards Bitcoin, one of the world's most popular digital currencies.

The research indicates that consumer intrigue and investment potential are the key factors spurring the acquisition of Bitcoin to date, but consumer use of Bitcoin as a payment method is still in its infancy. While the future potential of the digital currency is hotly debated, it is widely established today, evidenced by its budding network of trading exchanges, reported acceptance at more than 100,000 businesses worldwide, and adoption of its blockchain based technology by an increasing number of multinational corporations.

NEW RESEARCH SHOWS CURIOSITY ABOUT, & INVESTMENT POTENTIAL IN, BITCOIN

Key highlights from the **Bitcoin Sentiment Tracker** include:

- **Consumer interest has spurred adoption.** Almost four in ten Bitcoin users (39%) purchased Bitcoin the first time just to give it a try. A third of Bitcoin users did so primarily for investment purposes.
- **Price volatility has opposing effects.** Almost three in ten who acquired Bitcoin for investment purposes (29%) found price volatility to be a main advantage of Bitcoin as compared to traditional currency. Almost four in ten non-users (39%) cite price volatility as a primary reason for not owning it.
- **Bitcoin users are primarily satisfied with their experience,** with a third identifying ease of use (34%) and cross-border transactions (33%) as main advantages compared to traditional currency.
- **A significant percentage of Bitcoin users are dissatisfied with the number of businesses that accept Bitcoin payments.** Almost four in ten Bitcoin users indicated they were somewhat or very dissatisfied with this factor.
- **On the flip side, the majority of businesses that are transacting in Bitcoin would recommend other businesses owners adopt it** as a payment source and cited lack of consumer adoption as the cause of low transaction volumes.
- **Further growth in use will need to be fueled by awareness and education.** Six in ten Bitcoin users (60%) plan to use Bitcoin again in the next 12 months. Fewer than one in ten non-users (9%) plan to purchase or transact Bitcoin over the same timeframe.

Published: June 6, 2019

OUR PEOPLE

We are a 240-person organization responsible for Canada's national payments systems. As we prepare to carry out the actions that will modernize payments in Canada, balancing interests, sharing knowledge and finding common ground is more important than ever. The people we employ and the skills they have are the most important factors in maintaining this balance.

In 2019 we established the conditions for success by raising the breadth and diversity of our talent pool, leveraging technology to enhance engagement and ensuring compensation reflects industry standards.

TOWARDS OPERATIONAL EXCELLENCE

In 2019 we continued to focus on metrics and data analysis, keys to gaining greater insight into efficiency and engagement. This has enabled us to give managers the information they need to make better day-to-day decisions, completing the circle between system data and HR management. As we continue to refine HR data, we will realize even greater effectiveness and more real-time capabilities.

We believe people thrive in their chosen work environment. With headquarters in downtown Ottawa and a growing team in Toronto's financial district, we offer employees the opportunity to work in these two dynamic cities. As part of our goal to improve our work space, we moved into a new location in Toronto conceived with employee engagement and productivity in mind. This move was designed to help with industry collaboration and with bringing the Modernization program to completion. We also continued to optimize space at our head office in Ottawa.



BUILDING OUR PEOPLE

Payments Canada's culture ensures we have a uniquely rewarding place to work. Our culture reflects our approach to the work we do every day and how we relate to each other and to our stakeholders. Given the crucial role that Payments Canada plays in the country's financial ecosystem, we aim to attract and retain the best by focusing on three key areas:

1. TALENT

Building on the diversity strategy that we launched in 2018, in 2019 we added partnerships that broadened the diversity of our applicant pool. Our goal was to help increase our organizational diversity by eight per cent while augmenting the quality of applicants through engagement with a larger pool of talent. We turned our attention to leadership resources as well, with new senior positions in Risk, Research and the executive leadership team.

We built new connections with universities to maximize opportunities with co-op students. In 2019 we welcomed 16 students who rotated through the pillars of the Modernization program and across the organization. This gave them a snapshot of the different aspects of our organization, which we hope they will build upon during future engagements with Payments Canada.

2. ENGAGEMENT

In 2019, our leaders were given the tools to take more responsibility for employee engagement. This new initiative gave people managers direct access to team

feedback, made them more accountable for understanding that data and more accountable for taking specific actions to improve engagement. Overall, we experienced a measurable lift in engagement.

We also ratcheted up the frequency and quality of employee social events while building more cultural diversity into our events calendar.

