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October 10, 2018



# Let's Talk Science Talks Canada 2067



**Bonnie Schmidt**  
C.M., Ph.D., President & Founder,  
Let's Talk Science

Science, technology, engineering, and math (STEM) learning can help young Canadians build the critical skills they need to participate meaningfully in a digital economy, including an understanding of scientific methods, numeracy, digital literacy, and problem-solving. However, to meet changing economic and citizenship demands, Canada needs to revisit how and what we teach, how students learn, and who inspires them to engage with STEM and shows where it can take them.

Recognizing this, Let's Talk Science initiated Canada 2067 — an ambitious national discussion to develop a shared vision to improve STEM learning. The goal? To develop recommendations that align efforts of education stakeholders, community organizations, industry, governments, and parents to help our systems adapt to the demands of a changing global economy and prepare our

youth to compete, contribute, and thrive in a world of rapid technological change.

Leading the way, Let's Talk Science has embraced the Canada 2067 recommendations by developing new tools, activities, and resources in support of an integrated approach to digital literacy which has been recognized as critical to the successes of our future economy. Living Space — a citizen science action project launching this fall — will challenge youth across Canada to examine the environmental conditions in their classroom and compare them to those reported by David Saint-Jacques onboard the International Space Station. Using sensors and coding, classrooms will develop and use a combination of critical thinking skills and STEM competencies to report their findings. To find out more about the project visit [letstalkscience.ca/livingspace](http://letstalkscience.ca/livingspace).

To review the Canada 2067 recommen-

dations and see what you can do, visit [canada2067.ca](http://canada2067.ca). We all have a responsibility to prepare our youth for their future so that Canada is well-positioned as a leader in the digital economy.



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# Innovation and Education at Microsoft Canada

Kevin Peesker, CEO of Microsoft Canada, speaks to how Microsoft is setting the tone for the future of Canada’s digital economy



Kevin Peesker  
CEO,  
Microsoft Canada

Technology looks to be a key driver of Canada’s future growth and educating talent pools should pay dividends for innovating the digital economy. Despite the optimism, Canada’s readiness for disruption via artificial intelligence (AI) shows room for improvement. A study by McKinsey & Company found 89 percent of Canadian business leaders believe it will create major positive change in three to five years, yet only 34 percent have adjusted their long-term strategies to see AI’s potential benefits. Teaching the right tech skills today is crucial to positioning the workforce to thrive in tomorrow’s evolving landscape. “Canada’s tech industry must work closely with academia and policymakers

to ensure that Canadian tech talent can compete on a global scale,” says Kevin Peesker, CEO at Microsoft Canada. “We see Montreal as the epicentre of deep learning engineering and research. In B.C., we are actively supporting the Cascadia Innovation Corridor which opens collaboration and economic development opportunities between Vancouver and Seattle.” Customers and partners emerging from the country also vary across industries, with agriculture, retail, healthcare, and tech organizations ultimately enabled by AI innovation. **Reaching out** To follow through with the commitment to securing Canada’s digital future, Peesker believes the focus should go beyond the next five years. Learning how to code is beginning to form the backbone of this process, although most students aren’t finding the opportunity to do so in their schools. “In schools across the country, we have an incredible network of educators that are supporting our mission and bringing technology and coding into the classroom,” he says. “Coding doesn’t just end in the classroom, and we have a great set of partners that help us scale STEM awareness to as many young people as we can. Only one in 10 young Canadians

reports participating in coding or programming activity outside of school.” Peesker says the company has reached over 56,000 young people, 50 percent of whom were girls and 80 percent underserved and Indigenous youth. Microsoft has worked with partners travelling cross-country offering workshops, while the company’s stores are also holding STEM workshops of their own for children, parents and teachers. “We have an obligation as technology leaders to equip Canadian youth and STEM professionals with an evolving set of digital skills — but we need the entire community to come together to support this as well,” he says.

Ted Kritsonis

“Canada’s tech industry must work closely with academia and policymakers to ensure that Canadian tech talent can compete on a global scale.”

# Advanced AI Tech May Change Canadian Jobs for the Better



John Weigelt  
National Technology Officer,  
Microsoft Canada

Artificial intelligence (AI) is a common buzzword, yet it’s not widely understood publicly, despite the possibilities inherent in its vast potential, says John Weigelt, Microsoft Canada’s top tech executive. As the National Technology Officer at Microsoft Canada, Weigelt believes AI is a broad term that encompasses sub-categories like machine learning, automation, and neural networks, among others. “There’s a need for the skills and ability to always be learning and understanding how these tools can impact the business or organization you’re in,” he says. “We don’t see AI replacing humans — we see it complementing humans and making them better.”

**When opportunity knocks, who answers?** A physician working in tandem with AI can find a tumour with better accuracy. Self-driving trucks that give human operators more responsibility can act as brand ambassadors on the road through upselling and loss prevention. Weigelt equates these two examples as “repurposing” jobs with AI — similar to the expanded role tellers now play in banks, despite the presence of ATMs. “We’re involved with four of the five super clusters where the federal government is investing \$950 million in what’s next in technology,” says Weigelt. “We are trying to encourage people to do something new or explore something new each day. We’re helping our customers — both individuals and businesses — understand how AI can help them.” The Information and Communications Technology Council (ICTC) projects there will be over 200,000 vacancies in digital talent alone, and Weigelt believes Canada has a unique position from an AI thought leadership perspective. “We see that transformation happening across the community, and there’s going to be a need to learn and understand these tools.”

