

Productivity in Uncertain Times

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Abstract—Productivity in Canada has been an issue for several decades; this was largely brought to light by the Organization for Economic Co-operation and Development (OECD) warning issued in 2012. When compared to the United States, and other OECD nations, Canada’s productivity has fallen significantly behind, which in turn has hurt its competitiveness in the global trade market. Due to a lack of competitiveness, Canada does not export much, and as a result Canadian companies often cannot take advantage of economies of scale, economies that are needed to boost productivity. When looking into the causes of this productivity shortcoming, due diligence revealed that Canadians are highly risk averse, and while avoiding risk can be prudent in some circumstances, extreme risk aversion actually hampers development, innovation, and improvement as everyone follows the status quo. Another major contributor to the productivity problem is a failure to adopt technology for business growth, specifically in the small and medium sized enterprises (SMEs). The vast majority of research into the field of productivity focuses on large businesses, research that is of very little use to SMEs in most cases. The framework discussed in this text, which is designed specifically for SMEs, is called the four pillars of productivity (4POP) system. By implementing this framework, an SME can successfully undertake productivity initiatives that lead to sustainable productivity improvements. The paper also factors in the uncertainty and fluidity of today’s international diversity in terms of where each nation lies on the political spectrum and what that means for productivity.

Keywords—Canada, productivity, small and medium sized enterprises (SME), uncertainty.

I. INTRODUCTION

THE story of Canadian productivity has been a sad one, but all that has the potential to change for the better in the near future. In the last two decades, it has been outperformed by its neighbor to the south by a significant margin. Its metrics also fall short of several other Organization for Economic Co-operation and Development (OECD) countries. There are multiple reasons for Canada’s lag in terms of productivity improvement, some due to happenstance and others due to cultural tendency. Most noteworthy is a low risk tolerance level that curtails innovation. The exceptionally high average risk aversion for Canadian firms means the risk taking processes that leads to innovation are hard to come by. This is the consequence of a very sensible culture, perhaps too much so. Some risk is absolutely necessary in the long-run, but certainly can have short term consequences and failures. A vast change needed nationwide is an ability to tolerate failure, as long as it occurs in the pursuit of productivity and innovation.

Another, very important, cause of Canada’s inefficiency in

processes stems from slow technology adoption. Particularly in smaller enterprises, selecting technologies (often very expensive ones) can be a large and daunting undertaking. However, Canadians are very proficient with technologies at home. This means once technologies are selected there is no trouble making good use of them in the workplace. Now aware of the productivity implications, the government has, in the last half-decade, implemented programs and grants to aid smaller firms in selecting and implementing the right technologies. This is a good step in the road to meeting and exceeding productivity performances of competing nations.

In order for productivity improvements and initiatives to take effect, a firm must have its ‘house in order’, so to speak. To get the most out of productivity and innovation efforts, an environment conducive to such efforts is required. A systematic framework that prepares a company for rapid productivity growth and sustainable productivity improvement has been developed. It is known as the Four Pillars of Productivity framework, or 4POP. The framework addresses a foundation of culture that provides the base for four pillars: strategy, operations, technology, and innovation. With successful foundation and pillar construction, continuous productivity improvement becomes an organizational trait.

A series of recent global incidents have changed the global marketplace. Brexit and the election of several populist leaders portend the end of a long-term trend toward free trade and multilateral agreements. Instead, many bilateral agreements will be formed, and protectionist measures may be implemented. As such, the model has been elaborated upon to explain how it functions in what will likely be a vastly different global stage, particularly as it relates to international trade. The framework itself has not changed in any way, as it is designed to function regardless of the current global situation. The system is all about aligning pillars, and the global changes will require a shift in strategy, which in turn will require and shift in the other three pillars. Culture is the only constant, as a winning culture is independent of global circumstance. That is not to say, a culture cannot be poor, as a bad or toxic culture can ruin any company. However, a good culture can stand in place indefinitely, and is necessary, but not sufficient to form an outstanding company.

