



DIGITAL TRANSFORMATION FOR ALL

Bold changes to drive a strong future for Canada

ANNUAL REPORT 2021-2022



**CANADA'S DIGITAL
TECHNOLOGY
SUPERCLUSTER**

TABLE OF CONTENTS

- INTRODUCTION..... 4
- FROM OUR CO-CHAIRS..... 6
- FROM OUR CEO 7
- OUR IMPACT..... 8
 - IMPACT 8
 - GROWING AN ENGAGED DIVERSE, INNOVATION COMMUNITY 9
 - INVESTING IN CANADIAN FIRMS 10
 - BUILDING CANADIAN MADE INTELLECTUAL PROPERTY 11
 - FUELING CANADA’S DIGITAL ECONOMY..... 12
- OUR SUCCESS STORIES 13
 - PROTECTING THE HEALTH AND SAFETY OF CANADIANS 13
 - CANCER TESTING FOR ALL 13
 - MENTAL HEALTH SUPPORT FOR OUR HEALTHCARE HEROES.....15
 - PREVENTING OUTBREAKS IN THE WORKPLACE16
 - REAL-TIME MONITORING OF THE EVOLVING COVID-19 VIRUS..... 17
 - SUPPORTING CANADIAN INTELLECTUAL PROPERTY 19
 - LEVERAGING THE POWER OF CANADA’S NATURAL RESOURCE SECTORS 21
 - PROTECTING OUR WILD FISH STOCKS THROUGH SATELLITE SURVEILLANCE 21
 - EMPOWERING RURAL CANADIANS DIGITAL SKILLS FOR THE RESOURCE SECTOR.....23
 - DIGITAL OPPORTUNITIES ACROSS CANADA..... 24
 - HELPING AIRLINES AND AIRPORTS BUILD BACK BETTER AFTER THE PANDEMIC 24
 - HELPING UNEMPLOYED YOUTH PURSUE CAREERS IN TECHNOLOGY 26

THE POWER OF DIVERSITY	28
ENABLING DIGITAL TRANSFORMATION FOR CANADIANS THROUGH DIVERSITY	28
OUR STORIES	29
LEVERAGING AI TO ENHANCE PATIENTS TREATMENT FOR SEVERE COVID	29
DIVERSITY AND RECONCILIATION AT THE HEART OF FAST-GROWING HELPSEEKER	30
OUR GOALS	32
2020-2021 ACHIEVEMENTS	32
2021-2022 GOALS	33
LOOKING BEYOND OUR BORDERS.....	35
FINANCIALS.....	36
OUR PEOPLE.....	36
OUR PARTNERS AND COMMUNITY	40

INTRODUCTION

When the Government of Canada created the Innovation Superclusters Initiative in 2017, no one knew we were on the doorstep of a global pandemic – a crisis that fast-tracked and amplified the impact of digital technologies on our economy and society.

This past year COVID-19 confirmed the power of collaboration and the importance of an innovation ecosystem that is fast, agile, resilient and focused on results. Harnessing the power of data and driving Canada’s digital transformation are at the heart of the Digital Supercluster. In short, our Digital Supercluster shows how ‘digital’ improves the way we live, play, work and succeed.

The Digital Supercluster is the product of a bold vision to invest where Canada can lead the world in transformative digital technologies, while accelerating the success of innovative Canadian businesses. It’s a vision we enthusiastically embrace alongside our industry partners. In three short years, we have created the momentum to power a strong economy and the foundation for Canada’s enduring success. We are accelerating the success of Canada’s best small and medium enterprises while inspiring investments in R&D. Looking ahead, our success and impact to date is fueling Canada’s global presence and competitiveness in a rapidly evolving world.



Source: Adobe stock

With more than 900 industry partners, and a \$300-million portfolio of digital solutions, we have fully committed the initial five-year investment from the Government of Canada – two years ahead of schedule. As the world emerges from the pandemic, Canada has the opportunity and imperative to build on this foundation. We must move fast. The world will not wait. Canada can lead in the data-driven

digital world. The Digital Supercluster is here to do just that: move fast, deliver opportunities for Canadian industry, catapult the growth of our best organizations, accelerate SMEs and take our place on the world stage as a leader in digital solutions. This Annual Report reflects on what we achieved and foreshadows where we can go. The opportunity is on our doorstep. We are ready.

“

The Digital Technology Supercluster is helping develop innovative technologies and products across multiple sectors – including health care, natural resources and industrial sectors – to position Canada as a leader in the new digital economy. Thank you for your continued dedication to building a strong foundation for collaborative research and developing world-leading innovation ecosystems across Canada. Your accomplishments over the past year demonstrate the incredible possibilities that we can achieve when we work together.



**THE HONOURABLE FRANÇOIS-PHILIPPE CHAMPAGNE,
MINISTER OF INNOVATION, SCIENCE AND INDUSTRY**

FROM OUR CO-CHAIRS



Diane McIntosh
Psychiatrist and Chief
Neuroscience Officer
Telus Health



Nadine Letson
Assistant General
Counsel
Microsoft Canada

CREATING A BRIGHTER FUTURE FOR CANADIANS

Numbers tell a powerful story. When the Digital Supercluster was announced in the spring of 2018, we had a bold vision coupled with a focus on delivering meaningful impacts to Canadian industry and to Canadians. Over the past three years, we built a community of more than 900 organizations, 350 of whom are actively participating in our 82 projects. Our investments are delivering positive impacts for Canadians, for communities and for organizations. Notably, the Digital Supercluster project teams are developing more than 100 products and services and 350 intellectual property (IP) assets, driving success for Canadian companies, the creation of new IP and positive impacts across Canada, including 6,500 learning and development placements in progress.

When the global pandemic was declared, the Digital Supercluster stepped up to support 'Team Canada' in protecting the health and safety of Canadians. We delivered digital solutions to address vital issues, such as delivering faster, more accurate diagnosis, treatment and care of COVID-19 patients, while also supporting Canadian employers to save thousands of jobs as our project portfolio grew and technologies were deployed.

We are not slowing down. With a growing portfolio of world-class projects, we are continuing to drive Canada's leadership in the digital world by leveraging AI to advance environmentally sensitive mining, using smart farm data to boost crop productivity and harnessing machine learning to enhance social services combatting homelessness.