Ted Kritsonis

# How STEM Tools Bring Innovation to Life in the Classroom

**New, innovative technologies focused on STEM education are breathing new life into the classroom**

Kids have long been avid content consumers, but thanks to technology-inclusive classrooms, they’re also developing all the skills necessary to become dynamic content creators. Teachers utilizing new technologies to enhance the STEM education experience are finding that enhanced learning comes with more engaged students. By learning skills like coding, robotics programming, and video game development, students build their own hands-on projects in the present, with a look toward the future. As an additional benefit, technology in the classroom supports a level playing field by providing access to tools that students would not have otherwise been able to experiment with at home. “From a teacher’s point of view, we strive to have our kids be creators and makers instead of just consuming what someone else has made in another part of the world,” says Benjamin Kelly, a technology teacher at Caledonia Regional High School in New Brunswick. “If you put them into the water — they swim. By the time they hit grade nine, they’ve become legitimate game developers.”

**Higher learning** Kelly cites Minecraft as a prime example of technology-derived learning due to the STEM lessons inherent in the popu-



Benjamin Kelly  
Technology Teacher,  
Caledonia Regional High School,  
New Brunswick

lar game. Beyond game development, his students have been learning chemistry through it. This is the mark of a different era. Whereas Microsoft Office applications like PowerPoint and Excel were hard sells in the past, students are now finding more inclusive and innovative tools in products like the Xbox and HoloLens. Coding language has only enhanced the existing robotics in class. “I can now say I have a full-blown engineering program at my school because I have a HoloLens that allows us to do amazing things and bring them to life in the classroom,” says Kelly. “The whole purpose of school, in my mind, is to find kids’ passions and support them, so they can find a career that they love.”

Ted Kritsonis

# Microsoft’s Canadian Innovation Footprint

Microsoft Canada is investing more than \$2 million this year in programs, courses, OpenHacks, and resources to help developers and data scientists update their skills. In addition to this, the software giant is helping students, entrepreneurs, and professionals build their business and discover new solutions to complex problems

## BRITISH COLUMBIA

**Vancouver, BC** - The Cascadia Innovation Corridor between Vancouver and Seattle provides a unique opportunity to create social and economic opportunity for the nearly 12 million people who live in Seattle and Vancouver, enabling better collaboration between universities and research institutions.

## ALBERTA

**Calgary, AB** - Microsoft is working with the Missing Children Society of Canada to rebuild and improve their Most Valuable Network platform, which sends time-sensitive alerts and information to Canadians to help recover missing children across social media.

## MANITOBA

**Winnipeg, MB** - Farmers Edge, a global leader in decision agriculture, services over 22 million paid product acres worldwide with precision digital solutions that combine cutting-edge machine learning and artificial intelligence, powered by Microsoft Azure, to allow farmers to produce more with less.

## QUEBEC

**Montreal, QC** - Microsoft is a technology leader investing significantly in AI: acquisition of Maluuba, \$7M in research grants to University of Montreal and McGill, partnership with Yoshua Bengio, investment in Element AI hub, and doubling the size of Microsoft Research Montreal by 2019.

## NEW BRUNSWICK

**Moncton, NB** - Microsoft Innovative Educator Expert, Ben Kelly, integrates Microsoft technology into his curriculum to build digital literacy in K-12.

## ONTARIO

**Toronto, ON** Microsoft is the first to announce the opening of Canadian Cloud regions in Toronto and Montreal, delivering a trusted, complete cloud service to power Canadian businesses.



# Diversity and Inclusion are Core to Building a Successful Team



**Cherise Mendoza**  
Head of HR,  
Microsoft Canada

tering a more diverse and inclusive environment is such an important part of my job as the Head of HR at Microsoft Canada. We know that our culture is critical to attracting and retaining top talent and, ultimately, creating cutting-edge technology solutions that help our customers achieve more. We know that to create an irresistible culture where our employees can realize their full potential, every person needs to feel like they belong — and be able to contribute with their full and authentic selves.

## With authenticity comes innovation

Diversity is more than just a cultural tenet for Microsoft, it drives everything we do. We can't build effective solutions if our teams don't reflect our customers and their

“ We know that to create an irresistible culture where our employees can realize their full potential, every person needs to feel like they belong — and be able to contribute with their full and authentic selves. ”

customers. Canada is an extraordinarily multicultural market — it's one of the things that make this country great. If our teams don't understand how diverse groups think, make decisions, and interact, how can we build solutions for them?

It is my job to ensure we're implementing Microsoft's global diversity and inclusion (D&I) strategy here

in Canada. We actively support Women @ Microsoft and GLEAM, a resource group for Microsoft's LGBTQ+ employees. We celebrate Pride and Black History Month and sponsor Canada's Special Olympics team. Employees with accessibility needs can take advantage of the range of accessibility features built right into Windows and Office 365 — features that are getting smarter every day through AI-powered technology. We've even skinned our elevators with D&I decals — a small gesture on the surface, but an indication that we value diversity and discuss it openly.

We do this work not only because we believe it's important to serve our customers. It's also important to do good in the world.

The Information and Communications Technology Council (ICTC) estimates that women account for just 25 percent of information, communication and technology positions and that number has remained basically unchanged for the last decade. This means that men outnumber women at a ratio of three to one in the high-value STEM sector — the jobs of tomorrow. At Microsoft, female leaders make up half of our Canadian Leadership Team. We're proud of that but we know we can't rest on our laurels. Expanding the talent pipeline for a new generation of work is a key part of our D&I strategy.

