



GLOBAL PANDEMIC ACCELERATES
THE RISE OF DIGITAL PAYMENTS

CANADIAN PAYMENT METHODS AND TRENDS REPORT 2021

# Canadian Payment Methods and Trends 2021

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The views expressed in this report are solely those of the authors at the time of publication and should not be attributed to any of the organizations listed above.

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# CELEBRATING 40 YEARS OF PAYMENTS

# Building a history with purpose.

In 1980, the Canadian Payments Association (CPA) was established, formalized by the Canadian Payments Act. Since then, we have grown from a humble association to a dynamic organization that clears and settles close to \$200 billion dollars a day. This is 40 years in payments.

In 2020, the year in focus for this Canadian Payment Methods and Trends report, Payments Canada turned 40 years old. It's a milestone worth celebrating, as we have grown tremendously, both as Canada's payment systems provider and as an organization. We have made substantial human and financial resource investments across all parts of the company (e.g., technology, risk, security, research and policy), accelerating our evolution to a dynamic organization that will support Canada's ability to be globally competitive within the digital payment ecosystem.

Such strategic changes have enabled us to become well positioned to lead an industry movement that will put Canada at the forefront of modern payments.

For more on this historical milestone and a closer look at our year in review, please have a look at our **2020 Annual Report**.

Developments in the international and domestic marketplace were reflected in the progress of Payments Canada's Modernization program as well.

Payments Canada went live with a technology refresh of the Automated Clearing Settlement System (ACSS) and United States Bulk Exchange (USBE) application. These upgrades ensure the retail batch system continues to remain safe, sound and efficient while delivering a more streamlined and simplified user experience.

In June 2020, Payments Canada published ISO 20022 messages for Lynx, Canada's new high-value payment system, a result of extensive collaboration with key industry partners, including financial institution members and regulators. A foundational layer of Canada's payment Modernization initiative, ISO 20022, will support interoperable cross-border exchanges, the introduction of new products and services, and the digitization of manual and paper-based processes related to invoicing and payment reconciliation.

Following an extensive process of vendor identification and evaluation, Payments Canada selected Mastercard's Vocalink to supply the clearing and settlement component of the Real-Time Rail (RTR). Shortly thereafter, Payments Canada announced it had selected *Interac* Corp. as the exchange solution provider for the RTR. The RTR, expected to launch in 2022, will enable Canadian businesses and consumers to send and receive data-rich, irrevocable payments immediately and securely, 24/7/365.

# RESEARCH AT A GLANCE

# COVID-19 pandemic brings accelerated rise of digital payments.

The COVID-19 pandemic deeply impacted the Canadian payment industry. Stay-at-home orders and brick-and-mortar business closures restricted the ability for Canadians to make in-person purchases, and changed the way they transacted once they could. We reported seeing the start of a shift in the payment behaviour of Canadians due to the pandemic in last year's **Canadian Payments: Methods and Trends** (CPMT) report. These changes in payment behaviour persisted throughout 2020 and are captured in this year's report. While overall spending went down due to concerns about the economy and personal finances, Canadians spent more of their dollars online, meaning e-commerce transactions increased, accelerating the shift from cash to digital payment methods. At the same time, there was a sharp rise in the preference for contactless payment solutions, such as cards, smartphones, and wearable devices, when Canadians did make their way to a physical point-of-sale (POS).2 The magnitude of these changes in Canadians' payment behaviour is summarized next.



# KEY THEMES



# Canadians shift towards making more online purchases, and using contactless and digital payments.

43 per cent of Canadians stated that the COVID-19 pandemic had changed their payment preferences to digital and contactless for the long-term.<sup>3</sup>

- ▶ 67 per cent of Canadians made more retail purchases online in March 2021, up substantially from the 38 per cent who did so in March 2020.⁴
- ▶ The number of online transfers made by Canadians increased by 48 per cent in 2020 (compared to 36 per cent year-over-year growth in 2019). The growth in the number of first-time *Interac* e-Transfer users was 43 per cent higher than in 2019.
- ▶ 40 per cent of Canadians used their mobile wallets more often to pay for store purchases since the COVID-19 pandemic started. This was mainly because they felt contactless payments mitigated COVID-19 transmission concerns.<sup>7</sup>
- 3 Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker Survey. Figure is an average based on the three point-in-time measures collected in June, September and December 2020.
- 4 Angus Reid, "COVID-19: Ongoing Monitoring of Canadian Perceptions and Behaviour (Wave 33)", March 5, 2021.
- **5** Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey.
- 6 Data from Interac. Figure is based on *Interac* e-Transfer transaction data from March 16, 2020 May 3, 2020. For more, see: https://www.interac.ca/encontent/business/money-transfers-in-canada/
- 7 Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker Survey. Figure is a point-in-time measure collected in December 2020.

**<sup>2</sup>** Currency Research and Lipis Advisors, "Survey of central banks on the impact of COVID-19 on cash and digital payment policies", 2020.



# The COVID-19 pandemic accelerated the decline in cash usage.

58 per cent of Canadians used less cash during the pandemic and 40 per cent indicated they were uncomfortable even handling it.8

- Overall, cash transaction volumes and values decreased by around 16 per cent from 2019.
- Over a third of Canadians (36 per cent) reported they did not expect to return to using cash to the same extent as pre-COVID-19 once the pandemic is over.9
- ▶ When it comes to making purchases, 37 per cent of consumers said they avoided shopping at places that didn't accept contactless payments.¹¹ Debit contactless transactions are becoming more popular for low-value transactions (under \$15) at the expense of cash (see the **cash** section for more).



# Businesses transformed by investing in e-commerce sales platforms and accepting more digital and contactless payments.

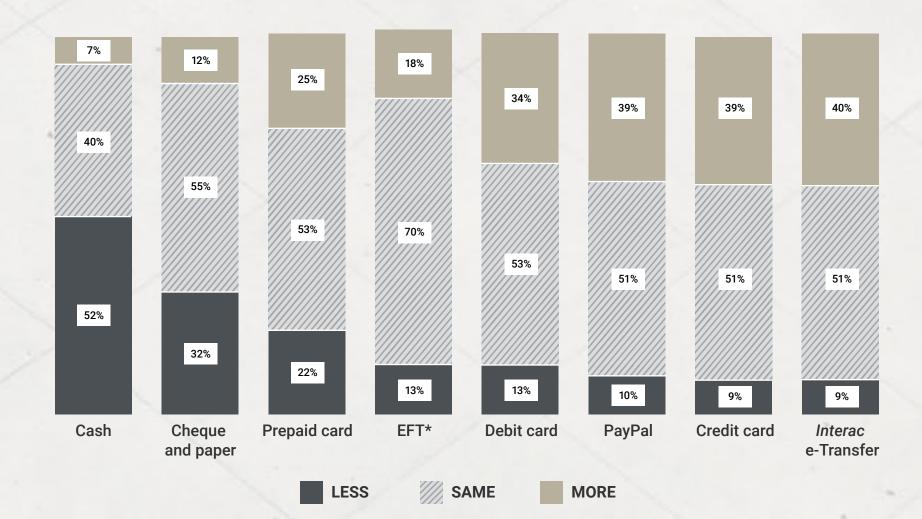
New online store creation by Canadian retail merchants increased 20 per cent from March 2019 to March 2020, right at the onset of the pandemic.<sup>11</sup>

- Overall, 11 per cent of businesses invested in a digital platform, either for the first time, or to increase their digital presence.<sup>12</sup>
- ▶ 37 per cent of businesses accepted payments via *Interac* e-Transfer more often.<sup>13</sup>
- ▶ 15 per cent of businesses accepted PayPal payments more often.¹⁴
- ▶ 9 per cent of businesses upgraded their current payment terminals to start accepting contactless payments.¹⁵

- 8 Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker Survey. Figure is an average based on the three point-in-time measures collected in June, September and December 2020
- 9 Ibid. Figure is an average based on the three point-in-time measures collected in June, September and December 2020.
- 10 Ibid. Figure is an average based on the three point-in-time measures collected in June, September and December 2020.
- 11 Data provided by Shopify. Figure is a point-in-time measure collected in March 2020.
- 12 Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker Survey. Figure is a point-in-time measure collected in December 2020.
- **13** Ibid. Figure is a point-in-time measure collected in December 2020.
- 14 Ibid. Figure is a point-in-time measure collected in December 2020.
- **15** Ibid. Figure is a point-in-time measure collected in December 2020.

# WHICH OF THE FOLLOWING MOST APPLY TO YOU? SINCE THE COVID-19 CRISIS STARTED, I AM USING...

Among those who use each payment method at least weekly pre COVID-19

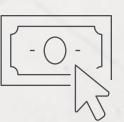


\*Note: Electronic Funds Transfer refers to direct deposits or pre-authorized debits to/from deposit accounts









THE COVID-19 PANDEMIC ACCELERATED THE CONTINUED DECLINE IN CASH, WITH CANADIANS MAKING MORE ONLINE PURCHASES, AND USING CONTACTLESS AND DIGITAL PAYMENTS.



# EXECUTIVE SUMMARY

The Canadian economy depends on the exchange of hundreds of billions of dollars each day. Payments Canada operates Canada's clearing and settlement infrastructure, and defines the processes and rules required to support this flow of funds.

As the owner and operator of the *Automated Clearing and Settlement System* (ACSS) and the *Large Value Transfer System* (LVTS), Payments Canada plays a vital role in the Canadian financial system. See the <u>glossary</u> for details on Lynx, Canada's new high-value payment system introduced in August 2021.

Every year, Payments Canada provides an overview of the payment trends observed in Canada through the publication of the Canadian Payment Methods and Trends (CPMT) report. This report provides expert insights on key drivers, emerging issues and relevant developments taking place within the Canadian and international payment ecosystems. The main objective of the CPMT report is to provide a holistic view of the payment market in Canada. This overview of payment behaviour and trends illustrates Canadians' use of different payment methods, and demonstrates shifts in payment behaviour.

In 2020, there were a total of 20 billion transactions worth \$9.4 trillion captured in the analysis. The total payment market in Canada shrunk year-over-year as a result of curtailed economic activity due to the COVID-19 pandemic. Overall, payment transaction volumes and values declined by nine per cent and six per cent respectively.

Payment volumes and values experienced a sharp drop in the spring of 2020 due to widespread public health measures instituted across Canada to curb the spread of the virus. This is reflected in the GDP as total GDP in April and May fell by 16.6 per cent and 13.1 per cent respectively year-over-year.<sup>16</sup>

**16** For more information, see: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610043402

However, total payment volumes and values returned to more typical levels between June and October, brought on by the phased re-opening of the economy in most provinces.

By October, when concerns about a second pandemic wave emerged, several provinces reinstituted public health measures. These measures were tightened further in December, as the total number of COVID-19 cases in Canada continued to increase. Interestingly, the total volume and value of payment transactions did not drop off sharply, as one might expect, as observed in the spring. Total GDP grew modestly by 0.8 per cent month-over-month in November, and remained flat in December.<sup>17</sup>

The COVID-19 pandemic contributed to the continued decline of paper transactions as more Canadians replaced cash with digital and contactless payments. Cash transaction volumes and values both decreased by around 16 per cent from 2019. In keeping with historical trends, the average cheque value continued to rise. In 2020, the average cheque value rose by 15 per cent to \$7,075, indicating that cheques continued to be a key choice for large-value payments for both consumers and businesses because cheques make it easier to track and reconcile payments.

The pandemic led to an increase in contactless payment transactions. There was a 13 per cent increase in volume and a 10 per cent increase in value from 2019 as many Canadians avoided handling cash and touching payment terminals at the point-of-sale (POS). Contactless growth was supported by increased availability of contactless and digital payment options, an increase in the contactless transaction limits from \$100 to \$250, and the introduction of new payment alternatives, like QR codes by PayPal.<sup>18</sup>

Debit transactions accounted for 62 per cent of total contactless transaction volume (up 10 percentage points from 2019), and

43 per cent of total contactless transaction value (up 13 percentage points from 2019). Credit transactions represented 38 per cent of total contactless transaction volume (down 10 percentage points from 2019), and 57 per cent of total contactless transaction value (down 13 percentage points from 2019). Canadians chose contactless debit over credit for a variety of pandemic-related reasons, including concerns over their personal finances.

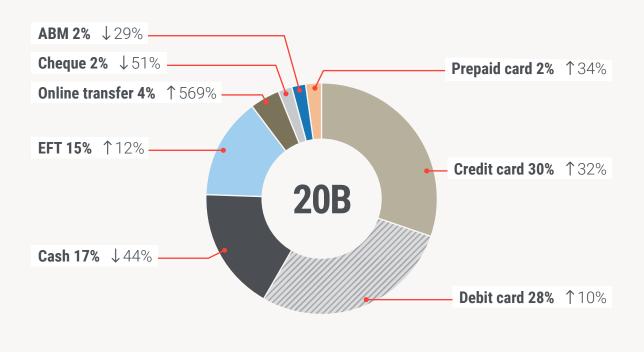
Contactless card payments continued to be more popular than mobile contactless payment — (paying with a phone or wearable device) among Canadians in 2020, although mobile payment use continued to grow. In 2020, nearly one-third (29 per cent) of Canadians said they had made a purchase using a mobile payment or a digital wallet.<sup>19</sup>

Online transfers continued their rapid growth in 2020, increasing by 48 per cent in volume, with a staggering five-year growth rate of 569 per cent. Moreover, online transfers are poised to overtake debit cards for total value (see **Figure 1**). This can be attributed to new consumer use cases for *Interac* e-Transfer, such as dividing grocery shopping bills with others, spurred by a desire to decrease infection risk during the pandemic. Many businesses also transitioned to *Interac* e-Transfer, as the service provider enhanced its offering with more B2B targeting features, like bulk processing with ISO 20022. The launch of *Interac* e-Transfer for Business in Q3 of 2021 indicates that small and mid-sized businesses have embraced e-Transfer as a payment alternative and is part of their post pandemic digital transformation.

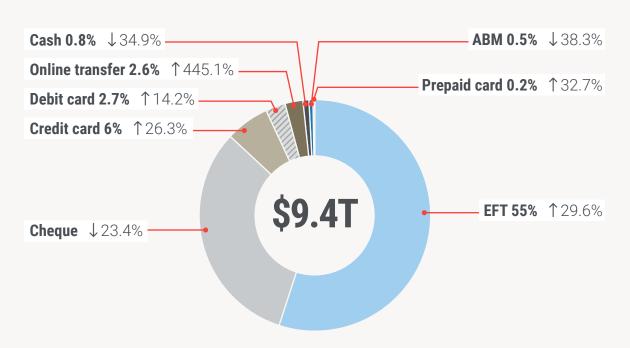
Finally, the pandemic led to sharp growth in e-commerce payments in 2020, with 477 million transactions worth \$56 billion (up from 420 million transactions valued at \$47 billion a year ago).<sup>20</sup> Close to half of all Canadians (47 per cent) used e-commerce platforms more frequently to purchase a wider range of products throughout the pandemic.<sup>21</sup>

# FIGURE 1: TOTAL PAYMENT TRANSACTIONS VOLUME AND VALUE

#### **2020 VOLUME**



#### **2020 VALUE**



2020 total payment transaction volume and value (arrows indicate the growth and decline of payment methods between 2015 and 2020).

<sup>17</sup> For more information, see: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610043402

<sup>18</sup> For more, see: https://newsroom.paypal-corp.com/2020-05-19-PayPal-Rolls-Out-QR-Code-Payments-for-a-Touch-Free-Way-to-Buy-and-Sell-In-Person

**<sup>19</sup>** Data from The Strategic Counsel. Trends in Internet Use and Attitudes Survey, 2020.

<sup>20</sup> TSI. Canadian Payments Forecast, 2021. Note for readers: Our data source for e-commerce transaction sizing has shifted; past e-commerce figures presented in the CPMT use an older methodology and should not be used for trending purposes.

**<sup>21</sup>** Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker Survey.

# Paper

Paper payment instruments include cash and cheque and paper items. Overall, total paper transaction volume and value continued on a downward trend, declining by 17 per cent and 15 per cent respectively from 2019 (**Table 1**).

Cash transaction volume significantly declined by 17 per cent year-over-year due to the impact of the COVID-19 pandemic. Cheque transaction volume also declined year-over-year (down by 26 per cent).

**TABLE 1:** PAPER YEAR-OVER-YEAR GROWTH

# **Volume** (in millions of transactions)

Payment method	2019	2020	Change %
Cash	4,065.0	3,394.0	-16.5%
Cheque (total)	583.9	432.0	-26.0%
Cheque (personal)	194.0	140.4	-27.6%
Cheque (commercial)	389.9	291.6	-25.2%
ABM	466.0	423.1	-9.2%
Total	5,114.9	4,249.1	-16.9%

# Value (in millions of dollars)

Payment method	2019	2020	Change %
Cash	85,649.0	72,003.5	-15.9%
Cheque (total)	3,586,221.0	3,056,371.0	-14.8%
Cheque (personal)	76,375.0	66,995.9	-12.3%
Cheque (commercial)	3,509,846.0	2,989,375.1	-14.8%
ABM	67,082.0	44,826.4	-33.2%
Total	3,738,952.0	3,173,200.9	-15.1%

# Card

Card payments include credit, debit and prepaid cards. Overall, total credit and debit transaction volume and value declined by about 10 per cent and six per cent respectively year-over-year (**Table 2**). However, their decline was less pronounced than that of paper payments captured above. Credit cards continued leading debit cards in terms of volume, and also made up the bulk of overall card value.

Of note, debit contactless transaction volume and value grew significantly in 2020 compared to the previous year (by 35 per cent and 60 per cent respectively), as more Canadian consumers and businesses favoured contactless payments at the POS.

Credit contactless payments did not see the same level of gains as debit contactless in terms of transaction volume and value; in fact, it declined by almost 11 per cent year-over-year. However, the average credit contactless transaction spend was higher than that of debit contactless (\$48 and \$22, respectively), likely due to the fact that **Mastercard and Visa increased tap payment limits to \$250** per transaction during the COVID-19 pandemic, while the limit remained at \$100 per transaction for debit card users.

TABLE 2: CARD YEAR-OVER-YEAR GROWTH

#### **Volume** (in millions of transactions)

Payment method	2019	2020	Change %
Debit card (total)	6,256.0	5,699.0	-8.9%
Debit card (contactless only)	2,440.0	3,302.0	35.3%
Credit card (total)	6,859.0	6,124.0	-10.7%
Credit card (contactless only)	2,280.6	2,036.3	-10.7%
Credit card (remote <sup>22</sup> )	685.9	612.4	-10.7%
Prepaid	328.7	301.9	-8.2%
Total	13,443.7	12,124.9	-9.8%

#### Value (in millions of dollars)

Payment method	2019	2020	Change %
Debit card (total)	259,255.0	251,731.0	-2.9%
Debit card (contactless only)	46,666.0	74,605.0	59.9%
Credit card (total)	615,154.4	569,000.0	-7.5%
Credit card (contactless only)	110,153.8	98,353.1	-10.7%
Credit card (remote)	61,515.4	56,900.0	-7.5%
Prepaid	19,237.0	17,900.0	-7.0%
Total	893,646.4	838,631.0	-6.1%

<sup>22</sup> Credit card remote transactions include all transactions that are not made at physical (brick-and-mortar) and virtual (online) payee locations. Instead, payors use financial institutions or payment service providers as intermediaries that move funds to intended payees through their services (i.e., for bill payments and ongoing subscriptions).

