Microsoft

August 5, 2016

Via Email
finapbc-cpb@parl.gc.ca

The Honourable Wayne Easter P.C., M.P.
Chair, House of Commons Standing Committee on Finance

Dear Mr. Easter P.C., M.P.

Re: Pre-Budget Consultations 2017

Please accept Microsoft Canada's submission for the 2017 Federal Budget.

We welcome the opportunity to work with the Government of Canada and other stakeholders on building Canada's capacity for innovation and the economy.

Should you have any questions concerning Microsoft Canada's submission, please do not hesitate to contact me.

Yours truly,

Janet Kennedy
President
Microsoft Canada Inc.

Microsoft Canada Inc.

2017 Pre-Budget Submission

August 5, 2016

EXECUTIVE SUMMARY

Microsoft Canada commends the Government of Canada's bold innovation agenda and urges the Government to enable its rapid execution within an affordable fiscal framework by leading the way in public cloud adoption. Experience has repeatedly shown that public cloud solutions allow governments to access far greater computing power, improve data availability and resiliency, and enhance security, all while reducing the Government's information technology (IT) costs. The benefits for the Government of Canada would be numerous. Microsoft Canada stands ready to work with the Government and other stakeholders to transform the Government's service delivery models, empower Canadian innovators, and strengthen our economy for the benefit of all Canadians.

ABOUT MICROSOFT

Our strong Canadian presence

Microsoft's mission is to empower every person and every organization on the planet to achieve more. Our mission is grounded in the fundamental belief that technology should be a tool that serves people by empowering them to achieve success as they define it. It is this mission that drives us each and every day to reinvent productivity and business processes, build the intelligent cloud platform, and create more personal computing.

Microsoft Canada Inc. was established in 1985 as the Canadian subsidiary of Microsoft Corporation (Nasdaq "MSFT"). We are headquartered in Mississauga, Ontario and have nine regional offices that provide nationwide sales, marketing, consulting and local support services in both French and English. We have eight retail stores in Canada that afford us the privilege of personally serving Canadians, and have established two data centres in Canada from which our enterprise cloud services are provisioned for the benefit of Canadian private and public sector customers. In addition, our growing team of 500 engineers at the Microsoft Vancouver development centre in Vancouver, British Columbia is developing some of Microsoft's most important mass-market products for the global market.

Supporting opportunities for Canadian youth

At Microsoft Canada, we believe that we all succeed when Canada's youth succeed. Through our YouthSpark program, we partner with non-profits to help them bring coding programs to children and youth, focusing on engaging girls with technology and providing opportunities for children and youth from underserved communities. We also believe in the promise of Canada's Indigenous youth, supporting the expansion of Right To Play's PLAY program to Indigenous communities in B.C. though a $3,000,000 (USD) grant.

Since we recognize that helping Canadian youth succeed requires a coordinated strategy and action, we have partnered with the Information and Communications Technology Council to develop a National Digital Talent Strategy. The strategy proposes concrete actions that

governments and industry can take to position Canada's young people, and indeed all Canadians, for future success.

INNOVATING IN A TIGHT FISCAL ENVIRONMENT

Empowering the government to do more with less using the public cloud

We commend the Government of Canada's renewed focus on driving innovation, both in the private sector and within its own operations. We are enthusiastic about the Government's innovation agenda, but also appreciate the tight fiscal constraints within which it will need to be implemented. We believe the Government's agenda could be enabled, within tight fiscal constraints, by leveraging hyper-scale, public cloud solutions.

Experience has repeatedly shown that public cloud solutions allow governments to access far greater computing power, improve data availability and resiliency, and enhance security, all while reducing the Government's information technology (IT) costs. The benefits for the Government of Canada would be numerous:

More scalable resources to power progress on core objectives. Public cloud solutions would allow government departments and agencies the opportunity to focus on key public priorities, such as facilitating a single window for Canadians to access the services they need and want from their government, enabling the acceleration of data-intensive research and analysis, and making open data sets available to the private sector that could be leveraged by Canadian start-ups and businesses to develop new insights and business models.

By way of example, the Canadian Broadcasting Corporation/Radio-Canada used Microsoft's Azure cloud service on October 19, 2015 to deliver live election results to Canadians via an application on their mobile device, tablet or personal computer. Microsoft's Azure cloud service enabled the CBC to scale their infrastructure across three different geographical regions, utilizing close to 1,300 compute cores to serve over 3.6 billion requests over a six-hour period with peaks of over 800,000 requests per second.[1] Despite the historic election results, the night was uneventful from a technological perspective. All of this was made possible without additional capital investment on our customer's part; and, they paid only for what they used to deliver the experience – a negligible fraction of the cost it would have taken to deliver that solution through a traditional on-premises environment.