Thanks to dedicated industry partners, we fully committed the five-year investment from the Government of Canada two years ahead of schedule. Our success is a testament to remarkable Members, Associates, staff and our volunteer Board. We are particularly grateful to Edoardo De Martin and Johanne Senécal who both helped found the Digital Supercluster and served as Co-Chairs until earlier this year. Edo and Johanne's vision, dedication and contributions will have a lasting impact on our organization, on the innovation community and on Canada.

FROM OUR CEO



Sue Paish
CEO, Digital Supercluster

HELPING CANADA BUILD BACK BETTER

As we look forward to a world beyond the pandemic, the Digital Supercluster's purpose is more compelling and relevant than ever.

In early March 2020, we had a growing portfolio destined to deliver critically important impacts, such as faster diagnosis of medical conditions using portable ultrasound technology in rural and remote communities and mitigating climate change impacts through the application of artificial intelligence and genomics. With the arrival of COVID, we pivoted quickly to support Canada's fight against the pandemic with the launch of the COVID-19 program. Within eight weeks, we received more than 450 submissions with a total project value of over \$1.4 billion. In less than 100 days, we committed \$60 million across 33 projects to address some of the most challenging issues emerging from the pandemic.

At the same time, our Technology Leadership programs continued to advance - developing and delivering technologies to combat illegal fishing, address effects of climate change and drive transformation in the aerospace industry and more. In addition, we are acutely aware of the talent gap and inequities arising from digital

transformation, highlighted even more so during the pandemic. In response, we accelerated the Capacity Building program, which now includes 6,500 learning and development placements through 19 projects from coast to coast to coast. This foundational program is targeting in-demand training, skilling and jobs for Canadians with a focus on those who might otherwise not have access to opportunities in the digital world.

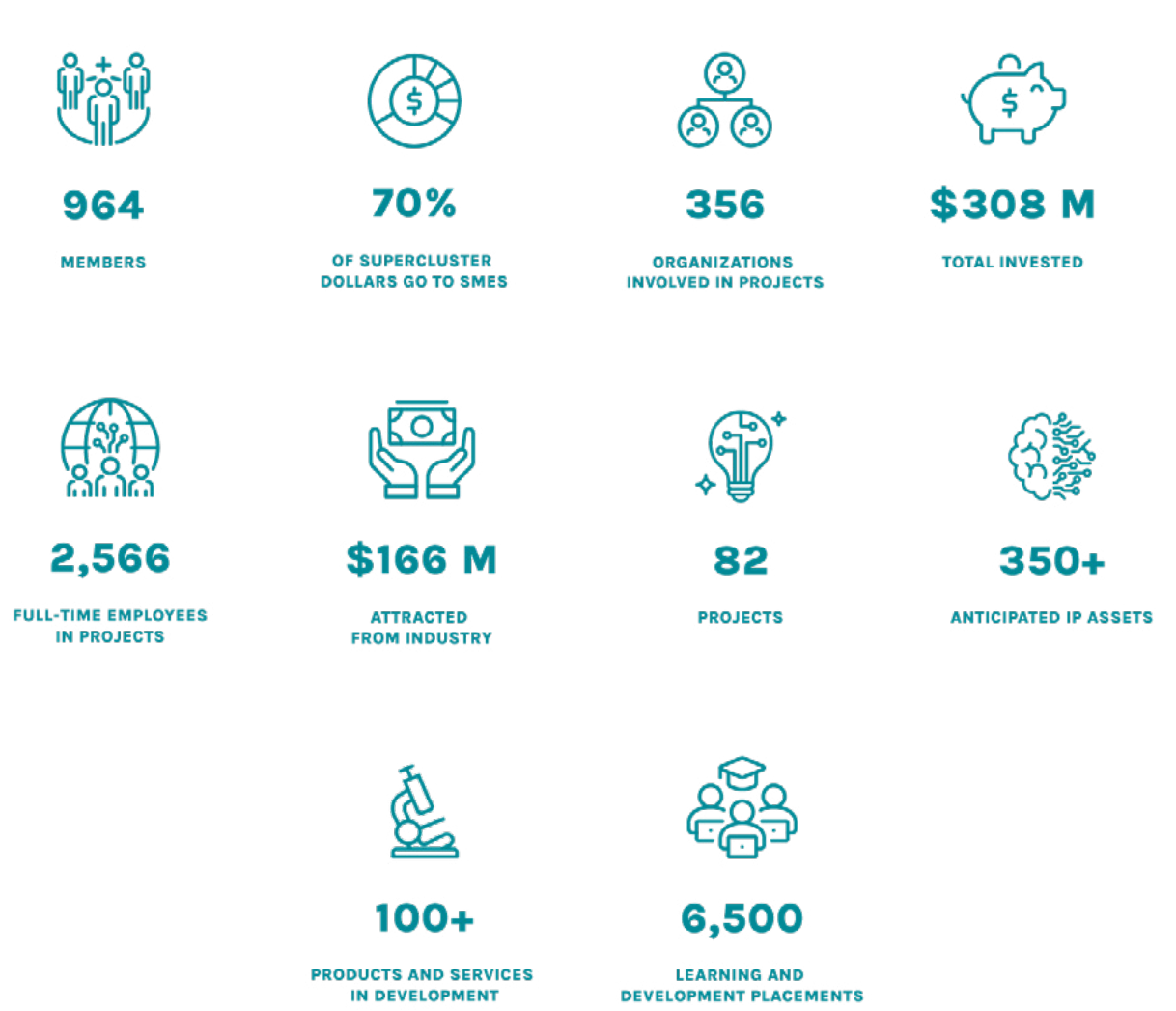
I am proud to have been part of this organization since the early days, and never more so than now. This past year, the Supercluster team delivered relentless dedication and commitment, surpassed perhaps only by that of our Board of Directors, our Members and Associates. We drove results to keep Canadians safe and we delivered so much more: the confidence and proof that collaborative innovation works, that Canada can lead in digital solutions and visionary IP, and that all of this matters to Canadian industry, to our citizens and to Canada. We can and will drive Canada to build back better.

OUR IMPACT

WHAT WE DO

We invest in digital innovations to deliver best-in-class digital health to Canadians and mitigate climate change impacts in natural resources and the environment, as well as help develop initiatives to equip Canadians with the skills they need to succeed in the digital economy.

