





A Call to Arms for PayTech

The Future of Payment in Canada

Darcy Drury & Fatima Saya
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A Call to Arms for PayTech: The Future of Payment in Canada

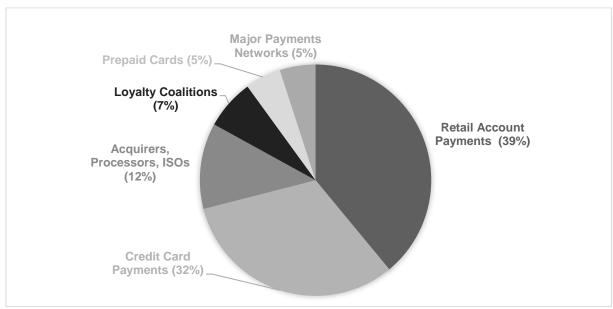
The following is based upon three pillars. First, it incorporates themes and insights from a two-hour roundtable discussion held at the Rotman School of Management on February 22nd, 2019 composed of leading investors, businesses, regulators, and academics. Chatham House rules were in effect. Second, several interviews were undertaken to further develop these themes and insights. Third, additional research was undertaken to complement the contents herein.

Background

1. Payments is a large industry built around financial transactions

Each year over \$50 trillion dollars are transacted in Canada. These transactions are processed through two main payments networks operated by Payments Canada: the Automated Clearing Settlement System (ACSS) and the Large Value Transfer System (LVTS). Each system first provides *Clearing*, which processes, transmits, and confirms orders between sender and receiver; then *Settlement*, which releases the funds to be transferred between parties. The ACSS processes 10 billion retail payments worth \$6 trillion through twelve authorized direct clearers—mostly banks and credit unions. These payments include debit (5 billion transactions), electronic funds transfers (3 billion), cheques (798 million), automatic bank machines (549 million), and bill payments (449 million). The LVTS is an electronic network introduced in 1999 to process large-value, time-critical payments continuously throughout the day. The LVTS has seventeen authorized direct clearers and processes 9 million transactions—or wire payments—worth \$43 trillion each year. This system also clears roughly 12.5 billion payments through independent networks (e.g. Visa, Interac), including cards (credit and prepaid), e-transfers, and cash, which settle through the 9 million wholesale wire payments mentioned above. Overall, the payments industry is a high-margin business, due to its relative exclusivity and centrality in the Canadian economy.

Payment represents a \$16 billion market, with an approximately 70% return on equity for the dominant players, mostly banks and credit cards. Figure 1 shows the breakdown of the revenues generated by the payments industry in Canada in 2016. Retail account payments, better known as chequing, savings, and credit card accounts, make up nearly 40% of the industry. These revenues have the potential to be disrupted by distributed ledgers (blockchain) and prepaid cards going forward. The credit card business, which pulls in over \$5 billion in revenue, represents roughly a third of revenues in the Canadian payments industry. Due to their massive scale and legacy relationships, players such as Visa and Mastercard dominate this space. The remaining 30% of the market is made up of connectors, such as service providers and payments networks (i.e. SWIFT), prepaid cards, loyalty programs, and a growing innovation space.



Revenues in the Canadian Payments Industry reached \$16.4B in 2016

Figure 1: Payments Canada

2. Payments Modernization is coming to Canada

Payments Canada is in the midst of a significant Payments infrastructure modernization process that will enable a new payments ecosystem. Modernization will entail a replacement of the older infrastructure with new systems. PayTechs will be significantly affected, and potentially aided, by payments modernization. There are three major changes underway: Lynx, Settlement Optimization Engine, and Real-Time Rail.

First, the LVTS will be replaced with a safer, more versatile high value payment system called "Lynx". Lynx will be built to align with international risk standards and the global ISO 20022 messaging standard. This will offer enhanced cyber security, resiliency, and flexibility for new technologies through interfaces and Application Programming Interfaces (APIs), which enable FinTech firms to make use of bank data on behalf of customers in innovative and helpful ways.

Secondly, the ACSS will be gradually replaced by a more efficient retail payment system "the Settlement Optimization Engine (SOE)". Enhancing the ACSS through the "Retail Payments and Enhanced Automated Funds Transfer" will deliver new features like same-day payroll, expedited bill payments, and faster settlement of invoices. Through increased automation and risk management, consumers and businesses will be able to complete data-rich payments via straight-through processing.

Third, a new real-time retail payment system, "Real-Time Rail", will be developed as a third core payment system to "better serve the needs of consumers and merchants and to provide a platform for innovation in the Canadian payments ecosystem." Real-Time Rail will lead to a new opportunity for customer-facing payment products to offer broader access with risk-based requirements to improve safety and soundness. Additionally, all Payments Canada systems will be upgraded to support the ISO 20022

messaging standard, which is an open, global standard that pairs payments with a wide-range of messages that both simplifies the transaction process and provides new opportunities for value-add services.