# Electronic

Electronic payments include electronic funds transfers (EFT) and online transfers. EFT payments include direct deposits, electronic remittances, pre-authorized debits and other online bill payment transactions.

Online transfers include electronic transactions initiated through online services and providers, which are either pre-funded or linked to deposit accounts at financial institutions (i.e., *Interac* e-Transfer, and PayPal).

Overall, total electronic payment transaction volume and value grew in 2020 compared to 2019 (by six per cent and less than one per cent respectively) as more Canadians adopted electronic payment methods (**Table 3**). This result was fueled by the surge in growth of online transfer payments in 2020, which grew by 48 per cent in volume, and by 40 per cent in value. See the **online transfers** section for more.

#### **TABLE 3:** ELECTRONIC YEAR-OVER-YEAR GROWTH

# **Volume** (in millions of transactions)

Payment method	2019	2020	Change %
EFT	2,948.0	2,908.0	-1.4%
Online transfer	540.6	800.7	48.1%
Total	3,488.6	3,708.7	6.3%

# Value (in millions of dollars)

Payment method	2019	2020	Change %
EFT	5,178,683.0	5,147,089.0	-0.6%
Online transfer	178,224.9	249,123.3	39.8%
Total	5,356,907.9	5,396,212.3	0.7%

# METHODOLOGY

Payments Canada works closely with payment service providers, payment consultants and researchers to compile a comprehensive 2020 data set and provide insights as to how Canadian consumers and businesses pay.

The general methodology involves a combination of industry data and market research.<sup>23</sup> Industry data are derived primarily from the Automated Clearing Settlement System (ACSS) data, industry payment card use data, and subject matter experts.<sup>24</sup> Data was also collected from payment service providers and payment networks on an aggregated annual basis, based on actual payment instrument use data. Market survey research is used to fill data gaps and to provide detailed insights.

This report compares data collected from 2020 with data from previous reports, allowing for the ongoing analysis of trends. In the following sections, 2015 and 2020 data are compared to understand how payment trends have evolved.<sup>25</sup> Year-over-year comparisons (2019 to 2020) are also considered.

Securities and derivatives transactions and trades are excluded from the research.<sup>26</sup> Payment types that have not reached significant volumes are also excluded. This includes payment methods that are less than

one per cent of total transaction volume or value (such as virtual currencies).<sup>27</sup> Finally, Large Value Transfer System (LVTS) transactions are excluded<sup>28</sup> as they would result in double counting as the payment volume and value information in this report are derived from the clearing data.

For 2021, the report format has moved away from reporting the results within a point-of-sale (POS) versus remote environment context in order to better capture the growth of emerging channels like e-commerce.<sup>29</sup> Instead, it looks at payments organized into paper, card, and electronic payment methods, so the findings from some sections will vary from the 2020 report. Information on transaction volumes and values by payment type reported by the POS and remote environments can be found in the appendix (see **Figures A6 – A9** in **Appendix I**).

- 23 Appendix II includes details on methodology and assumptions, including consumer and business survey market research methodologies.
- The CPMT also includes value transactions that may not specifically be used for the exchange of goods and services. For instance, ABM transactions are used to obtain cash, where the cash is used for actual payments. Both types of transactions fall within the scope of this research, as each forms an important element of the Canadian payment market. Payments Canada recognizes how this might pose as a form of double counting.
- 25 To view older reports, please see:
  Canadian Payment Methods and Trends: 2020. Payments Canada Discussion Paper No. 10. October 2020;
- Canadian Payment Methods and Trends: 2019. Payments Canada Discussion Paper No. 9. December 2019;
- Please note that certain methodologies for data collection were updated over the past two years when directly comparing figures from older CPMT reports to figures presented here.

  When a payment is made to purchase investments, the transaction will be counted in the appropriate payment segment. When derivatives, securities and other assets are exchanged and no payment
- is required or results, the exchange of value is not included.

  27 Only 11 per cent of adult Canadians reported using a virtual currency at least once in 2020. For more information about consumer familiarity and likelihood to use Bitcoin, please see the results of the
- 27 Only 11 per cent of adult Canadians reported using a virtual currency at least once in 2020. For more information about consumer familiarity and likelihood to use Bitcoin, please see the results of the 2019 Bitcoin Sentiment Tracker by Payments Canada.
- **28** For analysis on LVTS, please see Payments Canada's **Annual Report**
- The point-of-sale (POS) environment includes transactions that take place in either physical or virtual payee locations (i.e., brick-and-mortar merchants or online vendors), including in-app and other e-commerce transactions. The POS includes cash, prepaid, debit and credit card transactions. The POS environment is dominated by consumer payments (the majority of which are conducted physically), and is where Canadians spend and transact for their daily purchases. Remote transactions include all the transactions that are not made at physical (brick-and-mortar) and virtual (online) payee locations. Instead, payors use financial institutions or payment service providers as intermediaries that move funds to intended payees through their services. The remote environment includes cheques, EFT, online transfers (electronic account-to-account transactions) and certain credit card transactions (i.e., for bill payments and ongoing subscriptions). The remote payment environment is dominated by payments initiated by commercial payers, such as businesses paying each other and employees, and government benefit payments.



# THE PAYMENT LANDSCAPE

COVID-19 transformed the global payment landscape over the last year. Changes in consumer and business behaviour in response to the pandemic accelerated a shift to e-commerce, digital payments and the reduction of cash usage around the world.

That, in turn, spurred disruption and adoption of alternative payment options. Cryptocurrency awareness grew significantly due to more offerings, use cases and extraordinary valuations. That trend has inspired at least **80 per cent of the world's central banks** to explore the design and potential introduction of a digital currency. All the while, the modernization of the industry progressed with the introduction of new regulation, open banking, digital ID, and real-time payments in several countries around the world.

In response to the COVID-19 impact on consumers and businesses, the Canadian government introduced a set of economic support measures in 2020 that provided relief for millions of Canadians. That drove a rise in government payments—an added 33 million over the course of four months.<sup>30</sup> Canadian financial institutions partnered with the federal government to pivot quickly and offer online enrollment for Canada Revenue Agency's (CRA) Direct Deposit program in order to facilitate the fast, safe and convenient distribution of these support payments. This program helped drive awareness and comfort with digital payments in the Canadian marketplace.

**30** For more, please see: https://www.payments.ca/about-us/news/your-cheque-mail-hopefully-not-much-longer

Also in 2020, the Bank of Canada continued to explore central bank digital currencies (CBDC) with other G7 members in response to declining cash use and the rise of digital currencies and stablecoins. The **pandemic accelerated Canada's work** on this front.<sup>31</sup> A report released in October addressed underlying principles and primary features of a potential CBDC.<sup>32</sup> Generally speaking, the pandemic informed the view among many global central banks of the opportunities presented by CBDCs, and that the "exploration and launch of CBDC will become increasingly more common in the wake of COVID-19."<sup>33</sup>

Building on the call from the Senate Committee on Banking, Trade and Commerce for immediate, decisive action on an open banking framework, the Department of Finance began stakeholder consultations in the latter half of 2020. Several organizations and initiatives have arisen to advance the case for open banking—sometimes referred to as consumer directed finance—such as **Open Banking Initiative Canada**.

The COVID-19 crisis also delayed delivery of the Federal Retail Payments Oversight Framework (RPOF) legislation.<sup>34</sup> Drafting work of the legislation was completed, but this initiative was moved off the legislative agenda to allow the government to focus on other pandemic-related priorities. The Department of Finance reiterated that it remains committed to membership reform and the implementation of RPOF (see the **open banking feature** for more)<sup>35</sup> and, by the time of publication of this report, **commitments to a RPOF appeared in the 2021 Federal Budget.** This is an important development that marks the first step in broadening access to Canada's core payment systems, a notable benefit for Canadian paytechs and payment service providers.

In September 2020, the Digital ID and Authentication Council of Canada (DIACC) released the **Pan-Canadian Trust Framework.** The framework was developed with a number of industry partners including financial institutions, businesses and government representatives, and established a framework for how digital identity will be governed in Canada—an important step forward.



**<sup>31</sup>** For more, please see: https://www.bankofcanada.ca/2020/02/contingency-planning-central-bank-digital-currency/

<sup>32</sup> For more, please see: https://www.bankofcanada.ca/2020/10/central-banks-and-bis-publish-first-central-bank-digital-currency-cbdc-report/

**<sup>33</sup>** Currency Research and Lipis Advisors, "Survey of central banks on the impact of COVID-19 on cash and digital payment policies", 2020. For more on the developments of CBDC and cryptocurrency use in Canada, see our **Featured Analysis on Digital Currencies**.

<sup>34</sup> RPOF is now the Retail Payments Activities Act, introduced by the federal government on April 30, 2021

<sup>35</sup> By the time of report publication, the federal government had tabled the 2021 federal budget, which includes RPOF. For more, please see: https://www.payments.ca/about-us/news/payments-canada-welcomes-inclusion-retail-payments-oversight-framework-2021-federal

# OPEN BANKING IN CANADA



By: Brendan Carley

# What is open banking and how could it be of value and benefit to Canadian consumers and businesses?

Open banking refers to policy and technology frameworks that allow consumers to use, move and share their financial transaction data held at financial institutions with trusted third-party service providers (TPPs) in order to receive a wider range of useful financial services. Open banking is more than just new financial services; it is a mix of laws, regulation, technical standards, business relationships and technical connections that allow for the safe and efficient delivery of enhanced services to consumer and business clients. Enabling a more secure, transparent and inclusive way to share select types of data has the potential to fuel innovation and competition in the Canadian financial sector, as well as support Canada's overall global competitiveness.

# What have been the lessons learned so far in those countries operating an open banking system?

Around the world, some open banking regimes provide fintech TPPs "read access" to a customer's banking data, while others have added frameworks to safely allow "write access". Read access enables services such as consumer budgeting and financial advice as well as lending. Write access allows TPPs to perform some functions on behalf of a client with the client's bank, such as initiating payments from the client's chequing account to pay bills.



Open banking is operational in numerous jurisdictions, on multiple continents.<sup>36</sup> Some lessons taken from early adopters include:

- ▶ Government leadership and mandatory compliance will drive implementation and accelerate innovation. Balance is needed between ubiquitous adoption (getting everyone connected and interoperable) and innovation (enough flexibility for companies to create and compete) through API standards and data networks.
- ▶ Clear liability frameworks are needed for companies that transmit and hold personal data.
- Consumer awareness and education is needed on their rights and responsibilities, as well as those of their financial institutions and TPPs.

**36** For more information on which countries/regions have either implemented or are in the process of implementing open banking, see: https://www.trustly.net/open-banking/open-banking-around-the-world

# How would it work and who would be the main "players" operating an open banking system in Canada?

In Canada, the federal government has been studying how best to implement a safe and innovative open banking environment (commonly referred to as "consumer directed finance"). In 2018, the **Advisory Committee on Open Banking** was created to study the matter. In 2021, the advisory committee issued a **Final Report on Open Banking**.

It's expected that the regime will be underpinned by updated privacy legislation that will provide Canadians with more control over how their data is used and shared. This will then be augmented by rules, standards and accreditation frameworks that will form an open banking policy framework to underpin safe interactions between customers, financial institutions and TPPs. While the federal government has jurisdiction over certain deposit-taking financial institutions like banks, it is a goal for provincially-regulated credit unions to be included in the framework to enable a more level playing field in Canada.

On the technical side, it is expected that TPPs will gain access to the banking transaction information of their clients through application programming interfaces (APIs) and financial institutions.

This will replace the practice of "screen scraping" currently employed by some fintech TPPs. Screen scraping is where a client provides the TPP with the login credentials to their bank's online portal. The TPP then "scrapes" the client's data for analysis purposes. Because this practice involves a consumer providing their confidential login data to another party, screen scraping is generally recognized to be in contravention of a banking customer's account agreement, exposing that customer to financial risks if something goes wrong. API interfaces will also allow financial institutions to collect information from TPPs, should the client authorize it, to offer enhanced or better tailored banking products to clients.

The federal government is expected to pursue *read* access open banking as a first step, followed by *write* access and coverage for a wider range of financial services (e.g., insurance) in the future. This will require extensive cooperation with financial institutions, fintechs, consumer and business advocates and other levels of government, and Payments Canada is keen to be involved.

# What does open banking mean for payments in Canada?

While Canada's open banking framework might not include *write access* provisions on day one, other jurisdictions have provided a roadmap for expanding the scope to cover *write access* services, like third-party payment initiation. When a customer provides a TPP the authority to make payments on their behalf from their bank account, it can enable a suite of integrated financial services, including accounting and payables/receivables services, integrated personal finance, and payment applications.

Including payments in open banking will provide another avenue for competition and innovation in Canada. Whether those payments are initiated by TPPs through bilateral APIs with financial institutions, or through a centralized infrastructure such as **Payments Canada's Real-Time Rail**, the payment industry will create and establish new commercial partnerships and dynamics that will benefit Canadians. As the owner and operator of Canada's national payment systems, Payments Canada has a facilitator role in the development of new payment methods and technologies, and will work with the ecosystem to support progress in the payment sector as open banking evolves in Canada.



# FINDINGS

The sections below build on a number of different data streams in order to provide a comprehensive view of consumer and business payment behaviour conducted via paper, card and electronic payment methods.

# Five-year Canadian payment transaction trends

There were a total of 20 billion transactions, worth about \$9.4 trillion in the Canadian payment market for 2020. Over the past five-year period, the total payment market has declined slightly in volume by less than one per cent, while growing in value by six per cent (as seen in Table 4).

EFTs and cheques continued to lead in terms of payment value, accounting for 55 per cent and 33 per cent of total payment value, respectively. The shift away from cheques has deepened over the past five-year period, with cheque volumes having declined by 51 per cent from 2015. On the other hand, EFT volumes and values experienced growth during this time as more Canadian consumers and businesses shifted towards digital payment methods. Online transfer transaction volumes and values experienced the highest growth of any payment method over the past five years (569 per cent and 445 per cent respectively) and are expected to continue growing. However, they still make up only around four per cent of total payment volume.

The COVID-19 pandemic accelerated the ongoing decline of paper payment methods over this time period. Cash transaction volumes decreased by 44 per cent from 2015, replaced by debit and credit card payments, which now make up 28 per cent and 30 per cent of total payment volume respectively. In 2020, the five-year growth rate for credit card volume declined to 32 per cent from 62 per cent, largely due to the impact of the pandemic, as Canadians spent less overall. However, as consumers shifted their shopping behaviour to more online purchases, credit card transactions saw a bump in volume, with credit remaining the main payment method for e-commerce transactions. For more, see the **credit card** section.

**TABLE 4:** ALL PAYMENT METHODS ANNUAL TOTALS

	Total vol	Total volume 2015		Total volume 2020	
Payment method	In millions	% of total volume	In millions	% of total volume	Change from 2015 %
Cheque and paper	876.0	4.3%	432.0	2.2%	-50.7%
Debit card	5,178.0	25.5%	5,699.0	28.4%	10.1%
ABM	595.0	2.9%	423.1	2.1%	-28.9%
Prepaid card	225.0	1.1%	301.9	1.5%	34.2%
EFT	2,592.0	12.8%	2,908.0	14.5%	12.2%
Credit card	4,642.0	22.9%	6,124.0	30.5%	31.9%
Online transfer	119.6	0.6%	800.7	4.0%	569.5%
Cash	6,050.0	29.8%	3,393.8	16.9%	-43.9%
Total	20,277.6	100.0%	20,082.5	100.0%	-0.9%

	Total value 2015		Total va	Change from	
Payment method	\$ millions	% of total value	\$ millions	% of total value	<b>2015</b> %
Cheque and paper	3,989,942.9	45.0%	3,056,371.0	32.5%	-23.4%
Debit card	220,483.4	2.5%	251,731.0	2.7%	14.2%
ABM	72,666.7	0.8%	44,826.4	0.5%	-38.3%
Prepaid card	13,489.9	0.2%	17,900.0	0.2%	32.7%
EFT	3,972,263.4	44.8%	5,147,089.0	54.7%	29.6%
Credit card	450,416.6	5.1%	569,000.0	6.0%	26.3%
Online transfer	45,700.0	0.5%	249,123.3	2.6%	445.1%
Cash	110,589.0	1.2%	72,003.5	0.8%	-34.9%
Total	8,875,551.9	100.0%	9,408,044.2	100.0%	6.0%

# Year-over-year Canadian payment transaction trends

The following analysis compares the 2020 data to 2019 data (see Figure 2). This perspective allows us to identify if trends observed in previous years are continuing, and to spot the emergence of potential new trends.

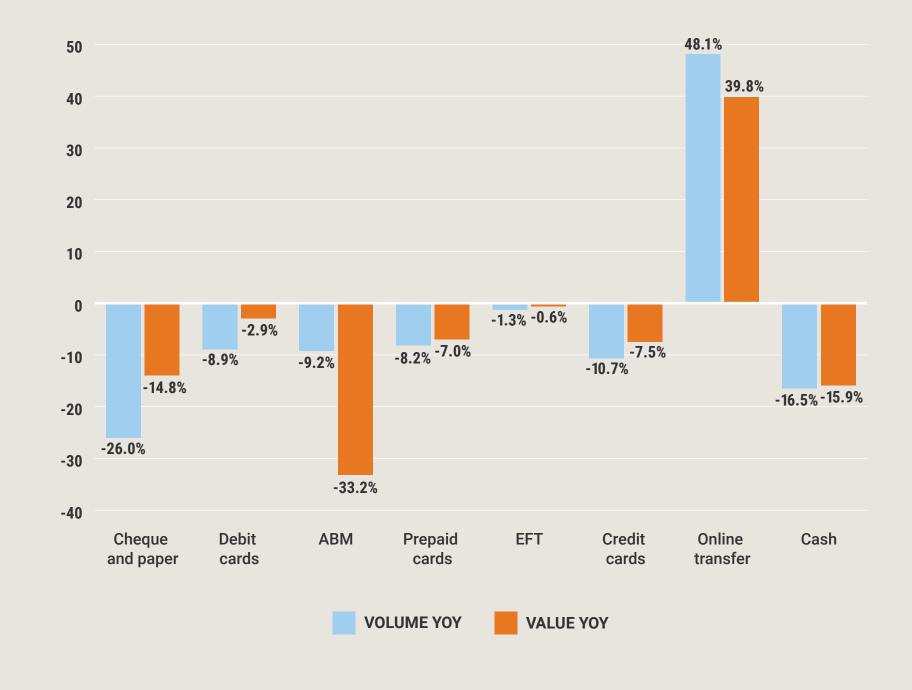
2020 marked an atypical year in the payment landscape that saw declines in transaction volumes and values across several payment types due to the negative impact of the COVID-19 pandemic on the Canadian economy. Overall, electronic payments continued to grow, while paper-based and card payments declined from 2019. Unlike last year, credit cards experienced negative year-over-year growth in volume and value (declined by 11 per cent and seven per cent respectively), despite the increase of credit use for e-commerce. However, credit cards continued to lead all payment types in terms of transaction volume.

