

# Moving Canada into the Digital Age

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### **Introduction**

### A COMPELLING NEED FOR A PAYMENTS SYSTEM OVERHAUL.

The way we pay for goods and services affects every Canadian in profound ways.

The Task Force for the Payments System Review has found that unless Canada develops a modern digital payments system, Canadians will be unable to fully engage in the digital economy of the 21st Century, leading to a lower standard of living across the country and a loss in international competitiveness.

Moreover, the Task Force found that a thoroughly modernized payments system could save the Canadian economy as much as two per cent of GDP in productivity gains, equivalent to \$32 billion in annual savings for Canada.

As important as this massive benefit, a modern Canadian payments system will lead to far greater choice, efficiency and convenience for consumers, businesses, governments and organizations, as well as a safer, more secure system.

A failure to act now will not only result in a loss of these benefits, but will also trap our economy in a less productive and more costly payments system. The question isn't whether Canada should overhaul its payments system. The question is: Can we afford not to?

### A collaborative investigation of the facts

To come to grips with the complexity of our payments system, and learn what solutions are required to bring Canada into the digital age, the Task Force went beyond a standard consultation processes to draw more fully on the wisdom of citizens, payments experts, consumer, retail and small business groups, federal and provincial government representatives, financial institutions, small and large businesses, and new entrants to the payments system in a process of extended dialogue.

The Task Force engaged many stakeholders in working groups and a scenario process in order to better understand the massive changes underway and their implications for government policy and action. It was the first time that the views of such a wide range of stakeholders had ever been heard in such depth on the subject of Canada's payments system.

### A swiftly evolving digital environment

From the outset, the Task Force heard that payments habits and the digital economy are evolving rapidly around us, exceeding most expectations for change. Even during its brief mandate,

the Task Force witnessed the advent of new digital payments products and services that have married payments to mobilebased apps, cloud computing, and "tap-and-go" technology.

The Task Force also learned about the vital interplay between payments and the business and personal information associated with those payments, a relationship that features prominently in a digital, information-based economy.

Amid these advances, and despite the fact that Canadians have a tendency to be early adopters of technology, we still rely largely on old-fashioned methods of payment such as paper-based processing, and cash and cheques. In addition, Canada is falling behind in the international push to generate a secure mobile ecosystem, the revolutionary agent that will deliver extraordinary new commercial and public services to consumers via their smart phones.

### Canada will be left behind

Twenty-seven European Union countries, the BRIC countries, even Peru and Romania, are significantly outpacing Canada's transition to digital payments, with obvious negative implications for Canada's global competitiveness and interoperability.

A study by Swiss e-invoicing and billing services firm Billentis (substantiated by separate studies carried out by the European Payments Council, Innopay and the European Banking Association) found the following benefits accrue in countries and organizations after moving from paper-based and non-automated invoicing and purchasing to electronic solutions:

- After five to seven years, 27 European Union countries expect to save the equivalent of 1.98 per cent of GDP, which amounts to €243 billion per year in increased productivity.
- Organizations are able to reduce the cost of invoicing by 60 to 80 per cent when they move from paper-based invoicing to electronic and automated methods.
- Businesses, on average, realize a 1- to 2-per cent-of-revenue reduction in costs by switching from paper to e-invoicing and automating the related supply chain processes.

### A system dominated by the major banks

Canadians continue to use an outdated payments system not necessarily because they prefer it, but because no viable alternative has been priced and promoted in a way that makes it attractive to use. Canada's system has simply not evolved in step with the wants and needs of its users, and this stagnation is standing between each one of us and a better standard of living.

The reason for the stagnation? Our payments system is controlled by Canada's major banks and other key institutions. Their interests are best served by keeping at bay new entrants to the system, the very entrants who would bring the innovations that Canadians need.