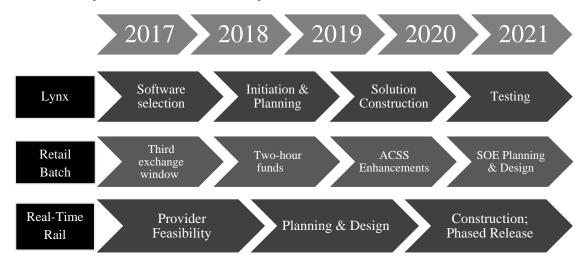


Figure 2: Payment Canada

Obstacles to Change

1. Bank Act as regulatory hurdle

All banking and payments activity require a banking license granted by the Ministry of Finance, which hinders many PayTechs' and foreign firms' ability to take part in the Canadian payments system. As the law stands, no bank or company can carry on financial business in Canada without obtaining the approval of the Finance Minister and the Office of the Superintendent of Financial Institutions (OSFI). The business of banking includes: providing any financial service, acting as a financial agent, providing investment counselling or portfolio management services, issuing payment, credit, or charge cards, and operating a payment, credit, or charge card plan in co-operation with others (including other financial institutions).^{iv}

To apply for a bank license, there is an extensive list of regulatory criteria, which can be subject to political interpretation, as the Finance Minister has the ultimate say in whether a bank license is granted. Typically, it takes 2 to 5 years to successfully acquire a banking license in Canada. Rogers Communications chose this path in 2011 and was granted a Schedule I bank license in 2013, opening Rogers Bank. While this path may be an option for large corporations, most Fintechs and PayTechs do not have the time or money to acquire a banking license. For these reasons, the existing banks are afforded a layer of protection from competition and are currently the main guardians of client deposits.

2. Regulator's lack of knowledge of the frontline

A major obstacle discussed at the roundtable was the slow pace of government and its impact on affecting regulatory change. One anecdote described a meeting between a PayTech and an OSFI representative in

which the PayTech demonstrated the use and purpose of their prepaid card, hoping for clarifications on regulatory implications. Upon seeing the physical card, the OSFI representative admitted they had never seen a prepaid card, and did not have any experience in dealing with the regulatory implications of this product. A major reason for this is that Canadian regulators, such as OSFI, do not have Fintechs and PayTechs within their scope, which is because they currently do not pose a threat to the safety and soundness of the financial system. A second anecdote described a PayTech executive attending a conference on regulatory compliance in which the only other people in attendance were lawyers. This point showed that compliance and regulatory functions, driven by second line of defence teams at financial institutions, have very little access to clients and the frontline. This disassociation harms the potential for innovation and offers large legacy players the opportunity to use compliance as a barrier to entry. This was a key insight from the Rotman PayTech rountable.

3. Banks and the last mile problem

A major theme that emerged from the roundtable discussion was that the existing payments landscape suffers from a last mile problem. What this means is that banks are good at getting most of the service and infrastructure built for their clients but are poor at customization and customer service. Banks have products that they push to client segments, while PayTechs start with customer needs and build their platforms out to meet those needs. Banks have very rigid ways of engaging with their clients, "they push information, they don't take it", while the proliferation of PayTechs shows that there is lots of demand for innovative offerings. An analogy mentioned during the roundtable was that the current system is like a basketball court, and players (consumers) can move the ball down the court as far as their opponent's three point-line—but no closer. Since the legacy players are satisfied with "shooting threes" from the beyond the arc, they do not bother developing an array of two-point plays (products) that serve more niche needs. This is where Fintechs and PayTechs play: inside the three-point line. They serve clients and connect them in the ways they need with the payments system. This analogy also illuminates the intrinsic partnership PayTechs have with incumbent players: they rely on existing rails and networks to connect clients' deposits with their innovative services.

Moving Forward

1. Leveraging the Payments System Task Force

In 2011, the Ministry of Finance Task Force for the Payments System Review noted that the Canadian economy was losing close to two percent, or \$32 billion as a result of inefficiencies in the Payments System. As a result, the Task Force recommended the adoption and implementation of a major modernization framework that would leverage digital technologies. Without such a modern digital payments system, the Task Force argued that Canadian businesses and consumers would be left behind in the digital economy.

Four major recommendations were outlined in the Task Force report, including:

- 1. A secure digital identification and authentication regime
- 2. A feature-rich electronic invoicing and payments system for businesses
- 3. A state-of-the-art mobile payments system for consumers
- 4. A governance structure to allow collaboration and innovation

It was these four recommendations that have guided the restructuring of the Canadian Payments Association into Payments Canada and its subsequent Payments Modernization Program.