IMPACT



GROWING AN ENGAGED DIVERSE, INNOVATION COMMUNITY



964

MEMBERS



10

PROVINCES WITH MEMBERS



34

POST-SECONDARY ORGANIZATIONS INVOLVED IN PROJECTS



53%

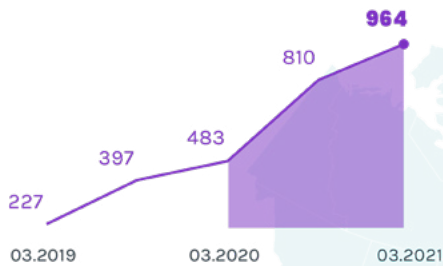
PROJECT PARTICIPANTS ARE SMES



356

ORGANIZATIONS INVOLVED IN PROJECTS

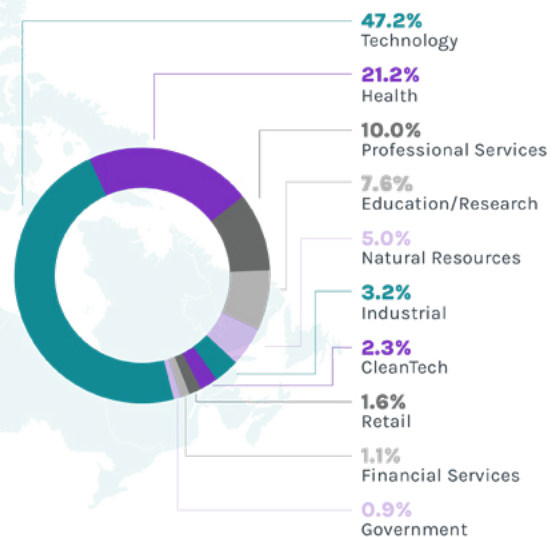
MEMBERSHIP GROWTH



X2

MEMBERSHIP HAS DOUBLED SINCE 2020

MEMBER INDUSTRIES



INVESTING IN CANADIAN FIRMS



\$308M

TOTAL INVESTED



82

PROJECTS



\$166M

ATTRACTED FROM
INDUSTRY CONSORTIA



63%

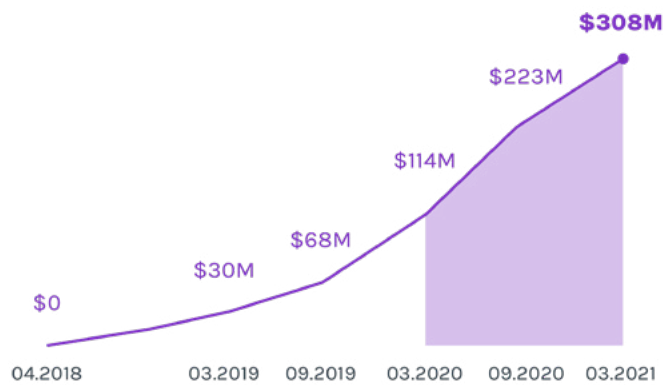
CO-INVESTMENT
FROM INDUSTRY*
(*through regular programs)



70%

OF FUNDING
GOES TO SMES

INVESTMENT PROFILE



INVESTMENT BY SECTOR



\$174M Health/COVID-19
44 Projects

\$59M Digital Transformation
13 Projects

\$35M Natural Resources/
Environment 6 Projects

\$40M Talent/Skills
19 Projects

BUILDING CANADIAN-MADE INTELLECTUAL PROPERTY



350+

ANTICIPATED IP ASSETS



75

FOREGROUND IP



13

PATENT APPLICATIONS



42

TRADE SECRETS



20

COPYRIGHTS

FUELING CANADA'S DIGITAL ECONOMY



100+

**PRODUCTS AND SERVICES
IN DEVELOPMENT**



20,000

EXPECTED JOBS



25

SMES SCALED



6,500

**LEARNING AND
DEVELOPMENT
PLACEMENTS**



40%

**OF TEAMS
EXPLORING
INTERNATIONAL
OPPORTUNITIES**

“

I believe this consortium-based innovation is the way of the future, especially in rapidly growing emerging areas such as AI and ML. By building teams with other 'A-list' players we are able to provide interesting, meaningful projects to work on. That means we can create Canadian IP and new jobs. The Digital Technology Supercluster played a key role as an 'honest broker' in bringing together the partners at a speed not otherwise possible around these ambitious AI/ML projects.



NICOLE JANSSEN, CO-FOUNDER OF ALTAML

OUR SUCCESS STORIES

THE POWER OF COLLABORATION:

Our innovation ecosystem has momentum, confidence and commitment to deliver positive impacts for Canada. Here are a few stories of what that looks like and what it means to Canadians.

PROTECTING THE HEALTH AND SAFETY OF CANADIANS

CANCER TESTING FOR ALL



Canexia Health Lab located in Vancouver B.C.

Carla Van Wyck-MacDonald was losing hope before she took a circulating tumor DNA (ctDNA) liquid biopsy test. Her breast cancer had progressed to an advanced stage, chemotherapy had caused complications, and pandemic travel restrictions and hospital outbreaks were making it difficult to explore new treatment options. “I made a promise to be here as long as possible to raise my kids,” says the mother of four from Shallow Lake, Ontario. “So, I kept praying and pushing my doctors for other options. What can we do to prolong my life? What else can I try?”. That’s when the [Access to Cancer Testing & Treatment in Response to COVID-19 \(ACTT\)](#) project changed everything.

Like thousands of other cancer patients across Canada, Carla's access to targeted therapy owes much to the work of a consortium led by Vancouver-based [Canexia Health](#). COVID-19 has delayed tissue biopsies for thousands of cancer patients. Canexia's technology, however, requires only a simple blood draw to search for the genetic biomarkers of cancer – data that can be used to identify treatment options.

The results of Carla's ctDNA test revealed a mutation known as PIK3CA, which led to her being enrolled in clinical trials for two drugs. According to Dr. Phillippe Bedard at the Princess Margaret Cancer Centre in Toronto, "Carla's story illustrates how it's helpful to have a blood test available that can be collected close to a patient's home. It's particularly helpful for patients who live outside of urban areas and who may not have access to specialized testing in academic research hospitals."

