MOVING TO ELECTRONIC PAYMENTS:

Implications for Small and Medium Sized Businesses

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Organizations that resist change get left behind, only to realize that when they do embrace change, the hurdles have become much higher.

GLOBAL SOLUTION NETWORKS

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Idea in Brief

Consistent with global trends, the Bank of Canada has documented a continuous decrease over the past two decades in the share of cash used in overall retail payments in Canada. Nevertheless, cash remains the most common form of payment in Canada, particularly for small transactions, and most commonly among smaller retailers that have been slow to adopt electronic payment methods. This report illustrates that small business reliance on cash places a significant constraint on growth and innovation and results in inefficiencies and lost profit opportunities.

Business strategies and government policies that inhibit the transition to electronic payments will adversely affect small business growth, and dampen innovation, efficiency and prosperity across the entire Canadian economy. Policies and strategies that encourage electronic payments are not only consistent with prevailing market trends—including shifting consumer payment preferences and the rapid rise of e-commerce—they offer key tools and opportunities that businesses need in order to grow and to enhance profitability.

Many small retailers assume that accepting cash payments is less costly than accepting electronic payments. As this report shows, this view does not take into account the direct and indirect costs associated with cash payments. There are the costs associated with processing cash—including time spent accepting cash, balancing the till and taking cash deposits to the bank. The time employees spend on this low value activity reduces the time available for higher order tasks and activities that could add value to the business. In addition, the importance of cash flow to a small business must be emphasized. Invoicing, waiting for payment and chasing after payment can significantly hurt a small business and undermine its viability as well as damage its relationship with customers. Furthermore, policies that require or encourage cash payments “trap” businesses in a low-value transaction environment, thus inhibiting a migration to higher value transactions. Put simply, the tendency of small businesses to prefer cash payments over electronic payments inhibits their growth and results in significant reductions in profitability.

Moreover, while electronic payments do come with fees, they offer many associated benefits that cash transactions do not. For example, electronic payments offer more efficient processes for managing payments, deposits and reconciliations. They create opportunities for businesses to migrate to higher value transactions. They are the preferred payment method of an increasingly important Internet and techno-savvy demographic and they are a pre-requisite for businesses seeking to capture a share of the rapidly growing e-commerce market. Electronic payments also allow businesses to participate in the emerging area of big data, and hence to measure the purchasing habits of their customer base and develop more effective business strategies to drive customer loyalty and profitability. Finally, the move to electronic payments together with an online presence allows merchants to market their products both nationally and internationally.

The report highlights the need for the Canadian government to encourage the adoption of electronic payments across the entire economy, not through regulation, but rather by leading, through its own adoption of electronic payments. The trends documented globally toward electronic payments will continue. As such, it is important for the government to embrace these changes and, in the process, help Canadian businesses adjust to these new realities.

It is also very important for the government to consider the broader macroeconomic effects and social benefits of shifting to electronic payments, including less tax evasion, reduced activity in the underground economy, increased tax revenue, reduced corruption, and improvements in the ease and efficiency of doing business. Indeed, the report shows that the benefits of electronic payments adoption not only flow to individual businesses through enhanced profitability and growth, they will also enhance the efficiency, transparency and fairness of the overall Canadian economy. It is therefore incumbent on government policy to address these social benefits and facilitate the move to electronic payments.

Finally, the report offers recommendations for the electronic payments industry that could help facilitate the adoption of electronic payments among small and medium sized businesses.

First and foremost, small businesses need greater information to educate them that electronic payments will help them grow their businesses and their bottom lines. In particular, they need assistance in evaluating the true total costs associated with accepting cash and the benefits associated with electronic payments. An intuitive online ROI tool, for example, would allow business owners to better understand the financial costs and benefits of adopting electronic payments. The development of an online benchmarking tool would also allow business owners to understand how they compare to other business in the same industry and of the same size.

Second, there is a need for more information and operational assistance to help businesses make the transition from cash to electronic payments. One of the greatest barriers to change is the lack of knowledge about which payment systems to adopt and which vendors to trust. Finally, the government must take a leadership role in encouraging the move to electronic payments. While a shift to electronic payments cannot be mandated by regulation, the government can help to educate small business owners and can also lead by example through its own policies on electronic payments. For example, the Government of Canada has in place a policy to replace all checks with electronic payments by April 2016.[1]

Together, these recommendations for policy makers and industry participants will enhance the move to electronic payments across the Canadian economy. The shift to electronic payments, in turn, will enhance the growth and evolution of small and medium sized businesses, increase the efficiency of the Canadian economy, and improve the incomes of average Canadians.

Introduction

According to research conducted by the Bank of Canada, there has been a continuous decrease in the share of cash used in overall retail payments in Canada over the past two decades. This is consistent with trends documented globally. The reductions in cash payments are associated with significant macroeconomic benefits. These include less corruption and an increase in the ease of doing business. They also include higher tax revenues, which can be used to both finance social programs and lower tax rates on business and for the average Canadian.

While these benefits are significant and will benefit Canada as a whole, they are not enough to incent many individual businesses to embrace electronic payments. Many small and medium sized businesses, especially small retailers, still rely on cash payments and have yet to be convinced that electronic payments can help grow their businesses and boost their bottom lines. The evidence provided in this paper, however, demonstrates that businesses that adopt electronic payments will be better off financially, and will become more innovative and efficient. That is, when a business adopts an electronic payments system, not only do they capture the macro benefits associated with higher levels of electronic payments in the overall economy, they capture significant business-specific benefits as well.

This report highlights a broad range of these business-specific benefits, including more predictable cash flows, less processing time and the ability of businesses to exploit the analytical power of big data and capture a share of growing e-commerce market. It also considers the many obvious and less obvious costs and risks associated with a continued reliance on cash as the dominant currency for doing business. Cash not only results in significant processing costs—including the need to reconcile balances at the end of the day and to make deposits—it also traps retailers in a low-value transaction environment and prevents them from retailing higher margin items that electronic payments enable. These costs and benefits are reviewed at length in the report.

The report also acknowledges that there are many barriers that inhibit the movement to electronic payments, including the lack of understanding of how to move forward, uncertainty on which provider of electronic payments to engage, and concerns around information security. While these challenges are valid, they can be easily overcome with the right combination of efforts from public and private sector leaders. For example, financial institutions and intermediaries could facilitate adoption of electronic payments with online tools that allow retailers to understand the ROI calculation for doing so and to benchmark themselves against their peers. The government can lead by example by reducing its own reliance on cash and by helping educate small business owners about the true costs of cash and the additional benefits that come with electronic payments. These strategies and recommendations, among others, are discussed at the end of the paper.

If there is one overriding sentiment with respect to adoption of electronic payments by small and medium sized businesses in Canada, it is that time is of the essence. The global retailing landscape is evolving quickly, in Canada and around the world. The changes of the past decade will surely be eclipsed by the changes in the decades ahead as new technologies continue to shape the way we shop for goods and services and as more nimble competitors emerge to capture a younger, more tech-literate demographic of consumers. Retailers that fail to adapt to new technologies, emerging competitors and changing consumer preferences will get left behind. As such, we begin with a few cautionary tales of business disruption that should serve as a rallying cry for Canada's small retailers.