As outlined in the section above, Payments Modernization will include the replacement of LVTS, ACSS, and the legacy rail system with Lynx, SOE, and the Real-Time Rail payments system. While the three new systems are responsive to the above, the recommendations outlined in the Task Force's report have mobilized change to a lesser extent and much more slowly than expected.

Given the number of stakeholders within the industry, a portion of which hold a significant amount of supplier power, this slow rate of change is no surprise. The ubiquitous influence of payment systems on government and business processes, as well as private citizens more generally, means that operationalizing a Payments Modernization to reflect the Task Force's recommendations will take time. However, given the opportunities offered by Payments Modernization, it is crucial that end-users, innovative PayTechs, public sector agencies, and financial services organizations—including the Big 6 banks—support its implementation to the fullest and ensure that it is fully responsive to industry needs.

2. Moving the dial on the Canadian Payments system

Digital ID

Progress on the recommendation to create a digital identification and authentication framework has not been effectively taken up by Payments Canada. Concerns regarding fraud and identity theft are the major obstacle to a Payments Modernization that is open to non-banks and leverages digital technologies. An increase in the size of the arena where Canadians transact business requires the development of processes that provide assurances that participants (a) are who they say they are, and (b) are using products and services in ways that are sanctioned by authorities. Despite this need, the development of a digital identification and authentication framework has moved more slowly in Canada than other jurisdictions and, much to the pleasure of the banking industry, precludes the participation of non-bank FinTechs in the payments system.

In Estonia, electronic ID cards have been in use since 2002, allowing citizens to both authenticate their identity when using government e-services, and sign documents or approve transactions online. Vii Using two separate but related government-assigned personal identification numbers (PIN), citizens can vote, file taxes, or review health records. Viii While the PIN required for authentification functions much like digital passwords used to log on to social media or online retailer sites, the PIN associated with identification is what establishes who a person is. In this environment, 99% of banking transactions are

already occurring online. With the implementation of the revised Payment Services Directive (PSD2) in the EU payments market, which not only gave non-traditional payment service providers the ability to initiate payments on behalf of users, but also introduced enhanced security measures like strong customer authentication, the development of innovative online and mobile payments systems is expected to grow.

In this way, the lack of a Canadian digital identification and authentication framework may limit the impact of Payments Modernization in creating opportunities within the payments industry. Although smaller agencies such as the Digital ID & Authentication Council of Canada (DIACC) are working to facilitate the development of a responsive and secure digital identity ecosystem, they have not yet had a significant impact on policymaking. Developed as a result of the Task Force's recommendation, DIACC is a non-profit coalition that includes both public and private sector leaders working to position Canada securely in the global digital economy.^x

As it stands, data governance and privacy are a salient policy imperative: payments, particularly in the context of the Real-Time Rail are going to carry a huge amount of data. Unfortunately, public agencies across the country have yet to articulate a uniform governance policy such as a digital identity ecosystem to standardize the use of consumer data. An ecosystem of this sort would not only help businesses mitigate the risk of fraud but also, according to DIACC, increase operating efficiency and accelerate the adoption of electronic business processes.^{xi} What's more, such a system will help end-users attain self-sovereignty over their digital identities, improving customer experience across a range of products.

Stakeholders within the Payments industry, in addition to end-users, must encourage progressive policy-making around the digital economy. PayTechs in particular have a great deal to gain with the development of digital identification and authentication ecosystems. Regulations in financial services and the payments system around security and anti-money laundering are especially prohibitive; PayTechs often starve for access to markets as a result of complex regulatory requirements. In the context of a digital identity ecosystem, these barriers would be lowered significantly, opening up the payments industry to more competition that would propel PayTechs to innovate more readily in Canada.

Looking ahead, DIACC member SecureKey is currently implementing a network (Verified.Me) on blockchain technology that strives to provide a foundational service to drive the digital economy forward. A SecureKey spokesperson said that "Establishing a secure and effective digital identity network would truly not be possible were it not for effective collaboration between the public and private sectors towards this shared goal." Through partnerships with the Canadian banks, Equifax, and the Government of Canada, SecureKey has launched Verified.Me for Phase 1 of its implementation in April 2019. This product acts as an intermediary between applications and services that require trusted identification, as well as the sources of such information (I.E. Governments and banks). Verified.Me is a strong attempt at a Digital ID, but unfortunately leaves most small players out of the development process, keeping them on the outside of the system post-implementation.

Electronic Invoicing and Payments

Secure digital identification and authentication is also an important component of a second recommendation outlined in the Task Force's report: electronic invoicing and payments (EIP), which Payments Canada has also been slow to implement. Without a digital ecosystem to protect against fraud and identity theft, Canadian business and consumers have continued to rely on paper cheques, which are both inefficient and costly to use. Although usage has declined between 7-9% annually since 2012, without a real EIP alternative, total monetary value of paper cheques used has increased over the same period. Banks are also partial to cheques because Canada has one of the most efficient cheque clearing systems in the world and can charge clients issuance fees.