With rapidly changing times, both in terms of culture and technology, the need for companies to be equipped for rapid improvement and change have never been higher. The preparation is arduous, but the payoff potential is vast. Trade uncertainty with the United States of America, Canada’s largest trading partner by a wide margin at the time of this writing, means the ability to respond to changes quickly will be a major determinant in a firm’s (whether it be small, medium, or large) success. The methods outlined in the text that follows are designed expressly for the purpose of making

a firm ready for continuous productivity gains and improvements, and achieving this state of readiness will allow the firm to adapt rapidly and successfully with the ongoing changes both the world, and particularly the business world, face.

II. FOUR PILLARS OF PRODUCTIVITY FRAMEWORK

Canadian SMEs represent 99.8% of all private sector firms [1] and there is a tendency in Canadian SMEs to use employee performance as the main productivity metric. When considering only employee performance, however, there is a big risk of missing more meaningful productivity metrics and indicators. Poor metrics mean that the success of any productivity improvement initiatives that the SMEs undertake are soon abandoned or fail to produce intended results. Well-informed SMEs will often take the correct approach to productivity improvement, one that considers multiple metrics at a holistic level, but even these companies see underwhelming results from their initiatives. The reason for the underperformance is missing prerequisites: systematic alignment of strategy, operations, technology, and innovation combined with a winning culture. Misalignment of these key components in almost all cases will hamper or prohibit the success any productivity initiative will result in, regardless of how strong the initiative may be. So, before taking on any productivity improvement efforts, it is highly advised that a firm address the alignment of the components. It should be noted that the four components (strategy, operations, technology, and innovation) have to complement and change with one another, whereas a good or winning culture need not change with a firm's direction, it simply needs to be conducive to productivity in ways that will be discussed below.

The necessity for the systematic alignment of the aforementioned components led to the development of the four pillars of productivity (4POP) framework. As can be seen in the Fig. 1, a strong (conducive to productivity) corporate culture is the foundation on which the four pillars rest. Each pillar represents one of the four components, and they visually demonstrate that without alignment of these factors, productivity comes toppling down. With alignment, however, productivity can be upheld and sustained. Many companies, although fewer on the SME level than in large corporations, have defined strategy, operations, technology (and sometimes innovation) in place. The issue these companies face is that the components are not aligned in such a way that productivity improvements can emerge, and certainly not sustain and grow. 4POP takes a systematic approach for component alignment within a corporation that serves as a bedrock for sustainable productivity gains.

A. Strategy

A firm's strategy guides a firm's decision-making with regard to the manner in which it will compete and in what markets. The reason a company must consult its strategy before making any decision is to insure any efforts it undertakes will not conflict with any other of its efforts. All initiatives and actions at any level must serve the strategy

above all else. While strategy can be extremely complex, at its base level it simply sits somewhere on a spectrum of low-cost leadership to full differentiation. The steps to establishing strategy are as follows: defining a company's mission and vision, conducting a strategic analysis (this will help to clarify where on the spectrum a company is and where it should be positioning itself), select a strategic position, and implement the strategy (assigning accountability for the implementation to improve the chances of successful implementation). With the exception of mission and vision definition, the aforementioned steps should be repeated periodically (at fixed intervals and in the event there is a market "shakeup"). Despite each component being important, strategy is the logical starting pillar since it needs to be established before operation, technology, and innovation can be considered.