### The Government of Canada must move forward decisively

The Task Force has concluded that, in the absence of a healthy competitive environment, government needs to create demand for a modern digital payments system. Such a system must put the needs of users first, protect the public interest and encourage collaboration and innovation by all stakeholders now and into the future. In particular, the Task Force calls on the Government of Canada to:

- Implement electronic invoicing and payments (EIP) for all government suppliers and benefit recipients;
- Partner with the private sector to create a mobile ecosystem;
- Propel the build of a digital identification and authentication (DIA) regime to underpin a modernized payments system and protect Canadians' privacy;
- Pass legislation to define a discrete payments industry
  and create a public oversight body to ensure effective
  governance of the industry; amend the Canadian
  Payments Act by overhauling the governance, business
  model and powers of the Canadian Payments Association;
  and, most important, transform the payments
  infrastructure so that it can innovate to meet the evolving
  payments needs of Canadians in a digital economy.

Canada must take decisive steps in overhauling our payments system to further our national interest and the well being of Canadians.

### How to read this report

"The Challenge" section of this report provides additional detail about the risks inherent in Canada's current payments system. As such, it complements certain ideas explored in the introduction. "The Opportunities" section explores Canada's prospects for creating a trusted, accessible and valuable digital payments system that meets the needs of myriad users. The "Recommendations" section details the specific actions government must take to deliver the digital payments system that Canadians want and need.

### **The Challenge**

### **KEEPING UP WITH CANADIANS.**

Canadians are increasingly at ease in the digital world and have moved online with confidence. By mid-2011, more than 80 per cent of Canadians had regular access to the Internet, and the CRTC expects that by 2015 all Canadians should have access to basic broadband. The benefits to Canadians of reliable online communication are well documented and appreciated.

Yet ironically, the way we take payments from our customers and investors and then make payments to our suppliers, service-providers and employees is remarkably antiquated. It is clear that profound changes are needed.

Before we move to implement changes, let's examine some of the challenges a little more deeply.

#### Canadians are frustrated.

The Task Force heard that users of the Canadian payments system, consumers, retailers, SMEs, large businesses, governments, and not-for-profit organizations, are dissatisfied with the status quo. Here are just a few of the concerns that the Task Force heard from Canadians:

- Consumers, who provided the Task Force with over one hundred pages detailing their issues and complaints, increasingly want to pay for purchases online but too often have limited choices. They also want to pay bills online, only to find out that processing takes days, often resulting in unwarranted late charges when transactions fail to clear by the deadline.
- Meanwhile, the online debit and credit options available to consumers are laborious, in part because Canada has not implemented a digital identification and authentication regime that would provide safety and security of all payments within a user-friendly, instantaneous-payment system.
- Small businesses are frustrated by the lack of digital alternatives to paper cheques. (Eighty per cent of small business payments are made by cheque because there is no accessible, reasonably priced electronic payment alternative.)
- Large businesses want the capacity to process invoices and payments in real time across the world, yet our infrastructure is unable to support the services they require.
- Millions of Canadians have families abroad to whom they
  want to send funds, yet they realize that mobile payments
  are cheaper and more effective where their families live,
  in Kenya or the Philippines, than they are here in Canada.

Innovators want to enter the Canadian market, but
they hesitate because, in the absence of any concerted
Canadian effort at modernizing our payments system,
they do not know how the rules will evolve. More than
that, incumbents control the rules and infrastructure.
The system as it stands is anti-competitive; it is an
insurmountable barrier to new entrants.

### Our transactions are less data-rich than they need to be.

Within our existing payments infrastructure, the transfer of information about a product or service is divorced from the transfer of the funds that pay for it. Our infrastructure cannot, for example, carry the information that banks, businesses and governments need to do a receivable and payable reconciliation. Instead, the technology to transfer funds carries only the barest details of origin and destination. The situation is analogous to our telephone system of 20 years ago, before any information about the call arrived with the call. Today, an added layer of information can provide services such as caller ID, caller waiting and intelligent call switching.

### The electronic payments we make today are not instantaneous.

When an individual makes an electronic payment the payment appears to have been made at lightning speed, but it was not. Our infrastructure today is not equipped to provide instant payments; instead, third parties process the payments at the end of the business day. Industry has not yet begun to address this shortcoming in the system.