Carla's new treatment soon started "turning my situation around," she says, adding that "I'm sure there are many other people who would benefit from this."

Indeed, more than 1,500 cancer patients across Canada received ctDNA testing through Project ACTT, with approximately 50 per cent of tests revealing reportable results. Through the consortium's educational outreach, 245 oncologists from more than 70 institutions have ordered a test, representing more than 30 per cent of oncologists in Canada.

At the same time, the Digital Supercluster's framework has been instrumental in generating data, allowing health authorities to evaluate incorporating ctDNA testing into cancer care. "Rather than just one company trying to solve this problem on its own, the Supercluster has been instrumental in building our project team quickly and efficiently," says Canexia CEO Michael Ball. "Cancer patients can't afford to wait."

"Rather than just one company trying to solve this problem on its own, the Supercluster has been instrumental in building our project team quickly and efficiently. Cancer patients can't afford to wait."

- Michael Ball, CEO, Canexia Health

MENTAL HEALTH SUPPORT FOR OUR HEALTHCARE HEROES



Source: Adobe stock

Frontline worker using digital mental health tool

The situation is even more troubling for those who work in direct contact with confirmed or suspected cases of COVID-19, with 77 per cent reporting worsening mental health.

That's where the [Digital Mental Health Tools for Healthcare Workers Providing COVID-19 Care](#) project comes in. The initiative is delivering highly personalized mental healthcare through two interactive cognitive behavioural therapy (CBT) tools via mobile phone, tablet and computer in English and French. Due to the impacts from COVID-19 on the education system, the project's scope was extended to include teachers and educators. In a few short months, the project developed and deployed Starling Minds' digital mental health platform to more than 30,000 healthcare workers in B.C.'s Fraser Health Authority and 200,000 educators, principals and vice-principals across Canada.

"In this time of crisis, we need to help our frontline workers with the incredible stress and risk of burnout of their profession during the pandemic, yet there is a chronic lack of access to mental healthcare professionals within the Canadian system," says Peter Oxley, CEO of Starling Minds - the project lead. "Our healthcare professionals are the foundation of a functional healthcare system, and we need to provide mental health tools that can be conveniently accessed during COVID and beyond for the unique needs of this critical profession."

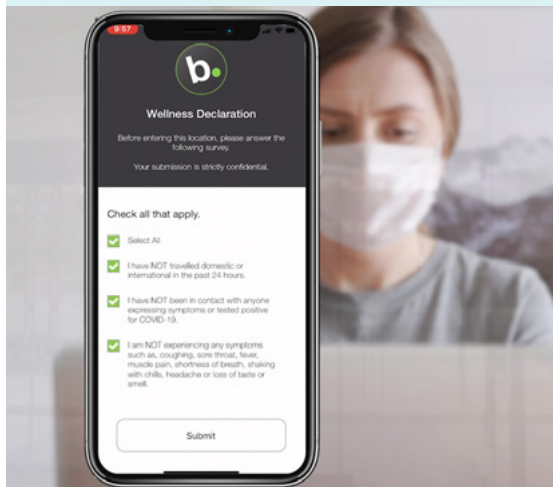
By recognizing the unique needs of these workers, Peter explains, Starling Minds Mental Fitness and Starling Minds Return-to-Health takes a profession-centric therapy approach and uses its proprietary Expert System to make recommendations and insights that foster early intervention and rehabilitation in workers. Users can also connect with their peers through a safe, confidential and anonymous online community to share their personal and professional experiences and struggles.

From calling them "heroes" to banging pots and pans, Canadians enthusiastically celebrate healthcare workers fighting COVID-19. But when it comes to keeping those workers healthy, resilient and productive, words and gestures are not enough.

According to Statistics Canada, 70 per cent of healthcare workers reported that their mental health was "somewhat worse now" or "much worse now" than it was pre-pandemic. The

The scope of Starling’s mental health tools continues to expand and now nearly 4.8 million Canadians have access to Starling’s digital therapy. The reach will grow even more, Peter adds, as the platform evolves to address mental health conditions among a wide group of professions and those who are unable to work due to a mental health issue or physical injury.

PREVENTING OUTBREAKS IN THE WORKPLACE



**Mobile Wellness Declaration app
(Source: BioConnect)**

When the **Mobile Wellness Declaration** project launched in August 2020, it focused on allowing long-term care administrators and business operators to turn any door with a traditional card reader into a smart door that could be integrated with a mobile health survey. With thousands of residents tragically affected by the COVID-19 pandemic, health screening of individuals entering care homes and essential services facilities was truly a matter of life and death.

Led by Toronto-based **BioConnect**, this project quickly deployed the first touch-free screening surveys and thermal imaging technology in Canada. What is unique with this solution is that it ensures only employees who have declared themselves as ‘healthy’ are granted access through the card reader at the door. While respecting personal privacy, an individual is denied entry if there is any level of detected risk, thereby supporting the safety of all employees at a facility.

In early 2021, **Toronto’s MaRS Discovery District** – North America’s largest urban innovation hub – selected the system to screen more than 200 workers daily in compliance with new health and safety mandates set by the Ontario government.

As the economy begins to reopen, a growing number of businesses are joining MaRS in seeking a key access control protocol for ensuring a safe and healthy workplace.

The Mobile Wellness Declaration is applicable and can be easily retrofitted into any business that has a card-access control system, says Jeff Crews, BioConnect's Chief Customer Officer. "By helping companies prevent COVID-19 outbreaks at their facilities and protect the safety of employees and visitors, Mobile Wellness Declaration is poised to play a key role in Canada's economic recovery."

BioConnect would never have been able to take on this timely role without Supercluster support, he adds. "We're experiencing tremendous growth, so resourcing trade-offs are always being made. The Supercluster's assistance was a real catalyst that allowed us to build this solution in a timeframe that will line up with the reopening of the economy."

REAL-TIME MONITORING OF THE EVOLVING COVID-19 VIRUS



Medical science doctor using technology to analyze sampling of COVID-19

As COVID-19 variants continue to emerge, there is an urgent need to understand the genetics of the virus so that we can better predict and manage variants. Large volumes of genomic sequencing data are being generated to help understand, predict and treat COVID-19. However, this biomedical data is not shared widely or quickly enough.