Another explanation for this delay is related to the adoption of ISO 20022. Among other things, ISO 20022 will address the current need for enhanced remittance data, facilitating the adoption of electronic invoicing. As ISO 20022 is implemented over the next 12-18 months, this process should move more quickly. Given the significant cost savings electronic invoicing can provide to the Canadian economy, businesses and financial institutions should be swift in the implementation of these systems. Not only will end-users potentially access these savings, but small businesses will also experience less burdensome financial transactions.

Mobile Banking

The development of a digital ecosystem and the implementation of EIP will also allow for advances in mobile payments systems. Although Payments Canada and financial institutions across the country did facilitate the development of mobile payments within two years of the Task Force's recommendation, the delivery of public and private sector businesses through the internet is still in its infancy. Particularly for smaller businesses, mobile payments and the benefits they provide are quite inaccessible.

What's more, the use of alternative payments methods—those not initiated through bank accounts—permeates emerging economies. India and China, for example, have regulatory environments that allow for the development of innovations in the payments sector. These economies have leapfrogged Canada and much of the rest of the developed world, both with respect to the openness of payment rails and their speed. The legacy infrastructure and highly regulated nature of Canadian financial services make access to payment rails difficult, stifling innovation in PayTech. Rather than focusing on the development of products that are efficient, effective, and responsive to customer needs, particularly in light of high smartphone penetration, Canadian PayTechs are forced to work within a highly regulated and oligopolistic market. As such, despite progress on Payments Modernization, the exclusion of PayTechs must be addressed more thoroughly by industry stakeholders.

Governance Structure

Initial changes made to Payments Canada in the two years following the Task Force Report created modest opportunities to increase participation from across the payments industry. The newly independent

governance structure, for example, provided nonbanks a greater degree of access to Payments Canada and the conversations happening around modernization. However, although providing PayTechs with a seat at the table is important, the extent to which their participation is impactful hinges on developments in the new infrastructure. If for example, Real-Time Rail continues to be a closed system, it will hamper innovation. Smaller industry players must continue to push for their voice to be heard.

As emphasized in the Task Force Report, the ideal governance structure is one based on an association model that (a) recognizes that payments systems are going to be evolving very rapidly over the next few years and decades, and (b) is flexible, non-hierarchical, and open to non-banks. Were such a model to be implemented through future governance changes at Payments Canada, this could enable more equitable participation by various stakeholders, and increased success for PayTechs.

3. Advocacy & an Association for PayTechs

In the absence of such a model, other resources need be mobilized to ensure that non-bank players in the payments industry are able to contribute their experiences to the policy-making environment. Recently, for example, stakeholders have joined forces to create an association for PayTechs in Canada that will change the conversation around payments by giving a voice to companies large and small that operate and support PayTechs in Canada. Not only does such an association provide an opportunity to identify common issues that PayTechs are grappling with, but also allows for the development of a focused advocacy and lobby strategy.

Such an association will inevitably challenge the incumbent banks. However, the innovation that results from the opening up of the payments system will also create a number of opportunities for sector growth. As such, if Payments Canada is committed to supporting the development of new businesses, the system will have to adapt to enable innovation rather than dampen it through rules and regulations.

4. Risks to modernization

While the advancement of payments innovation has the potential to make the payments ecosystem faster, more efficient, and cheaper for users, there exist risks. For one, outside technology firms (I.E. Google, Apple, WeChat, Alibaba) that have a significant head start in data collection and processing could build their own payment systems. For the time being, there is little interest by these firms in the Canadian payments market, but if barriers to entry are lowered, they could swiftly gain market share. Secondly, a small bank could partner with one of these firms and leverage their technology to expand their market share or even take over the entire market. Finally, but not exhaustively, a leveling of the playing field could hurt the bottom lines of banks, thus explaining the relatively slow pace of change.

A. Introduction to the Canadian PayTech Ecosystm

The wants of consumers and businesses in regards to payments has invited a plethora of players into the payments space, whether they focus on digitizing commerce, creating efficiencies, or enhancing user experience. Wendy MacKinnon, CEO and Founder of Digital Retail Apps, a consultant to PayTech, and a Founder of the industry effort to create a new association, provided the roundtable with an in-depth overview of the Canadian Paytech Landscape:

Legacy Layer

Banks

The legacy layer in the payments landscape represents the schedule 1 banks, which, according to the *Bank Act*, are the only institutions able to hold consumer deposits. The advantage they have, which is leveraged in their branding and strategic focus, is that deposits (up to \$100,000) are insured by the Canadian Deposit Insurance Corporate (CDIC). For these reasons, banks can charge card networks and payment processors fees (1-2%) to access their client's money and maintain a privileged position in the payments landscape.