### We rely too heavily on cheques and paper.

About one billion cheques are written annually in Canada. Some 60 per cent are issued by government, large corporations and small- and medium-sized enterprises, and 40 per cent are issued by consumers. More than half of consumer payments, including those to retailers, schools, charities, associations, relatives and friends, are made with either cash or cheques.

Cheques are inefficient. They reduce productivity and convenience because they involve manual steps, keying in information, printing and mailing, and reconciliation of payment and invoice. There are also time and value delays in processing and settlement. In contrast, electronic invoicing and payments eliminate inefficiencies, allowing invoices to be processed and paid faster and with less cost.

One reason Canada relies so heavily on cheques is that our financial institutions have invested in an infrastructure that supports the existing payments system. That system favours paper, bundling cheques in monthly account fees. At the same time, financial institutions charge a substantial fee for transitioning from cheques to digital payments, most charging \$1.50 for e-transfers. Financial institutions' reluctance to replace legacy systems when a digital alternative may not deliver the same revenues is understandable, but it is not good for Canada and will not, in the long term, be good for the financial institutions.

In fact, reducing the use of cheques will not necessarily lead to lost revenues for banks. Nordea Bank in Finland reports that it has reduced its costs after moving toward digital solutions and created new revenue streams from the development of innovative information-based products. Some estimates show that financial institutions will save \$600 million a year in cheque-handling related cost savings by 2020 under a digital payments system.

The task force is not proposing abandoning cheques immediately or altogether. Canada is far too reliant on them. Instead, we need to offer governments, businesses and consumers alternative electronic payments methods that deliver greater benefits than our existing cheque-based infrastructure. A reasonable goal is to eliminate 80 per cent of cheques by 2020.

### **The Opportunity**

# THE PRINCIPLES OF TRUST, ACCESS AND GOOD VALUE SHOULD GUIDE THE EVOLUTION OF CANADA'S PAYMENTS SYSTEM.

The reliability and stability of Canada's banking system, admired at home and abroad, will mean little to Canadians and the rest of the world if our banks, governments and businesses are unable to conduct simple transactions swiftly and efficiently according to international standards.

Experience in other countries shows that government leadership is critical to accelerating the shift to digital payments. Indeed, no country has successfully made the transition without government intervention.

To remedy Canada's outdated payments system the Government of Canada needs to take the lead. Government can bring about a swift and secure evolution that would result in a modern digital payments system by taking leadership in several critical arenas.

## 1. A feature-rich electronic invoicing and payments system for businesses

Moving to an electronic invoicing and payments (EIP) system will require replacing manual and paper-based accounting systems and processes with automated, electronic ones. This includes all steps of the purchase-to-pay and the order-to-receive cycles: sending and receiving invoices, dispute handling, acceptance, payment and collection, reconciliation and archiving.

One problem with the status quo in business and government payments is that the steps between purchase and final remittance alternate between electronic and physical formats. Businesses have to manually re-enter data, which wastes a great deal of time. For businesses to remain competitive, these redundant efforts need to be eliminated.

Governments have much to gain from full automation. A Capgemini report that evaluated 19 European Union members estimated a per-unit operation cost reduction of 70 to 75 per cent by removing paper from the delivery of government services. Meanwhile, separate research has shown that savings for large enterprises under a digital payments system are estimated at \$5 billion per year in Canada with small- and medium-sized enterprises and financial institutions capturing \$700 and \$600 million, respectively.

Through automation, managing information becomes easier because manual tasks are eliminated. Reconciliation rates and processing cycle times improve. Quality control and responsiveness are enhanced because information is real-time. EIP unlocks the potential for a much higher standard of service for the user and supplier.

### 2. A state-of-the-art mobile payments system for consumers

Technology has radically changed consumers' behaviours and expectations. We are early adopters of smart phones and tablets, and we are among the world's heaviest users of the Internet, and online banking and shopping. Why, then, are mobile payments largely absent in Canada?