As a result, public health officials and companies developing diagnostics, vaccines and therapeutics are unable to make the best data-driven decisions or fully measure the effectiveness of their efforts.

The Digital Supercluster's COVID-19 program inspired Marc Fiume, CEO of [DNAstack](#), to tackle this issue and approach thought leaders at diverse organizations, including Centre of Genomics and Policy (CGP) at McGill University, Mannin Research, Microsoft and Sunnybrook Hospital, among others.

According to Marc, “It was astonishing to see how many partners throughout Canada stepped up and rallied in support of this common vision. Our country has so much talent – in AI, genomic medicine and policy. What’s so special about the Supercluster is that it enables us to build world-class consortiums and scale quickly in a way that hasn’t been done before.”

The result is [COVID Cloud](#), a Digital Supercluster project that has developed an “all-in-one solution” to enable key data to be shared real time using global industry standards, providing scientists and decision makers with better information about COVID-19.

The project team made great progress this year. DNA Stack created an interactive dashboard, including an automated algorithm that estimates the rate of transmission of all variants as quickly as the data is received – triggering a software alarm when it appears there could be an outbreak. In addition, COVID Cloud is now a foundational element of Genome Canada’s national portal to detect, diagnose and anticipate the spread of new variants in partnership with the National Microbiology Laboratory.

DNASTack is also working with the Government of Ontario to increase the province’s ability to monitor variants.

In addition to all this, DNASTack is also working on initiatives to link genomics and clinical data to answer big questions, such as ‘can someone get reinfected with a new variant?’

In just one year, DNASTack has tripled in size and has exciting growth plans. “We’re now working on a new version of COVID Cloud with more data and tools and starting to deploy it internationally,” notes Marc. “We’re also spinning out a new project as a result of the Supercluster to explore new diagnostics and therapeutics for severe COVID-19 cases, and we’re taking our technology to address autism and fight diseases such as cancer.”

“It was astonishing to see how many partners throughout Canada stepped up and rallied in support of this common vision. Our country has so much talent – in AI, genomic medicine and policy. What’s so special about the Supercluster is that it enables us to build world-class consortiums and scale quickly in a way that hasn’t been done before.”

- Marc Fiume, CEO, DNASTack

SUPPORTING CANADIAN INTELLECTUAL PROPERTY



Business district in Ottawa, ON

The Digital Supercluster supports the creation of intellectual property and data assets in Canada to propel Canada's leadership position in digital technologies. We offer a range of support services to our Members and our project teams, including education, tools and frameworks for collaborating partners to:

1. Protect the ownership of Canadian-made IP
2. Commercialize IP (including from academic partners)
3. Support SMEs in leveraging new IP to grow while strengthening their background IP portfolios
4. Allow collaborating partners to share in the benefits of foreground IP created in the context of projects on fair, reasonable and non-discriminatory (FRAND) terms.

Through our IP advisors and programs team, we support the development, ownership and retention of Canadian IP by:

Promoting IP and data literacy. We support SMEs to improve IP and data literacy by ensuring project teams address ownership and the value of data and IP upfront. We also provide SMEs with access to educational workshops, resources and tools and provide specific guidance throughout the project lifecycle on IP generation and protection.

Raising awareness that IP is more than patents. We support Members in exploring different forms of IP that make best business sense for them - not just pushing towards patents, but also finding other forms of IP that guarantee members the freedom to operate.

Strengthening IP Portfolios. Many SMEs have weak IP portfolios. We actively support companies to clearly articulate their IP, protect it and leverage it beyond their current industry.

Commercializing university IP through Canadian SMEs. Academic partners are a rich source of IP. We facilitate relationships between SMEs and research organizations that help develop university IP to commercial-grade levels.

Developing standards. We encourage Members to explore, leverage and further develop standards – to augment their own portfolios and to build expertise, know-how and IP on top of open standards as public domain IP.

Leveraging the ecosystem. We encourage members to identify potential licensees of every new foreground IP that is being generated, and with this, stimulate cross-sectoral collaboration and leverage. We also work with the Innovation Asset Collective (IAC) on the creation, dissemination and deployment of IP.

“Working with the Digital Technology Supercluster has greatly accelerated the pace of innovation at Swift Medical, deepening our IP strategy and assets. This has sharpened our competitive edge against global competitors, raised our profile in health technology and allowed us to provide much more value to our healthcare customers – and ultimately their patients – with the technology we’ve developed and commercialized through the project.”

- Justin Allport, Co-founder and Chief Engineer at [Swift Medical](#)

“

Terramera has recently filed a new patent application family that expands IP protection on its Actigate™ technology, which was enabled by collaboration under Digital Technology Supercluster’s IP management framework. In addition, one of Terramera’s project partners, Compression.ai, has also developed technology, which led to filing of a new patent application family related to their project work on machine learning-based compression.



GRAEME HERRING, VP, INTELLECTUAL PROPERTY STRATEGY AT TERRAMERA

LEVERAGING THE POWER OF CANADA'S NATURAL RESOURCE SECTORS



Source: Adobe stock

Fisherman at sea

PROTECTING OUR WILD FISH STOCKS THROUGH SATELLITE SURVEILLANCE

Oceans around the world are facing increasing pressure from climate change and human activities. Global fisheries provide livelihoods for almost 12 per cent of the world's population, and now these precious stocks are under increasing threat from illegal, unreported and unregulated fishing.

The threat to fish stocks is real and it's growing. About 30 per cent of all fish stocks globally are overfished and about 60 per cent are fully fished. Illegal fishing costs the ocean economy more than \$23 billion a year, endangers the sustainability of marine wildlife and the fishing industry, and negatively impacts local people who rely daily on fish for food and their livelihood.

Illegal fishing is typically done by international 'dark vessels', which don't broadcast their location or appear in public monitoring systems.

Led by [MDA](#), a global leader in satellite technology, the [Protecting our Oceans](#) project uses satellites, artificial intelligence, big data analytics and virtual reality to identify these vessels, blacklist them and ultimately prosecute the owners to protect our global fisheries and marine ecosystems.