Embrace Change or Get Left Behind!

Significant waves of technological change since the turn of the century have disrupted virtually every industry and every aspect of doing business. Retailing is certainly no exception, as leading retailers adopt the Internet and digital technologies to transform everything from their marketing and in-store experiences to their growing acceptance of new forms of electronic payment and e-commerce.

The shift in the electronic payments landscape is particularly noteworthy. Globally, non-cash payments reached 307 billion transactions in 2011 and increased another 8.5% in 2012 to reach 333 billion transactions. Going forward, analysts expect e-payment volumes to increase 20% annually in developing economies and by 5% annually in mature markets where e-payments already constitute the majority of transactions.[2] In short, it is becoming inevitable that today's retailers will be affected by the global shift to electronic payments, especially as the growing popularity of e-commerce and mobile computing changes the way people shop for goods and services.

For retailers not yet convinced of the value of shifting to electronic payments, there is significant evidence to demonstrate that businesses that embrace change in a timely fashion do far better in terms of survival, growth and profitability than do those that resist prevailing trends. This can be seen in many different environments as the rise of the digital revolution has disrupted and displaced companies that have resisted the digital revolution and clung to old ways of doing business.

One of the best examples of this is the case of Kodak, the photography pioneer that introduced the Brownie camera over a hundred years ago. Last year Kodak filed for bankruptcy. The reason behind the decline and ultimate demise of Kodak was its failure to embrace change. Even though Kodak invented digital cameras, it refused to embrace this change, opting to shun it and maintain its old technology. Kodak's management believed that

if they buried the invention, their customers would not change their habits and, hence, not move away from the company. Furthermore, they believed the introduction of digital technology would destroy their business—the traditional film and camera business. As Kodak's competitors and consumers embraced this new technology, and consumers changed their habits, Kodak fell further and further behind. As has turned out to be the case, digital cameras and pictures are the new norm, and Kodak has filed for bankruptcy. In sharp contrast, companies that embraced new digital technologies have prospered. This is one of many examples of companies that have resisted change and paid the price.

Another example includes the demise of Borders bookstores. As noted by its president at the time of their bankruptcy filing, "The headwinds we have been facing for quite some time, including the rapidly changing book industry, e-reader revolution and turbulent economy, have brought us to where we are now."[3] But, as noted by several commentators, the introduction of the e-reader has been embraced by many companies who have been benefitting from a significant growth in sales of e-books. A *Slate* article compared the strategy deployed by Borders to that of the Barnes & Noble online strategy.

> *The company noted that its website might be eating away at its brick-and-mortar business. Still, it doubled down. "Our position has always been that if we pay a visit to our customers at home through barnesnandnoble.com, they will return the favor at our stores....Though the Nook is less popular than the Amazon Kindle, it is competitive in the e-reader market, and moreover drives healthy e-book sales."*[4] As it has turned out, by embracing the changes that came with the emergence of digital technologies, *"Barnes & Noble's share of the e-books market is bigger than its share of the paper books market in the United States. And the company loves touting its success.*

Rather than view the emergence of the Internet as a threat to its bricks-and-mortar business, Barnes & Noble embraced it and used it as an opportunity. It is clear, therefore, that it was not the emergence of the Internet that caused the demise of Borders. To the contrary, it was the fact that they refused to embrace change. Companies that were able to efficiently implement change, as Barnes and Noble did, have been able to thrive from the benefits associated with the Internet and the emergence of digital technologies.

As noted in a *Forbes* article,

> *In the end, you could blame the Internet for Borders' downfall. Retail has become a challenging, if not outright terrible, business, regardless of what you are selling. But, again, other companies adapted. Borders just didn't. Barnes & Noble may well not be around in five years. But at least it has built a business that recognizes the trends in bookselling—toward the Internet, toward e-readers, toward a more boutique retail experience, away from big-box stores. It is remarkably similar to the strategy Borders laid out in its bankruptcy filing. The*

> *company's management said it wants to "aggressively [grow] borders.com and eBook market share" and "[expand] the company's overall retail mix … to improve profitability and offset the digital effect." Alas, that strategy came too late.*

As suggested above, the longer a company waits to embrace change, the further behind it falls relative to its competitors and the more difficult it becomes to overcome those hurdles. As such, it is important to implement change in a timely fashion to both maintain your current clientele and grow the business.

The importance of embracing change applies just as strongly to the case of electronic payments. Even the taxicab industry, an environment where cash has traditionally dominated, is experiencing rapid growth in the use of electronic payments and new mobile apps that are generating significant new efficiencies. Users of the popular new mobile app Uber can now hail a taxicab with a few simple taps on their smartphone.[5] A GPS solution identifies the closest available taxi to the customer and provides an estimated time to meet. When the trip is complete, the customer exits the taxi and payment is completed electronically. The receipts are also provided electronically and there is even a big data element: taxi drivers are able to better understand the profile of potential customers—including how well they tip—and the customer can better evaluate the characteristics of the taxi cab including its cleanliness and the politeness of the driver.

While Uber customers use the app for free, taxi drivers are charged a small transaction fee. Given the rapid uptake in the world's largest cities, however, it is clear that such fees do not outweigh the benefits to the taxicab industry or company in terms of their ability to connect with customers efficiently and to grow their businesses. Moreover, with electronic payments, the taxi driver does not need to worry about having the correct change, counting money and making errors, or being the victim of robbery.

The New York taxi industry is an interesting case in point. As discussed in a 2009 *New York Times* article,[6] there was initial resistance to moving towards electronic payments. When the city of New York forced the implementation of electronic payments, some cab drivers went on strike. As it has turned out however, the move has proved very successful, with some attributing the rise in the cab business during the long recession to the ability for customers to pay electronically, with no minimum. In sharp contrast to the rise in business in the NY city taxi industry, other cities that have not embraced electronic payments have seen business fall. A detailed Columbia University study also found that electronic payments led to a sharp increase in size of the tips customers gave to the drivers.[7]

Air Canada is an example of the growing trend of cash simply not being accepted for in-flight purchases. Electronic payments not only eliminate the need to deal with foreign currencies, they help airline staff cope with increasingly quick turnaround times. Reconciling cash balances and taking cash off the plane is both time consuming and inefficient. Electronic

payments solve all of these problems and are increasingly becoming standard across the industry.