Our commitment to diversity and inclusion means creating an environment where everyone feels included and valued. Fostering this sense of inclusion and community will, in turn, create an environment that can help us fulfill our company mission to empower every person and organization on the planet to achieve more. This is an ambitious goal, but one we are committed to achieving.

*Cherise Mendoza*

## How Microsoft Technology Enhances Accessibility and Inclusivity



**Ricardo Wagner**  
Senior Product Marketing Manager & Co-Lead,  
Disability Initiative, Microsoft Canada

Currently, 15 percent of the world's population lives with a disability, whether it's situational, temporary, or permanent. Invisible disabilities — such as colour blindness or a mental health condition — affect 70 percent of the population. It's more important than ever to create inclusive environments in order to give everyone an equal opportunity for success.

## Re-imagining accessibility

Technology has the power to create an environment for everyone to bring their best to the table. “At Microsoft, accessibility is at the core of our products,” says Ricardo Wagner, Senior Product Marketing Manager and co-lead for the Disability Initiative at Microsoft Canada. Microsoft's inclusive design strategy means that from the early stages of a product's design, researchers, developers, and engineers recognize any aspect of the software or hardware that might pose a problem for those with disabilities and make changes to ensure it works for all. “We're creating products and solutions that empower people and organizations

on the planet to achieve more,” Wagner says.

One of these solutions is Eye Control — a solution already embedded into every Windows 10 system — which allows people living with physical paralysis to use their computer through eye-tracking and speech-to-text technology. Microsoft's speech-to-text software is a perfect example of an inclusive solution designed for extreme disabilities and that also provides solutions for the greater population. In an increasingly globalized workforce, speech-to-text programs can be used to communicate with colleagues in any language.

Although three out of 10 employees in the workplace live with a disability, many employers remain unaware of their limitations. Creating a diverse workforce needs to start with C-suite executives understanding various disabilities and championing inclusive solutions. Technology can help us do things differently.

*Melissa Vekil*

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“ We're creating products and solutions that empower people and organizations on the planet to achieve more. ”

## The Gender Skills Gap in STEM is Greater Than You Think

Fortunately, Microsoft is working to provide opportunities for girls and women to excel in the field through their global diversity and inclusion strategy.

**57%**

of girls say they are very to extremely interested in digital technology careers compared with 72 percent of boys.

Globally, female students only represent 35 percent of all students enrolled in STEM fields. Female enrollment is lowest in engineering, manufacturing and construction, natural science, mathematics, and ICT fields.



By 2021, employment in Canada's digital economy will reach

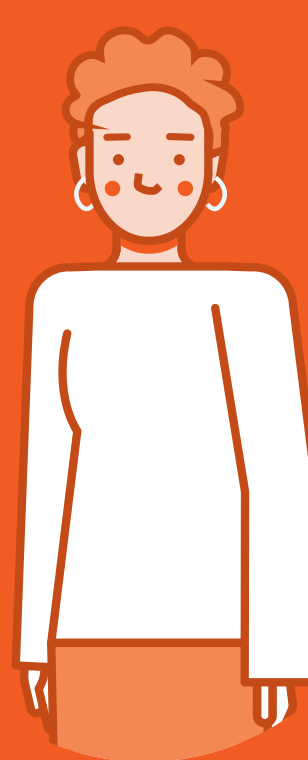
**1.6 million**

creating approx. **216,000 new vacancies for digital talent**

The ratio of men to women employed in ICT<sup>1</sup> positions is **3 to 1**



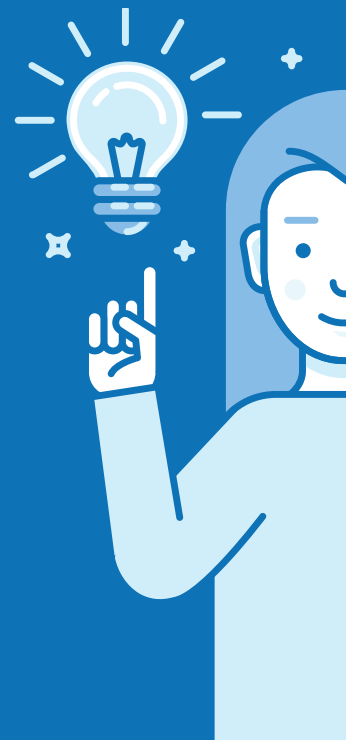
<sup>1</sup> Information communication technology



In the last 10 years, new businesses **with at least one female** founder outperformed businesses with all-male founders

**40%**

of private businesses are currently owned by women and have started successful businesses at a faster rate than ever before





## MOVING THE DIAL WITH

## Jodi Kovitz

As founder and CEO of #movethedial, an organization that aims to increase the participation of women in the tech industry, Jodi Kovitz is a dynamic force in Canada's tech scene. Since its inception two years ago, #movethedial has scaled rapidly into a global movement and a community of thousands.

But Kovitz' journey to success involved many twists and turns. Seven years into a successful law career, she realized she wasn't making the kind of impact she wanted to. "I felt like I'd lost my way," she says. "I forgot my sense of purpose."

Armed with an entrepreneurial spirit (Kovitz started her first company at age 16), her infamous "Just Say Hello" philosophy, and guidance from inspiring mentors, she carved a brand new path. Kovitz credits her success to discipline, hard work, and the numerous mentors in her life. "My life has been a series of moments of listening to people who truly believe in my success," she says.