"The collaboration with our Supercluster partners is bringing new thinking and ideas into how to solve illegal fishing with the use of advanced technologies such as behavioural analytics and immersive visualization," says Keith Beckett, Chief Product Engineer at MDA.

"The Supercluster has played a critical role in helping our consortium develop a clear vision and purpose, as well as assemble a team of diverse organizations faster than if we did so on our own," adds Hans Wehn, R&D Director at MDA.

The consortium's efforts are already paying off with Canada being recognized as a leader in this area. In February 2021, the Government of Canada awarded MDA a three-year, \$7-million contract to use made-in-Canada satellite technology to detect vessels engaging in illegal fishing around the world. The Protecting Our Oceans project is developing leading technologies to support MDA's Dark Vessel Detection program which has recently been deployed to protect the ecologically fragile Galapagos Islands, in partnership with the Government of Canada. MDA will also support the Pacific Islands Forum Fisheries Agency, which represents 17 Pacific Island member states to protect the environment and better manage wild stocks. This work has already led to significant fines to five foreign vessels that threaten a sustainable fishery.

“The collaboration with our Supercluster partners is bringing new thinking and ideas into how to solve illegal fishing with the use of advanced technologies such as behavioural analytics and immersive visualization”

- Keith Beckett, Chief Product Engineer, MDA



Source: Adobe stock

Systems technician in control room

EMPOWERING RURAL CANADIANS DIGITAL SKILLS FOR THE RESOURCE SECTOR

Canada's natural resources sector is embracing and advancing digital transformation to drive sustainability goals, improve globally competitiveness, ensure the ongoing leadership of the sector in Canada's economy and create high quality jobs. Ensuring people have the digital skills to work in this new environment is critical.

Teck Resources, a Canadian-based global leader in mining is deploying autonomous vehicles to move ore using digital sensors to improve digging and applying data analytics to ensure safe and efficient operations. Teck needs to make sure it has a pipeline of trained and skilled talent to advance its commitment to digital transformation.

In collaboration with Teck, British Columbia Institute of Technology (BCIT), and the **College of the Rockies (COTR)**, are working together to kick-start careers that support these game-changing innovations through a new, two-year, **Wireless Systems Technician** diploma program. Through this project, students learn to install, maintain and repair equipment related to automated control and monitoring systems used in natural resources and manufacturing.

Focused on B.C.'s East Kootenay region, the project aims to enable graduates to stay close to home while supporting sustainable community development and reducing travel and other industry expenses.

According to Jack Moes, COTR's Dean of Trades & Technology, the Supercluster's investment in the program is a "critical part of its success to ensure that students in the program have what they need to effectively learn the required skills. The region, a key employer, and most importantly, the students have a significant stake in the project as well as the anticipated successful creation of an ongoing new technology program. This cannot be achieved without continued support from the Supercluster."

“As automation becomes more commonplace, College of the Rockies has been seeking a technology program that fits with our economic and geographical context. This program meets a regional economic demand, attracts students from elsewhere and delivers a designation appealing to those looking to move into a new technology-focused field that has promising labour market demand. Without this investment, we would not have been able to launch this advanced technology program,” says Robin Hicks, COTR’s Vice-President of Academic and Applied Research.

“As automation becomes more commonplace, College of the Rockies has been seeking a technology program that fits with our economic and geographical context. This program meets a regional economic demand, attracts students from elsewhere and delivers a designation appealing to those looking to move into a new technology-focused field that has promising labour market demand. Without this investment, we would not have been able to launch this advanced technology program”

- Robin Hicks, Vice-President of Academic and Applied Research, College of the Rockies

DIGITAL OPPORTUNITIES ACROSS CANADA



Source: dobe stock

Maintenance mechanic working on jet engine

HELPING AIRLINES AND AIRPORTS BUILD BACK BETTER AFTER THE PANDEMIC

While many Canadians are looking forward to the return of air travel post-pandemic, no one has missed the delays that afflict about 20 per cent of scheduled airline flights.

That’s where **Augmented Reality for Inspection** comes in. By targeting an augmented reality (AR) system for aircraft

maintenance and inspection, this Digital Supercluster project is working to streamline and improve airport and airline operations and, in turn, improve on-time performance and safety. With the airline industry hit hard by the pandemic, the cost savings associated with AR inspections could help keep fares in check while reducing potentially long delays if inspections are held up. Inspections are expensive and time consuming, often costing millions of dollars and taking more than 700 hours to complete. Flight delays are similarly pricey: a delay involving a Boeing 777 costs an average of \$27,000 an hour.

[Boeing Vancouver](#), [Unity Technologies](#) and [Simon Fraser University](#) are working together to develop a specialized AR engine that will allow inspectors to precisely note and review defects on the surface of an airplane by comparing its current state with digital inspection records displayed on a handheld tablet. Without this tech, these defects would typically need to be mapped manually and double or triple-checked to ensure accuracy.

“If an aircraft has experienced a bird strike, or a collision with a baggage loader you want to locate, inspect and deal with the damage quickly and safely to reduce turnaround time,” explains Jack Hsu, Senior Manager at Boeing Vancouver. “AR tools can make time consuming maintenance manual processes such as aircraft inspections and repairs much more efficient.”

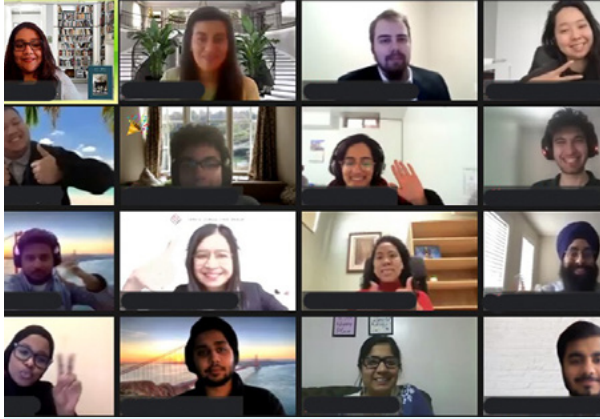
The project’s AR engine will lead to the development of a prototype application that will allow virtual inspections to be seamlessly adopted across the transportation industry. Likewise, learnings from this project could lead to other applications that leverage AR for diverse consumer applications.