Card Networks

The card networks act as a connector between banks and merchants as clients attempt to pay for goods and services in real-time. Charging a fee (~0.15%) on top of that applied by banks, card networks are well positioned to act as intermediaries because of their legacy position and size.



Payment Processors

Processors operate for the benefit of PayTechs and merchants who have adopted non-cash digital transactions as a means of payment. They allow for the authorization and settlement of transaction requests, while implementing fraud prevention measures to protect against illicit use. To date, nearly all Canadian-based payment processor offerings are partially owned by a Canadian bank. To go outside the bank-owned ecosystem, PayTechs need to look towards international players such as Stripe.



Intermediate Layer

The intermediate layer is a budding example of the role PayTech can play in improving the payments experience in Canada. These serve mostly as mobile wallets that create a more seamless transaction experience through mobile wallets, with retailers, or via e-commerce platforms. Cards accounted for 64% of volume of payments made at the Point-of-Service (POS), both in person and online, with all cards experiencing a year-on-year growth.^{xvi}



External Layer

An essential layer that is emerging adjacent to PayTechs is made up of the service providers that connect consumers with broadband and satellite data, as well as those providing authentication. While consumer devices, carriers, and authentication providers are developing unique forms of digital authentication, the innovations seen in the external layer can be leveraged or enhanced through a National ID program. The emergence of Verified.Me in 2019 is an example of a concerted effort by the major banks, Canadian government, and Equifax to overcome to create a new and safe way to verify your identity.



Retail and Restaurant Layer

Building off the card network and intermediate layers, retailers and restaurants have begun to build out an ecosystem of applications to improve their overall client experience through payment integration; they are bundling the payment function inside a broader experience. From mobile self-checkouts to mobile order ahead, retailers are trying to simplify the shopping experience and are leveraging mobile wallets to install

features such as one-click payment without a wait to pay or a separated payment flow. Restaurants are likewise overcoming logistical barriers to create a lower-touch and lower-wait experience for clients, which include in-store ordering at all-you-can-eat restaurants, order ahead, and in-store kiosks. One of the differences in Canada versus Europe, US and Asia is that we are experiencing far fewer new innovations in payments that put the control of payment on the end user mobile device, in part due to higher interchange costs for card-not-present transactions.



Transit Layer

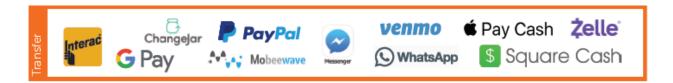
Transit is one area where Canada has been a slow adopter but has started to catch up in recent years with the introduction of mobile parking and tap-on services such as those provided by Presto and GreenP. These applications can integrate with a multitude of mobile wallets and payment solutions, simplifying an experience that used to be dominated by the requirement of small, exact change. As these apps become part of the daily routine of Canadian consumers, they improve their overall familiarity and comfort with PayTech solutions.



Transfer Layer

Transfers are peer-to-peer payments that act as an advanced version of cash exchanges between two parties. As cash retracts as a medium of usage, particularly with millennials and gen-Z, transfer applications are becoming more common to split bills, send gifts, or pay rent. While Canada is growing in this space, particularly through Interac and PayPaI, the rise of mobile wallets create an opportunity for new

services, particularly from the Big Tech giants. Canada saw a 48% increase in volume of transfers in 2017, largely due to online transfers through Interac.^{xvii}



B2B Payments Layer

Business-to-business payments are generally defined as those that mainly process payments between two businesses. While cheques represent 13% of business payment volumes, they make up 57% of payments by large corporations and 70% for SMEs, with average transaction sizes growing 86% in the past decade. This is a result of the necessity of having proper documentation associated with payments for legal, regulatory, and taxation purposes. B2B payments are required for working capital, international payments, supply chain management, payroll, purchase orders, and many other larger value transactions. In many cases, B2B PayTechs also provide software to manage invoices and account for money in and out.



Alternative Financing and Payments Layer

Alternative Financing options are often built off of existing card networks to provide unique services such as basket purchases, installment payments, and lower fees and interest rates, but there are also new players such as Klarna, Finance It and Affirm who are innovating in the point of sale financing space without a connection to a traditional credit card. These Paytechs thrive by building strong relationships with brands and retailers, offering tailored experiences for their clients.