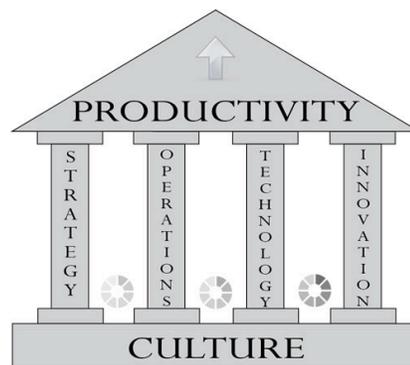


Fig. 1 Four pillars of productivity

B. Operations

Operations focus on the details and practicality of serving the strategy. A firm has to operate within constraints and limited resources; operations are effective management given those limitations. Progression occurs with each subsequent operational decision. Strategy is not entirely rigid, it may change very gradually or in rare exceptions quickly if there are major market changes. Operations differ in that they are highly flexible and when opportunities present themselves firms are much more able to take advantage of them on the operations level. The bigger a firm gets, the less flexibility it has in changing operations. Large supplier contracts, bulk purchasing, and several other factors force large firms to sacrifice operations flexibility for the benefits associated with economies of scale. This point is critical for SMEs, as it is one of the few areas in which they have an advantage over larger firms. Regardless of which strategy a firm employs, it must insure that on an operational level it is seeking efficiency. Productivity and operational efficiency go hand-in-hand; they are both focused on maximizing the output of a given input. Wherever on the strategy spectrum a firm lies, it can always benefit from efficiency in the form of higher profits (whether it means increased volume at existing margins, lower costs, or increased revenues). In terms of when operations must be considered, the answer is both with technology and innovation. Strategy can precede the other three pillars, but those three pillars are too interrelated to consider in sequence, and rather, must be considered in a holistic manner.

C. Technology

Technologies are, simply put, a set of tools. As with all tools, each one has a specific purpose and is conducive to a particular job. Having the tools is necessary but not sufficient. The ability to use the tools effectively is also required, and the more complicated the tool, the higher the skill required to operate it. Firms will have many technologies at their disposal, but the most productive firms will choose technologies that complement their operations, and train their workforce to handle the technologies to their maximum effect. In all companies, but more so in SMEs, selection of the right technology can be daunting and may not be immediately obvious. By establishing a strategy first, and considering technology in conjunction with operations and innovation, that selection becomes slightly less complicated because it eliminates several options and narrows the selection pool.

D. Innovation

The main focus of 4POP is to make SMEs competitive on a global scale; this would not be possible without a strong focus on the fourth pillar: *innovation*. It is possible for a company to stay in the market simply by retaining parity with competitors, but market leadership can only arise when innovation is used to put a company ahead of its rivals. Innovation, particularly *strategic innovation* has to be ingrained in the corporate culture for it to ever become a sustainable and reliable means of outperforming market challengers. The best part of making innovation a part of the culture and work environment is that it does not matter what direction the company takes in terms of strategy. A culture built around supporting and encouraging innovation can endure any change in strategy. With that said, the cultural aspect is just a portion of what is required. Innovation itself must be thought of with operations and technologies in mind. Also, one-off innovation can be expected in any firm, but *continuous innovation* is what a company should be striving for. This is the only way to get ahead and stay ahead of competitors. As such, a company should consider a strategic innovation framework to supplement its innovative culture, and concentrate on aligning it with the remaining core pillars of productivity.

E. Strategy-Operations Relationships

Strategy and operations are critical to a company's competitive prowess, and management needs to constantly ensure that operations are serving the greater strategy whenever said operations are implemented. Operations are, in essence, the execution of the strategy in small steps. It is very common for a company to overlook strategy and simply look at the tactics and operations that face them in the immediate future. While understandable, this is an awful trap for a firm to fall into. Some operations will inevitably clash with one another because they are unguided by a central theme, which is why strategy is needed. Firms that recognize this will outperform those that do not, and it takes a great amount of discipline to always check operations against strategy, especially when there is understaffing that is very common in smaller firms. When there is a strategy-operations

misalignment, a firm must never (there are very rare exceptions) consider revising the strategy to fit operations. Instead, operations must be revised so they are executing the strategy set forth. With that said, strategy is not entirely stagnant. In the long-run, even strategy changes need to be considered. Marketplace changes, especially international competition, often force a firm off of its position on the strategy spectrum as it can no longer compete there. It simply needs to move to a position on the spectrum where it can be more competitive (either by becoming more generic and low-cost or further differentiating to justify a premium pricing). With regard to the strategy and operations relationship, one thing must be kept in mind: productivity gains will be hampered or non-existent if there is misalignment.