Online transfer transaction volume grew by 48 per cent in 2020 compared to 40 per cent in 2019, as more consumers and businesses used online transfers more than ever to send funds. Despite this large percentage growth in volume, online transfers continued to account for only a relatively small portion of total payment volume and value (four per cent and three per cent respectively).

EFT transaction volumes and values saw a slight decrease in 2020 (see **Figure 2**). The continued decline in cheques, coupled with the increase in EFT value over the past five years, indicates that more Canadian consumers are replacing cheques with electronic payment methods for large-value transactions.



FIGURE 2: VOLUME AND VALUE GROWTH YEAR-OVER-YEAR



- The COVID-19 pandemic contributed to the continued decline of cash transactions by acting as a catalyst for more Canadians to replace cash with digital and contactless payments.
- Despite the impact of the pandemic, cash remained the third most used payment method.
- The average cash transaction value was \$21.
- Cash transaction volumes decreased
   by 17 per cent from 2019 to represent
   17 per cent of the total payment volume
   in 2020 (versus 30 per cent in 2015).
- Cash transaction values decreased by 16 per cent from 2019 to represent less than one per cent of the total payment value (versus one per cent in 2015).
- The main reasons consumers used cash for purchases were a desire to spend cash and coins on hand, speed and ease of use, and because the transaction value was small (under \$15).

#### Cash

Canadians conducted a total of 3.4 billion cash transactions, valued at \$72 billion, in 2020.<sup>37</sup> Cash represented about 17 per cent of the total volume and 0.7 per cent of the total value of all POS transactions.

Overall, cash volume decreased by 44 per cent since 2015, primarily losing volume to card payments.

The COVID-19 pandemic increased consumers' preference for and use of contactless card payments over cash in part due to concerns about handling cash. As a result, the transition to debit and credit contactless payments for cash-intensive use cases continued to grow in 2020.

In addition to replacing cash with contactless card payments, many Canadians began using mobile payments in store for the first time, or more often than before the pandemic, as well as using *Interac* e-Transfer more often for peer-to-peer (P2P) payments. The shift in consumer payment behaviour led businesses to upgrade their POS payment terminals to start accepting contactless payments (nine per cent), and move all or some of the business online (11 per cent). Businesses also accepted payments via *Interac* e-Transfer more often (37 per cent) in response to increased consumer use.<sup>38</sup> Stay-at-home orders and the closing of non-essential brick-and-mortar businesses during lockdowns also restricted the ability for Canadians to make in-store cash purchases.

Signs of cash hoarding were observed during the early months of the pandemic (in March and April), but Canadians' cash-on-hand holdings returned to prepandemic levels by mid-summer.<sup>39</sup> Consumer demand for and use of cash increased after the public health measures imposed at the beginning of the COVID-19 pandemic were relaxed during the summer of 2020.<sup>40</sup> In particular, cash in circulation increased in July due to ATM cash withdrawals and reduced cash deposits.<sup>41</sup> The Bank of Canada noted that the likelihood of Canadians making cash payments rose in July versus April 2020, and that consumer cash holdings returned to August 2019 levels.<sup>42</sup>

Overall, Canadians were still using cash throughout 2020, with close to half of Canadians (47 per cent) indicating that they had made a cash purchase in the past seven days, down from 61 per cent in 2019.<sup>43</sup> More than a third of Canadians (38 per cent) who are regular cash users<sup>44</sup> received a portion of their monthly income or compensation for employment in cash or coins, a growth of eight per cent from 2019.<sup>45</sup> Those who receive income in cash are more likely to use cash for payments.

The growing gig economy, which is in part cash-based, contributes to this trend. Business closures and scale-backs from the pandemic caused some Canadians to participate in the gig economy to either supplement their existing income or generate new income streams. The number of Canadians participating in the gig economy increased to 13 per cent in December (from 11 per cent in March 2020).<sup>46</sup>

- **37** For cash figure estimate sources, please see Appendix II.
- 38 Leger/Payments Canada. 2020 Business Payments Behaviour Tracker Survey.
- 39 For more, please see: https://www.bankofcanada.ca/wp-content/uploads/2021/03/sdp2021-3.pdf
- 40 The Bank of Canada, Cash and COVID-19: The effects of lifting containment measures on cash demand and use, March 2, 2021.
- 46 IIIC Dank Of
- **42** Ibid.
- 43 Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey.
- 44 Regular cash users are defined as those who used cash more than once in the past seven days
- **45** Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey.
- **46** For more, please see our **report** on the impact of the pandemic on gig workers and businesses.

Twenty-seven per cent of gig workers in Canada get paid in cash. The gig economy workforce is largely composed of Canadians who identify as male, are between the ages of 18 and 34, live in urban areas, and have lower incomes. This profile closely matches that of Canadians who received a portion of their income in cash in 2020 overall.<sup>47</sup>

Even though younger Canadians (18 – 34 years) were more likely to use technology-based payment options, they represented 29 per cent of regular cash users. This age group was especially more likely to have lower incomes and be unbanked, which could contribute to increased reliance on cash use.<sup>48</sup> Interestingly, while cash use continues to decline overall, 43 per cent of Canadians (regardless of age) indicated that they are feeling anxious about not being able to use cash for making payments at stores.<sup>49</sup>

Canadians primarily used cash because they had cash and/or coins on hand, because they felt it was quick and easy; and because the transaction value was small (under \$15).<sup>50</sup>

**Table 5** shows in more detail the key drivers of cash use among consumers.

The use of cash as a payment method at the POS is also influenced by the acceptance options provided by retail merchants. In deciding which payment methods to accept from customers, merchants consider customer preference and the relative cost of each payment method. Like consumers, merchants consider cash to be fast and convenient.<sup>51</sup> They also perceive cash to be the least costly method of payment to accept from customers, and the most reliable.<sup>52</sup> While most merchants offer an array of payment options in order to satisfy customer demand, small retail businesses prefer cash over credit card payments, especially for low value transactions; funds change hands in real time and the cost of acceptance is lower than debit and credit card payment charges.<sup>53</sup> The speed, ease, anonymity, and near-universal acceptance of cash payments explain current cash-intensive use cases, including individual services (e.g., paying for home services such as cleaners or contractors), or making charitable donations.



<sup>47</sup> For more, please see our report on the impact of the pandemic on gig workers and businesses.

**<sup>48</sup>** Unbanked refers to those who do not have a bank account (i.e., chequing or savings account) with any financial institution. Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey.

**<sup>49</sup>** Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker Survey.

<sup>50</sup> Ihid

**<sup>51</sup>** Bank of Canada. 2017, Merchant Acceptance of Cash and Credit Cards at the Point of Sale.

**<sup>52</sup>** Ibid.

**<sup>53</sup>** Ibid.

- ▶ Cheque and paper use continued to steadily decline, quickened by the impacts of the COVID-19 pandemic. Canadians are writing half the number of cheques they wrote in 2015.
- The average cheque and paper transaction value was \$7,075 (compared to \$6,142 from last year).
- Cheque and paper transaction volumes declined by 26 per cent year-over-year, and made up less than three per cent of the total payment volume (compared to four per cent in 2015).
- Cheque and paper transaction values declined by 15 per cent year-over-year, and made up 32 per cent of the total payment value (compared to 45 per cent in 2015).

# Cheque and paper<sup>55</sup>

Personal cheque usage continued to decline in 2020, with a 28 per cent decrease in volume and a 12 per cent decrease in value from last year.

The overall decline can be traced to the continued increased use of electronic payment methods such as EFTs, and online transfer payments by consumers (see **Figure 3** for key consumer cheque use cases). The COVID-19 pandemic contributed to a rise in electronic payments at the expense of cheques, as many Canadians opted not to exchange cheques over concerns about virus transmission through surface contact.<sup>56</sup> Still, 10 per cent of Canadians frequently used cheques in 2020. Younger Canadians aged 18 – 34 were most likely to be frequent cheque users, mainly using them for rent payment and payments or gifts to other people.<sup>57</sup>

Over the past five years, fewer cheque and paper items were being written. However, they were written for increasingly higher amounts, as evidenced by a five-year comparison of the average cheque and paper item transaction value for 2020 (\$7,075) versus 2015 (\$4,557). The significance of cheque and paper value can be attributed to commercial rather than consumer cheque use (refer to the section on **business payments** for more details on cheque usage drivers among businesses). Canadian consumers consistently use cheques for high value recurring expenses (see **Figure 3**).

Cheque usage is driven by consumers' desire to use their own funds rather than access credit, the ability to track and reconcile their payments, and payee preference (see **Table 6** on key drivers of cheque use among consumers).<sup>58</sup>

#### FIGURE 3: KEY CHEQUE USE CASES (CONSUMERS)

#### **TOP 3 TO A PERSON**

# 100

PAYMENT TO SOMEONE

23%



RENT

19%



DONATION OR CHARITY

9%

#### **TOP 3 TO A BUSINESS**



DONATION OR CHARITY

16%



**HOME SERVICES** 

15%



**RENT** 

13%

# TABLE 6: TOP FIVE DRIVERS OF CHEQUE USE (CONSUMER)59

	(n = 3857)
Easier to keep track of expenses	30%
Able to use my own funds (rather than borrow)	25%
Easier/more convenient than other payment methods	19%
Fast	15%
Widely accepted	14%

**<sup>59</sup>** Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey. For commercial drivers of cheque use, please see the **business payments** section.

**<sup>55</sup>** Cheque and paper items include paper remittances, imaged paper and encoded paper items.

**<sup>56</sup>** Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker Survey.

**<sup>57</sup>** Ibid. Frequent cheque user refers to Canadians who use cheques daily/a couple of times a week/weekly/every couple of weeks.

**<sup>58</sup>** Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker.

- Debit cards continued to be one of the most highly used payment methods. In 2020, 97 per cent of Canadians had a debit card, with 57 per cent of Canadians using their debit card at least once in the past week.
- ▶ The average debit transaction value was \$44.
- Debit card use decreased nine per cent in volume from 2019, to represent 28 per cent of total payment volume (compared to 25 per cent in 2015).
- ▶ Debit card use decreased three per cent in value from 2019, to represent nearly three per cent of total payment value (compared to just over two per cent in 2015).

### **Debit card**

Debit cards<sup>61</sup> continued to make up a significant proportion of payment volume, accounting for 28 per cent of total payment volume and is second to credit cards as the most used payment method.

The use of debit cards was consistent across generations, with those aged 18 – 24 having the highest propensity to use debit. This indicates a preference for using their own funds, or a lack of access to credit for this age group.<sup>62</sup>

Over the past five years, debit card transactions have been growing at a stable pace, and are more commonly used for low value transactions (under \$15). Debit contactless transactions continue to replace cash transactions at the point-of-sale (see the **contactless** section for more details). Canadians listed speed and ability to use their own funds as the key drivers for use of debit (see **Table 7** for more).

As a result of the COVID-19 pandemic, there was a significant increase in the use of co-badged debit cards for e-commerce and in-app transactions.

Around 60 per cent of debit cards in circulation in Canada are co-badged cards that allow end users to pay with *Interac* Debit at the point-of-sale, and Visa or Mastercard debit for e-commerce and in-app payments.<sup>63</sup>

Interac Online transaction volume increased over 70 per cent from 2019, with 30 per cent of Canadians indicating that they've used Interac Online services more frequently since the onset of COVID-19.<sup>64</sup> Interac has partnered with more online retailers to include Interac Online Debit as a payment option.<sup>65</sup>

Consumers made e-commerce transactions with debit cards as they perceived debit cards to have wide acceptance and high security measures in place. Canadian financial institutions that issue *Interac*, Visa and Mastercard branded products all have widely established "zero-liability" consumer protections, which increases consumer confidence in the security of their transactions. Explored in detail in the **e-commerce** section below.

# **TABLE 7:** TOP FIVE DRIVERS OF DEBIT CARD USE (CONSUMERS)<sup>60</sup>

	(n = 3981)
Fast	46%
Able to use my own funds	
(rather than borrow)	46%
Widely accepted	42%
Easier/more convenient than	
other payment methods	37%
Easier to keep track of expenses	34%

**60** Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey. For commercial drivers of cheque use, please see the **business payments** section.



- 61 Debit cards include all debit card transactions; for example, contact and contactless (including card and mobile) payments, Interac Debit In-App and Interac Online Payments.
- **62** Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey.
- 63 Co-badged cards refer to *Interac* cards that are co-branded with either Visa or Mastercard. When used at the physical POS, the cards use the *Interac* debit rails while offering e-commerce capabilities through Visa or Mastercard rails.
- **64** Transaction numbers provided by *Interac*. Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker.
- **65** For more, please see: https://newsroom.interac.ca/2020-a-year-in-review-at-interac/

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- Credit cards remained the most used payment method, despite a decline from last year's volumes and values.
- As e-commerce grew in the pandemic, credit card use accelerated as it was the primary method for e-commerce payments.
- The average credit transaction value was \$93.
- Credit card use decreased 11 per cent in volume from 2019, to represent 30 per cent of total payment volume (compared to 23 per cent in 2015).
- Credit card use decreased eight per cent in value from 2019, to represent six per cent of total payment value (compared to five per cent in 2015).



# **Credit card**

Overall credit card usage declined in 2020, with a 11 per cent decrease in volume and an eight per cent decrease in value from last year.

In spite of this, credit cards<sup>66</sup> remained the most used payment instrument, and they also made up the bulk of card value overall. In 2020, 93 per cent of Canadians reported that they had at least one credit card, and the number of credit cards in circulation rose three per cent.<sup>67</sup> The loyalty points and rewards associated with credit cards bolstered use, with 62 per cent of credit users listing "receiving discounts/loyalty points/rewards" as the key driver for use of credit cards.<sup>68</sup> Overall, around 88 per cent of credit cards offer rewards, with cashback (41 per cent), travel rewards (22 per cent), and retail rewards (15 per cent) being the most common reward types.<sup>69</sup>

Credit cards remained the preferred payment method, with higher-earning individuals more likely to be heavy credit users.<sup>70</sup> Credit card use remained consistent across

66 Credit cards include all credit card transactions; for example, card on file, contact and contactless (including card and mobile) payments

70 Ibid. Heavy credit users are defined as those who make more than 50 per cent of their transactions using credit.

all ages, with over 83 per cent of credit card users being classified as "regular" credit card users.<sup>71</sup> Thirty-two per cent of Canadians reported that they still carried a balance on their cards past their billing cycle, which indicates that some Canadians take advantage of the ability to make smaller monthly payments and carry a balance (see **Table 8** for drivers of credit usage). Younger generations (those aged 18 – 24) and individuals with a low income (those who make less than \$40,000 annually) are more likely to carry a balance on their credit cards and are likely to use their credit cards on a more frequent basis.<sup>72</sup>

The emergence of Buy Now Pay Later (BNPL) lenders (e.g., Afterpay and Affirm) that integrate themselves into e-commerce platforms, offering payment installment plans online and in-app as an option at checkout is also shifting credit card transaction volumes. BNPL lenders are especially appealing to Canadians who either carry a revolving credit card balance, or do not have a credit card at all. Credit card issuers

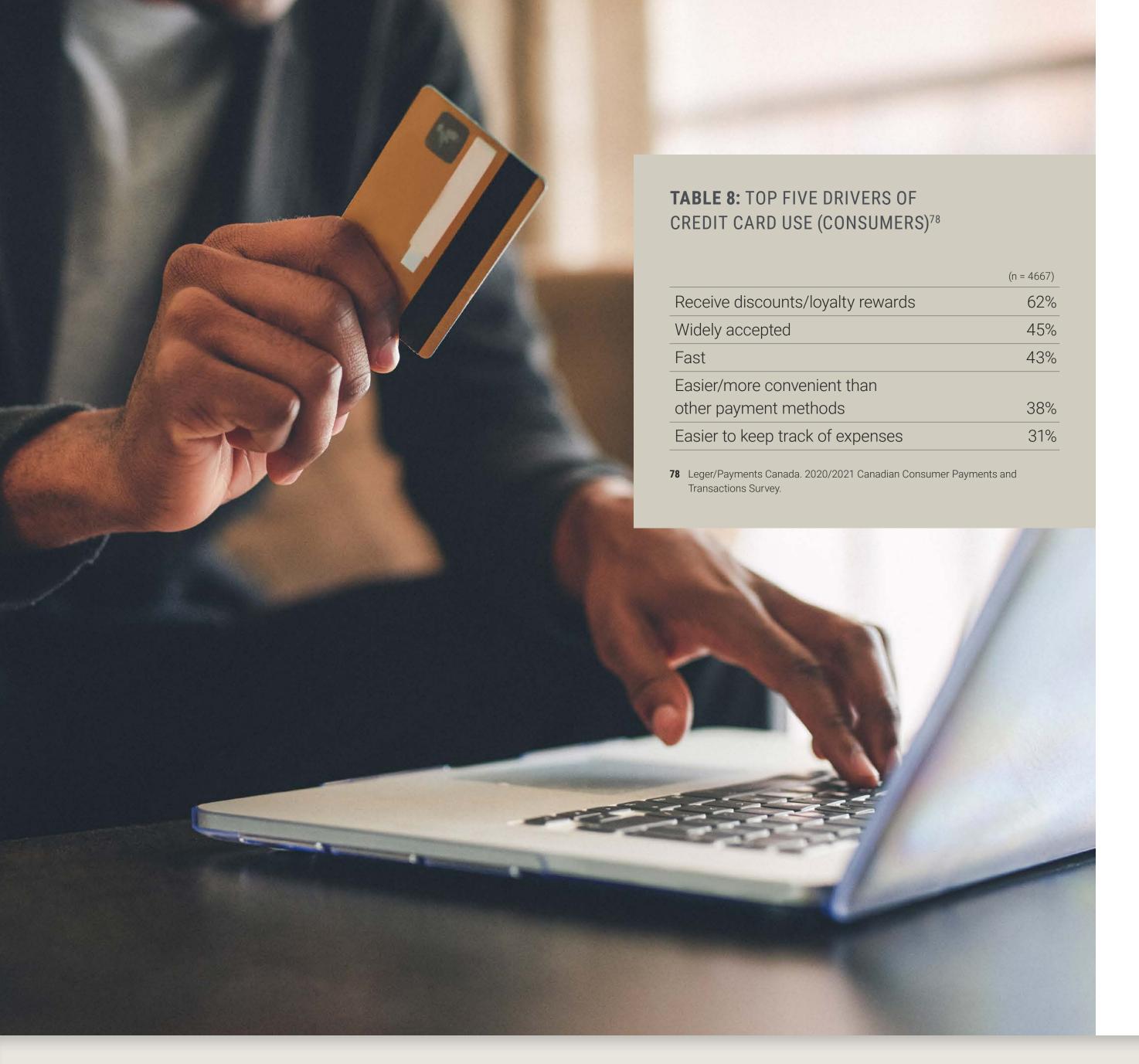
**<sup>67</sup>** Euromonitor. 2020 Financial Cards and Payments in Canada.

<sup>68</sup> Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey.

**<sup>69</sup>** Ihi

<sup>71</sup> Regular users are defined as those who used their credit card more than once in the past seven days.