After five years as Business Growth and Innovation Lead at Osler, Kovitz made her jump into Canada's tech scene as the CEO of AceTech Ontario (now Peerscale), a non-profit organization connecting CEOs and leaders of tech scaleups. It was there she fully realized the sector's problematic gender gap and felt inspired to create change.

We spoke to Jodi Kovitz about a career in tech and why female empowerment is the key to the future of Canada's digital economy.

**Mediaplanet** What drew you to a career in technology?

**Jodi Kovitz** There were a few distinct moments. In late 2017, I had the opportunity to speak in front of 130

"My life has been a series of moments of listening to people who truly believe in my success."

tech leaders. I looked around and realized that only about three percent of the leaders in the room were women. It was a stark difference from my experience in the legal industry, where I was surrounded by powerful female leaders. Standing in that room was a wake-up call for me to affect change and it's what inspired me to start #movethedial.

**MP** What are some of the challenges facing the industry?

**JK** Despite being one of the fastest-moving and fastest-growing industries, the tech sector still has a long

way to go in closing the gender gap. Women comprise 13 percent of the average tech company's executive team, while 53 percent of tech companies have no female executives. If Canada wants to lead the way in innovation, we can't let women sit on the sidelines — we have too much to gain with a more inclusive and diverse tech sector.

**MP** What lies ahead for #movethedial?

**JK** We recently released our first report on gender equality in the Canadian tech ecosystem called *Where's The Dial Now?*, in partnership with PwC and MaRs. This report tells us that though the gender gap is still wide, there are effective ways we can move the dial for the women and girls in our lives. We're also excited about our upcoming #movethedial Global Summit on November 7, 2018.

**MP** What advice do you have for young girls and women?

**JK** Seek out mentors that will support and guide you, take the time to create meaningful relationships, and build your network! Also, don't be afraid to step into the unknown or take risks that move you outside of your comfort zone.

Melissa Vekil

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THE  
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# Diverse Ideas Make for Good Business



Chris Eben

Managing Partner, TWG

TWG is a software innovation firm that helps companies unlock their potential by building the software they need to succeed. With offices in Toronto, New York, and Mumbai, TWG has built hundreds of products for a wide range of clients from innovation-driven enterprises to growth stage startups navigating the challenges of scaling their businesses. Build software with the people who help build software companies [twg.io](http://twg.io)

Toronto is one of the most diverse cities in the world. And yet, if you walked into the offices of many small and medium-sized companies — particularly in the tech sector — you wouldn't know it. Toronto-based digital transformation studio (software and app developer) TWG has bucked the trend and has made a conscious decision to harness Toronto's diversity in order to make it work for them. Today, they are eager to share their experiences and to show other companies how workplace diversity can provide advantages across all domains of business.

*Mediaplanet spoke with TWG's Managing Partner Chris Eben about the company's diversity initiatives and the benefits they've already accrued from implementing them.*

**Mediaplanet** It seems obvious that diversity in hiring is good for society, but what direct advantages does a company see when they build diversity into their workplace?

**Chris Eben** There are numerous studies that validate the positive business impacts that come from having a diverse workforce. More diverse companies are able to attract top talent, improve customer relations, drive greater employee satisfaction, and improve decision making. These are the fundamental elements that not only improve profitability, but also drive client loyalty, boost a brand's reputation, and increase a company's competitive advantage. TWG's own experience bears this out.

**MP** How does a diverse workforce change the products you build for your clients?

**CE** For TWG in particular, we build software for our clients that impact all humans, not just subsets. As a result, having a diverse set of individuals involved in designing and building products, as well as a company culture that encourages people to challenge the traps and tropes of group-think means the software we build is more likely to be embraced by the widest possible cross-section of users — which is what our clients are looking to achieve and why they hire us.

**MP** What are some of the challenges companies face in building a diverse workforce?

**CE** From my perspective, the single greatest challenge companies face in building a diverse workforce is the evolution from representation to inclusion. Creating inclusive cultures and work environments where everyone can be their authentic self and where all ideas and contributions are sought after by leadership remains elusive for most employers. Training leadership on unconscious biases, assessing inclusion through the right measurements, and implementing specific strategies to improve inclusive cultures is the way to solve this challenge.

**MP** What is Change Together, and how did it come about?

**CE** Change Together is comprised of a set of 11 unique policies and initiatives that address hiring and retention. It works to support the success of under-represented groups in tech and serves

as a do-it-yourself on-ramp to help small to medium-sized businesses take steps toward diversifying their workplaces. The policies are the result of a year-long partnership between TechGirls Canada (TGC) and TWG. The open source project (found at [changetogether.io](http://changetogether.io)) was designed to explore, test, and report on a set of strategies for boosting gender and racial diversity, equity, and inclusion in the workplace.

**MP** Where do you see things progressing in the future in terms of workplace diversity, particularly in Canada?

**CE** It is remarkable to me that we are still having this conversation today. But we are, which says things are not moving as quickly as they should be. Every workplace is unique and will face its own set of challenges and biases in building a diverse workforce. My hope is that more progressive companies can serve as models for others to follow and that a lack of diversity will stop being an issue and simply becomes part of the fabric of the way we choose to build and grow businesses.

D.F. McCourt

"Diverse companies are able to attract top talent, improve customer relations, drive greater employee satisfaction, and improve decision making."