F. Strategy-Technology Relationships

Misalignment of strategy and technology can be one the costliest mistakes an enterprise can make. Sufficed to say, investing in the wrong technology could spell doom for a firm in some situations. Conversely, investing in a complementary technology to strategy can produce excellent returns on investment. As was mentioned in prior sections, in the long run even strategy can be flexible. Technology is the only pillar which can actually work in a feedback-loop with strategy, as there are technologies that define a marketplace and measure a market place, and as such introduction of certain technologies could cause a firm to entirely re-define its strategy. For little more than a decade, social media has been a defining characteristic of many firms. The introduction of big data has shown firms there is a goldmine hidden in customer data. Understanding customer behaviour simply was not possible before massive and speedy processing became available. Instead of having to rely on management's and executives' "best-guesses" about what customers want, the opposite to a top-down management and information flow style is now possible. A bottom-up style can now be implemented, where customer-facing workers and the customers' behaviors are monitored, aggregated, and used as part of enterprise resource planning software to aid management in decision-making. The most successful businesses of today are data-driven, and with markets changing faster than ever, this is the only way for firms to remain on top of trends and give the customers what they want, when they want it. There is a need for both quantitative and qualitative data. Technology can handle the processing of quantitative data, but humans are still needed for the interpretation of qualitative data and determining cause-and-effect data trends as opposed to purely correlative relationships. In the coming years, with the exponential growth in technology, strategy needs to be in place simply to insure a firm does not get overwhelmed by new technology introductions, and can focus on the ones most relevant to its current direction.

G. Operations-Technology Relationships

As a firm expands, a complete integration of operations and technology needs to be in place. Technology assists in operational efficiency in several core functions of the firm.

The overarching technology usually in place is known as an Enterprise Resource Planning (ERP) system. Not all firms have such a system, but ones that do allow for a firm to scale and standardize processes. New technology can be used to automate processes that were once manual, or redefine a process for optimal efficiency. An example of how technology changed a process is best demonstrated in the way communication and correspondence has changed over the years in businesses. A little more than two decades ago, people who worked in different buildings would have to communicate via phone. This meant both parties needed to be available at the same time. Answering machine technology solved the synchronization problem, so that people could leave messages as things arose, rather than having to set a time aside for both people to be available. Email actually made mass communication far easier, and company-wide memos could be dispersed at the click of a button. Nowadays, Facebook, Twitter, Skype, Google Hangouts, and numerous other technologies are redefining communication and improving the efficiency with which we communicate. Twitter is interesting in so far as it seeks to improve productivity in the words people choose to communicate: brevity is rewarded by limiting the number of available characters to send in a message (140 characters). The software industry and digital distribution mean that any digital content can be sold globally with almost no effort or overhead whatsoever. There was a time not long ago where physical copies had to be shipped to distribute such content. Such technology is useless in many ways to physical goods producers, and while that may be a simplistic example, the point remains that technology and operations have to be selected in tandem to get the desired results in efficiency.

H. Culture

There are a few necessary components to a productivity-conducive culture. This has to be in place before any of the pillars can be considered, as this is the entire foundation of the framework. Culture is dissimilar to the pillars in that it must be rigid in some aspects; there are required traits that make a culture offer fertility to productivity initiatives. A culture needs a willingness to, and encouragement of, change. It must have an acceptance of calculated risk combined with a tolerance of occasional failures. An unexpected, but necessary, requirement is a flexibility of employee roles (in order to retain workers as change happens they must be adaptable). The final requirement is the ownership mentality, which means every employee from the bottom to the top of the hierarchy feels invested in the company's success. Developing a winning culture is surprisingly the longest and hardest implementation in the framework. It takes a great deal of time and effort to ingrain these principles in the workforce, and norms can form over time by repeated actions that show management values the aforementioned traits. The corporate benefits of such a culture are not limited to sustainable productivity; a strong corporate culture alone can serve as a source of competitive advantage. It can draw the best talent in the industry to seek employment at the firm. It can dictate the