<sup>72</sup> Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey.



and companies have responded to this new competitive threat. Scotiabank offers its Scotia SelectPay which provides customers with the option to convert in-store or online purchases made on their credit card into smaller installment payments, while still earning loyalty points/rewards on their purchases. CIBC and RBC both have similar products. Meanwhile, Visa announced a partnership with Global Payments and Desjardins Group in mid-2021 to launch its own installment program across Canada.<sup>73</sup>

Credit cards continued to be the preferred payment option for e-commerce transactions with 59 per cent of Canadians who made an e-commerce purchase using a credit card to do so.<sup>74</sup> Canadians made an average of 5.3 e-commerce transactions using a credit card in the past month, but only 1.9 using a debit card (see the e-commerce section for more details).<sup>75</sup> Credit card use for e-commerce grew significantly during the COVID-19 pandemic. With more consumers staying home, there was less opportunity for in-store spending and a subsequent increase in e-commerce transactions. While Canadians are spending less overall (around 61 per cent of Canadians have reported spending less relative to pre-pandemic levels), the use of credit has increased significantly.<sup>76</sup> Thirty-two per cent of Canadians report that they are using credit cards more based on a desire to pay contactlessly.<sup>77</sup>

Over the long term, credit card usage has been trending upwards. Compared to 2015, the use of credit cards has grown 32 per cent in volume and 26 per cent in value, as more Canadians take advantage of the benefits of credit cards.

<sup>73</sup> For more, see: https://www.theglobeandmail.com/business/article-fintechs-buy-now-pay-later-revolution-is-far-from-certain/

**<sup>74</sup>** Ibid.

**<sup>75</sup>** Ibid.

**<sup>76</sup>** Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker Survey.

<sup>77</sup> Ibid. See the Research at a Glance section for more details on pandemic spending habits.

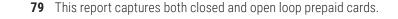
- Prepaid cards remained a less used payment method, but continued to be redefined with virtual prepaid products, like store cards, becoming more widely used.
- ▶ The average prepaid card transaction value was \$59.
- Prepaid use decreased eight per cent in volume from 2019, to represent two per cent of total payment volume (compared to one per cent in 2015).
- Prepaid use decreased seven per cent in value from 2019, to represent less than one per cent of total payment value (compared to less than one per cent in 2015).

# Prepaid card

In 2020, prepaid cards (both virtual and physical) declined slightly in both volume and value, as a result of decreased point-of-sale spending opportunity.<sup>79</sup>

Compared to previous years' growth, prepaid cards' growth rate in terms of both volume and value decreased. Over 50 per cent of Canadians used at least one prepaid card (virtual and physical) in the last month, with younger generations (those aged 18 – 34) and unbanked Canadians being the most likely to use prepaid cards. Historically, prepaid cards have been alternatives to traditional financial products; they are now increasingly used for e-commerce and as a digital alternative to cash.

Prepaid cards are pre-funded and not directly linked to user bank accounts. Some prepaid products do not require registration and offer an electronic method of payment that carries the anonymous characteristic of cash. Some prepaid cards offer the ability to receive discounts or loyalty rewards (see **Table 9** for the drivers of prepaid card usage). In 2020, a notable number of prepaid purchases were linked to virtual prepaid cards with around 37 per cent of Canadians using them. The majority of virtual prepaid payment options are associated with retail rewards or loyalty programs, with the most popular being Tim Hortons and Starbucks loyalty cards.





# **TABLE 9:** TOP FIVE DRIVERS OF PREPAID CARD USE (CONSUMERS)<sup>80</sup>

	(n = 601)
Receive discounts/loyalty rewards	62%
Widely accepted	45%
Fast	43%
Easier/more convenient than other payment methods	34%
Easier to keep track of expenses	37%

**80** Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker Survey.

- ▶ The COVID-19 pandemic contributed to more Canadians turning to contactless payments as a replacement for physical card and cash payments. However, yearover-year growth in contactless volumes and values declined in 2020 compared to 2019 due to an overall reduction in spend.
- Debit contactless transactions made up
   62 per cent of total contactless volume and
   43 per cent of total contactless value.
- Credit contactless transactions made up
   38 per cent of total contactless volume and
   57 per cent of total contactless value.
- The average debit contactless transaction value was \$22 while the average credit contactless transaction spend was \$48.
- Contactless transaction volumes increased by 13 per cent from 2019 to make up 32 per cent of total payment volume in 2020.
- Contactless transaction values increased by 10 per cent from 2019 to make up nearly two per cent of total payment value in 2020.



# **Contactless payment**

The impact of the COVID-19 pandemic fueled growth of contactless payments<sup>81</sup> (card and mobile) at the POS in 2020.

In total, there were 5.3 billion contactless transactions worth \$172 billion in 2020. Contactless payment volume and value increased by 13 per cent and 10 per cent year-over-year, respectively.

Many Canadians turned to contactless payments for in-store purchases due to concerns over virus transmission caused by touching surfaces and handling cash. In our most recent survey on the impacts of the pandemic on consumer behaviour (December 2020), over one-third of Canadians (37 per cent) avoided shopping at places that didn't accept contactless payments. Thirty-nine per cent of Canadians indicated they were uncomfortable touching a debit or credit card payment machine. Since the start of the pandemic, close to half of Canadians (47 per cent) tapped their credit card more, and 45 per cent tapped their debit card more when paying at a store.<sup>82</sup> The increased limit of \$250 on contactless payments by the credit card

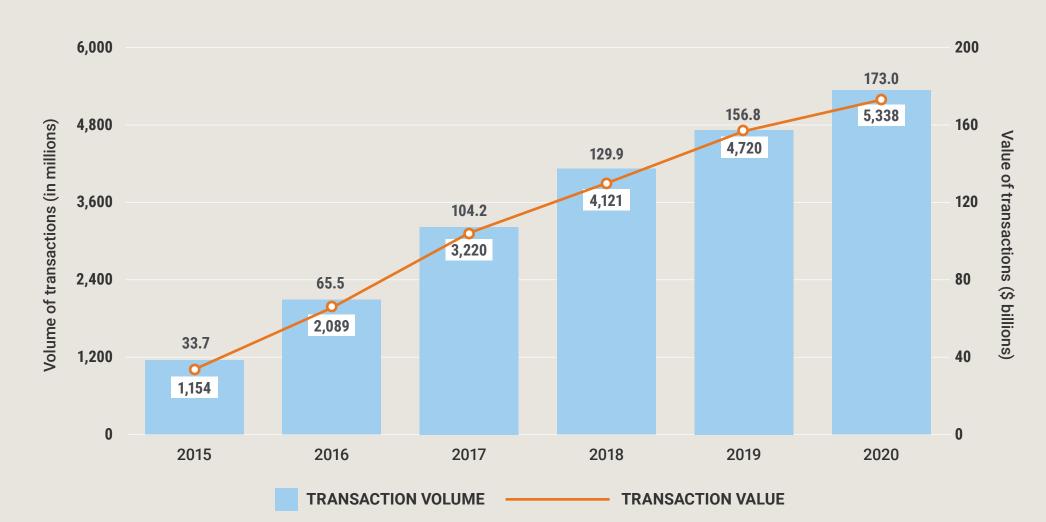
payment networks allowed consumers to pay contactlessly for a wider range of transactions. Many merchants across Canada encouraged the use of contactless payments, rather than cash, which added to the growth of contactless payments. (See **Figure 4** for contactless payments volume and value growth.) Most consumers chose to make contactless card payments whenever the transaction cost was within the transaction limit and if there was a contactless payment option available where they shopped.<sup>83</sup>

The average contactless transaction value was \$32, down slightly from \$33 last year due, most likely, to reduced store visits during the pandemic.<sup>84</sup> As the economy recovers and consumer spending begins to rebound, contactless payments are expected to grow at the expense of cash and contact (i.e., chip and PIN) card payments at the POS.

- 81 Contactless transactions are defined as using a payment card or mobile device tap to initiate a payment through a POS reader (in physical merchant locations).
- **82** Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker Survey.
- **83** TSI, Canadian Payments Forecast 2020.
- **84** Limitations to the amount that can be "tapped" affects the average transaction value.



FIGURE 4: CONTACTLESS GROWTH 2015 – 2020, VOLUME AND VALUE



More Canadians adopted mobile phone payments (in-app and contactless) as a mainstream payment option in 2020, spurred, in part, by the pandemic. Forty per cent of Canadians used mobile wallets more often to pay for store purchases mainly to address COVID-19 transmission concerns.<sup>85</sup>

In 2020, debit transactions accounted for 62 per cent of total contactless transaction volume (up 10 percentage points from 2019), and 43 per cent of total contactless transaction value (up 13 percentage points from 2019). <sup>86</sup> Close to two-thirds of Canadians (64 per cent) regularly <sup>87</sup> tapped their debit card for in-store purchases, with younger generations (those aged 18 – 34) and those with higher incomes being more likely to use tap to make purchases. <sup>88</sup> About one-third of Canadians (32 per cent) regularly tapped their mobile device to complete their debit card transactions, with younger Canadians being more likely to do so.

More older Canadians (those aged 55+) tapped their debit card in-store in 2020 compared to 2019 (58 per cent versus 47 per cent, respectively).<sup>89</sup> The number of older Canadians who tapped their mobile device to complete a debit card purchase grew from 18 per cent in 2019 to 21 per cent in 2020.<sup>90</sup>

Credit transactions accounted for 38 per cent of total contactless transaction volume, and 57 per cent of total contactless transaction value in 2020. Seventy-one per cent of Canadians regularly tapped their credit card for store purchases, with younger Canadians (25 - 34), and those with higher incomes more likely to use tap to make purchases.<sup>91</sup>

Two-in-five Canadians (39 per cent) regularly tapped their mobile device to complete their credit card transactions. Mobile device users tended to be younger and have higher incomes. The number of older Canadians tapping their mobile device to complete a credit card purchase increased slightly from 30 per cent in 2019 to 32 per cent in 2020. Consumers were more likely to link credit cards to mobile devices because of associated rewards, and credit cards were perceived to be more secure than debit cards overall.

- 85 Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker Survey. Figure is a point-in-time measure collected in December 2020.
- **86** Debit figures provided by *Interac*.
- 87 Regular users are defined as those who tapped their cards more than once in the past seven days.
- 88 Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey.
- **89** Ibid. Based on Canadians who tapped their debit card once or more in the past seven days.
- **90** Ibid.
- **91** Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey. Based on Canadians who tapped their debit card once or more in the past seven days.
- **92** Ibid.
- **93** Ibid.
- **94** TSI Canadian Payments Forecast, 2020.

Overall, Canadians chose contactless card payments over mobile contactless payments in 2020. Consumers not using mobile contactless payments indicated they were satisfied with their current payment methods, had security concerns using mobile contactless payments, and did not want to store their financial information on their mobile device. Current non-users might adopt mobile payments following greater awareness and education, and the availability of features in mobile wallets such as the ability to hold store loyalty cards, coupons and store membership cards.

The key players in the mobile contactless payment market continued to expand their presence in 2020. Apple Pay and Google Pay significantly increased their overall penetration year-over-year, to 22 per cent and 18 per cent respectively. Samsung Pay also increased its penetration rate year-over-year by two percentage points to 10 per cent. Mobile contactless payments are expected to continue to grow as more merchants accept contactless payments and more consumers use their mobile phones for financial transactions.

Wearable payments (i.e., those made with smart watches) received a boost in 2020 due to Canadians' preference for contactless payments during the COVID-19 pandemic. Wearables were used to initiate 18.5 million payment transactions worth \$244 million in 2020, up 115 per cent and 125 per cent in volume and value, respectively.

QR codes spurred the growth of mobile contactless payments. In June 2020, PayPal launched QR code **payments in Canada** for small businesses. This allowed business owners to accept touch-free mobile payments from their customers using the PayPal app. Up to now, QR code payment use among Canadians had been low but the pandemic triggered renewed interest. In addition, non-payment QR use cases grew: reading a menu in a contactless way at restaurants; creating digital line-ups at banks; displaying stock in store-front windows so customers could virtually shop while stores were closed during the lockdown; and collecting contact tracing details from customers. Overall, five per cent of businesses indicated using QR codes to interact with their customers and suppliers during the pandemic.99 The increased use of QR codes and the introduction of innovations such as PayPal's QR code payments for small business have helped to familiarize Canadians with QR code technology, and should increase comfort with the use of QR codes for payment in the future. Innovations such as PayPal's QR code payments for small business will help to quicken the migration of contactless payments to mobile phones, as well as expand the reach and popularity of contactless payments overall.



**<sup>95</sup>** Leger/Payments Canada. 2020 Payments Behaviour Tracker Survey.

**<sup>96</sup>** Ihid

<sup>97</sup> TSI. Canadian Payments Forecast, 2020. Note: penetration rate refers to per cent of smartphones with indicated payment application installed.

**<sup>98</sup>** Ihid

**<sup>99</sup>** Leger/Payments Canada. 2020 Business Payments Behaviour Tracker Survey. For the purposes of this analysis, QR code payments are classified as contactless transactions, even if an app (like PayPal) was used to facilitate these transactions.

- ▶ EFT continued to lead all other payments in transaction value by a significant margin.
- ► The average EFT transaction value was \$1,770.
- ▶ EFT transaction volume declined by just over one per cent from 2019, and made up 14 per cent of the total payment volume in 2020 (compared to 13 per cent in 2015).
- ▶ EFT transaction value decreased by less than one per cent from 2019, and made up 55 per cent of the total payment value in 2020 (compared to 45 per cent in 2015).

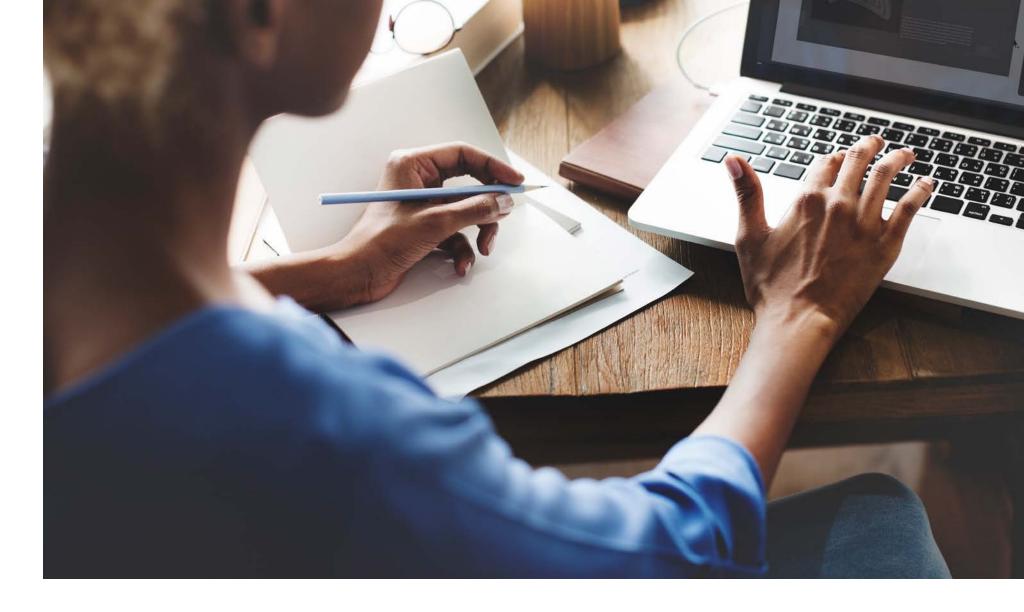
# **Electronic funds transfer (EFT)**

In total, there were 2.9 billion electronic funds transfer (EFT) transactions worth \$5.1 trillion in 2020. EFT continued to lead all other payment types in terms of total transaction value (55 per cent).

EFT includes transactions carried out through a deposit or operating account held at a Canadian financial institution (direct deposits, electronic remittances, pre-authorized debits and other online bill payment transactions).100 Overall, EFT remained the most used payment method for commercial payments in 2020. Businesses prefer using EFT because of the speed and convenience it offers them. See the **business payments** section for more.

The COVID-19 pandemic had a negative impact on EFT volumes and values during certain periods in 2020. Recurring and one-time transfers, such as direct deposit, pre-authorized debits, and bill payments, typically decline when there is a contraction in economic output (i.e., job loss, business closures, individuals cutting back on discretionary spending), and this was reflected in EFT data. Non-government electronic payments (i.e., direct deposits, pre-authorized payments)<sup>101</sup> decreased by nine per cent year-over-year by both value and volume in April, and a further 13 per cent for each in May, fueled by the shock to the labour market.<sup>102</sup> The value of nongovernment electronic payments grew year-over-year for five consecutive months to end the year, with particularly strong year-over-year growth in November and December of more than 10 per cent each month, showing a recovery in business expenditure.<sup>103</sup> The volume of AFT credits, which are direct deposit payments commonly used for payroll, sharply dropped in the spring as the unemployment rate reached a historical high of 13.7 per cent in May 2020.

While the pandemic had a negative impact on the value and volume of non-government electronic payments, it had an opposite impact on the value and volume of federal government electronic payments due to unprecedented emergency benefit payments to individuals and businesses. These included the Canada Emergency Response



Benefit (CERB) and Canada Recovery Benefit (CRB), and a one-time additional GST/HST credit worth \$5.6 billion.<sup>104</sup> Direct payments to businesses were made via pandemic relief programs such as the Canada Emergency Wage Subsidy (CEWS) and the Canada Emergency Business Account (CEBA). For the entire year, government direct deposits rose in value and volume by 49 per cent and 29 per cent respectively from 2019.<sup>105</sup>

The impact of the COVID-19 pandemic caused many businesses to change the way they send and receive money. According to a Mastercard study, over 80 per cent of Canadian and U.S. small businesses have introduced digital options for collecting funds and e-invoicing since the start of the pandemic. A noticeable uptick in the volume and value of electronic data interchange (EDI) and electronic remittances towards the end of 2020 may be a reflection of this shift.<sup>106</sup>

EFT usage among consumers continued to be driven by recurring payment and online bill payment use cases. Of all bill payment types, Canadians are more likely to pay utilities and service bills (i.e., internet, hydro and cell phone bills) with an EFT (i.e., online banking payments pulled from accounts or pre-authorized deposits (PADs)).

106 ACSS 2020 Transaction Data. To read more, please see: https://www.payments.ca/about-us/our-systems-and-rules/retail-system.

101 Non-Government electronic payments include: AFT credits and debits; EDI; and electronic remittances.

**102** ACSS 2020 Transaction Data.

**<sup>103</sup>** Ibid.

- ▶ Online transfers saw continued growth in 2020, with *Interac* e-Transfer still dominating this payment segment in Canada.
- ▶ The average online transfer transaction value was \$311.
- ▶ Online transfer transaction volumes rose significantly by 48 per cent from 2019, and made up nearly four per cent of total payment volume (compared to less than one per cent in 2015).
- Online transfer transaction values rose by 40 per cent from 2019, to represent nearly three per cent of the total payment value (compared to less than one per cent in 2015).
- The main reasons for using online transfers continued to be speed, convenience and security.