3. RETENTION

In the last four years, Payments Canada has transformed as a company, both culturally and in terms of the pools of talent that we draw upon. In 2019, we continued to develop the potential of our people through our "talent framework", which included mentoring, leadership challenges and ongoing learning, with the goal of increasing the effectiveness of our subject matter experts and future leaders. In addition, a review of our compensation philosophy and structure was undertaken to better align compensation and benefits with those in a variety of private sector industries in Canada. This has increased our ability to attract and retain the talent we need for future success.



OUR STORIES IN 2019

We live in an increasingly connected world, and that is having a BIG impact on the way we pay. Cross-border payments, international standards and interoperability between systems and markets are emerging as some of the most prominent issues and challenges in the payments industry.

A CALL FOR A GLOBAL STANDARD & CERTIFICATION FOR PAYMENT SKILLS

As more and more countries around the world modernize their payments systems, processes and rules, more experienced payments professionals with the necessary skills, knowledge and expertise are required to develop and maintain these systems. But, the current talent pool is small and regionally focused, and it is difficult to assess an individual's payments knowledge prior to hiring. To meet the growing talent demands in our industry, we need more people, more expertise, and a broader, more global perspective.

Last fall, CEOs from payments infrastructures around the world were consulted on this topic. During the discussions, the idea for a global payments accreditation program was proposed as a solution to help address two key issues: the global talent shortage, and the lack of a standardized way to assess payments knowledge.

In obtaining and maintaining a global payments credential, payments professionals would benefit from a broader, more advanced – but also standardized and aligned – level of knowledge. This would allow organizations looking for talent to better judge a potential candidate's level of expertise and suitability, as well as deepen the pool of candidates to draw from. And each of these accredited individuals would have an end-to-end understanding of the payments ecosystem – something that is not common in historically siloed industry.

The benefit this could bring to payments modernization initiatives around the world cannot be overstated.

Published: May 13, 2019

RISK MANAGEMENT: PROGRAM & GOVERNANCE

Payments Canada uses the three lines of defence model for risk management. The first line of defence is owning and managing risk on a day-to-day basis. The second line is establishing enterprise-wide risk management expectations and providing risk oversight and effective challenge. The third line (also known as internal audit) is providing independent assurance on governance, controls and risk management.

Payments Canada routinely scans the internal and external environments to effectively identify and manage the top organizational risks we face as well as those that have the potential to affect us in the future. These risks are reported to the Internal Risk Committee and the board's Risk Committee to provide decision-makers with a comprehensive and integrated view of organizational risks and how they align with our risk appetite.

MAJOR ENHANCEMENTS IN 2019

- Completed maturity assessments of our Enterprise Risk & Business Continuity Management functions to determine key opportunities for continued maturity and evolution.
- Planned and developed roadmap to address opportunities and evolve Enterprise Risk & Business Continuity functions.
- Enhanced risk management practices across the organization including risk rating and reporting to more comprehensively identify and manage risks.
- Developed and socialized the initial version of the Lynx Financial Risk Framework.
- Completed LVTS and ACSS self-assessments against the Bank of Canada's Risk-Management Standards.
- Supported and oversaw changes to the ACSS Interim Credit Risk Model.

SIGNIFICANT RISKS IN 2019

Payments Canada proactively identifies and assesses the likelihood and impact of possible risks. After all mitigations are considered, the highest possible risks to Payments Canada in 2019 were as follows:

1. **Cyber incident(s) affecting payment or corporate systems.**
Key Mitigations: Maintain and continually improve cyber protection, detection, governance, response, recovery, and resilience capabilities.
2. **Modernization program's scale, scope, and timeline challenging the payments ecosystem's ability to execute against Modernization Roadmap.**
Key Mitigations: Recalibrated Modernization roadmap with consideration for dependencies within the ecosystem. Modernization Governance structure revised and implemented. Application of a rigorous Project Management approach.
3. **Total cost of the Modernization program and cost of transactions exceeds what the market will bear or what members/participants will support/adopt.**
Key Mitigations: Effective cost management and containment. Develop and socialize system pricing frameworks. Enhanced financial transparency to participants and members.
4. **Challenges in achieving alignment of financial institutions', regulators' and other stakeholders' interests within our current authority constraints delays Modernization implementation.**
Key Mitigations: Modernization Governance structure revised and implemented. Ongoing engagement with industry, regulators and other stakeholders.
5. **Major payment system outage.**
Key Mitigations: Enhanced system testing. Implemented improvements to network architecture. Business continuity planning and contingency options in place and tested regularly.