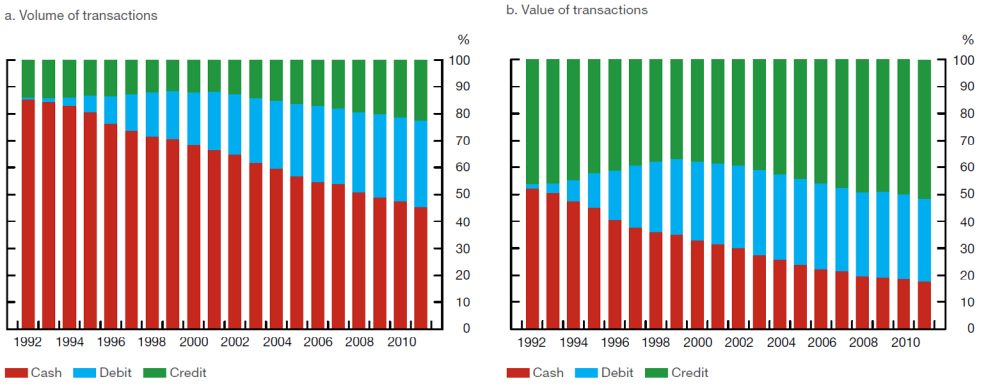
The examples above suggest that while change can be disruptive it's an integral and inevitable component of survival in a rapidly evolving business landscape. The analysis below shows even more clearly that businesses that have resisted the adoption of electronic payments have generally performed less well relative to those businesses that have embraced change. Organizations that resist change will quickly fall behind, limiting their evolution into higher value activities, thus reducing growth and profit opportunities. While there are many perceived obstacles or risks associated with adopting electronic payments, many of these are easily overcome and should not be held up as reasons to resist change.

Why Embrace Electronic Payments?

Cash is on the Decline in Canada[8]

Changing shares of Canadian transactions accounted for by cash, debit and credit cards are illustrated below. Panel (a) is measured using the volume of transactions and Panel (b) by value. The share of transactions accounted for by cash has fallen on both measures but far more in terms of value. In 2011, the cash transactions accounted for less than 50% of all transactions, down from 85% in 1992. In terms of value, cash payments fell from approximately 50% of all value in 1992 to below 20% in 2011. It must be stated, however, that electronic payments (credit and debit combined) exceed the number of cash payments. These trends are continuing, further eroding the share of cash payments and increasing the share of electronic payments payments.[9]

Chart 1: Shares of point-of-sale transactions, by payment method



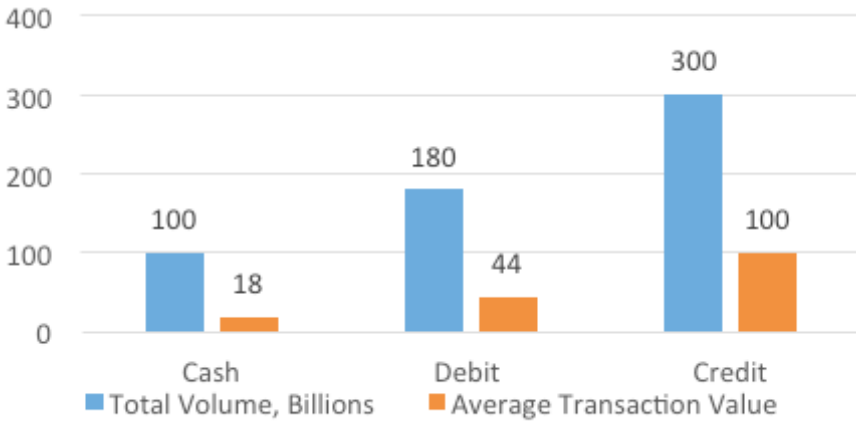
Reproduced from Bank of Canada (2012)

The surge in the use of debit for point-of-sale (POS) transactions began in 1994 with the introduction of the Canadian national Interac direct payment system, which utilizes debit cards. While this growth drove the decline in both cash and credit card sales, it is cash that fell most. The rise in the number of credit card transactions began growing again in 2000 driven in part by the introduction of credit card reward programs (BOC 2012).

Electronic Payments are Higher Value

In 2011, point of sale credit card purchases reached $300 billion; debit transactions $180 billion, and cash payments $100 million. However, as the figure illustrates, the average transaction value of cash payments is about $18, much lower than the average transaction for debit transactions at $44 and credit at $100.[10]

Total POS Volume and Average Transactions Values, 2011



Data underlying this figure taken from Bank of Canada, 2012

The implication from these data is that accepting only cash payments, or creating incentives to encourage customers to pay with cash, will "trap" these businesses in the cash bucket. Accepting only cash payments will result in companies attracting predominantly those customers who prefer to pay with cash. Individuals that have a preference to pay with electronic payments will shy away from these organizations.

Focusing on cash as the preferred method of payment will therefore limit the ability of businesses to attract higher value transactions, broaden the customer base and increase profits. That is, such policies serve as a barrier that limits a business's evolution into a higher value environment. This is a key principle of management, namely that customers gravitate towards businesses that appeal to their tastes and preferences. Businesses often do not understand this as they only observe the customers that they serve, not the customers that they don't.

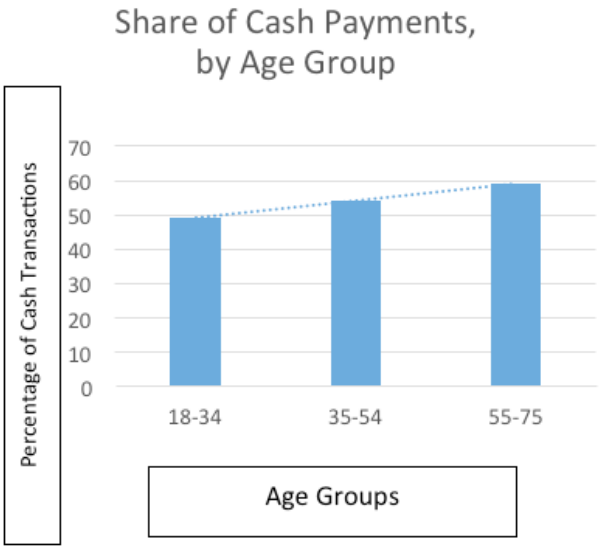
Adjusting the business model to enable and even encourage electronic payments will allow businesses to attract a clientele that has on average higher transaction values. More importantly, as the business attracts a larger number of these higher value transactions, it will see a concomitant increase in its revenues, growth and profitability.

Studies also show that when customers are given electronic payment options they are far more likely to make impulse purchases, join loyalty programs and spend more on any given purchase.[11] Allowing customers to use debit cards expands the available funds to the amount the customer has in the associated bank account, rather than the cash they are carrying in their pocket. When credit cards are accepted, the available funds to spend are further expanded to include the credit available. Using electronic payments to significantly expand the available funds results in larger transaction purchases, which is reflected in a merchant's higher average sales transactions and higher margins. When the transaction is done in cash, then "cash in pocket" limits the consumer's purchase. Together, electronic payments facilitate both larger and higher margin transactions.

Demographic Change is Shifting Consumer Preferences

Demographic changes will increase the cost and lost opportunities for businesses who do not embrace electronic payments. While older people are more likely to pay with cash, the demographic that grew up with the Internet has a strong preference for electronic payments. This group is now well into its working years and represents a vital market for Canadian retailers. Indeed, the degree to which payments are made in cash will diminish over time as the share of Canadians who have lived only in the digital age increases.