B. Global Case Study



Payments Modernization in the United Kingdom

Through Payment Services Directive 2 (PSD2), administered by the European Commission, January 2018 marked the date that European banks were to implement open banking by opening up their data and deposits to third parties. This is happening in a piecemeal approach, beginning with the release of ATM locations and savings account information, to be followed by more detailed information such as transactional data. The UK's Competition and Markets Authority has taken PSD2 a step further and adapted this legislation for the UK specifically by requiring the nine largest current account holding banks to open up their data, which has made Britain the leader in this new idea of Banking as a platform (BaaP).

On November 29, 2018 the Bank of England (BoE), Pay.UK, and the Payments Systems Regulator published a joint consultation response paper on its plan to implement ISO 20022 compliant messaging to payments in the United Kingdom. Seventy-five respondents, including payments service and technology providers, gave their overwhelming support (97%) for the BoE and Pay.UK to take the lead on moving forward with implementation.xix

One of the central proposals in the original June 2018 consultation paper was to harmonise CHAPS (the UK clearing system) and the retail payment systems operated by Pay.UK with the introduction of a Common UK Credit Message (CCM) based on ISO 20022 for UK interbank payment schemes. This proposal also received near unanimous support (97%), with the BoE and Pay.UK taking the lead on delivering the CCM over the next five years. The top sources of benefits of the CCM, according to respondents, were efficiencies in processing (80%), richer data (76%), and fraud and economic crime tracking (69%). There was support for ensuring alignment standards used across Open Banking and CREST (the UK securities settlement system) with the CCM, while alignment with card scheme standards was seen as more challenging and cumbersome.

Going forward, the BoE and Pay.UK will be developing market and technical specification guidelines, by end of 2019 and 2020, respectively. The introductory phase for adoption is expected to begin in early 2022, with full implementation set for mid-2023 with what will most likely be a "single cut-over weekend". 87% of respondents believe these timelines to be suitable for adoption. The UK serves as a model for Canadian legislators and interested parties to emulate as they have succeeded in garnering widespread support from small and large players within their well-developed banking industry.

C. Interviews with PayTech Executives





Brim – Steph Weiland, Marketing & Communications

Describe your PayTech's value proposition:

Founded in 2015, Brim is a Canadian Fintech and globally certified credit card issuer, licensed by Mastercard. Our first product, the Brim credit card was launched to market in July 2018 and it can be used anywhere in the world that Mastercard is accepted. As a fully integrated digital platform, Brim operates at the intersection of tech, finance, and lifestyle. We built our infrastructure from the ground up and remain independent from banks. What makes Brim different are the features and benefits that we've embedded into the credit card to give our cardmembers a more rewarding lifestyle, such as no foreign transaction fees, free global Wi-Fi, and embedded security features. With our digital platform (accessible by iOS & Android app and online portal), cardmembers can easily redeem rewards by clicking on a posted transaction and typing in the amount of rewards they'd like to redeem for. Reward redemption is available on any posted transaction. We also introduced Installment Pay, as a first-in-market feature, which can be set up by the cardmember in-app or online. Any large purchase over \$500 can be paid over the course of 12 - 24 months at 0% interest, a 7% one-time fee, and 0.475% monthly processing fee.

What is your strategic position in the overall Payments landscape in Canada?

One of the features that differentiates us from other cards is our approach to rewards. There are currently \$16 billion of rewards left unredeemed each year by Canadians. It's not just that people don't redeem their points; it's the fact that they're not relevant or have been devalued. Take travel for example. With Brim, you're able to use your points at market fare because you make a purchase first and then redeem your rewards against it. You're not redeeming your points at a marked-up value. Our platform makes earning and redeeming simple: your purchases are automatically rewarded, you can track them through our app, and you can redeem at any time. On the earn side, cardmembers can earn more rewards with customized merchant offers in the Brim Marketplace. A coffee shop might want to reward customers for frequency, encouraging a customer to come back every morning, we can do that with our platform, or it could even be total spend. It's easy on the merchant side because it doesn't require POS integration; everything's done on our side.

What makes PayTech unique relative to Fintechs? Would you consider Brim to be a PayTech?

It's hard to classify Brim as a PayTech, we are more of a Fintech because of the platform that we've built. On one side we have the Brim credit card, and then on the merchant side, we help encourage more sales by rewarding behaviour. We believe our reward offers enrich the experience for the cardmembers. For example, if you use Uber Eats 10x per month, or spend a certain amount, you could get 5x the points per dollar spent. We don't have to integrate with POS systems because the payment works automatically because we're the issuer.

What is the greatest obstacle you face in growing your business?

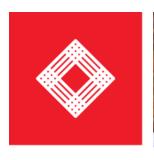
Since we just launched in July, awareness is definitely top of mind. As senior manager of marketing and communications, my role is to help scale the awareness of our product across the country. People have been extremely receptive to our product and value proposition as they hear about us, and we're doing our best to widen our reach. We had clients in places such as P.E.I. that were demanding we expand to them only months after launch. We're happy to say that recently received approval to operate in all provinces across Canada.