style of decision-making when the firm branches out, even if it does so on a global scale. One final important point on culture is that it cannot be copied. Many have tried and failed to simply take another firm's culture. However, corporate culture must develop organically, with management steering it to have the traits mentioned in the text above. Cultivating a corporate culture is an ongoing process, and is arguably the most important part of the entire framework.

III. RECENT DEVELOPMENTS

In recent months, the world has witnessed a populist movement in United Kingdom, a strong immigration policy change in North America, and a rise of populist parties across Europe. Historically populism was connected to economic downturn; the United States had witnessed such a movement from the Farmer's Alliances in late 1880s because of crop failures, which later resulted in the birth of the people's party, and that populist party produced a presidential candidate in 1892 [2].

But now the scenario is different; the world has almost recovered from the financial crisis of 2008. The United States' economy bounced back after a successful rollout of quantitative easing, and the economy is now growing again like a mature economy [3]. There is a greater abundance of free trade than ever before, and the world is more connected because of the Internet. So, why this is happening now? How can politicians in the western world so easily manipulate the population with tacky, vulgar, obnoxious attitudes? This was typically a strategy used only in developing countries where there is a high illiteracy rate. Today, certain forms of racism and nationalism have become cool again, xenophobia is no longer unacceptable, and fear mongering is a useful tactic to win popularity.

Economic inequality is also rising in many parts of the world. According to Oxfam, eight billionaires own as much as half the world [4]; the richest 1% owns more than all the rest of the world combined [5]. Even in rich countries, the middle class is suffering, "63% Of Americans Don't Have Enough Savings To Cover A \$500 Emergency" [6] In recent years, public figures such as Robert Reich, former U.S. secretary of labor cautioned the world about the widening income inequality with his documentary film: *Inequality for All*; Bernie Sanders became an advocate for the fight against poverty; during his speech in Baltimore he commented that "the life expectancy for someone born in Baltimore's poorest neighborhood is almost 20 years shorter than for someone born in the richest neighborhood." [7] Extreme inequality will affect long term national prosperity and productivity.

Among other things, in recent years the world is witnessing a new chapter of rapid technological growth and many speculate there will be year over year exponential growth of technology for the foreseeable future. There is wider adoption of the Internet of things (IoT), robotics, artificial intelligence, and mobile devices across all industries and all sectors. Today's workplaces are different; manufacturing is vastly different to what it was even two or three decades ago. Companies need to invest in research and development (R&D)

long before production to stay competitive in the marketplace, so the majority of product development cost is no longer incurred on the manufacturing floor. For instance, Apple spent \$10 billion on R&D in 2016, a 30% increase from the previous year [8]. In 2015, Samsung spent \$14.1 billion, Google spent \$9.8 billion, and Amazon spent \$9.3 billion, and so on. [9] Now there are hundreds of tech billionaires across the world, and the hi-tech industries need more talent with more knowledge and advanced degrees, strong quantitative skills, and global business knowledge. As such, there is far less demand for high school graduates.

At the same time, for the first time in history, more women are attending college. “Last year, 29.9% of men had a bachelor's degree, while 30.2% of women did, the [census] bureau reports. A decade prior, in 2005, 28.5% of men had bachelor's degree, while only 26% of women did” [10]. So, what are we going to do with millions of people who failed to keep up with the times? Adding to the problem is a rising living cost, as today it takes two incomes to run a family. “In today's economy, even two-income families struggle to make ends meet” [11]. This is a circumstance that nations worldwide are trying to combat with various innovative strategies. For example, the Canadian province Ontario plans to introduce universal basic income [12], as does Finland [13]. Will the notion of basic income become an obstacle to the growth of productivity, innovation, and entrepreneurship? How will it incentivize the population to work hard and add value to society? Is the old saying “crisis is the mother of innovation” no longer applicable in today's western societies? On the other hand, the proponents of basic income argue it is crucial for poverty reduction and other social wellbeing factors.