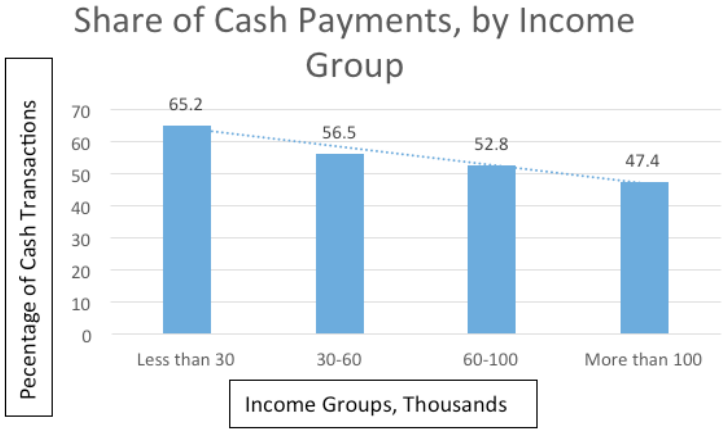
Failing to adopt electronic payments will impede a business's ability to appeal to this demographic. Furthermore the longer a business resists changing to accommodate this demographic, the further they will lag behind those businesses that do adjust. Put differently, there is no benefit to waiting to embrace such change, whereas there are significant costs.



Data underlying this figure from Bank of Canada (2012)

Furthermore, the share of older Canadians becoming more active on the Internet is increasing, including the extent to which they are engaging in e-commerce. As such, focusing on accepting cash will shut businesses out of this increasingly important share of online business activities across all age demographics.

There is also a strong relationship between the share of cash payment habits and income levels. Canadians who earn less than $30,000 per year rely most heavily on cash payments, using cash for 65% of all transactions. This share falls steeply with income levels. Those in the income range of $30,000 to $60,000 rely on cash payments only 56.5% of the time, which is almost 10 percentage points lower. The decline in the reliance on cash payments continues as income levels rise where those in the more than $100,000 income range rely on cash payments only 47.4 percent of the time.



Data underlying this figure from Bank of Canada (2012)

Big Data is Not Just for Big Business

The growth of electronic payments has made massive quantities of data available to retailers and facilitated a revolution in the way businesses analyze individual behavior. The evidence is clear that such efforts have allowed for the development and deployment of strategies that have enhanced sales, customer satisfaction, repeat business and hence business growth and profitability. For example, by identifying patterns in customer behavior, companies can better stock their shelves and understand how price discounts or product placement impact sales and profitability. Businesses can better understand which forms of advertising work best for their particular business or tailor their incentives and promotions to specific customers.

An immediate question that arises is how the analysis of data can work in a small- and medium-enterprise (SME) environment, and whether SMEs have the ability to both undertake and leverage such analyses. The answer is an absolute yes. "The concept of analyzing very large amounts of data and looking within it for patterns, trends and insights is one that nearly any business, large or small, can use to help make better decisions."[12] An important question that arises however is how to make these analyses accessible to smaller businesses. How do they collect and analyze the data, interpret the analysis, and create and implement strategies reflecting that analysis? These are important questions. As reported in *Forbes* magazine, "...every organization should have access to such a system, but the question remains—do you build it yourself or pay for the service in the cloud? Well, that's up to you, but the trick here is to not get left behind."[13]

Consistent with a general theme in this report, an organization that simply assumes that a big data analysis is not for them—or believes that they can't do it, or that it's too expensive—will get left behind as its competitors reap the benefits of deploying such techniques. Big data is quickly driving a revolution in the retail world. Instead of increasing revenue through opening new shops—traditionally considered the next sensible step for a small merchant—businesses are using technology to understand their customers. Devices installed in stores allow owners to predict the best opening hours, how many staff are needed on any given day, and even if a messy table arrangement piques more interest than a tidy layout.[14] Indeed, there is a growing body of evidence to suggest that big data analyses can be just as powerful for SMEs as it is for large firms. Here are some examples:

Examples of Big Data Applications in a Small Business Environment

Eartheasy.com: Eartheasy.com is a small Vancouver-based online merchant that uses Canopy Labs to track conversion rates by cross-referencing data on emails opened, click-through patterns and actual purchases. Reports provided on what specific customer groups tend to buy helps in the creation of more product-specific and more effective email promotions. The impact has been dramatic: the email-opening rate has jumped from 20% to more than 30%, and the click-through frequency has grown from 4% to more than 10%. "Now, we can do stuff that's similar to what Amazon is doing." Eartheasy has seen a noticeable uptick in transactions due to the more rigorous marketing focus provided by Canopy's analytics work. While Eartheasy's senior management does not think the analytical tools can pinpoint future customer behavior with precision yet, they do believe the company benefits from having an analytical edge over its rivals.[15]

Simply Good Technologies: A boutique data analytics company, Simply Good Technologies provides a software platform for small merchants and businesses seeking to exploit big data. The company specializes in analyzing the distribution and effectiveness of electronic coupons as they spread through email and social networks. According to its CEO, Winston Mok, "You want to find out what offers deliver the maximum return." Some companies use e-coupons to extend their brands, while others' goal is to provide incentives to new customers. Simply Good's analytics can also determine if the individual who uses the electronic discount is a new customer (good) or an existing one (not so good). Mok points out that this kind of tracking also enables firms to aim their marketing efforts at influential individuals whose product recommendations on deal forums and in social media may be picked up by hundreds of followers.[16]

The Spillers Group: The Spillers Group owns three restaurants in Dallas and uses a data application called Roambi that enables it to provide management with all the business information it collects, including point-of-sale data, labor metrics and accounting numbers. With Roambi, Spillers can link managers' pay to their restaurants' performance. The app has also cut Spillers' labor costs 10%, saving thousands of dollars every pay period.[17]

Boston Market: Chief brand officer, Sara Bittorf, says the restaurant chain is increasingly reliant on big data to optimize its operations. Central to those efforts is Boston Market's partnership with edo Interactive, as Bittorf explains: "One of the best things about this is it's one of the ways to figure out how to use big data. When they deliver us a report, I can understand what my average ticket is and who I'm targeting. I know people have been to a Boston Market before but haven't been in the past 60 days, for example. This is a frequency play for us, and we're getting incremental visits we would not have gotten."[18]

Founding Farmers: Founding Farmers, a U.S. based restaurant chain, gathers data from Swipely, OpenTable and analytics service Avero Slingshot. "We look to build our profiles on each guest so we know what their favorites are, the booze they like to drink, the food they like to eat and how they like to be served," says Simons, a partner in Founding Farmers. Profiles are then created for the top-100 guests. "You can have really targeted reach-outs. We look to communicate with them in a highly personalized way," Simons says. "One of the components is a service called Swipely, which replaces a restaurant's traditional credit card processing provider, usually at no extra cost and with no new hardware requirements. It works with existing POS systems to gather information about the guest check. It identifies repeat customers, new customers, what they ordered, how long they were at the table and how much they tipped. The minutiae is fed into a system that gathers the information into a dashboard. From that dashboard, operators can monitor overall sales, track marketing campaigns and view individual customer profiles."[19]

Competing with Growth of Online Channels[20]

For the most part, electronic payments must be used to engage in e-commerce. Conversely, not allowing for electronic payments will shut businesses out of this rapidly growing business opportunity. In fact, e-commerce is on the rise globally, as consumers increasingly opt for online stores that provide more convenience and a broader selection of products at competitive prices. This market is expected to grow by 18.1% per year from 2010 (when transactions numbered 17.9 billion) until 2014, at which point there will be an estimated total of 34.8 billion e-commerce transactions worth approximately $1.7 trillion. Moreover, in order to further drive sales, e-commerce businesses are increasingly offering personalized services and loyalty programs to frequent customers—again, all aided by the use of a digital payments infrastructure.