Developing countries that do not have access to stable banking services, and where many individuals do not even have physical access to banks, have been using mobile phone payments for more than a decade. More recently, developed countries such as the Netherlands, France, United Kingdom, and the U.S. have announced mobile payments offerings. Over the next two to four years mobile payments are expected to go mainstream and Canada risks being left behind. In particular, Canadians need to be offered alternatives to writing cheques and paying in cash.

The Task Force has helped encourage Canadian banks and wireless carriers to come together to create the conditions for mobile payments. Canada is already a leader in near-field communications (tap, or proximity payments) with 11 per cent penetration at the point of sale. Such devices are among the busiest terminals in Canada, found in retail and service industries consumers rely on, such as grocery stores, gas stations, restaurants and coffee shops. This reality demonstrates that Canadians are ready for a revolutionary shift in lifestyle. Yet we lag.

The next wave in consumer payments will come from new mobile technologies<sup>1</sup>. To take advantage of these innovations, government and industry must create the right conditions for the technology to thrive. The Task Force was encouraged by the willingness of the banks and carriers to open their discussions to the rest of the payments industry and to retailers to create a mobile commerce environment for consumers. But much more needs to be done to expand the discussion as the next battle is going to be over who owns the mobile wallet.

The transformative power of a mobile ecosystem that combines payments, commerce and government services can be harnessed to tip the scales towards broad adoption of such a system. And for good reason: as technology and the digital world continue to reshape common definitions

<sup>1</sup> Mobile Payments Outlook. KPMG. 2011

of identity, community, commerce and even information, the common key to unlock the technological door will be the one in the palm of our hands.

### 3. A secure digital identification and authentication regime.

One obstacle to revitalizing Canada's payments system is Canadians' legitimate concerns about fraud, identity theft and system failures. A necessary precondition to embracing EIP and mobile payments is generating the trust, access and cost-saving efficiencies that compel consumers to use them. At present, online debit and credit systems are laborious because of the absence of a robust digital identification and authentication (DIA) regime in Canada. Robust DIA enables parties to transact with greater certainty and confidence and is key to moving forward into the digital age.

DIA is a new way of conceptualizing identity. It is not a technology solution, as no program or app can handle the complexity of managing identity. Instead, it is a policy solution, a paradigm that enables us to navigate a digital world with maximum potential and minimum risk.

Thus far, federal and provincial governments have been proactive on DIA and that is a good sign. The time has come to draw in the private sector and start transforming policy into action.

The Task Force has taken a proactive approach as well, assembling leaders from government and industry responsible for bringing about DIA in Canada. These parties have begun the task of establishing roles and responsibilities, collectively mapping the best strategy for moving forward.

### 4. A governance structure to allow collaboration and innovation.

Effective governance is essential to the success of a digital payments system in Canada. The emerging payments system will be characterized by rapid, discontinuous change making it impossible to predict the future of payments in general and where frictions may surface. The solution to managing these complex realities lies in establishing a governance model that is inclusive, collaborative, flexible and adaptable, and that protects the public interest.

The Task Force has concluded that our payments landscape will thrive by ensuring all stakeholders have an opportunity to participate in a collaborative process, by placing primary responsibility for achieving the broader policy objectives of our payments system, trust, access and good value, on all stakeholders, and by providing an oversight mechanism to

quickly and flexibly intervene. (The Task Force thoroughly analyzed these issues in a series of four policy papers listed in the Contents section). At the apex of such a pro-active and responsive governance model is simple and straightforward legislation that accomplishes several objectives.

### An established industry

Government needs to recognize payments as a bona fide and discrete industry; no such industry exists today except as part of the banking and financial services industry. Such recognition would make it clear who the industry's participants are, that is, all payments service providers, not just incumbents. This would necessarily involve identifying entities subject to the regime based on the function they perform.