Immigration is also a hot topic now, populist leaders use tactics such as bans on certain ethnic groups, ... Just days after the U.S. travel ban for seven Islamic countries, there was a shooting in a mosque in Quebec; many claimed that hate was being exported from the U.S. to Canada. The fact of the matter is, the western world is dealing with an aging population, and the cost of a child has increased. In the U.S. and Canada, the average cost to raise a child before you send him or her to university is around \$250,000 [13], [14]; in some areas that number is much higher. Truth be told, immigrants in America launch more than a quarter of the nation's businesses [15]; there would not be any Silicon Valley without foreign skilled laborers in information technology.

The uncertainty and unpredictability at all different levels are now obvious, which will impact the old way of doing business. The world might even witness more chaos in the coming days or years, and today's chaos might disrupt the harmony of productivity, innovation, and entrepreneurship. However, the question remains, how should businesses navigate around these new barriers, government regulations, etc.? It is time to go back to the strategy map and start over with all four pillars of the 4PoP model.

A. Strategy

Strategy cannot be carved in stone. With today's rapid changes the duration of a strategy has fallen significantly. A

strategy used to last for potentially decades, and that will very rarely be the case anymore. Considering that in the last two years we have seen countries moving towards protectionism and away from free trade, local and foreign markets may need separate strategies. The position a company occupies on the differentiation to low-cost spectrum must factor in tariffs and plan for expected foreign exchange rate changes. The term glocalization refers to having a global identity but with differences based on each location; the same will apply to strategy. Global ethics and values seem to be more diametrically opposed than ever before. The relationship between the United States and Canada, where trade and labor mobility has, for many years been very flexible, is possibly no longer going to be defined by the existing terms of the North American Free Trade Agreement (NAFTA). This not only reflects on exchange and exports, but the mentality held about foreign goods. The subtext of not “buying American” is that somehow the nation is being betrayed if you do buy imports. While this is not supported by economic theory, it does play into consumer behavior, and that must be factored into decision-making.

B. Operations

Despite the duration of strategy having fallen somewhat in the face of uncertainty and rapid change, operational decisions have always required more flexibility and as such are less damaged by increased uncertainty. With the need for multiple strategies (potentially one for each nation exported to or operated in), there, too, needs to be multiple operations. The principle remains the same: strategy and operations must be aligned. However, this is now a bigger task because there are simply more of them. Forwards markets show expected exchange rate trends, and companies must now consider what those trends are before committing to international investments or business. Having operations that were inflexible for short periods (six months to a year) are in many cases no longer viable, and instead, must be flexible and frequently changed based on global event changes.

C. Technology

In the new era of digitization, automation, and the Internet of Things (IoT), it is important to balance between human labor and automation; what can be done with the newly available human resources? Re-allocate them for growth and innovation. This is where the earlier discussion of labor flexibility, and being able to reassign workers to new tasks, becomes relevant. Rather than having employees leave as their jobs become obsolete, reassigning them to new jobs is what should be advocated. This way, employees are willing to facilitate automation progress, rather than hamper it because they see it as a path to unemployment. It is more important than ever to have dedicated staff for technology, even in the smallest of firms, because technology will soon be (if it is not already) the most important determinant of success for a firm in most industries (perhaps with the exception of some service industries). The rapid growth of technology and approach of the “technological singularity) will wipe out existing human job roles. Recently, The Economist indicated that, “By 2037, an estimated 47% of jobs currently done by humans will be

performed by machines. With so much automation to come, what will humans do with their time?" [16]. Overall the new trend of the technological singularity might cause structural unemployment globally; the situation might even get worse if we do not change our education system and how we produce talent and cultivate the workforce.

