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About Tech Manitoba

With over 160 corporate members representing 10,000 plus employees, Tech Manitoba is a thriving, member-based industry association for technology in the province. Through collaboration, education and promotional initiatives Tech Manitoba brings people together to share skills, explore ideas, build, and grow a stronger tech sector.

Introduction

Our economy and way of life has changed dramatically this year. Uncertainty has risen and is likely to remain high until the COVID-19 vaccine can be widely distributed. Hopefully more positive developments will be forthcoming but some of these trends are unlikely to be reversed.

One of the biggest shifts has been towards a digital economy. Organizations have shifted their workforce to working from home and e-commerce has become a must for most businesses. This shift is perhaps no better exemplified by Shopify becoming the most valuable company in Canada. Transitioning online and to e-commerce can be a challenge for many SMEs, and we encourage government to look at programs such as Digital Main Street that can make a difference for our SMEs today and tomorrow.

Also, unlikely to reverse is the growth of the information and communication technologies (ICT) industry. Since 2015 ICT has been the third fastest growing industry in Manitoba behind cannabis and agriculture. With cannabis being a new sector and the volatility of commodity prices, ICT is perhaps best positioned to lead Manitoba's growth in the decade to come. In 2019 ICT became a \$2 billion industry in Manitoba. If the growth rate from 2018 to 2019 is just maintained (let alone increased), ICT will add an additional \$1 billion plus to Manitoba's GDP on annual basis by 2030.

Those economic impacts are just for ICT, but almost every industry and company is making the shift to digital right now. Organizations are applying technology in multiple ways to become more productive and efficient. Software developers for example are working in the insurance, manufacturing and creative industries, their impact is not just limited to the technology sector.

Just as the positive effects go beyond technology companies, so do the positive impacts on the provincial economy. Technology is easily exportable, it doesn't have to be put on a truck and shipped elsewhere. Marginal costs of production are typically much lower making it easier for technology companies to rapidly expand and grow. One only has to look at the myriad of technology companies that have gone from idea stage to hundreds (if not thousands) of employees in a few short years. The best part of this is the benefits that accrue back to Manitoba. Technology or software created here and exported elsewhere creates wealth, prosperity and jobs right here in Manitoba. That leads to increased tax revenue that can help pay for the social services we rely on everyday.

Our budget submission is focused on the key issue of access: access to customers, access to talent, and access to capital. Access to customers is the primary issue, as talent and capital help our local companies get those new customers. These are three critical legs of the stool and we need them to all be working together if Manitoba technology companies are to succeed and grow.

Recommendations

1. Access to Customers

Accessing new markets is critical to the growth of local technology companies. With less than 1.4 million people Manitoba is a small proportion of not only the Canadian but the North American and global markets as well. The appetite for technology is growing and our local companies must access these new markets and customers. This is the biggest challenge they face and is the focus of our submission.

There is existing momentum that can be built on. The recent report *Towards a Trade Strategy for Manitoba* showed digital services as having the fastest trade growth amongst all 14 clusters that were measured. That trade supports good, high-paying jobs as the digital services sector had the second highest income levels behind aerospace, a cluster that is obviously undergoing major challenges with COVID-19.

Forging stronger ties with the federal trade commissioner services is just one opportunity. Manitoba could also create its own offices to assist with boots on the ground in large key markets. Saskatchewan is opening new trade and investment offices in Japan, India and Singapore in early 2021 for example. Alberta has 13

international offices with one more in Houston on the way. To keep up with our western neighbours we have to increase our global presence.

As one of the largest purchasers in the country, governments can play a significant role in stimulating the growth of technology companies as well. The U.S has been a prime example of the wealth governments can help create by acting as a purchaser. That trend is likely to continue under a Biden presidency. During the recent campaign he committed \$300 billion in new investments into research and development of breakthrough technologies such as 5G and AI. More focused government purchasing could help companies not only get through but grow through the COVID-19 induced recession.

First customer programs are a potential tool that can help stimulate jobs and economic growth. The recent federal Build in Canada Innovation program allowed for the targeted sale of innovative products and services to federal departments with a \$500,000 limit. The State of Michigan also has a robust first customer program that extends beyond government and includes help with sales into new markets. To date Michigan's program has created over 800 jobs and helped companies raise an additional \$163 million in external capital. On a smaller scale Saskatchewan's MIST program (Made in Saskatchewan Technology Program) provides contracts of up to \$10,000 for smaller companies to have their technology piloted by the provincial government.

A joint industry-government working group could be created to look at barriers to growth and ways to increase local technology procurement by government. This working group should have a targeted mandate and timelines with clear goals and objectives. The recent First Procurement Strategy and Action Plan out of New Brunswick provides a good model of some of the initiatives this working group could explore. It could also eventually lead into a more joint planning such as done in North Dakota. Every two years a Statewide IT Plan is published that sets out the goals, objectives and initiatives that the state will focus on. North Dakota's plans are jointly developed by technology leaders within government and the state's education system.

Increasing Manitoba procurement could speed up the economic recovery as well as enable government to operate faster and more efficiently in the future. Like all organizations, the provincial government has had to undergo a digital transformation over the past few months. Ontario, for example, has established a Future State

Modernization Committee, a cabinet committee focused on making their public services more customer-focused, digital and data driven. Tech Manitoba and its members are ready and willing to help with such a transformation in Manitoba as well.