# **Online transfer**

Online transfers are defined as electronic payments made between end users, including businesses, through online services and providers, which are either pre-funded or linked to a deposit or operating account held at a Canadian financial institution.

The two most familiar examples are *Interac* e-Transfer and PayPal. In total, there were 800 million transactions worth \$249 billion in 2020.<sup>107</sup> Online transfers continued their growth in 2020, increasing significantly by 48 per cent in volume and 40 per cent in value, and representing four per cent of the total payment volume in Canada (compared to two per cent in 2019).<sup>108</sup>

**107** Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey. **108** Ibid.

Interac e-Transfer continued its stronghold of the online transfer payment segment in Canada. Over 763 million Interac e-Transfer transactions were sent in 2020.<sup>109</sup> Fifty-one per cent of Canadians made at least one Interac e-Transfer payment within the past month with an average value of just over \$600 in 2020.<sup>110</sup> Mobile phones remained the most popular method used to send Interac e-Transfers at 54 per cent.<sup>111</sup> Interac e-Transfer was mainly used for peer-to-peer (P2P) transactions, with 73 per cent of Canadians who used Interac e-Transfer, using the service to pay other people (e.g., family members, friends).<sup>112</sup> Close to half (45 per cent) of Canadians who used Interac e-Transfer used the service to pay a business or a bill.<sup>113</sup>

**109** Figures provided by *Interac*.

110 Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey.

**111** lb

**112** Ibid.

**113** Ibid.

The COVID-19 pandemic led to a surge in *Interac* e-Transfer volume sent in 2020. According to data from *Interac*, it reached a historical daily high at the beginning of May, with over 3.75 million transactions.<sup>114</sup> The growth in the number of first-time *Interac* e-Transfer users was 43 per cent higher when compared to user growth during the same period in 2019.<sup>115</sup> Canadians were using *Interac* e-Transfer more frequently too. The average number of *Interac* e-Transfer transactions per user increased by nine per cent in April 2020 year-over-year.<sup>116</sup>

PayPal transaction volumes and values also received a bump during the first year of the pandemic, increasing to 37 million transactions worth \$2.8 billion in 2020. PayPal's transaction volumes and values increased by 28 per cent and 21 per cent respectively from 2019. In fact, PayPal remained the second most popular online payment method after credit card, with 43 per cent of Canadians reporting having used PayPal to make an online purchase in the past twelve months.<sup>117</sup>

New use cases emerged for online transfers during the pandemic, in addition to replacing cash and cheque (see **Table 10** for key drivers of online transfer use). Due to physical distancing guidelines, many Canadians pooled grocery shopping responsibilities with family, roommates, and neighbours. *Interac* reported that Canadians used *Interac* e-Transfers to split grocery bills and big-box store purchases more often than before the start of the pandemic.<sup>118</sup>

Another growing use case for online transfers throughout the pandemic was sending financial support to family and neighbours, which included splitting the cost of supplies or sending money to those in need.<sup>119</sup>

**114** Figures provided by *Interac*. For more see: https://newsroom.interac.ca/money-transfers-in-canada/

**115** Ibid.

**116** Ibid.

117 TSI. Canadian Payments Forecast, 2020.

**118** Figures provided by *Interac*. For more see: https://newsroom.interac.ca/money-transfers-in-canada/

**119** Ibid



# International payments

Fifteen per cent of Canadians sent money internationally on a regular basis, up slightly from a year ago.

Funds were mainly sent to another bank account or to pay an international merchant/retailer directly.<sup>121</sup> The average number of international payments made by Canadians in a month remained unchanged at seven, while the total average payment value increased to \$748 CAD from \$495 CAD last year.<sup>122</sup>

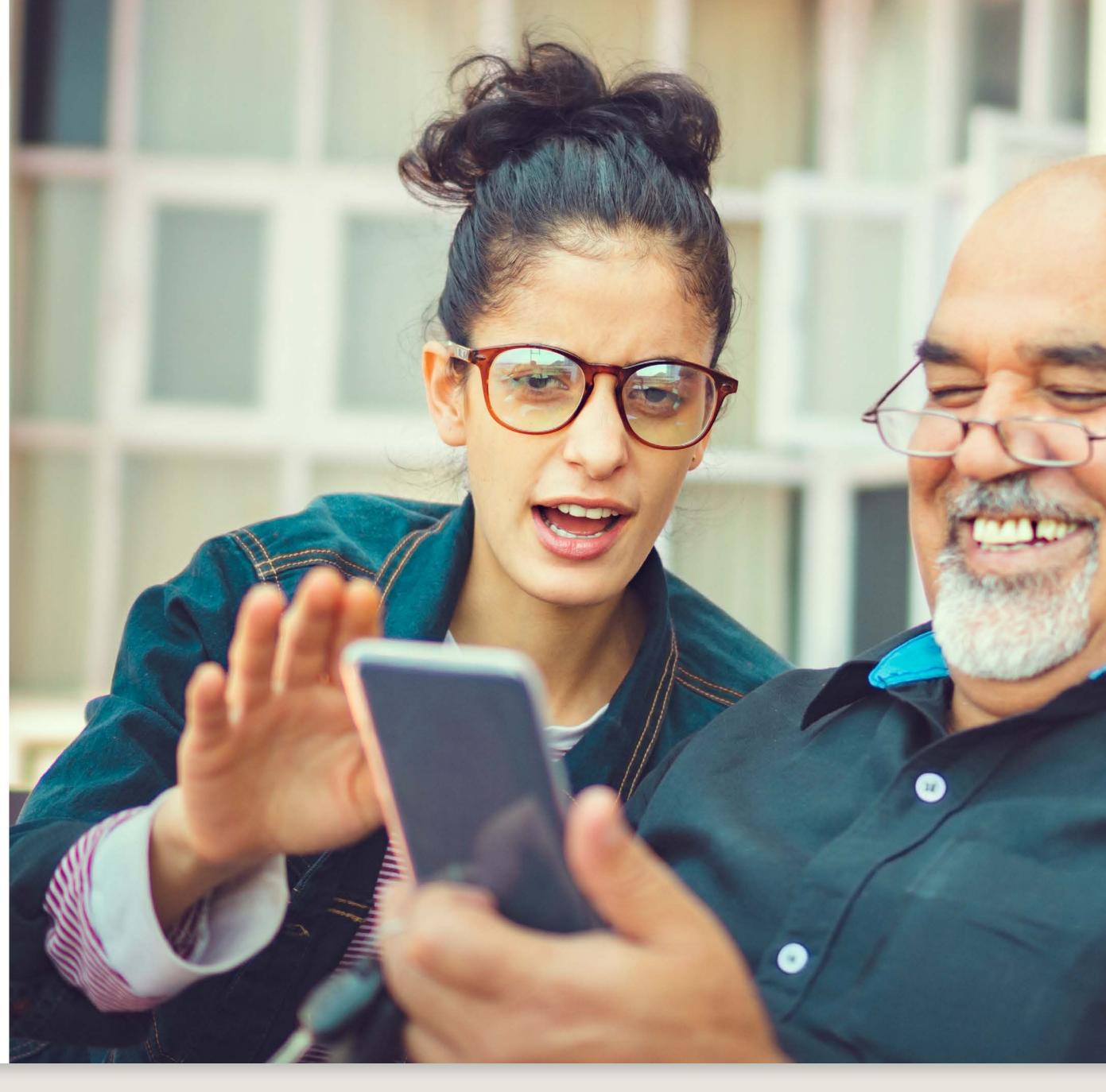
Canadians continued to send money internationally through a financial institution (33 per cent) or PayPal (28 per cent). Close to one-in-five (18 per cent) used online providers such as Western Union or Wise.<sup>123</sup>

Younger Canadians (18 – 34 years) chose PayPal to make international payments because they perceive it to be secure, easier to keep track of transfers, and convenient.<sup>124</sup> Older generations preferred financial institutions, citing security, convenience, and ease of keeping track of transfers.

The single biggest challenge or frustration continued to be the fee/charges to complete the transaction, with close to one-in-five (17 per cent) Canadians mentioning it as a pain point.<sup>125</sup>

**124** Ibid.

**125** Ibid.



**<sup>121</sup>** Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker. Regular users are defined as those who sent an international payment at least once a month.

**<sup>122</sup>** Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey.

**<sup>123</sup>** Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker.

- Nine out of 10 Canadian consumers (90 per cent) made an online purchase in the past year. 126
- Online shopping patterns shifted from travel, memberships, and entertainment events to home entertainment, personal beauty products, gift cards, fast food, groceries, and household items. Close to half (46 per cent) used online store fronts, compared to 38 per cent in 2019.
- Credit cards continued to be the preferred choice for e-commerce transactions at 59 per cent followed by PayPal at 22 per cent.

**126** Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey. The average number of online transactions in a month per consumer grew from 3.2 in 2019 to 4.3 in 2020.

#### The e-commerce environment

E-commerce refers to the use of web-based store fronts and applications to obtain goods and services from merchants.

E-commerce payments are made through merchant-provided online store fronts and applications via computers or mobile devices (e.g., tablet, smartphone).<sup>127</sup> In 2020, e-commerce payment transactions totalled 477 million transactions worth \$56 billion in Canada, up 13 per cent in volume and 20 per cent in value from 2019.<sup>128</sup>

The COVID-19 pandemic helped fuel sharp growth in e-commerce payments in 2020. Due to lockdown and emergency stay-at-home orders, consumers replaced in-store with online shopping. According to Statistics Canada, in May 2020 e-commerce sales were double that of May 2019.<sup>129</sup> It is likely that Canadians will continue to leverage online platforms for everyday needs, even after the COVID-19 pandemic. A PayPal Canada survey revealed that Canadians, in general, are spending \$178 each month online, an increase of \$69 from pre-pandemic, even as Canadians emerge from lockdown. Overall, this increase represents an increase of more than \$2 billion in monthly online spending.<sup>130</sup>

Many businesses transformed by moving to e-commerce sales platforms for the first time. New online store creation by Canadian retail merchants increased 20 per cent year-over-year during the last two weeks of March 2020.<sup>131</sup> This contributed to the rise in online purchases, as Canadians had more choices for online shopping.

The COVID-19 pandemic also changed online shopping patterns of consumers. The product categories that experienced the greatest year-over-year decline were travel, memberships (e.g., fitness, social clubs), and entertainment events, while home entertainment (i.e., movies/music, games), personal beauty products, and gift cards experienced year-over-year growth.<sup>132</sup>

**132** Ibid

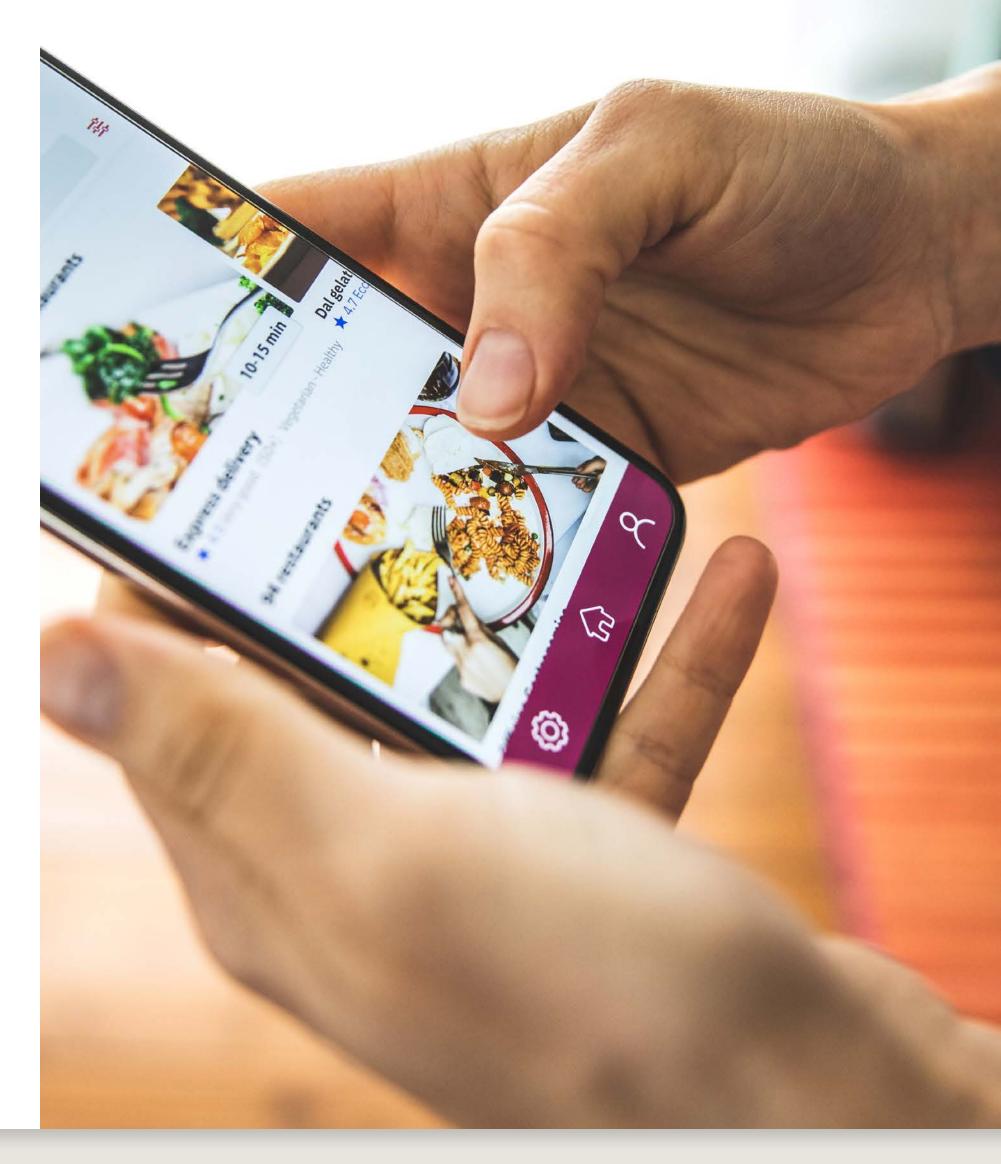


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<sup>127</sup> Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker.

**<sup>128</sup>** Excludes online transactions originating from businesses to align with industry figures.

**<sup>129</sup>** TSI Canadian Payments Forecast, 2020.

**<sup>130</sup>** For more, see: https://newsroom.ca.paypal-corp.com/Trends-Spends

**<sup>131</sup>** Data provided by **Shopify**. Figure is a point-in-time measure collected in March 2020.

When looking at the most popular categories for online purchases, clothing and footwear remained the highest (52 per cent), followed by electronics and books/magazines (32 per cent and 29 per cent, respectively).<sup>133</sup> Fast food, groceries and housewares were also popular.<sup>134</sup> Of note, 29 per cent of Canadians reported using delivery services (e.g., Uber Eats, Foodora, Instacart, etc.) more often once the COVID-19 pandemic started.<sup>135</sup> Overall, younger Canadians and those with over \$80,000 in household income were more likely to make frequent online purchases.<sup>136</sup>

Credit cards continued to account for the largest share of e-commerce purchases at 59 per cent, followed by PayPal at 22 per cent in 2020 (see **Figure 5** for more ).<sup>137</sup>

When prepaid cards and PayPal accounts linked to Visa and Mastercard credit and debit products are considered, Visa and Mastercard payment products represented about 98 per cent of total e-commerce transactions in Canada.<sup>138</sup>

Most online purchases by Canadians were still made via merchant websites (e.g., Amazon.ca or Walmart.ca), followed by in-app purchases through a mobile device.<sup>139</sup> Online purchases made through gaming consoles and Internet of Things (IoT) devices continued to trail these two channels.<sup>140</sup> Close to half of all Canadians (46 per cent) who made an online purchase did so via online merchant web pages, compared to 38 per cent in 2019.<sup>141</sup> The number of Canadians who made in-app purchases increased slightly from 18 per cent to 21 per cent year-over-year.<sup>142</sup> Only 10 per cent of Canadians made an online purchase using consoles, and even fewer (less than five per cent of Canadians) used IoT devices to make an online purchase in 2020, remaining unchanged from last year.<sup>143</sup>

**133** Data provided by **Shopify**. Figure is a point-in-time measure collected in March 2020.

**134** Ibid

**135** Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker.

**136** Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey. Frequently is defined as more than three times a month.

**137** Ibid.

**138** Debit cards used for e-commerce use credit card rails as the cards are connected, so Visa and Mastercard networks are used for online and international transactions.

**139** In-app purchases require users to store their credit or debit cards in mobile device apps or app stores (e.g., Uber, Apple App Store or Google Play) to make funds available for in-app purchases. Purchases are made within the app.

**140** IoT refers to the Internet of Things. This includes smart technology like Google Home and Alexa where consumers can set up autonomous or disparate purchasing of goods and services.

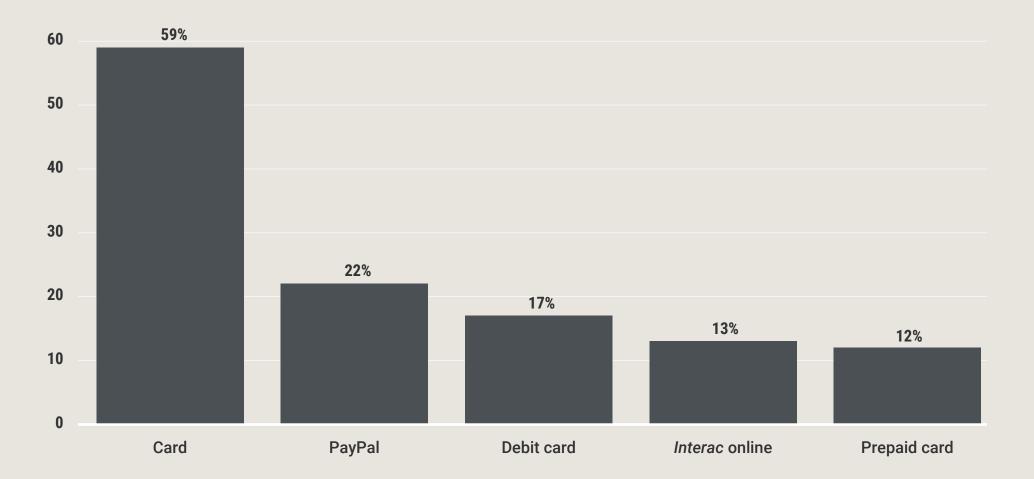
**141** Leger/Payments Canada. 2020/2021 Canadian Consumer Payments and Transactions Survey.

**142** Ibid

**143** Ibid.



**FIGURE 5:** E-COMMERCE PAYMENT MIX



# THE STATE OF DIGITAL CURRENCIES IN CANADA



By: Pooja Paturi

# What are digital currencies and what do they offer to Canadian consumers and <u>businesses?</u>

Digital currencies refer to a wide range of electronic money. This can include currencies like Bitcoin, Stablecoins, or Central Bank Digital Currencies (CBDCs) (see **Table 11** for more on different types of digital currencies).