Canada is no exception to this global trend. According to a Statistics Canada survey, in 2012, 56% of Canadians ordered goods online, up from 51% in 2010. The amount purchased online in 2012 was $18.9 billion, a 24% increase over 2010 ($15.3 billion), which itself was almost double the figure in 2005. All indications are that these trends will continue.[21] The age demographic of 25- to 34-year-olds was the most likely to engage in online purchases. In 2012, 69% of this demographic engaged in e-commerce.

For those who did engage in online purchases, they averaged 13 separate online orders in 2012, and spent on average $1,450. This number is up from its 2010 level of $1,362 in average purchases by shopper. In 2010, a full 89.4% of these online purchases were by credit card. There is clearly significant heterogeneity across sectors, which speaks to the opportunities available for businesses.

A list of the kinds of purchases undertaken online:

Electronic commerce, types of goods or services ordered, 2012

	Online shoppers
	%
Travel arrangements (e.g., hotel reservations, travel tickets, rental cars)	58
Tickets for entertainment events (e.g., concerts, movies, sports)	52
Clothing, jewellery or accessories	42
Books, magazines, online newspapers	42
Music (e.g., CDs, MP3)	35
Memberships or registration fees (e.g., health clubs, tuition, online television subscriptions)	35
Software	24
Other	24
Consumer electronics (e.g., cameras, stereos, TVs, DVD players)	22
Videos or DVDs	22
Toys and games	21
Food or beverages (e.g., specialty foods or wine, pizza delivery)	18
Gift certificates or gift cards	17
Photographic services	15
Computer hardware	15
Other health or beauty products (e.g., vitamins, cosmetics)	15
House wares (e.g., large appliances, furniture)	12
Sports equipment	11
Home improvement or gardening supplies (including tools)	7
Prescription drugs or products (e.g., glasses)	6

Source: Statistics Canada

To engage in e-commerce and to understand its potential, we turn to Internet usage in Canada. As the number of Canadians who use the Internet continues to grow, so too will the extent to which Canadians engage in online shopping, and with it the growing consumer reliance on electronic payments. In 2012, 83% of Canadians aged 16 or over used the Internet for personal use, up from 80% in 2010. Quite importantly, a significant contributor to this increase in Internet usage is the demographic aged 65 or older. In 2010, only 40% of this demographic used the Internet. This increased to 48% in 2012.

The kinds of online activities Canadians undertook online in 2012 are detailed below. It is perhaps little surprise that email is the most prevalent activity. However, what may be surprising is that the second most prevalent activity that Canadians do online is "window shopping or browsing for information on goods and services." In other words, the Internet is the window into many businesses, and provides significant opportunities to defend a business's current customer base and to attract new consumers.

Online Activities of Canadians

Online activities from any location, 2012

	Internet users
	%
E-mail	93
Window shopping or browsing for information on goods or services	77
Electronic banking (e.g., paying bills, viewing statements, transferring funds between accounts)	72
Reading or watching the news	71
Using social networking sites	67
Searching for medical or health-related information	67
Travel information or making travel arrangements	66
Visiting or interacting with government websites	63
Researching community events	58
Downloading or watching movies or video clips online	54
Obtaining or saving music (free or paid downloads)	50
Making telephone calls online	43
Using an instant messenger	40
Downloading or watching TV online	39
Listening to the radio online	38
Obtaining or saving software (free or paid downloads)	38
Formal education, training or school work	37
Searching for employment	36
Playing online games	35
Researching investments	27
Contributing content or participating in discussion groups (e.g., blogging, message boards, posting images)	24
Selling goods or services (e.g., through auction sites)	23

Source: Statistics Canada

Despite the substantial growth in e-commerce over the past decade, the share of overall sales remains quite small and there remains significant growth potential from online sales.[22] There is no doubt that, over time, this share will continue to grow and a tipping point will arrive at which the growth in the share will be exponential. For example, mobile devices are becoming increasingly important in e-commerce. Businesses need to be set up to be part of the significant opportunities that such changes in electronic payments and e-commerce will bring.[23]

Factors Limiting the Acceptance of Electronic Payments

In order to enhance the extent to which Canadian companies accept electronic payments, it is important to better understand the obstacles they face. Are the Canadian businesses that are not accepting electronic payments doing so out of an explicit preference for cash and hence a misunderstanding of the costs associated with this method of payment, or do formal obstacles within their businesses drive their reluctance to accept electronic payments?

The Canadian Federation of Independent Business (CFIB) commissioned a survey that addressed the obstacles to accepting electronic payments.[24] The most important obstacle reported was the cost of implementing a system that would allow for the acceptance of electronic payments. These costs, it is claimed, are too high. This result is also consistent with testimony provided to a Canadian parliamentary committee that stated that many small businesses lack the capital to finance the introduction of such systems.[25,26] As shown below, we find that the adoption costs are far lower than many business owners anticipate and that implementation of such systems is now less complicated than it was in the past. Moreover, the long-term, ongoing benefits of adopting electronic payments far outweigh any initial adoption costs borne by the retailer.

It is important for small retailers to recognize that the set-up costs for electronic payments have fallen quite dramatically in the past decade. For example, today's retailers can buy simple electronic payment systems at Staples for a nominal cost. They can even use their mobile phone to accept credit card payments by setting up a PayPal account with a card reader or use one of many solutions including Square, Intuit's GoPayment, WePay or a host of other options. These new solutions perhaps underscore the relative lack of understanding on the part of many business owners regarding the cost of implementing electronic payment systems, and how straightforward and simple implementation of such systems can be.

Consider Square, the brainchild of Twitter co-founder Jack Dorsey, launched in 2009. Its flagship service is an affordable card reader for companies in the US, Canada and Japan. Market stall owners and cafés that only accept cash can request a free Square card-reader, attach it to an iPhone or iPad and accept card payments using their mobile device. In this instance, the set-up costs are negligible assuming the merchant already owns a compatible mobile device. Merchants are charged a 2.75% fee per transaction, however, so these ongoing costs must be factored into a retailer's pricing strategy.[27] The apparent lack of understanding of how the e-payments landscape has changed on the part of many small business owners informs one of the

recommendations below regarding the need to provide more information and education to the SME community on what is involved *vis-à-vis* costs and technologies in moving to an electronic payments system.

Indeed, it must be stressed that while the costs of implementing an electronic payments system are one time, the benefits associated with electronic payments are continuous. That is, for as long as the electronic payments system is in effect, there will be benefits to the business. The payback, or the ROI, will vary, depending on the sophistication of the system implemented and the number and value of transactions. This will inform a recommendation which will be discussed below on the development of an ROI tool that will allow business owners and managers to better understand the economics underlying the decision to implement an electronic payments system.