2. Access to Talent

Technology companies rely on ideas and a skilled workforce in order to generate sales and revenue. They don't have factories, they instead have software developers and coders to create the networks and applications that drive their sales and growth. Without a skilled workforce and access to high-quality talent Manitoba technology companies and the province will struggle to survive in the ideas economy. The need for a high-skilled technology workforce is readily apparent as the recent *Towards a Trade Strategy for Manitoba* report showed digital services workers having the highest education levels.

This was an issue before COVID-19 as the unemployment rate for software developers over the past 5 years was approximately only 2%. The pandemic is poised to make things even more difficult. A rise in working from home could lead to companies poaching Manitoba talent as they are cheaper to hire than talent in other areas. COVID-19 has underscored the need for all organizations to have (at a bare minimum) good IT supports in place so competition for existing talent is likely to increase bidding up wages.

In the short-term speeding up processing timelines and increasing immigration levels will have a positive impact. The provincial government has looked at tighter timelines for permitting, a similar effort could be made with immigration in partnership with the federal government. As human capital will be the main driver of economic growth going forward, we need to speed up timelines to get people into our province faster.

Increasing post-secondary capacity will also help in the long-term. The recently created cybersecurity centre of excellence at MITT provides a platform for Manitoba to build around. In partnership with our leading private sector companies we have the potential to become a global leader in this space. The global cost of cybercrime is predicted to hit \$6 trillion in 2021, a simply staggering sum. In 2017 alone Canadian businesses spent over \$8 billion on cybersecurity salaries, contractors and consultants. That number is only going to grow, and we are well-positioned to capitalize on the opportunity. It is also a prime example of a sector where the work

can be done here and then exported globally. These are good, high-paying jobs that are only growing in demand. Manitoba should look to plant a flag and aim to become the global cybersecurity leader.

Increasing the amount of work integrated learning opportunities will also help create more workforce ready tech talent. The Pembina Trails Early College program provides a prime example. Starting in grade 9 students dedicate half a day to computer science studies. In grades 11 and 12 they move over to MITT where they can graduate with both a post-secondary and high school diploma. These students are the definition of workforce ready and are prepared for whatever the world throws at them. Expanding the availability of this type of program to more schools will pay dividends now and into the future.

Compounding this issue is all jurisdictions are in a similar race for tech talent. Demand is increasing globally and we can't immediately create the necessary supply of tech workers. Increasing worker re-training and re-skilling programs could help fill some of these gaps. COVID-19 has led to mass layoffs and some of those jobs won't be coming back. According to the World Economic Forum half of all employees will require reskilling by 2025. Ideally this retraining will require months not years to get people back into the workforce.

Individuals need to be aware of the jobs available and the training paths required to get there. Shortening the time someone spends unemployed benefits everyone in the ecosystem.

3. Access to Capital

Accessing capital has been a longstanding issue for technology companies. Traditionally economic value has been derived from physical assets such as buildings, machinery and land. Technology companies rely less on hard assets and instead their focus is on software, data and other intangible assets.

For example, Uber has a market capitalization of billions of dollars, yet they don't own any vehicles like a traditional transportation company. Airbnb's market cap is more than the Marriot, Hilton and Hyatt hotel changes combined yet they don't own any physical properties unlike a traditional hotel chain.



Financial institutions typically rely on hard physical assets and inventory when they allocate debt and equity. That traditional model just doesn't work for tech companies.

Tech Manitoba was extremely pleased to see in the recent Throne Speech that the Premier's Economic Opportunities Advisory Board will be "asked to examine the need and role for a provincial venture capital investment fund to give Manitoba businesses better access to innovative financing to bridge established private investment capital sources."

Some good opportunities are already being explored. For example, as the province looks at pooling the buying functions for pension plans, a portion of those savings could go towards venture capital. The estimated annual savings of pooling the buying functions is \$200 million which could massively kickstart venture capital in the province through partnering with the private sector.

Other provinces have used a similar model to great success, such as Caisse in Quebec. Caisse has partnered with over 750 companies in Quebec and had investments and commitments of \$3.3 billion in 2019. Saskatchewan provides another example as Connexus Credit Union recently created a \$30 million fund. Half of that money came from Conexus and the other half from institutional investors.

Conclusion

The COVID-19 pandemic has underscored that the future will be increasingly digital driven. Manitoba already has several strong technology companies that are leaders in their respective areas. Their growth over the past few years has been tremendous, and we are also home to many promising startup technology companies. Our training and education system's capacity is also increasing. Now is the time to capitalize on these existing assets and momentum to accelerate growth in the technology sector.

Key to the growth of the sector now and going forward will be access to customers, access to talent, and access to capital. These are three critical legs that hold up the technology stool in Manitoba and we need them all working to ensure our companies can grow. The opportunities ahead are tremendous. Saskatchewan's

growth plan sets a goal of tripling the growth of their technology sector by 2030 and there is no reason Manitoba cannot meet or exceed that same target.

On behalf of its over 160 members representing 10,000 employees, Tech Manitoba appreciates the opportunity to present a budget submission and is ready and willing to help build a better Manitoba.

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