Do you have direct competitors in your business? Who are they?

We are disrupting the traditional credit card space, and that's difficult because people are born into a bank, and with it, the products and cards that they issue. Like any new company on the market, there's an education phase where you need to tell people who you are to build rapport. What we offer is infrastructure built on 21st-century technology that easily improved to meet growing data security needs and development of new features. Unlike companies with legacy systems, we don't get stuck, we can always continue to innovate. We sit around boardroom tables and think about new ideas, as well as incorporate client feedback within weeks rather than years. A question we get asked a lot is if we're a pre-paid credit: we're not. We are a non-banking Canadian company licenced to issue credit cards.

Are there any potential legislative or regulatory changes that you hope to see take place to help your business succeed? What would you like to see change?

As we grow, it's important to have the right legislation in place to make our payments system operate. It's important to have conversations with government so we can do what we do without worrying about unintended consequences. It's also very important to have regulations in risk-profiles and anti-money laundering because having controls allows us to confidently innovate forward. Our CEO spent 20 years in the banking industry working across the board with experience in structured finance and capital markets, and brought many experts in their respective fields to build Brim. We make sure to have the right people at the table when it comes to all aspects of our business and that includes regulation and compliance.





Pungle - Braulio Lam, Co-Founder & CTO Questions

Describe your PayTech's value proposition:

Pungle enables businesses to make real-time digital payments to customers and suppliers. We are focused on removing Business Payment Friction by making payments fast, connected, and easy to use by enabling businesses to make deposits in real-time directly to an account in seconds, not days. The only way to send business payments at the moment is through the bank networks, which cater more to the needs of larger clients rather than SMEs. We are one of only a couple Fintech startups working with large players (merchant acquirers, cards networks) in this B2B space with whom we are building strong relationships to increase our access to new clients.

What is your strategic position in the overall Payments landscape in Canada?

There is an incredible need for payments to be made in less than the usual 4-5 days. One example is in the alternative payments market (loans of <\$35,000), where innovative lenders provide on-demand loans for businesses and consumers. Without Pungle, businesses that need cash instantly, whether to settle up with a supplier or pay for an unexpected expense,

must wait several days to receive the money. With Pungle they can receive the money instantly, improving the transaction experience for both the business and client. A second example comes from the rise of the gig economy, which is impacting the way employees are expecting to be paid: there is increasing expectation to be paid instantaneously or at shift-end. This affects service workers across the board, whether it be Uber-drivers or fast-food workers. We've found that the more frequent payment of wages has had a direct correlation with lower turnover.

What makes PayTechs unique relative to Fintechs? What sorts of opportunities and challenges do you face that are unique in the payments space?

At first I wasn't sure what to think of the PayTech designation, but the more I hear about it, the more it makes sense to differentiate from Fintechs. In my last two years with Pungle, I see more and more Fintechs coming as the term gets thrown around referring to significantly different firms: insurance, rental, lending, etc. Building a PayTech in Canada requires a lot of knowledge of payments itself: compliance, data

security, regulation—it's not just building an app. We need to comply with KYC, AML regulations, money transfer guidelines, credit card security, bank partner rules, as well as VISA/Mastercard network rules. Our Co-founder and CEO comes with 20-years of payment experience, which gives us a natural advantage over other PayTechs.

What is the greatest obstacle you face in growing your business?

Building trusting relationships with our large network partners is the biggest obstacle to growth we face. Pungle has to be let into the payments network by a bank sponsor, which most are hesitant to do because we may be seen as a threat to their existing cash management services. Through bank sponsorship we gain the necessary "trust" to access card network rails. It is hard to find bank partners because most are not open to working with PayTechs. Banks prefer to work with ISOs because it is more profitable to license an independent reseller to offer your proprietary products than build something new. However, you can't innovate by selling someone else's solutions. Pungle is a platform built from the ground up, and this can be seen as a threat.

Are there any potential legislative or regulatory changes that you hope to see take place to help your business succeed? What would you like to see change?

Looking to the UK, they're 5-10 years ahead of us. PayTechs there can go directly to the card networks thanks to their open banking legislation. If I could stand in front of the Minister

of Finance and advocate, I would argue for adopting similar requirements for PayTechs in Canada. Bank sponsorships make it too difficult to work with card networks and Interac, and they have little incentive to let us in. This is because we have 5-6 big banks, who have a strong lobby and reason to support existing regulations. Open banking may not be at the top of their priority list. In terms of Payments Modernization, we are excited about Real-Time Rail and have talked a lot with Payments Canada about opening these up to third parties-not just the banks. We want to be the hub that connects businesses with suppliers. We want to be partners with Visa, MasterCard, Interac, and Payments Canada. Today it's a closed loop environment and we need to open it up. Open banking is the key to this. And to be clear, Open Banking is broader than just data, it's about opening all the services banks provide today.