Risk management plays a critical role in ensuring the safety and reliability of payments systems in Canada. Payments Canada maintains a robust enterprise risk management program to identify and manage the key operational, strategic, financial, and settlement risks that could prevent us from achieving our strategic objectives and legislative mandate.

2019 PERFORMANCE AT A GLANCE

2019 PRIORITIES & STATUS

Progress made against our corporate strategies and initiatives are detailed in the following table.

Legend for Status

-  Planned progress on schedule and within budget
-  Delays in terms of time to completion, budget and/or target variances
-  Deferred or cancelled

PRUDENT MANAGEMENT

EXPECTED OUTCOMES:

Advancement of the Modernization program, ensuring that Payments Canada's financial operations are sustainable, and our organizational risk function continues to improve.

KEY INITIATIVES	STATUS	UPDATE
Modernize the core payments systems, including the policies, rules, standards and technology infrastructure		The approved deliverables associated with Lynx, SOE and overall program management were achieved during the year. On Real-Time Rail (RTR), it was determined the proposed design solution would not meet all requirements and that the industry was not aligned with the direction, resulting in a pause taken on activities mid-year. Achievements moving RTR forward in 2019 included realignment within the industry on the path forward; the separation of exchange from clearing and settlement; a letter of intent signed with Interac; and the completion of a request for information (RFI) process in October that will be used to develop a request for proposal for clearing and settlement capabilities.
Ensure financial sustainability		We achieved all objectives with regard to prudently managing the core operations budget, effectively managing the Modernization program's budget and financing as well as refining the pricing framework.
Improve risk functions		Objectives achieved include maturation of our ERM framework, functional benchmarking of Financial Market Risk (FMR), attaining Bank of Canada risk standards for LVTS and ACSS, and delivering financial risk frameworks for Lynx, RTR, and SOE.

2019 PERFORMANCE AT A GLANCE

MEMBERS & STAKEHOLDERS

EXPECTED OUTCOMES:

- Members' and stakeholders' objectives relate to our ability to successfully engage with key constituents within the ecosystem. Specific objectives to achieve during 2019 included the following:
- Maintaining member and stakeholder confidence with the Member Advisory Council, the Stakeholder Advisory Council and the Senior Operational Committee;
- Ensuring the reliability and availability of our key payments systems (LVTS and ACSS) as well as our corporate system (CSN) that is used regularly by our members
- Strengthening our ability to facilitate and influence the ecosystem through our annual payments conference (The SUMMIT) and using payment analytics to engage with the industry.

KEY INITIATIVES	STATUS	UPDATE
Maintain member and stakeholder confidence	▲	Payments Canada's staff were instrumental in continuing to build and maintain the confidence that members and stakeholders have in the organization. Based on the results of surveys we conducted on a regular basis this objective was achieved consistently throughout the year.
Maintain current payments infrastructure	▲	System availability targets for ACSS and CSN were achieved quarterly; however, availability target for LVTS was not met in the first quarter, but has been achieved since then.
Improve ability to facilitate and influence the ecosystem	▲	The 2019 SUMMIT was a success, surpassing both attendee satisfaction and financial targets. The Payments Canada Research team also engaged with all LVTS participants on payment-data-driven analytics, which proved to be a successful tool in engaging with our members.

Legend for Status

- ▲ Planned progress on schedule and within budget
- ▼ Delays in terms of time to completion, budget and/or target variances
- Deferred or cancelled

OUR STORIES IN 2019

Increased mobile penetration and a growing level of consumer comfort with making payments through a smartphone or tablet continues to impact consumer spending habits across the globe.

THE FUTURE IS BRIGHT FOR MOBILE PAYMENTS

In 2018 we surveyed consumers from Canada, the U.S., the U.K., Germany and Austria to measure the impact of this trend. The results painted a clear picture of how improved technology, changing consumer habits, and new regulation is reshaping the role of mobile in making card present (CP) and card not present (CNP) payments.

Nine per cent of consumers stated that they had made a purchase in-person using a mobile wallet in the past month. An equal percentage of consumers had made a payment for a good or service they received in-person via an in-app purchase.