However, as the payments sector becomes increasingly fragmented, complex and populated with new types of players along the value chain, it is no simple task to come up with a definition that accurately reflects the full scope of the industry. The Task Force has settled on the following working definition of who should be considered a payments service provider:

The payments system refers to arrangements that allow consumers, businesses, governments and other organizations to transfer monetary value from one party to another. It includes the institutions, instruments and services that facilitate the transfer of monetary value between parties in a transaction.

### Trust, access and good value

Government also needs to formally enshrine high-level principles of trust, access and good value that serve the public interest. Though the Task Force favours light-touch legislation, the fundamental need to uphold the public interest should be pursued above all other considerations.

Strictly speaking, the Minister of Finance is accountable for this important function. At the same time, we cannot expect the Minister and his Department to address every concern. Instead, as outlined below, government can delegate some authority to a public oversight body and, ultimately, to the industry.

### A public oversight body

A body is needed to protect the interests of the public and ensure that the principles enshrined in Canada's payments system, trust, access and good value, are upheld at all times. A body is needed to monitor how changes are implemented as the payments system evolves, and that

those changes reflect the needs and wants of Canadians, above all. In addition, governance needs to be eminently flexible and adaptable, offering industry, including businesses and innovators of all sizes, as much rule-making authority as possible. The complexity of Canada's emerging payments system virtually guarantees that the stakeholders tasked with governance will experience moments of impasse or indecision.

These realities call for an oversight body that acts in the interests of the public. Under the ultimate direction of the Minister of Finance, this public oversight body would delegate much of its regulatory and policymaking mandate to a self-governing organization, or SGO, (see below) while retaining the right and requirement to ratify the strategies of the SGO and review its performance. All providers of payments would be required to become members of the SGO and users would be eligible for membership. The oversight body would also provide recourse for stakeholders who could not resolve concerns within the SGO.

### Self-governing organization

Technological change, new entrants and competitors, shifting risks and opportunities and security and privacy issues, all provide challenges that can be solved only when healthy collaboration is built into decision making. The Task Force envisions as part of a new governance model an SGO, delegated by a public oversight body, that would provide a platform for broad-based collaboration and strategic thinking for the industry as a whole.

The Task Force envisions an SGO more inclusive than others around the world; it will bring together financial institutions, payment card networks, acquirers and new entrant payments service providers alongside a user stakeholder community that includes consumers, merchants, small- and medium-sized enterprises, not-for-profit organizations, large corporations and governments.

Although the proposed governance model has its roots in legislation, it effectively falls to the industry, in consultation with the public oversight body, to develop the appropriate self-governance vehicle needed to achieve effective collaboration among stakeholders. While legislation may take time, the process of building an SGO can begin right away and we urge industry, for its own good, to take the lead in beginning this process.

### Responsive infrastructure

The existing infrastructure entity, the Canadian Payments Association, is governed by its members, the Canadian deposit-taking financial institutions; therefore, its board is particularly influenced by the views of the major banks.

This arrangement creates a conflict of interest (the members' interests are served by minimizing investment and keeping new entrants at bay). It is difficult for the organization to plan and build for the longer-term and there is no incentive for the organization to remove barriers to entry for new participants.

Consequently, Canada's payments system has been unresponsive to market forces and shows little sign of undertaking the fundamental innovation needed to transform the payments infrastructure to meet the evolving payments needs of Canadians in a digital economy.

The Task Force proposes that government undertake important actions that would transform the Canadian Payments Association. Changes to the objects, governance, powers, business and funding model would reinvent the CPA to enable it to provide infrastructure that underpins an innovative payments system for the future, responsive to Canadians needs while maintaining our trust and promoting access and efficiency. Ideally, the core infrastructure entity would include the CPA, Interac/Acxsys and cheque processing to facilitate the transition to a state-of-the-art payments system and to protect our low-cost domestic account-to-account debit system.