Obstacles to Accepting Electronic Payments	Percentage of Respondents Citing the Obstacles Listed
Cost of implementing system does not justify investment	56%
This is not a common payment type accepted in my sector	36%
Do not want to change business process with respect to accepting payments	30%
Concerned with online security	26%
Do not want to give out banking account information to payer	22%
Don't know where to start	16%
Customers do not want to give out banking account information	14%
Difficult to perform reconciliation of payments	11%
Existing payments solutions do not fit the needs of my business	10%
Other	10%

Source: CFIB, "Changing the Way We Pay: Getting the Transition Right for SMEs, Oct. 2011

The second most important factor cited is that electronic payments are not the commonly accepted payment method in a particular business's industry. What is puzzling about this perceived obstacle is that implementing an electronic payments system does not preclude businesses from accepting cash. Nevertheless, the view that electronic payments are not the norm in a particular industry may lead the business owner to conclude that the economics work against implementing an electronic payments system. Clearly, further education on these issues would allow small and medium sized business owners to make more informed decisions.

The third factor listed is that small businesses are hesitant to change their business processes to enable electronic payments. Many small businesses are accustomed to working with cash and the move to electronic payments—along with computerized cash flow and retail management systems—represents a change that they do not understand and therefore fear. Very

much related is that merchants don't know where to start or who or what to trust. Although off-the-shelf payment systems are widely available, small merchants may lack the confidence to evaluate the options and choose the solution appropriate for their business. In testimony to the parliamentary committee,[28] business owners and managers testified that they don't have the ability to assess the extent to which vendors are legitimate, and who is reliable and reputable. There was also concern voiced around transparency of the costs associated with electronic payments. The public campaign around electronic payments costs, particularly credit card fees, has caused many firms that had seriously considered moving to embrace electronic payments to reconsider. Unless adequately addressed, resistance to change, combined with lack of knowledge, will severely curtail the ability of the businesses to adjust and adapt to the new realities and seize the associated benefits of electronic payments.

The fourth most important factor inhibiting the adoption of electronic payments relates to online security. This too is an artificial barrier. That is, the security issues related to online payments have been easily overcome, particularly for small business.[29] For example, the research shows that most security breaches are perpetrated by insiders and are often the result of negligence or naïvety. Using USB keys in company computers that are infected is one systematic problem. Training employees to ensure computers have up-to-date virus protection and firewalls has been shown to be incredibly effective, and inexpensive. Awareness training campaigns for employees and low cost technologies are often sufficient to protect the confidential information small and medium sized businesses would retain when processing electronic payments. Again, using information security as a reason to resist change reflects a relative lack of understanding of how to manage that change, and an irrational fear that such change cannot be implemented securely.

Put simply, there are significant knowledge gaps around electronic payments. The lack of understanding around the true costs associated with accepting cash payments and the benefits associated with electronic payments is quite significant, and is leading business owners to make sub-optimal decisions.

Helping Small Businesses Understand the ROI on Electronic Payments

The testimony before the parliamentary committee[30] indicated that many SMEs lacked access to the capital needed to implement an electronic payments system. Also, the most cited obstacle to implementing electronic payments listed above from the CFIB study was the set-up costs. Other concerns included understanding how to begin, whom to engage, and how to understand the nature of the equipment and information services the company would need to serve its purposes.

As discussed, the benefits of the electronic payments are many, and include the following: First, it allows for the efficient management of payments, deposits and reconciliations. Second, it encourages a migration of businesses to higher value transactions and permits access to a larger customer base. Third, it is consistent with the preferred payment habits of an increasingly important Internet- and techno-savvy demographic. Fourth, it allows businesses to capture more of a rapidly growing e-commerce business. Finally, electronic payments allow businesses to participate in the emerging area of big data, and hence to measure the purchasing habits of their customer base and create more effective business strategies that drive customer loyalty and profitability. There is significant evidence that such strategies are applicable in the small and medium sized business environment.

In order to undertake a formal ROI calculation—that is, consider the financial costs and benefits of a move to electronic payments—a dollar value for each of the factors listed below must be considered for any particular business. What must be highlighted is that many of the costs associated with the movement to electronic payments are one-time whereas the benefits are continuous and flow to the organization forever. While some may argue that there is also a continuous flow of fees associated with electronic payments, this must be offset by the continuous flow of costs associated with accepting cash payments and the ongoing benefits from the electronic transactions. Given the significant benefits associated with the move to electronic payments, a favorable ROI will emerge in most business environments.

The significant move to electronic payments by the vast majority of large businesses and an increasing share of the small and medium sized business reveals that the ROI calculation has been favorable.

Factors to Consider in the ROI Calculation

Benefits Associated with Electronic Payments	Costs Associated with Electronic Payments
Much more efficient at reconciling accounts • Reductions in the time employees must spend handling cash • Employees can spend time doing more profitable activities Cash flow management far more efficient Reductions in employee theft Allows businesses to migrate to higher value environment Enhances opportunities for e-commerce Big data analyses to develop more effective business strategies	Set Up Costs • Understanding requirements, both in terms of equipment and Internet services • Navigating the different providers to understand what best suits the business • Buying the equipment, having it installed • Training employees • Information Security System, including training These Set up Costs are one-time. Once an electronic payments system is implemented, the only additional costs are: • Fees per transaction • Internet Fees (most companies already have Internet access at the business).

Many of the perceived costs associated with moving to electronic payments are non-financial, and reflect a lack of understanding—what can be called knowledge gaps. These costs can be reduced significantly, if not eliminated, through an education program directed at SMEs. Furthermore, enhancing business owners' understanding of these issues will go a long way towards reducing the resistance to change, likely making the ROI calculation more favorable, thus enhancing the move towards electronic payments.

The arguments in this paper of course do not suggest or recommend that cash payments should be eliminated—to the contrary. Rather, it is argued that both cash and electronic payments should be allowed, and customers will make the decision on which method to use. When this is done, there will be a further movement in the direction of electronic payments as that form of payment will be both in the interest of the customer and the business.

Implications for Government Policy

The creation of government policies or government strategies requires a full understanding of the relevant issues in any context. In the current context, creating government policies in response to complaints from businesses that are not fully informed inhibits both innovation and change. The media is filled with uninformed arguments that claim that costs associated with electronic payments are "too high" particularly when compared to the "zero costs" associated with receiving cash. The analysis presented here shows that the costs associated with cash payments are not zero, and arguments that assume a zero cost are wrong. To the contrary, the costs associated with receiving cash payments can be very high. Furthermore, cash payments result in significant impacts on the business in other ways that limit its growth and evolution. When taken together, these direct and indirect costs of accepting cash are substantial. Businesses and government must incorporate all costs associated with payments into their strategies and policies.

It has been argued that governments need to intervene to cap fees associated with the use of electronic payments. Such an approach fails to fully understand the total costs of cash payments or the benefits that come from electronic payments. In fact, the analysis presented in this paper underscores the need for governments to create policies that enhance and encourage the move from a cash based business model to an electronic payments system. That is, governments must help businesses embrace change and must not create policies that in any way inhibit change.

The benefits of such policies will be dramatic both at the individual business level and at the macro level. Not only will business benefit from the move to electronic payments, those that do not will be handicapped. Hence it

is incumbent upon government to encourage such moves and to allow appropriate economic incentives and to all participants.