Adoption of these types of payments isn't slowing down. Here are three factors that will ensure mobile payments continue to be at the forefront of payment innovation for the foreseeable future.

The role of biometrics in payment authentication

mCommerce, even via a mobile-optimised web page or in-app, has often been clunky and delivered a

poor user experience due to a lack of mobile native payment authentication processes. However, the introduction of biometric authentication through fingerprint technology or facial recognition is a significant upgrade in this area. This will be particularly relevant as VISA and Mastercard roll out their new 3D Secure 2.0 authentication process, of which authentication by "who you are" (biometrics) will be a key component.

Contactless payments are gaining momentum

The majority of contactless transactions are made using credit and debit cards, but consumers who have adopted mobile wallet technology are positive about its benefits, leading us to believe that we will see greater adoption moving forward. An overwhelming majority (84 per cent) of mobile wallet adopters said that paying using their mobile was more convenient than cash, and over three-quarters (77 per cent) agreed that mobile wallets were more convenient than contactless cards.

Published: July 9, 2019

2019 PERFORMANCE AT A GLANCE

PRODUCTS & PROCESSES

EXPECTED OUTCOMES:

Continued maturity and evolution of our internal process from a technology, security, and project management perspective.

KEY INITIATIVES	STATUS	UPDATE
Improve operational frameworks and technology capabilities	▲	On-premise systems were transferred to the cloud, CSN network capacity to add additional participants was confirmed, data analytics and BI practices were improved, and an application program interface (API) offering was established.
Improve Cyber Security	▲	The metrics used to measure Payments Canada's security rating were either achieved or exceeded.
Improved management of core offerings	▼	Performance indicators for this initiative were largely tied to RTR as a new core offering, which was paused during 2019. Some work associated with the development of a roadmap and adoption tool for RTR was completed and will continue as part of future key initiatives.
Improve operational processes	▲	Process management was improved through the establishment of a process repository and process improvement methodology as well as maturation of service management.

PEOPLE & ENGAGEMENT

EXPECTED OUTCOMES:

Attracting and retaining top talent, ensuring current staff remain engaged in the organization's long-term strategy, and creating and developing leaders for the future.

KEY INITIATIVES	STATUS	UPDATE
Position Payments Canada as an employer of choice	▼	The organization successfully expanded applicant pool diversity; however, our employee engagement score and turnover rates fell short of established targets.
Improve effectiveness of leadership	▲	The organization has benefited from the depth and breadth of three new executive team members in 2019, and succession plans are in place for the future.

Legend for Status

- ▲ Planned progress on schedule and within budget
- ▼ Delays in terms of time to completion, budget and/or target variances
- Deferred or cancelled

2020 CORPORATE PLAN

As we move from Modernization planning to system delivery, Payments Canada remains focused on three strategic objectives that have anchored our corporate plan for several years: modernize, operate and enhance, and facilitate. The key points are below and we encourage you to explore the full details of our [2020-2025 corporate plan](#).

1. MODERNIZE THE CANADIAN PAYMENTS SYSTEM

Modernize the core payment systems, including policies, rules, standards and technological infrastructure.

KEY 2020 INITIATIVES

Lynx, the high-value payments system.

Operationalize the new Lynx platform, including the new risk model, in time for Phase 1 system launch in Q2 2021. In preparation, build the required internal capacities and manage change within our core operations team.

Real-Time Rail. Engage Interac Corp as service provider for the exchange function, select a technology provider for clearing and settlement functionality, and begin the system build.

Policy and legal framework. Encourage the introduction of the Retail Payments Oversight Framework and a related review of the Canadian Payments Act. This will allow for the potential expansion of our member base and lay the groundwork for open banking and modernized data rights. We will look to the Department of Finance to provide related policy direction to the financial sector.

2. OPERATE & ENHANCE CURRENT SYSTEMS

Strengthen management and performance in key areas of payment systems interoperability and resilience, management optimization and operational streamlining.

KEY 2020 INITIATIVES

Payment System Interoperability and Resiliency

Core Payment Systems. Complete and deploy a refreshed ACSS application, build out the Lynx high-value payments system and execute changes to facilitate effective new member onboarding. Enhance product management and operational frameworks to support the new batch retail and high-value payment systems.

Cyber Security Maturity. Mature our cyber practice through the creation of a holistic information security management system, the delivery of a comprehensive Vendor Management Framework, and the application of a certification process for connecting to Payments Canada services.