### Recommendations

### **GOVERNMENT MUST LEAD THE CHANGE.**

For Canada's payments system to substantially modernize, changes are required in multiple arenas, from consumer behaviours to accounting solutions, to the very procedures governments rely upon in delivering services. Industry has not implemented change due in part to uncertainty and lack of coordination. Therefore, the Government of Canada should lead the change by undertaking the following actions:

- Implement electronic invoicing and payments (EIP) for all government suppliers and benefit recipients.
- Partner with the private sector to create a mobile ecosystem.
- Propel the build of a digital identification and authentication (DIA) regime to underpin a modernized payments system and protect Canadians' privacy.

The Task Force also calls on the Government of Canada to overhaul the governance structure of Canada's payments system in a manner that puts the needs of users (consumers and businesses) first, protects the public interest and encourages collaboration and innovation by all stakeholders now and in the future. Specifically, the Government of Canada should pass legislation to:

- 1. Define a discrete payments industry and require payments service providers to become members.
- 2. Create a new public oversight body for the payments industry that will:
  - a) Protect the public interest as broadly defined through a principles-based approach;
  - Monitor the implementation of changes to the payments system, ensure that it continues to meet the public interest and propose adjustments where necessary;
  - c) Provide redress, where necessary, when industry behavior no long inspires trust, or enables access, competition or innovation.
- 3. Encourage industry to create a broad-based, collaborative, self-governance organization including both providers and users to develop and implement strategy and standards for the payments industry. This entity would be recognized by the public oversight body as a self-governing organization.
- 4. Reinvent the objects, governance, powers, business model and funding of the Canadian Payments Association (CPA). This will enable the CPA to deliver the modern systems required for meeting the payments needs of all Canadians into the future.

### **Conclusion**

# CANADIANS WANT TO PARTICIPATE FULLY IN THE DIGITAL ECONOMY.

Over the course of its 18-month investigation, the Task Force heard a clear and urgent message from Canadian consumers, businesses, governments, associations, and other organizations: most are calling loudly for immediate, information-rich digital payments so that Canada can join the digital age.

The benefits of embracing a digital payments system are abundant. In the near future, members of a busy family will move through the aisles of a grocery store scanning items with smartphones, comparing prices, tallying their purchase total, then heading directly to their car without passing through a checkout. A small-business owner will finance a new venture with a loan against specific receivables that will be paid on specific days known precisely in advance. A clinic will ship test results and receipt for payment in the same data packet. And a government will pay benefits to its citizens more swiftly, cheaply and securely than ever before.

The enthusiasm with which Canadians have already embraced the digital lifestyle, in the areas of communication, education, retail shopping, entertainment and news, among others, and the dissatisfaction they voiced to the Task Force toward the current system make it clear that Canadians would applaud a bold move to digital payments.

With strong government leadership combined with sound governance, Canada can adopt a digital payments system protected by secure credentials, propelled by public-private partnerships, embraced by businesses and welcomed with open arms by consumers.

It's time to go digital.

# A comprehensive body of work

Throughout its work, the Task Force has actively engaged in participatory dialogue and related research. We have sought to capture the essence of this work in four separate discussion papers:

- Scenarios for the Future of the Canadian Payments System
- The Way We Pay: Transforming the Canadian Payments System
- · Going Digital: Transitioning to Digital Payments
- Credit and Debit Card Markets

The Task Force crystalized its thinking in a series of policy papers. The policy papers tell the story of how Canada's payments system needs to change: starting with the needs of users; setting out a new principles-based, inclusive governance model; defining the legislation necessary to bring about change; and focusing on changes required to provide an updated infrastructure for Canada's payments system. The policy papers are entitled:

- Policy Paper A: Users and their Discontent
- Policy Paper B: Governance Stakeholders and their Disconnect
- Policy Paper C: Legislation Establishing an Industry
- Policy Paper D: Infrastructure A Reinvented Canadian Payments Association

The members of the Task Force consider it a rare honour to have been asked to undertake this important research on behalf of the Minister of Finance. Throughout, we have worked diligently in the interests of Canadians and the Canadian economy.

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