There are many additional macro benefits that go well beyond the effects at the individual business level. Since businesses only consider their "private return" in making business decisions, the positive externalities, or additional benefits, to the broader Canadian economy will not enter their decisions. This is the classic "free ride" problem. In the presence of such positive externalities—which means broader benefits to the Canadian economy when an individual business implements this change—optimal government policy must involve encouraging the move to electronic payments.

The macro implications of electronic payments, notwithstanding issues of causation, are substantial. In cross-sectional correlation across many countries, including Canada, higher levels of cash utilization (measured as the share of transactions that use cash) mean:

- The GDP per capita is lower.
- The size of the underground economy is larger.
- The level of corruption is higher.
- The difficulty of doing business is greater.
- Tax evasion is higher.

These correlations underscore the costs associated with cash-based transactions. One needs to be careful to interpret these as causal, that is, one cannot simply assume that reducing cash usage in all environments will necessarily result in improved outcomes. Nevertheless, one could use these relationships or correlations to back out what the "potential" benefits could be of reducing cash based transactions. Put differently, increasing the extent to which the Canadian economy utilizes electronic payments will (1) raise GDP per capita (2) reduce the size of the underground economy (3) reduce levels of corruption (4) make it easier to do business and (5) reduce the amounts of tax evasion, thus enhancing government revenue.

It is worthwhile to discuss these issues in a bit more detail.

Illegal Activity

Available estimates put the figure of consumer cash purchases annually made outside the formal economy at $8.3 trillion, with $1.5 trillion being illegal. Cash permits such informal transactions to take place. Eliminating the ability to transact in cash and replacing this with electronic payments would significantly reduce—though not eliminate—the extent to which individuals could engage in informal transactions because electronic payments and their associated transactions would be traceable.

It must be stressed that not all cash transactions are illegal. On the contrary, it is likely that the vast majority of cash transactions involve legal activities. However, it also true that the vast majority of illegal activities involve cash. The arguments made in this report indicate that policies that encourage the move to electronic payments would result in both a more efficient payment system for legal transactions and at the same time reduce significantly the extent of illegal activities.

Social Costs of Illegal Activity

In addition, an important role for tax policy is to incent people to behave differently, particularly when there are externalities, or social implications for their actions. Taxation changes prices paid for particular good and services so as to influence behavior and to move the private cost (benefits) closer to the social cost (benefits), thus enhancing social welfare. When these taxes are not paid then the incentives are not inserted into the transaction, thus resulting in a non-socially-optimal amount of the activity taking place. This can be demonstrated in a producer/consumer surplus context. As such, eliminating the ability to transact in cash would move the economy towards socially optimal outcomes.

Taxation

Transactions in the informal economy escape government taxation, and hence represent an important social cost. Estimates within Canada put the size of the underground economy at 5.2% of GDP, with 4.2% comprising unreported activity and 1% accounting for black market illegal activity. The elimination of cash along with the assumption that this would lead to the elimination of the underground economy would result in $17 billion dollars of additional tax revenues for all 3 levels of government, a figure that amounts to about 1% of GDP. As such, eliminating the underground economy would generate approximately $18 billion in additional government revenue. It is the role of government to work to capture these benefits.

Given these macro benefits, there is clearly a case for the government to encourage the adoption of electronic payments so as to enhance the performance of the Canadian economy. However, the most persuasive arguments to drive adoption will address the motivations of individual business owners, rather than the broader systemic benefits to the Canadian economy as a whole. As this study has shown, those arguments will be won on the basis that businesses that embrace electronic payments will experience a fall in costs and a rise in efficiency. That is, on a cost-benefit basis, the individual organization will be directly better off, period. As a small or medium sized business moves in the direction of electronic payments, the individual business will be made better off, as will the overall efficiency and prosperity of the Canadian economy.

As noted above however, adoption of electronic payments cannot be forced. That is, the government should not legislate the move to electronic payments. Rather, the correct approach for government is to lead in this effort. As an example, the government of Canada has in place a policy to replace all checks with electronic payments by April 2016. Such policies allow the government to lead by example, and in the process generate significant cost savings for government, at the same time moving many Canadians from check based payments towards electronic payments.

Conclusions and Recommendations

The trends are clear and continue: the relative importance of cash payments is declining and electronic payments increasing. There are many benefits associated with electronic payments that many SME businesses do not understand. Furthermore, business owners often refer to relatively high costs of electronic payments but fail to understand that the costs associated with cash payments are not zero. Furthermore, there are many benefits associated with electronic payments that are absent when payments are made with cash.

What must be stressed again is that consumers who wish to pay using electronic methods will gravitate to businesses that offer these payment options. Transactions that utilize electronic payments tend to be significantly higher in value relative to those transactions that involve cash payments. Therefore, not accepting electronic payments “traps” businesses in the bucket of transactions that are of low value and shuts these businesses out of the more lucrative group of transactions involving electronic payments.

Many businesses have cited the relatively high cost associated with implementing an electronic payment system, a claim that has been shown to reflect a lack of understanding of what the costs truly are—that is, the adoption costs associated with the move to electronic payments have fallen significantly and most of the costs are variable. Furthermore, businesses have expressed a sense of not knowing where to start to make the change to electronic transactions. There is also significant uncertainty relating to the number of providers of electronic payment systems, and understanding which are reputable and which are not, as well as uncertainty associated with some aspects of costs and fees associated with electronic payments. As such, strategies deployed that could close these knowledge gaps would help small businesses better navigate this process, and should be enormously helpful in enhancing the move to electronic payments. Helping small and medium sized businesses better understand these complex issues will reduce many of these non-financial costs significantly, thus reducing resistance to change and increasing the move to electronic payments.

Similarly, the issue of online security is an artificial barrier. There are many strategies that have been proven to enhance the security profile of small companies. For example, research by the Rotman School of Management and TELUS lays out best practices for businesses to enhance their security posture, and it's not about spending more to get the best outcomes. Furthermore, there are strategies to enhance information security that have been tailored for small business.[31]

Several specific recommendations flow from the analysis above. These recommendations will increase awareness of the benefits that come with the introduction of electronic payments and underscore the risks a business would face by not embracing electronic payments. That is, these recommendations also allow small business owners to better understand the relevant issues and hence make more informed business decisions. The recommendations call on the electronic payments industry and the government to work together to reduce the direct and indirect costs associated with movement to electronic payments.

Evaluating the Costs of Cash and the Benefits of Electronic Payments

The discussion in the report has identified several knowledge gaps. This specific recommendation relates to addressing knowledge gaps related to the cost of cash and the benefits of electronic payments. The analysis demonstrates that small and medium sized businesses underestimate the costs associated with cash payments, and do not fully acknowledge the benefits that come with electronic payments. Together, these two gaps contribute to a dramatic underestimate in the benefits associated with the move to electronic payments, which undermines the case for change within such businesses. It is therefore recommended that the electronic payments industry create some kind of outreach program combined with a user-friendly website or online community or literature that will allow businesses to get a better understanding of these issues. With a better understanding of the true costs of cash and the benefits associated with electronic payments, small and medium sized businesses will be better positioned to make more informed business decisions.