Do you lobby the provincial or federal governments for change? What is your strategy? Do you work with other likeminded firms?

We are very excited about a PayTech Association. If they can be the voice of the PayTechs and help open up legislation, it will help our business. This group seems to have good people in place to succeed.





Rob Hyde – Payment Source, VP Payment Services

Describe your Paytech's value proposition:

Payment Source provides alternative payment solutions; where there is friction in the market, we are there to provide choice. Ultimately, we are about empowering inclusion, and want to make sure we are providing access to all Canadians using payment methods that fit their specific needs. The payment industry takes Canadians' access to credit cards, or tech savviness or cash availability for granted, and the reality is that individuals have preferences regarding payment methods that reflect their individual needs. In Canada's ecosystem, we are a bridge between the traditional and innovative... between physical and digital payments.

What is your strategic position in the overall Payments landscape in Canada?

Our niche in the market focuses on eliminating barriers faced by taxpayers when making payments to the government. For example, we provide technology that allows Canadians to make payments to the Canada Revenue Agency without having to resort to online portals or traditional banks. We've enabled this by building technology based largely on a QR code

standard. Using QR codes that can either be printed on paper or be put into a mobile app, we allow Canadians to go into a Canada Post and pay their taxes in either cash or with a debit card. Through this process, a client from a rural community that has no access to a bricks and mortar bank can make a digital same-day payment to the CRA, which receives an electronic data interchange. The success we've had with the federal government has opened the door to improving the connections between citizens and other government institutions, such as with municipalities and provincial utilities.

What makes Paytech unique relative to Fintechs? What sorts of opportunities and challenges do you face that are unique in the payments space?

The Paytech categorization is definitely a valid subset of the Fintech space. As a group, we face many of the same challenges and will be afforded similar opportunities if we work together. For instance, on the technology side, many PayTechs are looking to sell their product to large institutions and face similar obstacles in bringing their products to market. For firms looking to make more of a consumer play, they are likely trying to be either better than or supplementary to current products offered by banks.

What is the greatest obstacle you face in growing your business?

One major obstacle we face as a PayTech is access to the various payment rails, which we

hope will be improved by Open Banking or Payments Modernization legislation. Banks are reluctant to include Paytech firms as this will can ultimately impact areas in the market where they generate a great deal of revenue. The emergence of a PayTech Association proves that there are common obstacles being faced by many firms outside the legacy rail network. This has encouraged "co-opertition" with each other. For example, Paytm is in some ways a competitor with us as they allow consumers to pay their taxes without going through banks, but they are also a customer of ours that we want to be successful. As each of us is focused on solving different problems, The market is large enough that we can afford to work together.

Do you have direct competitors in your business? Who are they?

We have both direct and indirect competitors. We have direct competitors in all the small niches we operate. Plastiq is an example of a competitor in our space: they allow clients to use a prepaid credit card for transactions not typically permitted by the banks. Paytm, like I mentioned before, is another. In terms of indirect competitors, we are intrinsically at odds with existing payment methods since many of our clients have the option of paying their taxes online for free. Therefore you can see cheques and online banking as our competition too. What we offer is other aspects to a payment that are really important to some consumers, such as collecting points on their cards or managing cash flow. We also help clients that may have a small business on the side that requires them to remit GST to the government but don't have a corporate account or accountant to help them with that.

Are there any potential legislative or regulatory changes that you hope to see take place to help your business succeed? What would you like to see change?

We want regulation and to be regulated. We're constantly trying to do the right thing and we don't want cowboys operating in the payments space. We are positioning ourselves to be part of Payment Service Provider Framework and Legislation, which is an alternative to a Money Service Businesses. We are engaging with the Department of Finance in consultations and hope that either this or Open Banking legislation will improve our access to the system. The Payments system is analogous to the telecom industry: the big telcos are good at shutting down the regulatory process and keeping new players out. As long as banks are always involved with every transaction, this will stay the same.

Do you lobby the provincial or federal governments for change? What is your strategy? Do you work with other likeminded firms?

A PayTech Association works because there is a role for advocacy, education, and collaboration. There are joint problems that companies share and issues we need to collaborate on because of our size and scope.

Glossary

ACSS – Automated Clearing Settlement System

API – Application Programming Interfaces

DIACC - Digital ID & Authentication Council of Canada

EIP - Electornic Invoicing & Payments

ISO 20022 - Independent Sales Organization 20022 (Electronic data exchange)

LVTS – Large Value Transfer System

OSFI – Office of the Superintendent of Financial Institutions (Canada)

SOE - Settlement Optimization Engine

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