“When the price of the technology comes down, you’ll be able to walk around a rental car or a broken lawnmower with an iPad or AR smart glasses and look for defects,” says Bob Cantwell, Managing Director, Boeing Canada Operations Ltd.

“Without the Supercluster’s involvement, it would have been much more difficult to connect with the machine learning and vision researchers at SFU and the world leaders in synthetic imagery at Unity,” Bob says.

“When the price of the technology comes down, you’ll be able to walk around a rental car or a broken lawnmower with an iPad or AR smart glasses and look for defects. Without the Supercluster’s involvement, it would have been much more difficult to connect with the machine learning and vision researchers at SFU and the world leaders in synthetic imagery at Unity”

- Bob Cantwell, Managing Director, Boeing Canada Operations Ltd.



**NPower Canada, GTA West Cohort,
Feb.-May 2021 (Source: NPower
Canada)**

HELPING UNEMPLOYED YOUTH PURSUE CAREERS IN TECHNOLOGY

Less than four months into its three-year mandate, the **Canadian Tech Talent Accelerator (CTTA)**, project is already changing lives for the better.

Canadian youth with the skills and experience they will need to secure meaningful well-paying jobs in the digital economy. Using educational resources developed in partnership with Microsoft, NPower is delivering a 15-week online skills training program to 2,500 participants in Vancouver, Calgary, Toronto and Halifax, and launching a new Junior Data Analyst training stream. Within months of launching this project, the Province of BC saw its value and has invested an additional \$7 million in the project to triple the number of positions available to BC youth.

Led by **NPower Canada**, this Supercluster project is working to equip under-served

At the same time, both NPower and Microsoft are working with employers to identify the types of junior digital positions that need to be filled quickly and, in turn, align the CTTA curriculum with recruitment efforts. Following the completion of the program, students will earn industry certification and receive support to find a technology-related position that leverages their competencies and skills learned through the program.

Investment from the Supercluster helped the project chart a more ambitious course by covering program delivery costs for the thousands of young adults who can now enroll at no cost to themselves or their families. Participants come from low-income households and are either unemployed or underemployed in precarious or minimum-wage. They include women, Black, Indigenous and other racialized youth, LGBTQ+ youth, new Canadians and youth with disabilities. These Canadians are at risk of becoming chronically under-employed or unemployed but with the support of the CTTA project and the Supercluster's investment, these young citizens now have the opportunity to secure 'jobs of the future' - today.

"Our mission to reduce poverty in Canada by addressing youth unemployment has been amplified by the pandemic," says NPower Canada CEO Julia Blackburn. "However, we see a huge opportunity through this accelerator program to deploy rapid skilling solutions that will enable youth to enter meaningful and sustainable careers."

The program has achieved this goal in impressively short order. According to Julia, one of the first Toronto-based participants secured a quality assurance role with a software company, and doubled her household income, after earning certifications in SQL,

Microsoft Azure and Python for data analysis, cloud and AI scripting.

“She was a newcomer to Canada who quickly emerged as one of the superstars in our program,” Julia recalls. “She had the technical aptitude, but it was her work ethic and empathy for her fellow classmates that really inspired us. Coming from diverse backgrounds and facing similar challenges around lack of access to opportunity, our students really support each other and share an eagerness to learn.”

“We expect at least 2,000 of the young adults enrolled in our programs to successfully complete training and earn industry certifications, with at least 1,600 launching their IT careers by securing tech-related employment or pursuing higher education within 12 months of graduation,” Julia says. “It’s a real win-win: Canadian employers are being provided with a growing pipeline of diverse, custom-trained talent, while young Canadians are pursuing sustainable employment.”

“Our mission to reduce poverty in Canada by addressing youth unemployment has been amplified by the pandemic, however, we see a huge opportunity through this accelerator program to deploy rapid skilling solutions that will enable youth to enter meaningful and sustainable careers.”

- Julia Blackburn, CEO, NPower Canada

“

The Digital Technology Supercluster and its industry, academic and government partners continue to lead the development of ground-breaking transformative technologies that people and industry across the globe will be seeking. The B.C. government is grateful to be a part of this pioneering collaboration that benefits our industries and communities and takes us closer to building the innovative, inclusive and sustainable economy that benefits all British Columbians.



RAVI KAHLON, MINISTER OF JOBS, ECONOMIC RECOVERY AND INNOVATION, GOVERNMENT OF BRITISH COLUMBIA

THE POWER OF DIVERSITY



ENABLING DIGITAL TRANSFORMATION FOR CANADIANS THROUGH DIVERSITY

Equity, diversity and inclusion (EDI) are core values and at the heart of our Supercluster’s strategy and day-to-day operations. It’s fundamental in our approach to working with organizations of all sizes in all sectors.

To provide “digital transformation for all”, we must include the perspectives and insights of all Canadians.

That’s why the Digital Supercluster supports the Government of Canada’s [50-30 Challenge](#), calling on Canadian organizations to take meaningful action toward diversity and inclusion. Our Supercluster, alongside more than a dozen of our members, have committed to improving access to senior leadership and board positions for underrepresented groups, such as racialized Canadians.

Specifically, the 50-30 Challenge aims to increase diversity on Canadian board(s) and senior management through:

1. Gender parity (50 per cent); and
2. Significant representation of racialized Canadians, members of the LGBTQ2 community, people living with disabilities and Indigenous peoples (30 per cent or higher)

We are stronger when we understand, listen and embrace the power of different perspectives, experiences and knowledge. We are committed to this. It will define us just as it will define Canada.

Below are stories of our members who are leading the way in equity, diversity and inclusion, ensuring that participating in Canada's digital future is possible for all Canadians.

OUR STORIES



Deepak Kaura,
Chief Medical Officer
Officer at [IQBit](#)

When Deepak Kaura graduated from medical school at the University of Manitoba, he took the Hippocratic Oath, pledging to “consecrate my life to the service of humanity.” It’s an oath he takes to heart. Born and raised in Kenya, helping others has been the biggest driver of Deepak’s professional career and what ultimately motivated him to become Chief Medical Officer at IQBit, an advanced computing company that’s leading [XrAI](#), a Digital Technology Supercluster project.

XrAI is an AI-driven chest x-ray tool developed by IQBit in partnership with healthcare organizations and physicians. XrAI has been approved by Health Canada as a Class III medical device to support health providers in the fight against COVID-19. The software solution has been deployed by Trillium Health Partners in Ontario and will soon be available across Saskatchewan.