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# Leading the Way to the Future at Thompson Rivers University

What we think of as a tech sector job is evolving, according to Dr. Lincoln Smith, Director of Research Partnerships and Enterprise Creation at Thompson Rivers University (TRU). “It’s not just people in front of computers programming,” he says. “As the regional technology sector grows, companies are needing graduates in business, communications, and visual arts as well as in engineering and sciences. We work directly with these regional companies to provide the trained workforce for their continued growth.”

As well as training the workforce, TRU is creating jobs with its TRU Generator. Established two years ago, the Generator is a place on campus for students and faculty to get advice and support to evaluate their business ideas and build them into companies. It allows innovative student entrepreneurs to learn about new tools and methodologies and gives them the opportunity to leave TRU with both a degree and their own start-up.

“The TRU Generator has a pion-

neering approach that is closely partnered with the external tech accelerator in Kamloops,” says Dr. Smith. “Each organization can focus on what it does best. Together we are accelerating the growth of the tech community in the region, with more start-up businesses providing good paying jobs for graduates.”

Dr. Smith adds that TRU’s commitment to tech has benefits beyond the university. With the increased development of the tech community, young people have new opportunities to work in the region and do not necessarily need to move elsewhere for work. The university will attract new students with the local job opportunities during and after studies are completed.

“The mission for the TRU Generator is to change the way that innovation is thought of and practiced at the university,” says Smith. “Students will leave TRU with a degree and the skills to work in the digital economy — possibly in their own company.”

Ken Donohue



**Dr. Lincoln Smith**  
Director, Research Partnerships & Enterprise Creation



For more information on how to enroll, visit [tru.ca](https://tru.ca)



# Innovative Software Engineering Builds a Path for Success



**Dr. Tom Dickinson**  
Dean, Faculty of Science



**Dr. Faheem Ahmed, P.Eng.**  
Chair, Department of Engineering

Software engineering, like other engineering disciplines, is all about solving problems and developing solutions. But as technology continues to play a bigger part in daily life, the solutions being developed must also evolve, requiring software engineering programs to evolve into multifaceted courses to better serve students.

The software engineering program at Thompson Rivers University (TRU) does just that. “Our new program provides a fantastic opportunity to not only meet the needs of the expanding tech sector, but let students complete their entire course of study at TRU,” says Dr. Dickinson, the university’s Dean of Science. “With growing innovation hubs in Kamloops and Metro Vancouver, there is a huge need for software engineers and the demand can’t be met with the current level of graduates.”

Software plays a critical role in our ever-increasingly technology-driven world, and this means there is a lot of variety in the kinds of work and sectors one can pursue. “It’s the entire life cycle of the software — programming, designing, and testing — and there are some pretty cool applications that software engineers can get involved with,” says Dr. Dickinson. “The self-driving car wouldn’t be possible without software engineers.”

## Best practice in learning

TRU’s Bachelor of Software Engineering is one of only two in BC, so to differentiate itself and create a better experience for students, the university has made a commitment to keep its class sizes small. “We have put experiential learning at the forefront and



adapted our program to include best practices in problem-based and group learning,” says Dr. Faheem Ahmed, a professional engineer and Chair of Engineering at TRU. “This, along with our mandatory two co-op work terms, [ensures] graduates learn practical skills and are ready to work in the sector.”

Dr. Dickinson says there has been a lot of excitement from students and young people about this new program. “We need to change the perception of what an engineer does. It’s not all about wearing a hard hat. The pro-

fession has evolved to meet the changing economy.”

Kamloops was recently recognized as the start-up community of the year, and with the city’s creative and growing tech sector, there are huge opportunities for software engineers.

Ken Donohue

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## How the CBC Remains Relevant with Diverse New Perspectives



**Soo Kim**  
Executive Director,  
Media Operations

When Canadians talk about diversity in tech, the first thing to come to mind probably isn't the CBC. But, Soo Kim, Executive Director of Media Operations at Canada's public broadcaster considers that an outdated way of looking at things. "We've had to expand our thinking about the business we're in," says Kim. "Nowadays, what sector doesn't leverage sophisticated technology? From a talent perspective, we all have to be tech-focused now."

Kim oversees multi-platform production at the CBC, ranging from digital products to more linear services like radio and television. How to hire for a diverse and inclusive workplace, especially on the technical side, is very much on her mind these days. "We need more women and more diversity in general, in tech," Kim says. "It makes us better and it makes our products better. As a public broadcaster, we need to be relevant and useful to all Canadians, evolving as Canada evolves."

### New technology, new voices

Transitioning Canada's national public broadcaster into the digital era has required a lot of innovation as well as a willingness to embrace unconventional ideas. Machine learning, big data, and personalization algorithms are the sorts of terms you hear in the halls of the CBC today and Kim is focused on hiring the right people to make good on the innovative broadcasting future these words promise. She strongly believes that a diverse workforce must be an integral part of that because with diversity comes new perspectives.

"It really comes down to creativity," Kim says. "If you increase diversity, then

**"If you increase diversity, then you really have a great opportunity to crowdsource creativity and develop diverse ideas, which we need."**

you really have an opportunity to crowdsource new ideas and new approaches to doing things. But it's not enough to hire a diverse workforce, you also need to foster a culture of inclusion to ensure their voices are heard."