Management Optimization & Operations Streamlining

Target State Readiness. Reorient the operations team to achieve better consumer and business outcomes vis-à-vis payment products. Manage change to ensure a smooth transition from Lynx project delivery to implementation of a plan for managing technology providers operating our systems.

Maturation of Organizational Development. Deliver an integrated platform of API-enabled technology services. Leverage technology to enhance engagement, increase the breadth and diversity of our talent pool, add senior talent and bring compensation in line with industry standards.

3. FACILITATE INTEROPERABILITY AND INNOVATION IN THE PAYMENTS ECOSYSTEM

Actively engage with payments system players to understand, inform and leverage market forces.

KEY 2020 INITIATIVES

Stimulate Open and Broader Membership. Present our research on the impact of expanded membership and real-time payments. Provide education and support to new market participants through hosted forums.

Engage Members, Stakeholders & Ecosystem. Create a structure to formalize payments knowledge and education for the industry. Create awareness of both the importance of payments and the need for education within the federal government.

Provide New Service Offerings & Emerging Technologies. Evolve our integrated API cloud-based platform of technology services to facilitate member connection to payment systems. Promote the adoption of new API functionality via web-based developer portal enhancements.

SUMMARY OF FINANCIAL OPERATIONS

APPENDIX 1

SUMMARY OF FINANCIAL OPERATIONS

(in millions of Canadian dollars)

SUMMARIZED STATEMENT OF OPERATIONS

REVENUES	2019	2018
Fees	62	54
Other Revenues	6	4
Total Revenues	68	58
EXPENSES	2019	2018
Core Operations	55	45
Projects	5	8
Modernization	24	32
Total Revenues	84	85
(Deficit)	(16)	(27)

As Payments Canada operates on a cost recovery basis, revenues from members' fees are closely correlated with the annual operating budget. 2019 fees from members were \$62 million, consistent with planned operating costs for the year, an increase in transaction volumes as well as Principles for Financial Market Infrastructures reserve funding and the stabilization fee.

2019 total expenses were \$84 million, down slightly from \$85 million the previous year. This is reflective of a higher rate of capitalization for the modernization costs, shown on the balance sheet in the form of an increase to intangible assets, as well as overall increases in our core operations expenses as we continue to invest in cyber security, additional technology costs and our people to deliver on our priorities.

Modernization costs reflect expenses directly related to the Modernization program. The rollout continued into 2018, with program expenses of \$32 million associated with Modernization. In 2019, as the program focused more directly on the

high-value system, expenses totalled \$24 million for the entire program, with an additional \$39 million of Modernization-related costs reflected on our balance sheet in the form of capital assets.

The 2019 deficit is attributable to the manner in which the Modernization program is being financed. While day-to-day operating costs for the current systems are covered by transaction fees paid by members, the costs associated with the Modernization program are being funded through debt financing. This method of financing will continue for the duration of the program. Accordingly, an annual deficit is expected each year while the national payments infrastructure is being modernized. The Canadian Payments Act and supporting by-laws permit Payments Canada to charge members appropriate dues in order to pay down the financing costs of the Modernization program. As a result, the deficit is temporary in nature and will diminish once modernized systems become operational and members are subsequently billed for their use.

SUMMARY OF FINANCIAL OPERATIONS

(in millions of Canadian dollars)

SELECTED ITEMS FROM THE STATEMENT OF FINANCIAL POSITION

	2019	2018
Cash & short term Investments	42	40
Accounts receivable	16	14
Capital assets & Intangible assets	72	31
Total assets	138	88
Accounts payable & accrued liabilities	18	15
Demand loans	132	71
Net assets (liabilities)	(16)	(1)

Payments Canada's statement of financial position continues to experience significant growth directly related to the Modernization program. Cash and cash equivalent balances increased as reserves required under the Principles for Financial Market Infrastructures were strengthened along with higher reserves for the Fee Stabilization fund, while accounts receivable balances have increased slightly year-over-year to coincide with the increase in transaction volumes.

The growth in capital assets relates to the development of our modernized payments systems, specifically Lynx, the forthcoming new high-value system. The deficit in Modernization has put us into a net liability position, as planned.

Liabilities grew during the year, reflecting an increased draw on the demand loan facility and an increase in accounts payable, both attributable to the Modernization program. Debt financing of the Modernization program resulted in a demand loan of \$132 million at the end of the year.