Most digital currencies operate via Blockchain meaning that there is not a single entity controlling the network, but rather, it is made up of a decentralized peer-to-peer (P2P) network where the "peers" are those making digital currency transactions within the network. The transactions tend to be much quicker than transactions made with traditional payment methods and can be used for cross border payments. For consumers, digital currencies offer a level of privacy that is not possible when using an intermediary like a financial institution. There also tend to be lower transaction costs associated with opening and maintaining a digital currency account, as well as lower barriers to access accounts, relative to traditional banking services. All that's needed is an internet connection to set up an account. More consumers are using digital currencies for cross-border transactions as there are typically minimal/no fees associated with cross-border payments via digital currencies.

In addition, small-and-medium-sized businesses (SMEs) will benefit from lower transaction costs, cross-border payment opportunities and a simplified payment process without the need for intermediaries like financial institutions to carry out transactions.

However, many digital currencies available today are not regulated, which leaves transaction data and e-wallets open to security risks by third parties. Digital currencies are also not widely accepted in Canada, which makes day-to-day transacting difficult.

144 https://www.canada.ca/en/financial-consumer-agency/services/payment/digital-currency.html



#### **TABLE 11:** TYPES OF DIGITAL CURRENCIES<sup>145</sup>

Cryptocurrencies are privately/ algorithmically issued digital currencies that have no ties to domestic fiat currencies (i.e., the Canadian Dollar)
A subset of cryptocurrencies, Stablecoins are pegged to physical stores-of-value like gold or to fiat currency like the U.S. Dollar. Stablecoins tend to have less volatility in value relative to other types of digital currencies.
The extension of central bank issued bank notes in a digital format; an alternative to physical cash that holds the same value and security. <sup>147</sup>

**145** Note: This list is non-exhaustive and based on what the Government of Canada currently considers to be classified as digital currencies. For more, see here

**146** For more on USDC, please see here.

**147** For more on the implications of CBDC in Canada, please see our **CBDC education series**.

### What does current Canadian use of digital currencies look like?

At the time of publication of this report, digital currencies in Canada have yet to be recognized as legal tender.<sup>148</sup> This does not mean that digital currency use is illegal, but rather that digital currencies are not considered official currency and are not openly supported or regulated by financial authorities like the Bank of Canada, the Royal Canadian Mint, banks or other financial institutions.<sup>149</sup> The majority of digital currencies are classified as a commodity. This makes sense as their use is currently driven by high volume purchases of digital currencies/digital assets as an investing practice rather than for everyday purchases of goods and services.

Currently, Canadians can access digital currencies by signing up for one of the online exchange platforms available in Canada today.<sup>150</sup> Approximately 99 per cent of digital currency trades occur on online exchange platforms where users can buy and sell them in various forms.<sup>151</sup>

Few Canadians understand what a digital currency is and even fewer have used one to purchase goods and services. In 2020, a quarter of Canadians claimed to have an understanding of what a digital currency actually is,<sup>152</sup> while only 19 per cent of Canadians stated that they used a digital currency in 2020 (either for investment or for making purchases). Younger Canadians (aged 18 – 34) and frequent users of digital payments are the two cohorts most likely to understand and use digital currencies, though generally for investment purposes rather than for daily purchases.<sup>153</sup> However, investment in digital currencies is mostly adopted by investors with higher risk tolerances as digital currencies are perceived to be volatile.

The biggest reasons Canadian consumers don't use digital currencies for purchases are security and safety reasons (18 per cent) and a lack of knowledge (10 per cent). This points to an overall need for more consumer education around digital currencies with a focus on the security implications.

### What does the future of digital currencies in Canada look like?

The number of merchants/businesses accepting digital currency as a form of payment in Canada is extremely low. As of early 2021, just over a thousand merchants across the most populated cities in Canada accepted some form of digital currency. However, as global use of digital currencies increases, more Canadian institutions are taking steps to widen acceptance of them. For example, early 2021 also saw the release of Canadian digital currency exchange-traded-funds (ETFs) with the **Purpose Bitcoin ETF**. Collectively, digital currency ETFs currently make up a higher trading volume than the largest ETF trading in Canada, showing that more Canadians are gaining familiarity with the digital currency market.

We are also seeing a rise in the use of social media to influence the use of digital currencies. Early 2021 saw users on platforms like Reddit and Twitter coming together to crowdsource and influence the purchase and holding of digital currencies like Bitcoin and Dogecoin. With the massive impact of social media-driven market behaviour seen in cases like GameStop, more Canadians are learning about digital currencies, which may pique interest in using them.

While the Bank of Canada has stated that there is currently no compelling case for the issuance of a CBDC, they are working with domestic and international parties to assess economic, functional and technical design choices for CBDCs, including cross-border interoperability, and sharing of knowledge on emerging technologies.<sup>158</sup>

With the development of more refined legislation around the use of digital currencies and wider Canadian merchant and consumer familiarity, the possibility of paying for a morning coffee with a digital currency seems plausible. However, consumer education around the implications of digital currency use is essential for the wider safety and resilience of payments.

<sup>148</sup> https://www.canada.ca/en/financial-consumer-agency/services/payment/digital-currency.html

**<sup>149</sup>** Ibid

**<sup>150</sup>** Some of the most popular digital currency exchange platforms in Canada (at the time of publication) are Bitbuy, Coinsquare, Coinsmart and NDAX. Certain payment service providers (PSPs) like Wealthsimple and Mogo also offer digital currency services.

**<sup>151</sup>** For more, please see: https://www.wealthsimple.com/en-ca/learn/how-to-buy-bitcoin

<sup>152</sup> Leger/Payments Canada, 2020 Consumer Payments Behaviour Tracker Survey.

**<sup>153</sup>** Ibid.

**<sup>154</sup>** Ibid.

<sup>155</sup> Statista. Count of businesses in the 15 biggest cities in Canada that either have a digital currency ATM or offer digital currencies as an in-store payment method as of March 9, 2021.

**<sup>156</sup>** https://www.statista.com/statistics/730876/cryptocurrency-maket-value/

<sup>157</sup> https://www.etftrends.com/crypto-channel/canadian-cryptocurrency-etfs-showing-monster-trading-volumes/

<sup>158</sup> For more, please see: https://www.bankofcanada.ca/2020/02/contingency-planning-central-bank-digital-currency/

# BUSINESS PAYMENTS

The majority of Canadian businesses (about 98 per cent) are classified as small and medium enterprises (SMEs).<sup>159</sup> Understanding their payment behaviour is key to understanding what drives the volumes of business payments.

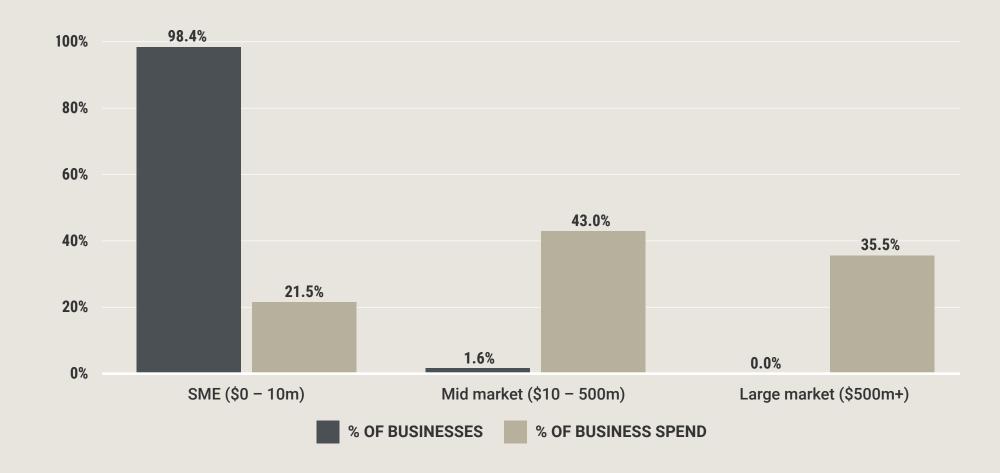
However, SMEs comprise only 21 per cent of total business expenditure.<sup>160</sup> Mid-market companies<sup>161</sup> make up less than two per cent of Canadian businesses, but account for 43 per cent of total business expenditure.<sup>162</sup> Large companies make up less than one per cent of Canadian businesses, but represent 35 per cent<sup>163</sup> of total business expenditure (**Figure 6**).<sup>164</sup>

The COVID-19 pandemic adversely impacted Canadian businesses in a number of ways in 2020. The economic lockdowns resulted in the layoff of employees (temporary and permanent), loss of revenue, increased costs, and depleted business owner savings. Businesses turned to e-commerce sales to maintain a presence through multiple lockdowns.

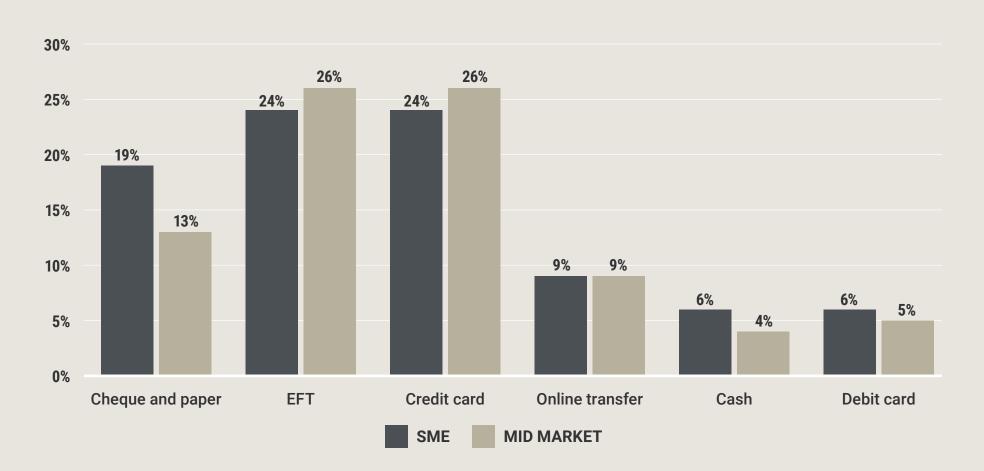
The rise in unemployment, along with an erosion in consumer confidence, led to decreased consumer spending. Thirty-seven per cent of businesses expected to see a decrease in profitability between the start of Q2 and Q3 in 2021.<sup>165</sup>

In 2020, Canadian SMEs and mid-market companies continued to choose EFT, credit cards and cheques for payments. The proportional distribution of total expenditures by payment method for SMEs and midmarket companies is shown in **Figure 7**. EFT, credit cards and cheques hold the largest proportion of spend for both groups.<sup>166</sup> The use cases for each payment method differ by business segment as shown in **Table 12**.<sup>167</sup>

#### FIGURE 6: BUSINESS CLASSIFICATIONS IN CANADA



#### FIGURE 7: BUSINESS PAYMENT MIX



**<sup>159</sup>** Businesses with an annual revenue between \$0 and \$9.9 million

<sup>160</sup> Statistics Canada, Establishment Counts, 2020.

**<sup>161</sup>** Businesses with an annual revenue between \$10 million and \$500 million.

<sup>162</sup> Statistics Canada, Establishment Counts, 2020.

<sup>163</sup> Businesses with an annual revenue greater than \$500 million.

<sup>164</sup> Statistics Canada, Establishment Counts, 2020.

<sup>165</sup> Statistics Canada, Canadian Survey on Business Conditions, May 2021. For more, see: https://www150.statcan.gc.ca/n1/en/daily-quotidien/210528/dq210528b-eng.pdf

**<sup>166</sup>** RFi Group's Canada SME Banking and Payments Council and Canada Commercial Banking and Payments Council (RFi Group 2020). Includes the payment usage habits of about 1,700 Canadian businesses (both SMEs and mid-market commercial enterprises).

**<sup>167</sup>** Ibid

**TABLE 12:** MOST COMMON USE CASES FOR BUSINESS PAYMENT METHODS<sup>168</sup>

Payment method	Small and medium enterprises <sup>169</sup>	Mid-market companies <sup>170</sup>
EFT	<ul> <li>Government payments/tax</li> <li>Payroll</li> <li>Utilities/telecommunications</li> </ul>	<ul><li>Payroll</li><li>Government payments/tax</li><li>Utilities/telecommunications</li><li>Insurance</li></ul>
Credit Card <sup>171</sup>	<ul> <li>Travel related expenses</li> <li>Entertainment</li> <li>Office supplies/computer equipment</li> </ul>	<ul> <li>Office supplies/computer equipment</li> <li>Travel related expenses</li> <li>Stock/inventory/raw materials</li> </ul>
Cheque	<ul><li>Payroll</li><li>Professional services</li><li>Rent</li></ul>	<ul><li>Government payments/tax</li><li>Professional services</li><li>Payroll</li></ul>

EFT represented the bulk of total business expenditure, making up 25 per cent of total payment value in 2020. Overall, EFT payments were mainly used for payroll, payments to government, and to pay bills (i.e., utilities, business services, and rent).<sup>172</sup> Of note, EFT payment value declined by four per cent and seven per cent from 2019 for SME and mid-market companies, respectively, likely due to the impact of the pandemic (i.e., fewer direct deposit and bill payments due to payroll reduction and business closures).

Credit cards remained in second place, accounting for 24 per cent of total business expenditure in 2020 (up from 22 per cent in 2019). Credit card payment value increased to 24 per cent (up two per cent) of total business expenditure for both SMEs and midmarket companies from 2019.<sup>173</sup> The modest growth is a reflection of the effects of the pandemic. The large majority of businesses chose to use credit cards, with 78 per cent of SMEs and 83 per cent of mid-market companies preferring to pay by credit card versus other payment methods.<sup>174</sup> Payment acceptance, rewards, perceived convenience, and easier control of payments are the key drivers of credit card usage among businesses.<sup>175</sup> The convenience factor is particularly relevant for use cases like employees paying for travel or entertainment. Also, easier control of payments is especially important for SMEs when it comes to managing cash flow.

While the pandemic led businesses to increase their spending on preventative measures (i.e., cleaning and disinfectant supplies, personal protective equipment), it also led them to reduce their credit card expenditure on travel and entertainment. Businesses purchased less inventory, stock, and raw materials using their credit cards because many were either closed (i.e., brick-and-mortar merchants) or operating at reduced capacity. They also spent less on office supplies and computer equipment because most employees were working from home. The spending of the supplies are supplied to the spending of the supplies and computer equipment because most employees were working from home.

Cheques remained in third place accounting for 17 per cent of total business expenditure in 2020 (up from 16 per cent in 2019). Businesses continued to use cheques mainly for payroll, government payments and business services. SMEs were more likely than mid-market companies to use cheques for these types of payments.<sup>178</sup> While overall cheque usage continued to trend downwards for mid-market companies from last year, it remained the same among SMEs in 2020 driven by SMEs using cheques to pay for fuel, utilities and advertising/media expenses.<sup>179</sup> As many small businesses turned to e-commerce as a sales channel (fuelled partly by the COVID-19 pandemic), they likely incurred incremental expenses related to increased advertising and promotions through social media, and other online target marketing methods, as well as setting up an e-commerce presence.

**174** Ihid

175 Leger/Payments Canada. 2020 Business Payments Behaviour Tracker

**176** Ibid.

**177** Ibid.

**178** Ibid.

**179** Ibid.

**<sup>168</sup>** These figures are based on SME and mid-market companies' responses to which payment method they used to pay various expenses. Numbers do not add up to 100 per cent as less used payment methods (digital remittances, virtual payments, buyer-initiated payments, remittances via counter at branch, line of credit) were excluded from this analysis.

**<sup>169</sup>** Businesses with an annual revenue between \$0 and \$9.9 million.

<sup>170</sup> Businesses with an annual revenue between \$10 million and \$500 million.

**<sup>171</sup>** RFi Group's Canada SME Banking and Payments Council and Canada Commercial Banking and Payments Council (RFi Group 2020). Notably, 46 per cent of SMEs stated that they used the business owner's personal credit card to pay for expenses.

**<sup>172</sup>** RFi Group's Canada SME Banking and Payments Council and Canada Commercial Banking and Payments Council (RFi Group 2020). Notably, 46 per cent of SMEs stated that they used the business owner's personal credit card to pay for expenses.

**<sup>173</sup>** Ibid.

Businesses that continue paying their bills or expenses by cheque do so for a few reasons: wide acceptance; easier reconciliation of payments; and supplier preference. However, many businesses currently using cheques indicate that they prefer to use credit cards instead to pay for most of their bills and expenses. The prevalence of cheque usage coupled with a preference for cheques suggests that there are still many businesses that have payment structures based on cheques and not around electronic payment methods.

Online transfers represented nine per cent of business payments in 2020 (a four per cent increase year-over-year). In general, businesses use online transfers mainly for government payments and payroll. For SMEs, online transfers represent a fast and convenient way to make payments such as travel-related and entertainment expenses. Service providers continue to target business payment use cases, as well as augmenting the features and benefits of their service offerings associated with this payment method, to attract more business users. *Interac* has indicated that it will focus on improving the transaction and processing capabilities of its *Interac* e-Transfer services to support the day-to-day needs of SMEs. It will also focus on supporting mid-market companies' need for high commercial value payments, and low volume payments. In the service of t

The fact that online transfer expenditure for mid-market companies nearly doubled year-over-year from four per cent to nine per cent suggests that larger businesses are starting to take advantage of B2B targeting features offered by *Interac* and other payment service providers.

180 Leger/Payments Canada. 2020 Business Payments Behaviour Tracker.

181 RFi Group's Canada SME Banking and Payments Council and Canada Commercial Banking and Payments Council (RFi Group 2020).

**182** Ibid.

**183** Ibid.

184 For more, please see: https://newsroom.interac.ca/what-does-a-record-year-for-interac-e-transfer-mean-for-businesses/





# CONCLUSION

In 2020, there were a total of 20 billion transactions worth \$9.4 trillion captured in the analysis. The impact of the COVID-19 pandemic was seen in reduced economic activity and overall, payment transaction volumes and values declined by nine per cent and six per cent respectively.

However, the COVID-19 pandemic also played a significant role in accelerating previously established trends. For instance, the pandemic contributed to the continued decline of paper transactions as more Canadians replaced cash with digital and contactless payments.

Cash transaction volumes and values both decreased by around 16 per cent from 2019 while cheque volumes and values decreased 26 per cent and 15 per cent, respectively.

Accompanying a decline in paper payment methods was a rise in the use of electronic payment methods, particularly contactless card transactions. There was a 13 per cent increase in volume and a 10 per cent increase in value of contactless transactions from 2019 as many Canadians avoided handling cash and touching payment terminals at the point-of-sale (POS). Contactless card payments continued to be more popular than mobile contactless payments (paying with a phone or wearable device) among Canadians in 2020, although mobile payment use continued to grow. In 2020, nearly one-third (29 per cent) of Canadians said they had made a purchase using a mobile payment or a digital wallet.<sup>185</sup>

In addition to a rise in contactless payments, 2020 also saw online transfers, a rapidly growing payment method, increasing by 48 per cent in volume from 2019, and with a staggering five-year volume growth rate of 569 per cent. We expect to see online transfer use continue to rise as new use cases for both consumers and businesses emerge with *Interac* e-Transfer enhancing their offerings with features like bulk processing of transactions.