This is an important and too often overlooked aspect of workplace diversity. Hiring a diverse workforce is only the beginning. Empowerment is critical, as is ensuring that organization-wide diversity isn't hiding a series of monocultures in certain divisions or at the higher levels of the organizational chart. "In recent years, we've gotten really

The CBC offers careers in a variety of fields — employing thousands of Canadians and creating inspiring content on a daily basis. The CBC's digital teams build the sites and apps that Canadians use to connect with and experience digital content, devise the analytics tools and intelligent systems that allow the CBC to better understand audiences, and develop and support content management systems that thousands of content producers use to make and distribute content.



serious about making inclusion and diversity a strategic goal of the organization and, broadly, the numbers say we're doing okay," says Kim. "We know though, that we still have work to do. It's about challenging ourselves to look at the evidence differently and not be satisfied with just top line numbers. For instance, we over-index with women leaders in our workplace, but when you look at the technical functions, not so much. I'd like to see more women in technical functions and I'd like to see more diverse faces in the leadership ranks at CBC."

### An inclusive conversation

In a way, the CBC is exactly the place we should be looking for leadership in diversity. The CBC is home to Canada's conversations' so it's vital for that dialogue to include all of the many diverse voices that make Canada, Canada. "The CBC, as the public broadcaster, has a unique opportunity to make empathy and understanding a key dimension of our programming," says Kim. "We can use our privileged place in Canadian society to facilitate local and national conversations, especially the uncomfortable and necessary ones. That's the sort of thing I am really excited about."

*D.F. McCourt*



**"We haven't even scratched the surface of what we are able to do."**

### Encouraging innovation from within

"We have a lot of in-house talent and the number of ideas generated shows that people are thinking of new things," says Pilapil. "To be given the freedom to stop our work for two weeks and focus on innovation was great. It gave staff an opportunity to learn and grow."

The CBC is adapting to new technologies and sharing its digital transformation through the Digital Labs blog. This platform allows the CBC to gain insight from users, as it creates products that enlighten, inform, and entertain.

"Innovative thinking will keep us relevant in the digital economy," says Pilapil. "We haven't even scratched the surface of what we are able to do."

*Ken Donohue*

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## Innovation Key to the CBC's Digital Transformation



**Melissa Pilapil**  
Senior Machine  
Intelligence Developer

Melissa Pilapil is part of a new wave of tech professionals who have joined the CBC in recent years. And while the sector is still dominated by men, she is seeing growth in the number of women entering the field. "We have a Women in Tech employee resource group at the CBC, with over 90 members," says Pilapil. "It's really empowering to see so many women interested in technology, and there are lots of opportunities at the CBC in tech. We're doing some really cool things."

According to Pilapil, the CBC has long had a culture of supporting innovation, with staff being encouraged to dedicate a portion of their work time to learn new technology that will help with their job. "The Innovation

Sprint takes that one step further," she says. "You end up working with other teams with different skills and backgrounds."

During the Innovation Sprint, groups of staff put aside their day-to-day work for two weeks and instead work in teams to develop innovative ideas with the goal of increasing user engagement with CBC products. This helps to enhance current products or develop new ones. During the CBC's first Innovation Sprint, about 24 ideas were pitched. Pilapil joined a team that created four games for the CBC Kids website, while another team developed a voice activation system for Android devices so that people could access podcasts and music in their cars, hands-free.



# Pursuing Entrepreneurship has Never Been Easier



**Dr. Steven Muegge**  
Associate Professor,  
Technology Innovation Management,  
Carleton University

Instead of hunting for the perfect job, entrepreneurs can control their own careers by launching and growing high-tech companies. Entrepreneurship can be a great career path for ambitious engineers, scientists, and business professionals.

Carleton University's Technology Innovation Management (TIM) program helps aspiring technology entrepreneurs acquire the right knowledge, know-how, and resources.

The TIM program is a joint initiative of the Faculty of Engineering and Design and the Sprott School of Business. It offers three

graduate degrees: a Master of Applied Science, a Master of Engineering, and a Master of Entrepreneurship.

"Our best students leave with a degree in one hand and a new technology business in the other," says Dr. Steven Muegge, an associate professor of the program.

TIM is designed around the practical needs of time-constrained professionals. For example, all TIM courses take place in the evening.

"TIM is the hub of an entrepreneurial ecosystem with many complementary parts," says Dr. Muegge. Lead To Win ([leadtowin.ca](http://leadtowin.ca)) which provides space, mentorship, and support to technology startups with high growth potential. It was ranked as one of the top 10 university business incubators in North America. The Technology Innovation Management Review ([timreview.ca](http://timreview.ca)) is a

peer-reviewed open-access journal with global readership. The Global Cybersecurity Resource ([cugcr.org](http://cugcr.org)) is a lead project located off-campus at Bayview Yards ([bayviewyards.org](http://bayviewyards.org)), Ottawa's innovation hub. "Our best students get involved throughout the TIM ecosystem," he says.

Admission requires a bachelor's degree in engineering, business, or science, and at least two years of technical work experience.

Catherine Roberts

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For more information visit  
[timprogram.ca](http://timprogram.ca)

## Three Stories of Entrepreneurs from the TIM Program



**Ewan Reid**  
Founder & CEO,  
Mission Control Space Services

Mission Control Space Services provides solutions for space exploration, robotics, and education. Its first contract was a system to anticipate hazards that could immobilize a planetary rover on Mars or the moon.

Ewan Reid is an experienced engineer who worked previously on the NASA Space Shuttle program and designed rover prototypes for the Canadian Space Agency.