Internal Controls over Financial Reporting

In 2019, testing of all high risk, medium risk, general IT and entity level controls were completed, with no significant deficiencies or material weaknesses identified. We successfully brought forward all testing in 2019, including 51 additional controls originally planned for late 2020.

OUR STORIES IN 2019

Electronic payments account for 73 per cent of all transaction volume versus cash at 21 per cent, reports Payments Canada.

CANADIANS RAPIDLY ADOPTING NEW PAYMENTS CHANNELS

New technology and payments innovation are transforming the way Canadian consumers and businesses make payments, according to data from Payments Canada's annual [Canadian Payment Methods and Trends](#) report.

In pursuit of more convenient, faster and secure payment experiences, Canadians are rapidly adopting newer digital channels, such as contactless (tapping card or mobile), e-commerce, mobile and online transfers, in favour of more traditional 'paper and coin' payments.

The newly released 2019 report analysed the 21.1 billion payment transactions made in 2018, totalling more than CA\$9.9 trillion in value. The study points to insights and trends that continue to transform the payments landscape.

Key findings include:

- **Overall average transaction size grew to CA\$468** in 2018, up 22 per cent over five years from 2013.
- **Electronic payments accounted for 73 per cent** of total payments volume (number of overall payment transactions), and 59 per cent of total payments value (the combined monetary value of total transactions).
- **Cash payments declined 40 per cent** in volume over the last five years.
- **Contactless payments grew 30 per cent** year-over-year from 2017-2018 with a total of 4.1 billion contactless payments (card and mobile) worth CA\$129.9 billion at the point-of-sale (POS). Debit represents almost 60 per cent of volume of these contactless payments - often viewed as a convenient substitute for cash. In fact, debit card use overtook cash for the first time in recent years.
- **Mobile devices were used by nearly 35 per cent** of Canadians for contactless payments on a regular basis in 2018, representing a slower uptake than contactless cards. Concerns about security remain the key barrier of usage, with less than a third of consumers expressing their belief that mobile payments are safe and secure.
- **Explosive growth of online transfers**, with a 52 per cent year-over-year increase in volume growth from 2017-2018.

Published: December 5, 2019

FINANCIAL STATEMENTS & AUDITORS REPORT

INDEPENDENT AUDITOR'S REPORT

To the Members of Payments Canada

OUR OPINION

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of Payments Canada (the Company) as at December 31, 2019 and the results of its operations and its cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

What we have audited

The Company's financial statements comprise:

- the statement of financial position as at December 31, 2019;
- the statement of operations for the year then ended;
- the statement of changes in net assets for the year then ended;
- the statement of cash flows for the year then ended; and
- the notes to the financial statements, which include a summary of significant accounting policies.

BASIS FOR OPINION

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada. We have fulfilled our other ethical responsibilities in accordance with these requirements.



OTHER INFORMATION

Management is responsible for the other information. The other information comprises the information, other than the financial statements and our auditor's report thereon, included in the Annual Report.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

PricewaterhouseCoopers LLP

Chartered Professional Accountants, Licensed Public Accountants

Ottawa, Ontario

February 27, 2020

STATEMENT OF FINANCIAL POSITION

AS AT DECEMBER 31, 2019

(in thousands of dollars)

	2019 \$	2018 \$
ASSETS		
Current assets		
Cash	6,168	7,836
Short term investments (note 3)	35,809	31,886
Accounts receivable (note 4)	16,006	13,651
Prepaid expenses	8,301	3,689
	66,284	57,062
Capital assets (note 5)	9,631	7,647
Intangible assets (note 6)	62,108	23,466
	138,023	88,175
LIABILITIES AND NET ASSETS (LIABILITIES)		
Current liabilities		
Accounts payable and accrued liabilities	18,375	15,498
Demand loans (note 8)	132,000	70,500
Deferred revenue	1,262	407
	151,637	86,405
Tenant inducement	1,112	1,292
Employee future benefits (note 7)	1,852	1,370
	154,601	89,067
Net assets (liabilities)		
Unrestricted – Core	18,303	15,663
Unrestricted – Modernization	(69,311)	(45,467)
Internally restricted	34,430	28,912
	(16,578)	(892)
	138,023	88,175
Commitments (note 9)		

STATEMENT OF OPERATIONS

FOR THE YEAR ENDED
DECEMBER 31, 2019

(in thousands of dollars)