D. Culture

Human resources development and ongoing training needs to be a big part of establishing a culture of continuous learning and innovation. Employee characters, soft skills, and interdisciplinary approaches to problem solving are an integral part of forming a winning culture. Especially in conjunction with technology, flexibility in job roles has to be a core component of a corporate culture. Despite growing divides in international cultures, and a wide spreading nationalism, companies have to transcend this type of thinking. The corporation must be seen as a team, and everyone on that team should be looking out for the interests of their teammates. The 'name of the game' has been multilateral trade agreements for many years, but this is shifting to multiple bi-lateral agreements instead. In terms of culture, this will again mean more and more international diversity, and while this should try to be overcome by corporate culture, when dealing with customers a 'glocalization' strategy is advocated. Glocalization is a hybrid global-local strategy, where common elements are held throughout the world, but small changes are made based on local preferences and beliefs.

IV. CONCLUSION

Canada has to solve its productivity shortcomings. On a positive note, it is already taking steps in that direction, and the future looks bright as long as certain steps are followed. The 4POP model is as applicable as it has ever been, but as all companies find themselves having to shift strategy with recent changes, the model calls (as it always does) for realignment with technology, operations, and innovation. Even the foundation of culture comes under fire, as country culture of course plays a role in company culture. It is important for firms to maintain the winning cultures they already have, or develop one if they do not.

Along with cultural changes, technology growth is reaching ever higher rates. Keeping up with such growth is both daunting and difficult. This can be addressed by having dedicated staff in the technology department, even if a firm is very small. Technology will continue to make up a greater percentage of a company's operations in almost all industries. It is time for all firms to recognize this, and dedicate resources appropriately.

In terms of cultural changes, we are seeing a move towards protectionism that has not really been a part of widely accepted economic theory in almost two centuries. Bizarre international relations are now becoming the norm. "The PMO's [Prime minister's office] unprecedented new Canada-U.S. relations 'war room', led by Brian Clow, is being lauded by observers as a smart move, created to help coordinate the Trudeau government's quick response and strategy to U.S. President Donald Trump's unpredictable new administration.

There's not been a unit like this set up within the PMO to the best of my knowledge,' said Greg MacEachern, a senior vice-president at Environics Communications and former Liberal staffer. 'Obviously, the prime minister wants to be keeping a very close eye on this. ... It's an unprecedented situation in the U.S. we're watching'" [17]. Today's global economy is bit worrisome, more for some countries than others [18].

The world is experiencing all kinds of negative shocks; world leaders seem to have forgotten that it is easy to burn a bridge and hard to build one. Similarly, it is hard to establish a culture of mutual respect within a company [large or small] and even harder in the region, state, or country. Within a very short period of time, culture has been shifting, norms are now different, and it is no longer abnormal for leaders to insult people based on their background [sex, color, race etc.]. The ripple effect of that is now spreading beyond the borders; we have witnessed extreme effects: the killing of innocents because of their faith, racial profiling at borders, declining passage to people at the border because of their political views, and fundamental civil rights and freedom of speech being at stake. These things that took the world centuries to establish are all of a sudden falling apart almost instantaneously.

Uncertainty is climbing to its highest peak because of political, economic, and social unrest. That will also affect the market; social unrest will make the market more volatile, which will also ultimately affect immigration, inflow and outflow of labor, global trade, and economic growth. Technological growth and innovation go hand in hand with productivity; talent mobilization and growth are crucial for strategic and continuous innovation. Can government regulations be used to boost sustainable productivity and a culture of innovation? Let us hope so. Canada has invested in technology assistance for smaller firms when that was of the highest priority. There is no reason to doubt it will recognize the regulation and technology needs coming today, and address them accordingly. Meanwhile, it is up to businesses to ensure they do everything in their power to maximize their chances of success. For most firms that will mean following 4POP after making strategy revisions, and then working their way towards continuous and sustainable productivity and innovation gains.

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