"I originally joined the TIM program to help me get my next job. But I realized that the skills I was learning — to turn a technology idea into a business — could help me launch my own company," Reid says. "So I decided to do just that! Mission Control has generated over one million dollars of business and shows every sign of continued growth. This would not have happened without the TIM program."

For more information visit  
[missioncontrolspaceservices.com](http://missioncontrolspaceservices.com)



**Patrick Millward**  
Co-founder & CEO,  
Interactive Studios

Interactive Studios is revolutionizing the visitor experience in shopping malls, hospitals, and other campuses with interactive digital kiosks for visitors and cutting-edge analytics for facility owners.

Patrick Millward and Colin Pritchard were accepted into the Lead To Win accelerator, and then enrolled in the TIM program. Pritchard says, "Before we joined TIM, we had only achieved one sale. We had ambition and a first customer but needed the know-how to grow and scale. TIM enabled us to achieve million dollar sales targets."

Millward adds, "This is not a typical Masters program. Coursework, reading, and assignments were never a distraction from the business but rather helped make it successful. Everything we did was about growing the company."



**Colin A. Pritchard**  
Co-founder & COO,  
Interactive Studios

For more information visit  
[interactivestudios.ca](http://interactivestudios.ca)



**Jade Phan**  
Co-founder & CEO,  
Transcend Cards

Transcend Cards is an e-commerce platform that sells trading cards and related products to customers on five continents.

Though Jade Phan had previous experience founding a startup overseas, she realized that there was still much to learn. After getting accepted into the TIM program, she co-founded Transcend Cards two months before class even started and was later accepted into Lead To Win.

As Phan says, "The TIM program is well-designed for a new entrepreneur like me. I expanded my network, furthered my understanding of global business, and got inspired to propel myself to new heights. The networking and business pitch opportunities were more than just enlightening — they were vital for my success."

For more information visit  
[transcendcards.com](http://transcendcards.com)

**MONSTER**  
FIND BETTER

## Technology and a Personal Touch are the Secrets to Finding a Winning Career



**Angela Payne**  
General Manager,  
Monster.ca

Even with all these technological innovations, the most important thing Monster offers, according to General Manager Angela Payne, has always been — and will always be — the human touch.

**Mediaplanet** *How does Monster stand out in a competitive marketplace?*

**Angela Payne** We are changing the way people think about work and we're helping them actively improve their lives and workforce performance with new technology, tools, and practices.

We focus on fostering connections to bring humanity and opportunity to the job market across Canada. This means identifying and addressing the specific needs of employers and job seekers more efficiently than ever before. We do this through renewed focus on the candidate. Monster is meeting candidates every step of the search process through employment branding and social job ads. We meet the candidate where they are, where they are spending their time, and where they connect online.

**MP** *How are today's job seekers finding jobs?*

**AP** Consumers are continually searching for products and services that mitigate the stresses associated with the job search. **Monster.ca** allows job seekers to customize their search in a way that caters to their direct needs, interests, and qualifications. This allows them to connect with a job that ignites their passion and ambition. After all, meaningful and rewarding employment is rooted in contentment.

**MP** *How is Monster.ca using technology to change the way people search for jobs?*

**AP** Monster is continuously improving its products to provide the innovation and user experience that meet the expectations of job seekers and employers. This includes products like the Monster Job Search App and Monster Social Job Ads as well as products set to reach Canadian consumers in the near future. Our free resume assessment tool, which is pending release in the Canadian market, uses proprietary smart-scanning technology to provide detailed feedback on the appearance and content in a resume while providing a prediction

of a recruiter's first impression.

Together, these innovations are connecting the most qualified job seekers with employers faster than ever before.

**MP** *Will AI, algorithms, and computers take over the job placement market?*

**AP** It's not a matter of will, it's a matter of when. Technology, if utilized correctly, can expedite the search process by connecting companies with the right talent. At Monster, we have enhanced our search algorithms and results to ensure that we're matching the right people with the right jobs.

There is so much shared value in the proper implementation and use of AI, algorithms, and computers — for our company, the companies we serve, and for job seekers. But we will never waver from our focus on fostering personal connections and bringing humanity to the job search.

Gavin Davidson

For more information visit  
[monster.ca](http://monster.ca)





# Skilled and New to Canada? There's Room for You



**Allison Pond**  
President & CEO,  
ACCES Employment

Allison Pond, the organization's President and CEO.

Much of its success — ACCES has an 83 percent placement record for its sector-specific programs — stems from the fact that it engages its business partners as volunteers, mentors, and advisors, allowing the organization to stay abreast of trends, such as the need for electrical engineers and cybersecurity experts, for example. These partnerships also support the development of innovative programs such as the highly successful Speed Mentoring® program, which connects newcomers with Canadian professionals who guide them through the system.

ACCES also works with those in the

Canada goes to great lengths to admit educated immigrants into the country. However, it is these very same, highly-skilled immigrants who encounter a labyrinth of obstacles when they try to find employment in their professional fields. This forces them to settle for lower-skilled positions while employers' need for skilled talent remains unfulfilled.

Since 1986, ACCES Employment has bridged this gap by connecting internationally-trained professionals and Canadian employers. A non-profit employment organization, it works with more than 32,000 job seekers across the GTA each year by hosting workshops and occupation-specific programs for those in the engineering, financial services, IT, sales and marketing, supply chain, health care, and human resources fields, among others.