	2019	2018
	\$	\$
REVENUE		
Fees	61,948	53,516
Costs recovered from members	1,694	1,538
Conference	2,550	1,882
Other	2,131	1,189
	68,323	58,125
EXPENSE		
Modernization program	23,844	31,915
Salaries and benefits	26,602	21,739
Technology and telecommunications	10,196	9,209
Projects	5,429	8,424
General administration	6,248	4,800
Amortization of capital assets	2,750	2,293
Professional services	6,018	3,868
Costs incurred for members	1,767	1,575
Bank of Canada settlement services	900	900
	83,754	84,723
Net expense for the year	(15,431)	(26,598)

STATEMENT OF CHANGES IN NET ASSETS (LIABILITIES)

FOR THE YEAR ENDED
DECEMBER 31, 2019

(in thousands of dollars)

	Balance - Beginning of year \$	Net revenue for the year \$	Employee future benefits remeasurements \$	Transfers \$	Balance - End of year \$
UNRESTRICTED					
Core operations	15,663	8,413	(255)	(5,518)	18,303
Modernization program	(45,467)	(23,844)	-	-	(69,311)
	(29,804)	(15,431)	(255)	(5,518)	(51,008)
INTERNALLY RESTRICTED					
Principles of Financial Market Infrastructure	14,837	-	-	1,828	16,665
Modernization program	10,573	-	-	-	10,573
Stabilization	3,502	-	-	3,690	7,192
	28,912	-	-	5,518	34,430
	(892)	(15,431)	(255)	-	(16,578)

STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED
DECEMBER 31, 2019

(in thousands of dollars)

CASH PROVIDED BY (USED IN)

Operating activities

	2019 \$	2018 \$
Net expense for the year	(15,431)	(26,598)
Items not affecting cash		
Amortization of tenant inducement	(180)	(197)
Amortization of capital assets	2,750	2,293
Employee future benefits expense	250	251
Cash paid for employee future benefits	(23)	(23)
Net change in non-cash working capital items		
Accounts receivable	(2,355)	(153)
Prepaid expenses	(4,612)	(1,641)
Accounts payable and accrued liabilities	2,877	2,174
Deferred revenue	855	(386)
	(15,869)	(24,280)

Investing activities

Purchases of short-term investments	(35,809)	(38,215)
Proceeds on sale of short-term investments	31,886	29,467
Purchases of capital assets	(4,734)	(978)
Purchases of intangible assets	(38,642)	(12,641)
	(47,299)	(22,367)

Financing activities

Proceeds from demand loans	(70,500)	(24,500)
Advances of demand loans	132,000	70,500
	61,500	46,000

Net change in cash for the year

Net change in cash for the year	(1,668)	(647)
Cash - Beginning of year	7,836	8,483
Cash - End of year	6,168	7,836

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2019

(in thousands of dollars)

1 GENERAL INFORMATION

Canadian Payments Association, doing business as Payments Canada (“the Company”), was incorporated in 1980 by an Act of Parliament of Canada. The objectives of the Company are to:

- establish and operate national systems for the clearing and settlement of payments and other arrangements for the making or exchange of payments;
- facilitate the interaction of its clearing and settlement systems and related arrangements with other systems or arrangements involved in the exchange, clearing or settlement of payments; and
- facilitate the development of new payment methods and technologies.

The costs associated with Canada’s central automated facilities and telecommunications facilities of the national clearing and settlement systems are the responsibility of the Company. All other significant operating costs in relation to the information technology infrastructure relative to the actual clearing process are the responsibility of the member institutions.

The Company is funding the Modernization Program by way of bank financing as opposed to annual dues and fees from members. As a result, the Company is expected to operate in a deficit position over the period of time in which national payments infrastructure is being modernized. The Canadian Payments Act (“the Act”) and Finance By-Law made under the Act provide the Company with the authority to require its members to pay dues and fees.

The Company has elected to operate as a non-profit organization, under paragraph 149(1)(l) of the Income Tax Act and, as such, is not subject to income taxes.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of accounting

The financial statements have been prepared in accordance with Canadian accounting standards for not-for-profit organizations.

Use of estimates

The preparation of financial statements in conformity with Canadian accounting standards for not-for-profit organizations requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenue and expense during the year. Actual results could differ from these estimates.

Short term investments

Government of Canada treasury bills are measured at fair value. Changes in fair value are recorded in the statement of operations.