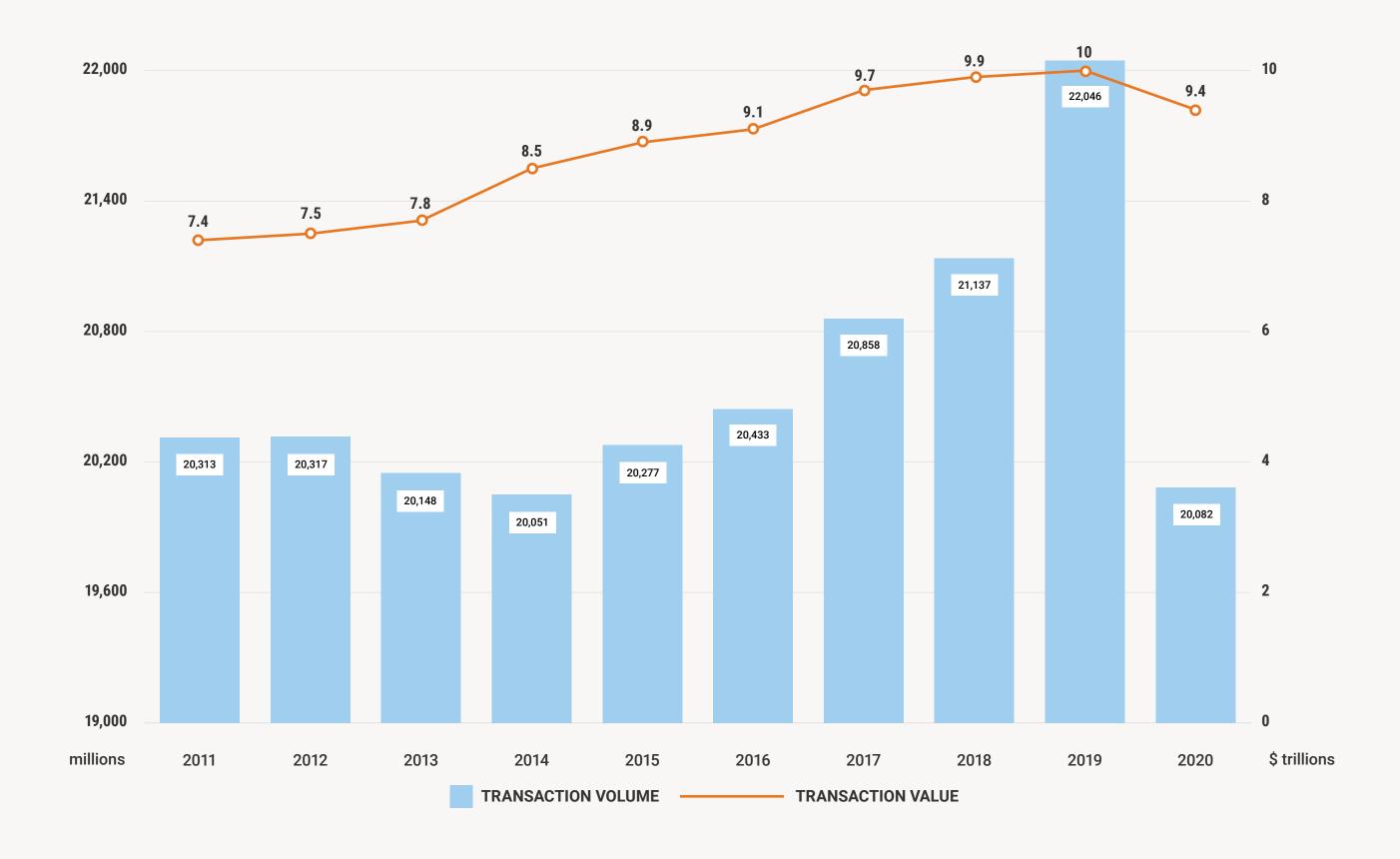
Finally, the pandemic led to sharp growth in e-commerce payments in 2020, with 477 million transactions worth \$56 billion (up from 420 million transactions valued at \$47 billion a year ago). Close to half of all Canadians (47 per cent) used e-commerce platforms more frequently to purchase a wider range of products throughout the pandemic. Page 187

The impact of the COVID-19 pandemic on the payment industry is significant, particularly for the acceleration of digital payments and end-user trust in digital payments. This sets the stage for rapid innovation in payments post COVID-19.

- **185** Data from The Strategic Counsel. Trends in Internet Use and Attitudes Survey, 2020.
- **186** TSI. Canadian Payments Forecast, 2021. Note for readers: Our data source for e-commerce transaction sizing has shifted; past e-commerce figures presented in the CPMT use an older methodology and should not be used for trending purposes.
- **187** Leger/Payments Canada. 2020 Consumer Payments Behaviour Tracker Survey.

# APPENDIX I: DETAILED PAYMENT SEGMENT CHARTS

FIGURE A1: TOTAL ANNUAL CPMT TRANSACTIONS (VOLUME AND VALUE)



# FIGURE A2: ALL PAYMENT METHODS ANNUAL TOTALS

# **Volume** (in millions of transactions)

Payment method	2011	2015	2019	2020
Cheque and paper	1,187.0	876.0	583.9	432.0
Debit card	4,148.0	5,178.0	6,256.0	5,699.0
ABM	759.0	595.0	466.1	423.1
Prepaid card	148.0	225.0	328.7	301.9
EFT	2,124.0	2,592.0	2,947.0	2,908.0
Credit card	3,424.0	4,642.0	6,859.0	6,124.0
Online transfer	28.7	119.6	540.6	800.7
Cash	8,495.0	6,050.0	4,065.0	3,394.0
Totals	20,314.0	20,277.6	22,046.9	20,082.5

# **Value** (in millions of dollars)

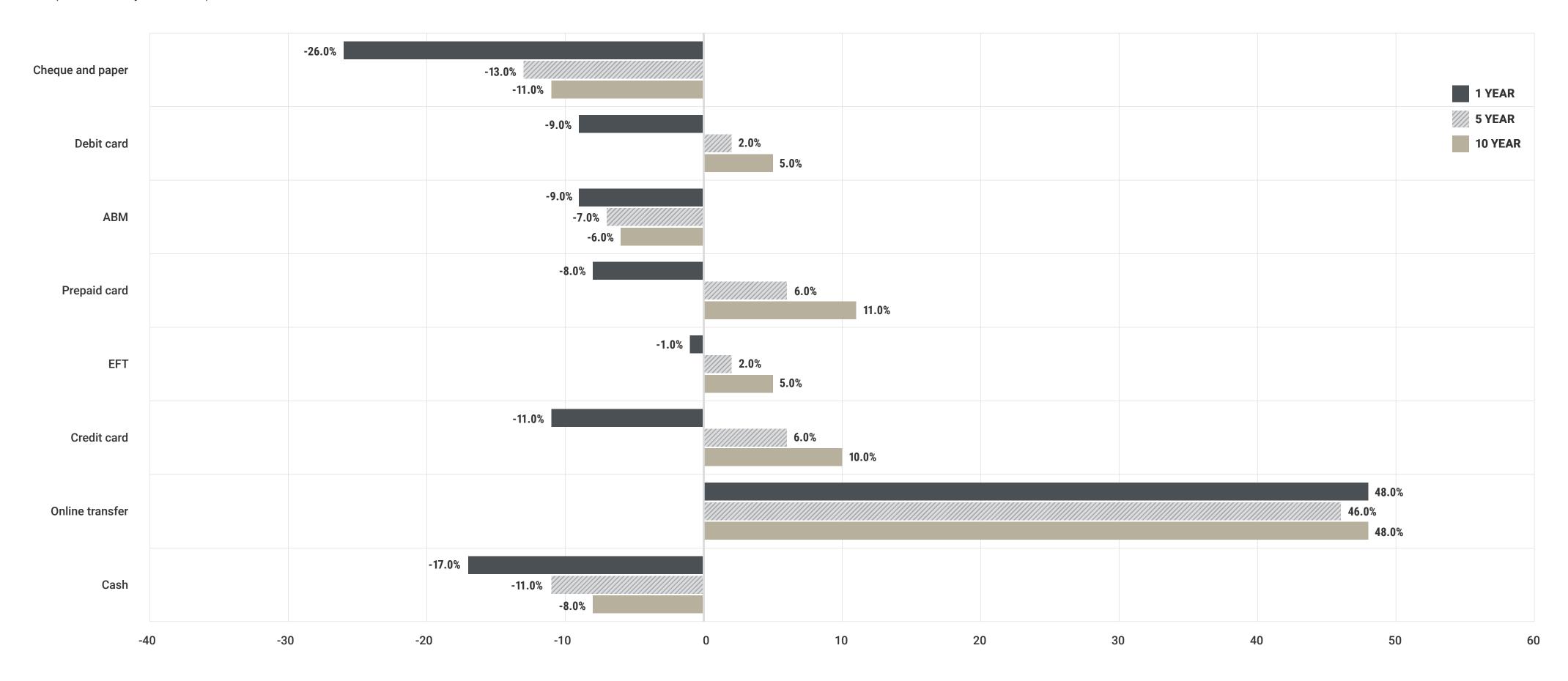
Payment method	2011	2015	2019	2020
Cheque and paper	3,648,448.0	3,989,942.9	3,586,221.0	3,056,371.0
Debit card	184,038.0	220,483.4	259,255.0	251,731.0
ABM	85,062.0	72,666.7	67,082.0	44,826.4
Prepaid card	9,930.0	13,489.9	19,237.0	17,900.0
EFT	2,868,755.0	3,972,263.4	5,178,683.0	5,147,089.0
Credit card	391,198.0	450,416.6	615,154.0	569,000.0
Online transfer	9,659.0	45,700.0	178,224.9	249,123.3
Cash	154,274.0	110,589.0	85,649.3	72,003.5
Totals	7,351,362.0	8,875,551.9	9,989,506.2	9,408,044.2

#### FIGURE A3: AVERAGE TRANSACTION SIZE

Payment method	2015	2019	2020	% Change (YOY)
Cheque and paper	\$4,557.3	\$6,142.0	\$7,074.9	15.2%
Debit card	\$42.6	\$41.0	\$44.2	7.7%
ABM	\$122.2	\$144.0	\$106.0	-26.4%
Prepaid card	\$59.9	\$59.0	\$59.3	0.5%
EFT	\$1,532.5	\$1,757.0	\$1,770.0	0.7%
Credit card	\$97.0	\$90.0	\$92.9	3.2%
Online transfer	\$382.1	\$329.7	\$311.1	-5.6%
Cash	\$18.3	\$21.0	\$21.0	0.0%
Average payment size	\$437.7	\$453.1	\$468.5	-4.7%

# FIGURE A4: ALL PAYMENT METHODS AVERAGE ANNUAL GROWTH VOLUME (ONE-, FIVE- AND 10-YEAR CAGR)

# Volume (1, 5 and 10 year CAGR)



# FIGURE A5: ALL PAYMENT METHODS AVERAGE ANNUAL GROWTH VALUE (ONE-, FIVE- AND 10-YEAR CAGR)

Value (1, 5 and 10 year CAGR)

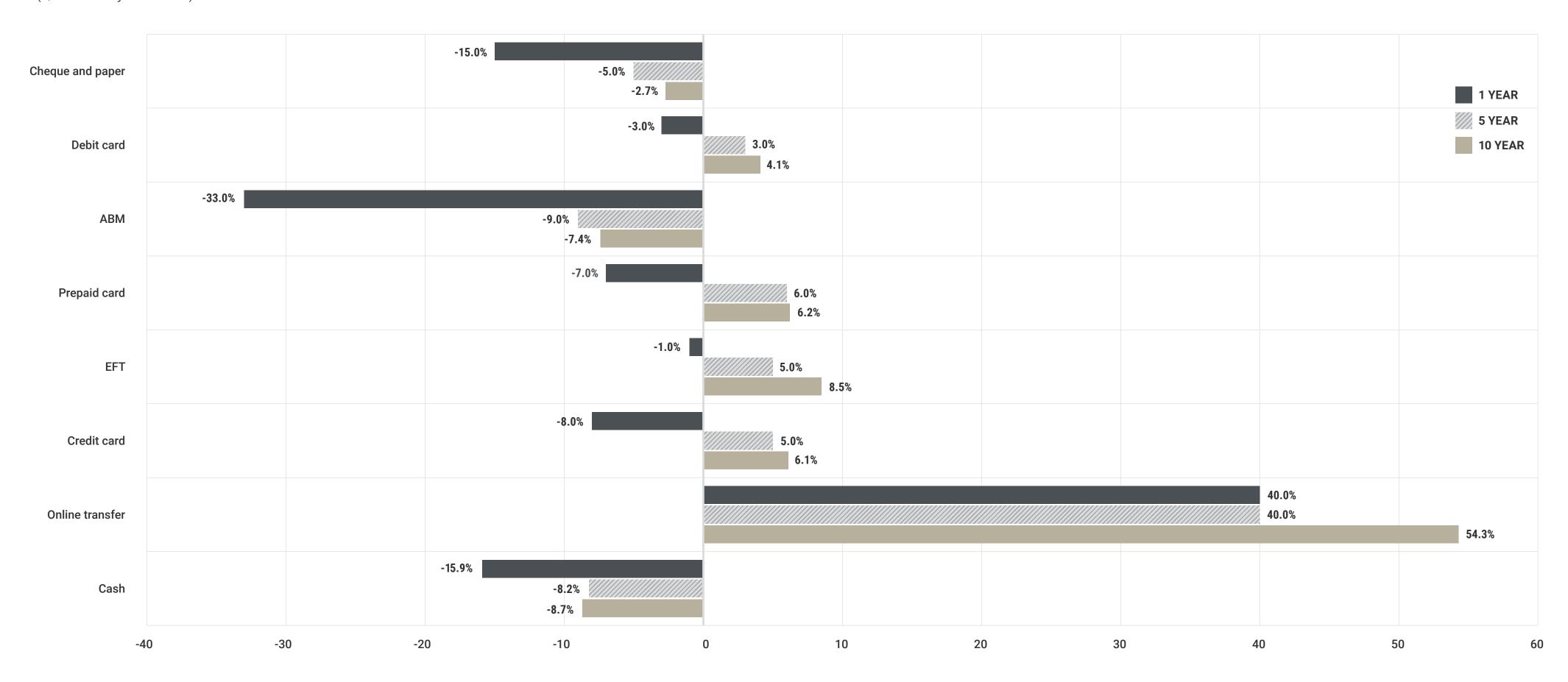
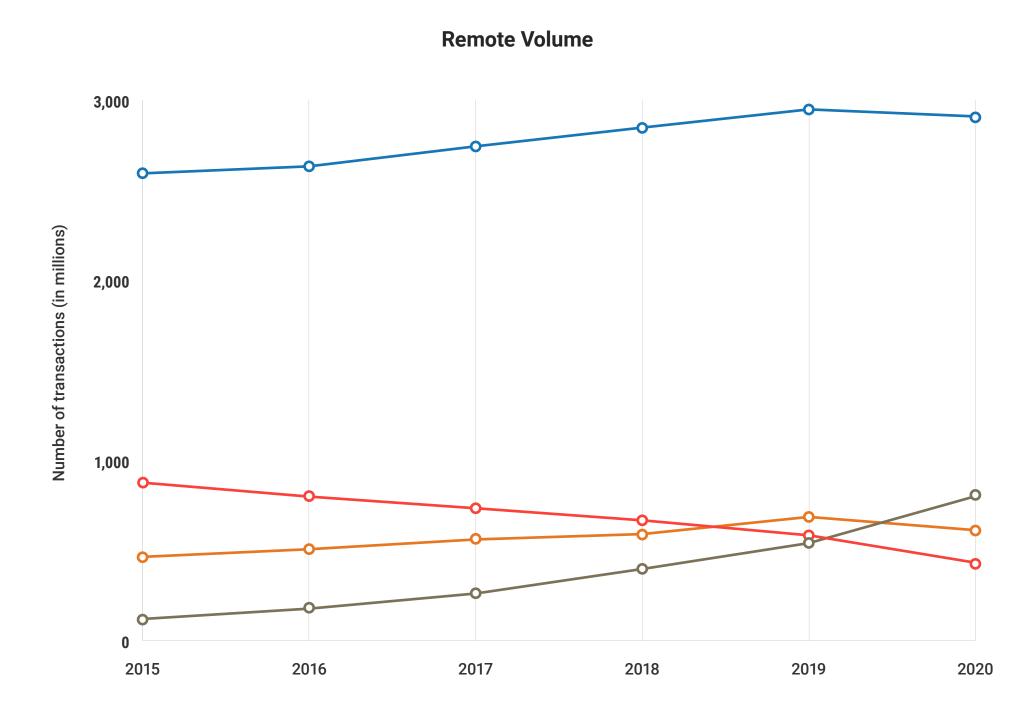
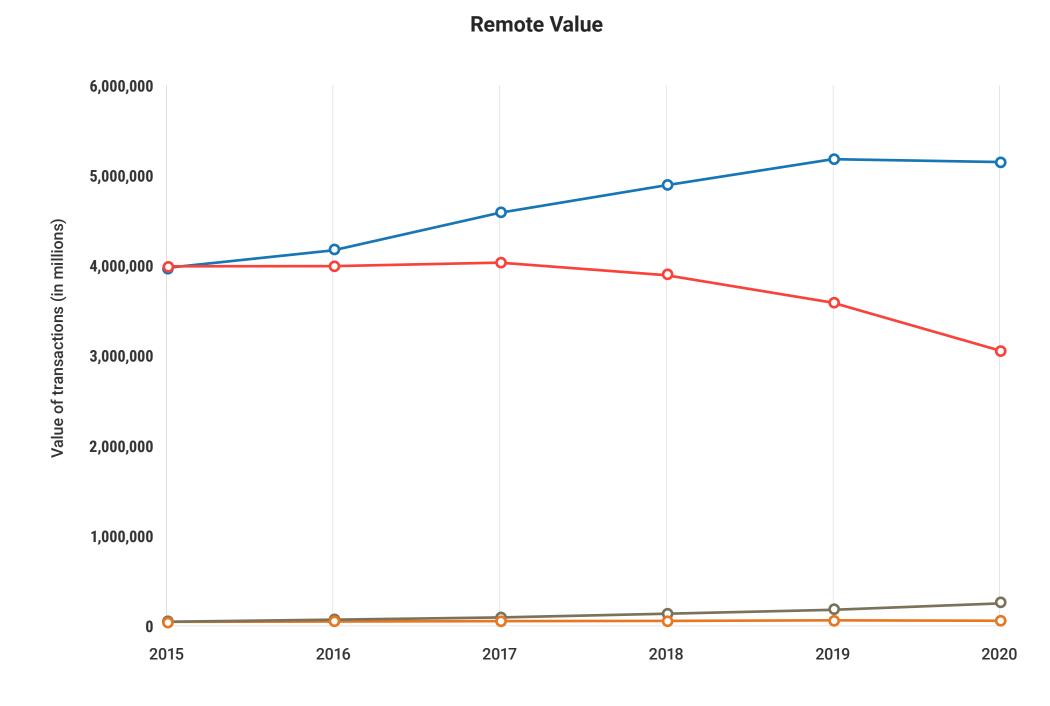