Understand the Technical Requirements for Moving to Electronic Payments

The discussion above has also identified knowledge gaps as they relate to understanding how to move to electronic payments. Specifically, business owners have revealed difficulties in the following areas:

- How to understand the needs of a business—what equipment and IT services are sufficient? What are reasonable cost estimates—many business owners are unfamiliar with this activity and hence are reluctant to sign on given their ignorance. These concerns are compounded by the large number of providers canvassing to sell services, thus confusing SME business owners.
- How to train employees to process electronic payments.
- How to enhance information security within the business, and convince customers that the business can process electronic payments securely.
- How to work with customers to encourage a migration to electronic payments.
- How to collect data that comes with electronic payments and understand how the data can inform the creation and implementation of strategies for the business (i.e., how to benefit from Big Data)?

It is recommended that the electronics payment industry create an effective method of communicating with the SME business community to address these knowledge gaps. These knowledge gaps are tantamount to real costs associated with the move to electronic payments, and clarity works to reduce these costs. Furthermore, it is important to highlight to businesses that set-up costs are one-time, while the benefits of electronic payments are ongoing. Together, this effort will reduce the reluctance to embrace change, and facilitate the move to electronic payments.

Building an ROI Tool for Small Business

It is highly recommended that an ROI tool be created by which the costs and benefits are operationalized. Users of this tool can enter information relevant to their business and get back an ROI calculation. The tool should also have analytics embedded, which can simulate the impact of the move to electronic payments on the business. This analysis would be based on the experience of other firms that would be interviewed and whose experience would be calibrated for the web site. This will allow users to understand the potential impact of electronic payments on their business, and how this feeds into the ROI calculation.

The ROI tool needs to also communicate that embracing electronic payments is not optional and that by not embracing change, growth in revenue will be negatively impacted. These scenarios can be displayed in a user-friendly way. It can highlight how companies that have embraced change and moved to electronic payments will outpace businesses that don't. Put differently, while there are costs associated with electronic payments, there are also costs associated with not embracing electronic payments.

Creating a Benchmarking Tool for Industry Comparisons

It is recommended that the electronic payments industry create a user friendly website that allows users (SME businesses) to consider a set of scenarios to assess how they compare or benchmark relative to other businesses in the same industry and of similar size.

- The online tool or website can also help businesses better understand where they are currently, and where they need to be for the ROI calculation to make sense. Or, to put this differently, for them to determine whether the ROI calculation makes sense.
- With the arguments made in this report, the benchmarking tool can allow users to better understand how embracing change will impact their business model: they can compare their own business to other businesses they are being benchmarked against. This will demonstrate how the move to electronic payments impacted the business strategies of other firms, as well as the impact on revenue, growth, efficiency and so on. Business owners can gain a better understanding of how the move to electronic payments will allow their business to operate more efficiently, migrate to higher value activities, engage in big data exercises and enhance profitability. This analysis would be based on the experience of other firms that would be interviewed and whose experience would be calibrated for the web site.
- The online ROI tool will allow users to better understand and appreciate the benefits of electronic payments. Businesses can chart their progress as they move in the direction of an electronic payments system that makes sense. This is a win/win situation for all stakeholders.

Identifying a Role for Government Leadership

It is incumbent upon government to facilitate the move to electronic payments. There are many benefits associated with the move to electronic payments that enhance the efficiency of the Canadian economy. These benefits extend well beyond the individual businesses. In order to ensure that the Canadian economy captures these gains, the minimum one would expect from the government is not to impede these changes. Any kind of regulatory change that worked to inhibit change to electronic payments would be misguided.

Furthermore, an argument could be made for the government to enhance the move toward electronic payments, perhaps through a tax incentive that would be associated with the adoption of these technologies. These

incentives would be repaid through the more efficient operation of the Canadian economy, a reduction in tax evasion and increased tax revenue.

It must be stressed that it would be misguided for government to legislate to force changes on the business community. Market forces, on their own, already provide strong incentives to migrate to electronic payments. Regulation, on the other hand, carries the risk of stifling innovation in a fluid and fast-moving electronic payments landscape that will continue to offer new benefits and conveniences to businesses and consumers. What small businesses need most is education about the benefits of electronic payments and tools to help them make the transition. They also need to see the Canadian government taking a leadership role in its own adoption of electronic payments. For example, the government's move to significantly reduce its issuance of checks is a great example of the suggested leadership role.

Moreover, by working as a neutral convener, the government can help both the financial services industry and the small business community design and implement policies, tools and strategies that make it easier for merchants to adopt electronic payments, which it turn will provide the tools and opportunities that businesses need to grow and enhance profitability.

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9 Similar statistics apply to the US where credit and debit cards are almost as common as cash. In the US, 27% of purchases are made with cash, a figure that is expected to drop to 23% by 2017. While almost every American has an electronic payments card (i.e. a credit or debit card), only 55% of the 27 million small businesses in the United States still do not accept credit cards. Furthermore, 66% of all point-of-sales sales in the US use cards, either—credit, debit, or gift cards. As is argued on the Forbes website, "if businesses are not accepting these forms of payment, they are missing out on a huge opportunity. That is a lot of sales for millions of businesses to miss out on." (http://www.forbes.com/sites/tjmccue/2013/08/16/why-dont-more-small-businesses-accept-credit-cards/)

10 According to research by the Bank of Canada, for transactions in the $25 to $50 range, consumers tend to trade the speed and ease of paying with cash for the other attributes offered by debit cards. (Arango, Huynh and Sabetti 2011; Arango, Hogg and Lee 2012). That is, this seems to be the range of transaction values when the "substitution" between cash and electronic payments "kick in.".

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21 It should be mentioned also that not only are Canadians increasingly buying goods and services online, almost one-quarter (23%) of Canadians have sold items online, either through online auction sites or other means.

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24 CFIB survey of the Canadian Payments System, July 7-25, 2011. This was an online survey that resulted in 8,209 responses. What immediately jumps out is there is no mention of fees associated with accepting electronic payments. It must be stated that respondents had to choose obstacles from the list chosen. It is unclear whether fees were listed as an obstacle. Regardless, those undertaking the research would have known form their preliminary research what the major obstacles would be.

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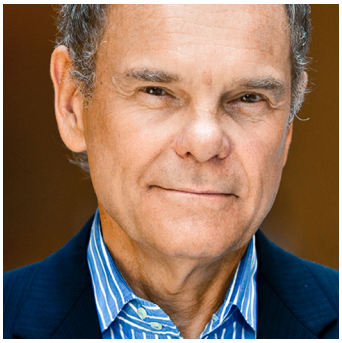

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About Global Solution Networks

Global Solution Networks is a landmark study of the potential of global web-based and mobile networks for cooperation, problem solving and governance. This research project is a deliverable of the GSN program, offered through the Martin Prosperity Institute at the Rotman School of Management, University of Toronto.

Program Management

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GSN Program Membership

Membership in Global Solution Networks offers unlimited access to gsnetworks.org program deliverables including project plans, research publications and multi-media presentations, all posted for member use, review and feedback. webinars on current research are held quarterly. Please visit our website at www.gsnetworks.org or contact info@gsnetworks.org for information on participation.

Ten Types of Global Solution Networks

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