Innovation with cost savings, robust privacy and security. Our private sector customers in some of the most sensitive industries - where privacy and security are absolutely essential - are also leveraging the cloud. TD Bank is a great example of a Canadian financial institution at the leading edge of innovation. They have adopted Microsoft's Office 365 productivity suite to move

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[1] Tardif, Byron. *Canadian Broadcasting Corporation/Radio-Canada leverage Azure for smooth election coverage.* Microsoft Corporation. October 22, 2015. Retrieved on August 2, 2016 from azure.microsoft.com.

98,000 employee mailboxes to the Microsoft Cloud, reducing their costs to provide email to each employee by 50%.[2]

Breakthrough insights from data, more affordably. The immense scalability and affordability of cloud storage, computing and big data analytics is already being put to good use by researchers. DNA sequencing analysis can unlock medical breakthroughs, but it requires supercomputing resources and immense data storage that many research institutions lack. Virginia Tech is currently using the Microsoft Azure cloud service to access DNA sequencing tools and resources on a cost-effective basis, accelerating advancements in their medical research. They are not only analyzing data faster, but more intelligently as well.[3]

Data resident in Canada with local Microsoft data centres. Like the Government of Canada and many of our enterprise customers in the private sector, we understand the importance of data privacy and security to Canadians. For this reason, Microsoft established two data centres in Canada from which our enterprise services are provisioned. This assures Canadians that their data is backed up and stored solely in Canada. And, as with our existing global network of 100 data centres, the operation of these data centres are carbon neutral.

Leveraging the cloud to simulate private sector competitiveness and growth

The potential benefits of public cloud adoption extend well beyond the operations of the Government of Canada. Canada has tremendous potential owing to, among other endowments, its well-educated population, diverse and inclusive society, and abundance of natural resources.

Any strategy that seeks to stimulate economic activity and the growth of Canada's private sector must address small and medium-sized (SMEs) businesses. SMEs currently dominate our business landscape, employing 9 in 10 Canadians and generating almost 40% of Canada's gross domestic product.[4] In order to grow the economy and create good, high-wage jobs, we need to support the growth of Canadian SMEs: growing more small businesses into medium businesses, and more medium businesses into large businesses.

There is a wealth of untapped opportunity available for SMEs through the adoption of cloud solutions that could help strengthen and expand this important sector of the Canadian economy. The Government of Canada can lead the way for Canadian SMEs by adopting the cloud in its own operations, demonstrating the delivery of new services to Canadians at a lower cost. And, by adopting the cloud for its open data initiatives, the Government can directly help Canadian SMEs access data they can use to develop new applications and business models that can be monetized by them to drive growth within our SME sector.

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[2] Hilson, Gary. *Moving email to the cloud is just the beginning for TD Bank*. ITWorldCanada.com. November 11, 2015. Retrieved on August 2, 2016 from www.itworldcanada.com.

[3] *University Transforms Life Sciences Research with Big Data Solution in the Cloud.* Microsoft Corporation. August 21, 2014. Retrieved on August 2, 2016 from customers.microsoft.com.

[4] *Key Small Business Statistics - August 2013.* Statistics Canada. August 2013. Retrieved on August 2, 2016 from www.ic.gc.ca.

MOVING FORWARD: RECOMMENDATIONS TO FACILITATE CLOUD ADOPTION

The cloud is a powerful tool that is currently enabling digital transformations and innovation abroad and within select sectors of Canada's economy. In order to achieve the Government of Canada's bold innovation agenda, the Government must position itself to adopt this tool in its own departments, agencies and research facilities. We recommend adopting a procurement approach that reduces friction in the acquisition and deployment of solutions and maximizes the range of options available to the Government of Canada. This can be achieved through the following measures:

1. ***Adopting a preference for public cloud services that are commercially available at scale over government or private clouds and managed service models.*** This is critical to ensuring that the Government benefits from the economies of scale, flexibility and on-demand scalability of cloud solutions. Similarly, adopting a procurement preference for currently available services, over services that have not yet been created, is the only way to avoid the risks and costs of procuring custom solutions that are unproven;

2. ***Maximizing the amount of government data that is moved to the public cloud.*** This can be achieved by immediately moving commodity workloads to the cloud and adopting a data classification process and taxonomy that will inform which data can be moved to the cloud and which needs to remain on government premises because of its sensitivity to national interests;

3. ***Avoiding custom technical, security or other requirements when procuring cloud services.*** Rather than attempt to create new requirements for each procurement, the Government should align its requirements with desired outcomes and assess whether existing national and international standards and certifications meet the Government's needs; and

4. ***Updating existing procurement vehicles to enable consumption of public cloud services.*** Public cloud services generate immense value for their users by virtue of the scale of those services. That scale, which enables extraordinary investment in features, service resiliency and security, is only possible through standardization of the service. Since the terms and conditions reflect how the service operates and is delivered, they cannot be replaced by existing standard government procurement terms which do not align with the service delivery model. The Government's service imperatives and risk tolerance can, and should, be addressed within a contractual framework that reflects the service delivery model.