FIGURE A6: REMOTE PAYMENT METHODS VOLUME AND VALUE (FIVE-YEAR TRENDLINE)188



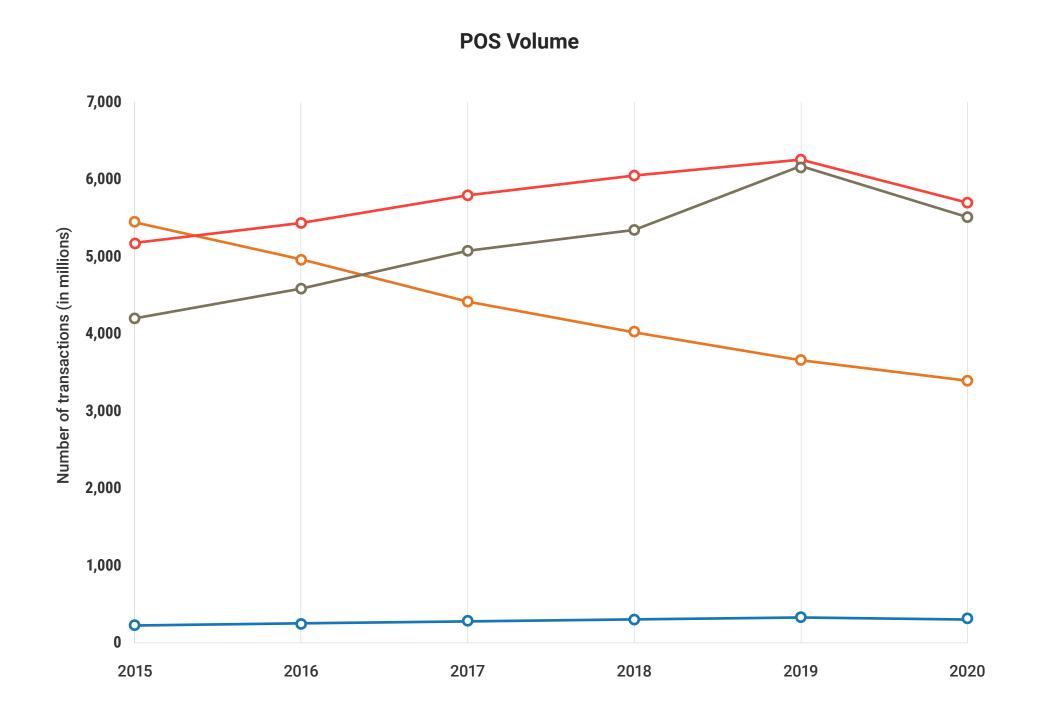
Payment method	2015	2016	2017	2018	2019	2020
O Cheque and paper	876.0	798.6	734.0	667.0	583.9	432.0
O EFT	2,592.0	2,631.0	2,742.0	2,846.0	2,947.0	2,908.0
O Online transfer	119.6	177.0	261.0	397.0	540.6	800.7
O Remote credit card	464.2	506.7	560.9	590.7	685.9	612.4



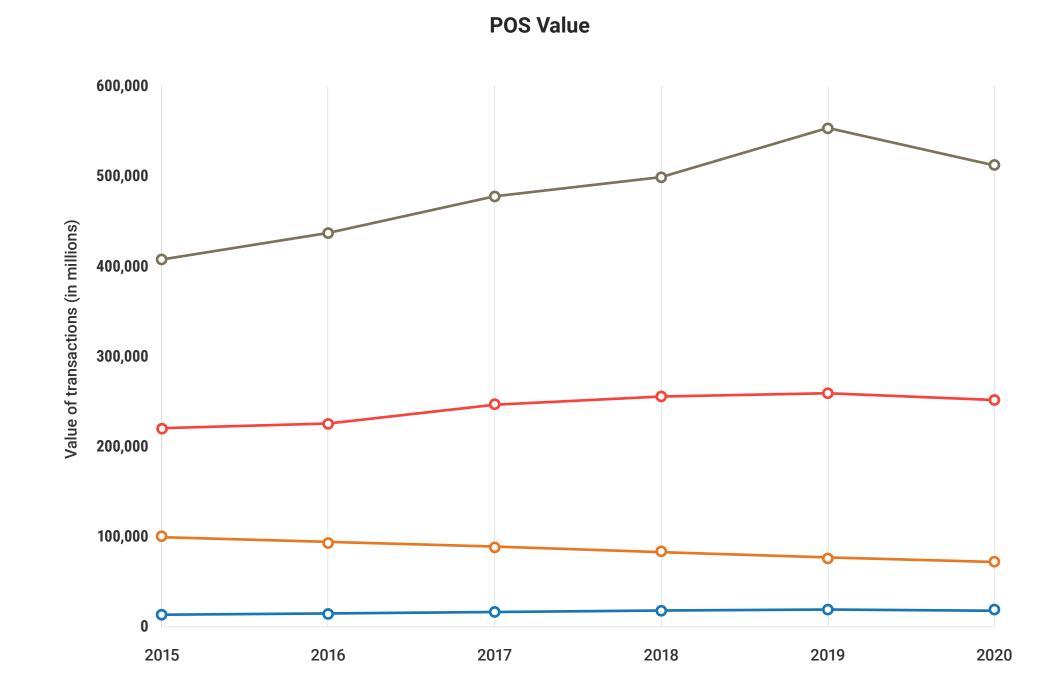
Payment method	2015	2016	2017	2018	2019	2020
O Cheque and paper	3,989,942.9	3991,848.6	4,030,697.2	3891,136.0	3,586,221.0	3,056,371.0
O EFT	3,972,263.4	4167111.4	4,583,973.2	4,889,626.6	5,178,683.0	5147,089.0
Online transfer	45,700.0	68,755.4	93,513.0	134,769.7	178,224.9	249,123.3
O Remote credit card	45,041.7	48,302.8	52,796.2	55,149.7	61,515.4	56,900.0

<sup>188</sup> Remote transactions include all transactions that are not made at physical payee locations, virtual payee provided apps or store fronts. Note: Remote credit card transactions involve the use of financial institutions or payments service providers as intermediaries that move funds to intended payees through their services (i.e., for bill payments).

FIGURE A7: POINT-OF-SALE PAYMENT METHODS VOLUME AND VALUE (FIVE-YEAR TRENDLINE)189



Payment method	2015	2016	2017	2018	2019	2020
O Debit card	5,178.0	5,436.0	5,794.0	6,050.0	6,256.0	5,699.0
O Prepaid card	225.0	253.0	278.0	304.0	328.7	301.9
O Credit card	4,201.0	4,586.0	5,076.0	5,346.0	6,173.1	5,511.8
O Cash	5,445.0	4,965.0	4,418.0	4,020.0	3,658.5	3,394.0



Payment method	2015	2016	2017	2018	2019	2020
O Debit card	220,483.4	225,661.1	246,499.0	255,600.0	259,255.0	251,731.0
O Prepaid card	13,489.9	14,895.0	16,495.4	18,155.2	19,237.0	17,900.0
O Credit card	407,627.0	437,140.2	477,805.3	499,105.1	553,638.6	512,100.0
O Cash	99,530.1	94,325.4	89,125.2	82,886.4	77,084.4	72,003.5

**<sup>189</sup>** Point-of-sale or point-of-service transactions include both physical and virtual merchant locations, including online and in-app purchases. With remote estimates for credit card and cash removed.

# FIGURE A8: REMOTE PAYMENT METHODS VOLUME AND VALUE (YEAR-OVER-YEAR)

# **Volume** (in millions)

Payment method	2019	2020	YOY change
Cheque and paper	583.9	432.0	-26.0%
EFT	2,947.2	2,908.0	-1.3%
Remote credit card	685.9	612.4	-10.7%
Online transfer	540.6	800.7	48.1%
Totals	4,757.5	4,753.1	

# Value (in millions of dollars)

Payment method	2019	2020	YOY change
Cheque and paper	3,586,221.0	3,056,371.0	-14.8%
EFT	5,178,683.0	5147,089.0	-0.6%
Remote credit card	61,515.4	56,900.0	-7.5%
Online transfer	178,224.9	249,123.3	39.8%
Totals	9,004,644.3	8,509,483.3	

# FIGURE A9: POINT-OF-SALE PAYMENT METHODS VOLUME AND VALUE (YEAR-OVER-YEAR)

# **Volume** (in millions)

Payment method	2019	2020	YOY change
Debit card	6,256.0	5,699.0	-8.9%
Prepaid card	328.7	301.9	-8.2%
Credit card	6,173.1	5,511.8	-10.7%
Cash	3,658.5	3,394.0	-7.2%
Totals	16,416.3	14,906.7	

# Value (in millions of dollars)

Payment method	2019	2020	YOY change
Debit card	259,255.0	251,731.0	-2.9%
Prepaid card	19,237.0	17,900.0	-7.0%
Credit card	553,638.6	512,100.0	-7.5%
Cash	77,084.4	72,003.5	-6.6%
Totals	909,214.9	853,734.4	

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FIGURE A10: BILL PAYMENTS HEAT MAP<sup>190</sup>

	HYDRO	WATER/SEWER	GAS/HEATING	MONTHLY FEDERAL/ PROVINCIAL TAX PAYMENT	CABLE	INTERNET SERVICE	RENT/MORTGAGE	CAR PAYMENT	HOME INSURANCE	AUTO INSURANCE	HOME SERVICES	DAYCARE/ TUTORING	AVERAGE
ONLINE BANKING PAYMENT FROM MY BANK ACCOUNT	51%	50%	48%	51%	<b>42</b> %	41%	16%	15%	18%	16%	15%	23%	24%
PADS (PRE-AUTHORIZED DEBITS)	32%	29%	31%	27%	24%	25%	52%	70%	<b>52</b> %	55%	8%	20%	24%
CREDIT CARD (IN ANY FORM)	6%	6%	9%	5%	23%	25%	2%	<b>4</b> %	19%	19%	24%	12%	29%
INTERAC E-TRANSFER	3%	3%	2%	3%	2%	2%	11%	2%	1%	2%	13%	14%	2%
CHEQUE FROM MY BANK ACCOUNT	2%	<b>4</b> %	3%	<b>6</b> %	2%	1%	10%	2%	5%	<b>4</b> %	17%	11%	1%
DEBIT CARD	2%	2%	2%	<b>2</b> %	2%	2%	1%	<b>2</b> %	1%	2%	3%	4%	2%
CASH PAYMENT	1%	1%	1%	1%	1%	1%	4%	2%	1%	1%	14%	7%	1%
OTHER	0%	1%	1%	1%	1%	0%	1%	1%	0%	0%	<b>2</b> %	3%	0%

**<sup>190</sup>** Totals for this figure do not add to 100% due to rounding.

# APPENDIX II: METHODOLOGY, DEFINITIONS AND SEGMENT DESCRIPTIONS

# Methodology

The data presented are a combination of Payments Canada systems data, payment service providers and scheme operator data and estimates based on market research and in consultation with industry experts.

Payment service providers contributed either by sharing their internal research and data or by providing expertise that enhanced the data set's accuracy. As was assured during the data collection, Payments Canada has made every effort to keep participant data non-discernable, where asked to do so.

This paper leverages the full data set gathered from past efforts and contains appropriate updates in methodology, data and findings. As such, this paper represents a full update of the previously published data points (including those provided in past papers) and should be viewed as essentially replacing the previous data sets.

## Survey market research details and methodology

#### 1. RFi Group business surveys

The RFi Group conducts separate surveys on larger corporate enterprises and small to medium sized enterprises (SME). The corporate survey was in field in May and November 2020 with a total of 689 individuals interviewed online. Basic quotas were applied to the sample to ensure that the data were representative of the Canadian commercial population. All respondents had decision-making powers within commercial businesses operating in Canada with global annual revenue of \$10 million to \$500 million. RFi Group's SME survey was in field in May and November 2020 with a total of 1,040 individuals interviewed online. Basic quotas were applied to the sample to ensure that the data were representative of the Canadian SME market. All respondents had decision making powers within SMEs operating in Canada with global annual revenue of less than \$10 million.

#### 2. TSI Consumer Survey

Technology Strategies International Inc. (TSI) provides in-depth assessments of consumer payments in Canada, drawing upon a wide range of information resources including desk research, executive interviews and discussions, consumer research and analysis—compiled into an annual report. In 2020, the TSI consumer market survey data were also analyzed for additional insights. The 2020 consumer survey included a sample size of 2,000.

#### 3. Payments Canada/Leger Consumer and Business Surveys

Leger is a full-service market research consultancy experienced at providing both quantitative and qualitative research. Leger is a pioneer and leader in web-based research. They have their own proprietary online panel of over 475,000 Canadians. In 2018, Leger acquired an additional panel, which includes an additional one million millennials. As of 2019, Leger provides Payments Canada with a customized consumer payment survey focused on Canadians' usage of different payment methods in both the POS and remote transactions environment. Leger also provides Payments Canada with a customized consumer and business payment survey focused on Canadian usage of different payment methods and their sentiment towards payment methods. In this report, we included a sample size of 9,000 Canadians and 500 businesses across the surveys. The surveys were in field in late 2020 and early 2021.

#### 4. Euromonitor Financial Cards and Payments in Canada

Euromonitor offers an in-depth analysis of financial cards usage in Canada, drawing on figures from a multitude of sources including the Canadian Department of Finance, Statistics Canada, and National Bank of Canada in order to provide a comprehensive look at card market growth. Euromonitor's analysis provides a qualitative and quantitative look at growth within card providers, the impact of supply and demand trends and forecasts for future card growth in Canada.

# Definitions and segment descriptions

#### ABM payments

ABM data are derived from data found in published proprietary reports and validated with published payment networks.

#### **ACSS**

The <u>Automated Clearing and Settlement System (ACSS)</u> is Canada's retail payment system, a designated Prominent Payments System (along with the LVTS) that clears the vast majority of payments in Canada.

#### CAGR

Compound annual growth rate (CAGR) calculates the annual average growth over multiple years, while taking into account the effects of average compounding growth experienced in each year.

#### Cash

Total cash was estimated based upon a combination of previous years' data from the 2017 Bank of Canada Methods-of-Payments survey<sup>191</sup> and the market research suggestion of cash decline from 2015 – 2020. Estimates from the data establish the mean number of cash transactions per Canadian per day, the mean cash expenditure per transaction and cash use decline rates. We used these numbers to extrapolate to the larger Canadian population to formulate cash payment estimates.

# Cheque imaging technology

Several Canadian financial institutions offer apps for remote deposit capture, through the digital representation of the front and back of a cheque.

#### Commercial EFT

Commercial EFT (Electronic Funds Transfer) refers to business/ government use of AFT credits/debits, electronic remittances and EDI transactions (i.e., businesses' payroll to employees through EFT).

#### Commercial payments

Commercial payments include transactions that originate from Canadian organizations, businesses, and governments.

#### Consumer payments

Consumer payments are transactions that originate from Canadian households and individuals for paying bills, managing accounts at financial institutions, and payments for goods and services.

#### Credit card

Credit card data are a combination of consumer and business credit and charge card payments found in proprietary published reports. Charge cards differ from credit cards primarily in their application of interest. Credit cards charge interest at an annual percentage rate. Charge cards apply full interest charges after a defined period (typically 30 days) so users are more inclined to pay off balances each month.

#### Debit payments

Debit payments include Payments Canada POS debit and online debit transaction data, *Interac* debit card data and data provided by participants.

#### **EFT** (Electronic Funds Transfer)

EFT was calculated using a combination of AFT (debits and credits), electronic remittances and electronic data interchange (EDI) transactions.

#### Gig economy

A growing share of Canada's workforce consists of "gig workers." These are workers who enter into short-term contracts with firms or individuals to complete specific and often one-off tasks. The term "gig work" includes: traditional independent contractors (such as consultants) and other freelancers (such as those who work with online platforms like Uber).<sup>193</sup>

<sup>191 2017</sup> Methods of Payment Survey Results, Bank of Canada, December 2018.

<sup>192</sup> Euromonitor International (2019), Passport: Financial Cards and Payments in Canada 2020 Edition, TSI (2019), Canadian Payments Forecast 2019 and Nilson Reports, 2019.

**<sup>193</sup>** Definition from the **Government of Canada**.

#### ISO 20022

ISO 20022 is an international standard designed to simplify global business communication. The standard enables efficient payment clearing and settlement among financial institutions globally through the use of a common set of messages and language. It is an open standard developed by ISO (International Organization for Standardization).

#### LVTS

**Large Value Transfer System (LVTS)** payments were excluded from the analysis because the report is focused on more common payments made by consumers and businesses.

#### Lynx

Lynx, Canada's new high-value payment system, will replace the LVTS in the third calendar quarter of 2021. The new system will process large-value, time-critical payments with real-time settlement finality, and will be built in compliance with Canadian and international risk standards. Lynx, which is being implemented in two releases, will also support the global ISO 20022 messaging standard. This will enable data-rich payments and support Canadian financial institutions in meeting SWIFT ISO 20022 global requirements by November 2022.

#### Online transfers

Online transfers include online e-wallet and electronic person-to-person (P2P) transactions initiated through online services and providers that are prepaid or linked to deposit accounts at financial institutions (e.g., PayPal). Includes data and estimates for online and mobile environments used to make remote electronic person-to-person payments and payments to merchants, excluding transactions based on credit and debit cards, which are counted in the credit card and debit card categories.

#### On-us

On-us refers to transactions drawing upon direct deposit accounts (e.g., bank chequing accounts or business accounts) where both the payor and payee reside at the same financial institution. A variety of payment types, normally associated with Payments Canada cleared payments, are impacted by on-us items, including cheques, debit and EFT. On-us payments do not result in a Payments Canada clearing entry (and do not appear in Payments Canada system data). On-us payment data must be determined from sources other than Payments Canada. On-us amounts were derived from participant data and estimates. The analysis determined on-us payments to amount to approximately 20 per cent more transactions than can be found in Payments Canada data. On-us amounts differ by payment type, such as cheques (~25 per cent), debit (~13.7 per cent), EFT (~19 per cent), etc.

## Cheque and Paper

Paper/cheque data are based on Payments Canada ACSS data for cheque and paper items, including paper remittances.

#### Paytechs

Paytechs are organizations that provide technology to enable or support electronic payment transactions. This also includes the technology for the acquisition, management, analysis, and use of payment-related data.

#### Personal EFT

Personal EFT (Electronic Funds Transfer) refers to consumer use of AFT credits/debits and electronic remittances (i.e., consumers paying bills through pre-authorized debits (PADs)).

#### Prepaid

Credit card company and store-branded prepaid product data (both openand closed-loop) are based on proprietary publication data. We also include virtual prepaid products, that may be purchased through mobile device application stores, such as Apple and Android.

#### **SET transactions**

Settlement and exchange transactions (SET) are intra-day exchange of fund transactions that deal with the dislocation of settlement funds between the ACSS and the LVTS. These transactions are generally done through cheques and make up a significant amount of cheque value in the ACSS.

#### Unbanked

Unbanked refers to those who do not have any financial products (i.e., debit cards or credit cards) associated with a traditional financial institution.

#### Underbanked

Underbanked refers to those with limited engagement with established financial institutions (i.e., having a credit card but not a debit card or vice versa).