"Language and communication barriers, learning how to market their skills, and a lack of recognition by employers of their international skills and experience, are things that can challenge immigrants' efforts to find work in their fields," says

**"In a city where newcomers make up half the population, fully integrating internationally-trained professionals into the local job market just makes sense."**

process of immigrating to Canada by preparing them for the job hunt before they even set foot on Canadian soil. "In a city where newcomers make up half the population, fully integrating internationally-trained professionals into the local job market just makes sense," says Pond.

Catherine Roberts

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# It's Time WE Act

Join the Ontario Society of Professional Engineers (OSPE) on Wed., Oct. 10th at the Shaw Centre for *It's Time WE Act*.

Now in its 16th year, this annual forum is OSPE's signature event and the province's most significant gathering for women in engineering and advocates for diversity in STEM.

For the first time ever, the conference will be held in our nation's capital — a city boasting the largest concentration of engineers and scientists in North America.

This year's theme centres around Women's History Month. Over 500 attendees from the engineering community and beyond will gather to learn, network, and brainstorm.

Together, we will celebrate the invaluable contributions of historic and modern-day trailblazers — women engineers and engineering graduates who have shaped and changed our country and our lives. Award-winning CBC news anchor Suhana Meharchand will be our Master of Ceremonies.

Our panels will focus on varied and timely themes including diversity in the tech sector, women in transportation, women in politics and leadership, and practical strategies to stand out in the classroom, workplace, and boardroom.

As Women's History Month is also a time to recognize the work that remains to make gender equality a reality, speakers will outline initiatives that employers can implement to better support inclusive environments.

Registration includes a continental breakfast, lunch, refreshments, and access to our networking reception.

This full-day conference is guaranteed to sell out. To avoid disappointment, visit [ospeweact.ca](http://ospeweact.ca) to reserve your spot today.

For event inquiries, contact Catrina Kronfli, Lead, Policy and Government Relations, at [ckronfli@ospe.on.ca](mailto:ckronfli@ospe.on.ca)

## HERE'S WHAT YOU CAN EXPECT



Learn about best practices that can better support gender equity in your workplace

Build your professional network



Meet our accomplished speakers, including elected officials, industry leaders, and experts

Gain valuable career advice



Come join us!  
Wednesday, October 10<sup>th</sup>  
The Shaw Centre, Ottawa, ON  
[ospeweact.ca](http://ospeweact.ca)

HOSTED BY



# Strengthening Canada's Digital Advantage in the Global Economy



**Namir Anani**  
President & CEO,  
ICTC



**Sandra Saric**  
Vice President of Capacity  
Building, ICTC

of \$2.43 billion GDP, contributing around \$74.7 billion to the overall economy.

"The reality is that all sectors of the economy are becoming digital," says Namir Anani, President and CEO of the ICTC. "To remain competitive in this fast-paced economy, companies need to develop the talent of the future."

ICTC supports Canada's digital transformation and economic growth in three key ways. The first is by developing forward-looking research in technology, economics, and labour market trends. The second is by designing and implementing innovative capacity-building programs. The third is by creating evidence-based policies that chart Canada's path in the global economy, including the creation of the nation's first digital talent strategy. According to Sandra Saric, ICTC's Vice President of Talent Innovation, "Canadian companies are in a place where they need to tap into every potential resource and focus on the best ways to recruit and integrate talent."

### Endless digital opportunities

Canadian companies are integrating, innovating, and leveraging technology on a daily basis for future returns. "With the skills that will be required, the opportunities are endless," says Saric.

For example, technology-driven innovation in financial services creates a demand for highly skilled professionals with expertise in artificial intelligence, blockchain, and cybersecurity. The automotive industry will need workers with advanced digital skills as autonomous and electric vehicles arrive on the market. And with cybercrime on the rise, there will be plenty of demand for skilled cybersecurity experts.

The digital skills demanded are not restricted to frontline workers — future leaders will also need to build their own digital technical expertise and skills.

For this reason, ICTC is encouraging digital literacy and skills development across the entire Canadian population to build expertise from the ground up. This includes working with youth, Indigenous populations, women, newcomers, and persons with disabilities. "Having inclusivity and diversity of talent will allow for innovation and global competitiveness," she says.

ICTC works closely with governments, educational insti-

tutions, other non-profits, and industry leaders to create a diverse spectrum of programs that will support the country's global digital footprint. From supporting workplace diversity and inclusion to fostering industry growth, the organization is focused on winning the innovation race. "Canada is at a critical point and ICTC is trying to tackle it from as many angles as possible to help ensure the right skills are being developed and that we're creating pathways to jobs of the future," says Saric.

The multi-pronged strategy is proving to be successful. Over the past year, they've successfully bridged skills gaps, connected talented individuals with jobs, and helped the industry adopt transformative technologies to become more competitive in a global economy. The latest initiative will engage over 5,000 students and 500 teachers across the country and will create innovative education and career pathways for youth through the Digital DASH program, a Government of Canada-funded CanCode initiative.

Through the WIL Digital program (funded by the Government of Canada's Student Work-Integrated Learning Program), 320 students have secured work placements in emerging technology sectors and over 4,000 internationally-educated ICT professionals have leveraged ICTC's GO Talent initiative for pre-arrival employment preparation and employer connection program funded by Immigration, Refugees and Citizenship Canada.

ICTC plans to continue supporting its stakeholders by focusing on enhancing their ability to leverage talent and technology effectively. "Canada is very much in a global innovation race and with shifting trade dynamics, we need to invest in digital talent now more than ever," Anani says.

Anne Papmehl

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