Capital assets

Capital assets are initially recorded at cost. Amortization is provided on the basis of their useful lives using the straight-line method over the following durations:

Leasehold improvements	over the term of lease
Office furniture	5 years
Technology	3 – 5 years

Intangible assets

Internally generated modernization systems under development are recorded at the sum of the expenditures incurred and will not be amortized until substantially available for use. The expenditures incurred mainly include salaries and benefits, professional services and interest costs directly related to the development of the modernization systems. Once available for use, amortization will be provided using the straight-line method over the payments systems estimated useful life.

Tenant inducement

In 2014, the Company entered into a 10-year lease agreement for new office space. As part of the lease, the Company received tenant inducements totalling \$1,931. In 2016, the Company entered into a nine-year lease agreement for additional office space and received a lease inducement totalling \$121. In 2019, the Company entered into a five-year lease agreement for additional office space and received a lease inducement of \$16. The tenant inducements are amortized on a straight-line basis over the terms of the leases and are included in general administration expense in the statement of operations.

Employee future benefits

The Company provides a life and health insurance plan to its employees subsequent to their retirement.

The Company accrues its obligations and related costs for employee future benefits as the employees render the service necessary to earn retirement benefits. As these benefits are unfunded, the obligation is measured using an actuarial valuation prepared for accounting purposes, which incorporates management's assumptions used for cost escalation, average ages of employees and other actuarial factors. The actuarial valuation is performed at least every three years. In the years between valuations, plan results are prepared based on extrapolations of the latest available actuarial valuation results.

The benefit plan expense for the year consists of the current service and interest costs. Remeasurements and other items are recognized directly in the statement of changes in net assets (liabilities).

Revenue recognition

Service fees are recognized as revenue as transactions are processed.

Common service fees are recognized as revenue proportionately over the year to which they relate. Fees received in advance of the related fiscal year are recorded as deferred revenue.

Costs recovered from members are recognized as revenue in the year in which the related service is performed.

Revenues from conferences are recognized in the year the conference takes place.

3 SHORT TERM INVESTMENTS

Guaranteed investment certificates bear interest at fixed rates ranging from 1.203% to 1.620% (2018 – 1.351% to 1.93%), and mature in 2020 (2018 – in 2019).

4 ACCOUNTS RECEIVABLE

74% of accounts receivable are owing from five members (2018 – 75% owing from five members).

5 CAPITAL ASSETS

			2019	2018
	Cost \$	Accumulated amortization \$	Net \$	Net \$
Leasehold improvements	4,415	1,499	2,916	1,963
Office furniture	2,309	1,302	1,007	473
Technology	16,114	10,406	5,708	5,211
	22,838	13,207	9,631	7,647

Cost and accumulated amortization amounted to \$18,105 and \$10,458, respectively, as at December 31, 2018.

6 INTANGIBLE ASSETS

	2019			2018
	Cost \$	Accumulated amortization \$	Net \$	Net \$
Modernization systems under development	62,108	-	62,108	23,466

Cost amounted to \$23,466 as at December 31, 2018.

7 EMPLOYEE FUTURE BENEFITS

The most recent valuation date was October 31, 2017. Extrapolations of the actuarial valuation indicated an accrued benefit liability of \$1,852 (2018 – \$1,370).

As the plan is unfunded, this amount is recorded as an employee future benefits liability in the statement of financial position.

Significant assumptions:

	2019 %	2018 %
Discount rate	3.20	4.00
Health care cost trend rates		
Hospital, dental, other medical	4.00	4.00
Drugs, grading down to 4.00% per annum in and after 2040 (2018 – after 2020)	6.50	6.50

8 DEMAND LOANS

The Company has an authorized credit facility, made up of a syndicate of members, which is being drawn down by way of bankers' acceptance notes with minimum terms of 90 days as follows:

	2019 \$	2018 \$
2.14%, maturing on January 19, 2019	-	30,000
2.29%, maturing on March 20, 2019	-	40,500
1.98%, maturing on January 17, 2020	63,000	-
2.02%, maturing on March 18, 2020	69,000	-
	132,000	70,500

9 COMMITMENTS

The Company is committed to minimum payments under long-term operating leases for the rental of premises, infrastructure services and office equipment as follows:

	\$
Years ending December 31, 2020	7,434
2021	12,223
2022	16,417
2023	15,111
2024	14,287
Thereafter	21,113