LEVERAGING AI TO ENHANCE PATIENTS TREATMENT FOR SEVERE COVID

Talks are also underway with health authorities in Greater Vancouver and B.C.’s Fraser Valley.

XrAI has been critical in the fight against COVID-19, where chest x-rays are an essential tool for identifying lung abnormalities in patients. The challenges faced by frontline teams trying to detect and treat COVID-19 include the time it takes to receive a formal report from a radiologist. Often the treatment teams rely on their own interpretation of an x-ray to manage a patient while waiting for a radiologist’s report, if they have access to one. These interpretations drive clinical decisions, including the decision to admit or discharge a patient. A late or incorrect diagnosis could result in an infectious patient being sent home and a rapid deterioration of their health.

“Our algorithm is the only one in the world that can run on a laptop without any Internet connectivity, which is ideal for remote and rural areas.” Deepak adds, “In my day-to-day practice as a pediatric radiologist, I can treat one child and family at a time. However, when you leverage technology and develop a solution such as XrAI, you can begin to help hundreds or thousands of people at a time. That is unbelievably empowering and beautiful.”

Canada is a leader in quantum computing and physics, and along with our diverse population and talented medical professionals, Deepak says Canada is poised to lead the way in digital health and make healthcare more equitable for people in smaller communities across the country and around the world.

“What if we could all receive the same level of care whether we were in a small, remote community or a large centre with specialists?” Deepak says. “I’m excited about what we can create in Canada with our healthcare data, knowledge and expertise and take it to those who need it most.”



Alina Turner, Co-President
and Co-Founder of
HelpSeeker

DIVERSITY AND RECONCILIATION AT THE HEART OF FAST-GROWING HELPSEEKER

It’s been a whirlwind year for HelpSeeker. In 2020, the social enterprise employed nine people in Calgary. In just one year, HelpSeeker has grown dramatically, now with 53 team members and counting, across Canada.

HelpSeeker is addressing complex social challenges such as addictions, homelessness, domestic violence and poverty – issues exacerbated by COVID-19.

In response, the organization is leading [Leveraging AI in Canada’s Social Response to COVID](#), a Digital Supercluster project involving seven partners from across the country. Together, they’re using data and artificial intelligence to help government and community leaders anticipate the social needs of Canadians before they become crises.

“Given our focus is on social issues, we have an equity lens in all that we do,” says Dr. Alina Turner, Co-President and Co-Founder of HelpSeeker.

“One of our five core values is ‘action on reconciliation, equity, diversity, inclusion and sovereignty,’” Alina adds. “What that looks like in practice is interesting. It’s one thing to declare it and another to do it. For instance, this value now shows up in our hiring practices and performance evaluations, as well as our technology development and machine learning projects, workflows and quarterly plans.”

HelpSeeker’s VP of Community Success is Indigenous and leading the culture-building process across departments. “We have learned that we want diverse experiences and

perspectives to permeate our entire organization. We understand that accountability for reconciliation and equity has to be a priority for all team members.”

Diversity is reflected throughout the team – for example, 70 per cent of employees are women, 50 per cent are from racialized communities and 20 per cent identify as LGBTQ or non-binary. The team is also made up of a dynamic mix of social science and policy experts and technology professionals. Alina says, “creativity happens when there is debate and a positive tension between colleagues of diverse backgrounds.”

The collaborative innovation within HelpSeeker and with the Digital Supercluster community is leading to growth and positive outcomes. For example, HelpSeeker has sold one of its digital solutions to seven communities in Alberta to track and address local homelessness. The Government of Alberta is also working with HelpSeeker to better deal with domestic abuse.

The organization currently serves more than 200 municipalities across Western Canada. With recent funding support from the Canada Mortgage and Housing Corporation, Alina and team are looking to expand the app’s reach to more than 5,000 communities nationwide by 2023.

“The Digital Supercluster gave us the foundation to secure our growth,” notes Alina. “With their support, we were able to land some significant federal contracts and build a machine learning team. They have also guided us in developing a five-year plan and 24-month targets. It’s not just about the investment, it’s about a meaningful partnership. You can’t put a price tag on these relationships.”

“

The Supercluster is a unique opportunity for us to put Canada on the innovation map, to showcase our creative and awe-inspiring approaches to solve some of society’s biggest problems. I’m motivated by the sheer grit with which our industry partners are taking on the challenge to change Canada and the world for the better. I love and am truly honoured to play a part in the scaling journey of our Members.



NADIA SHAIKH-NAEEM (DIRECTOR, PROGRAMS)

OUR GOALS



2020-2021 ACHIEVEMENTS

We started the fiscal year focused on growing a high-quality investment portfolio and an engaged Member community, building on the momentum outlined in our previous annual report. We delivered on both of these determinations, while also making a deliberate and significant commitment to Canada's COVID-19 efforts. The combination delivered truly exceptional results, such as:

- **Member engagement:** Even with the COVID-19 pandemic, we saw a steady rise in engagement. We grew our innovation community to 964 Members, of which 356 organizations are actively involved in projects. Private-sector organizations account for 80 per cent of our membership.
- **Portfolio investment:** We closed the year fully invested with a portfolio of \$308 million in 82 projects; attracting \$166 million from industry. Our COVID-19 program resulted in \$89 million of investment within two months. In the last quarter, we completed Cycles 3 and 4 of the Technology Leadership programs and Cycle 2 of the Capacity Building program.
- **Skilling and training:** We are supporting 6,500 learning and development placements through the Capacity Building program which has a focus on skilling for underrepresented groups and rural communities.
- **International engagement:** We cultivated international opportunities for connecting with global innovation networks as well as links through our projects with potential partners and customers in Asia, Europe, United States

and the United Kingdom. To date, more than 40 per cent of our project teams are exploring international opportunities and several projects have signed MoUs and agreements with international partners.

- **Intellectual property (IP):** We have supported the development and protection of Canadian-made IP and increased the know-how of SMEs in addressing IP through education and hands-on support with Canadian companies. More than 350 foreground IP assets are expected from projects in our portfolio, with 75 foreground IP assets already created across 30 organizations. Our IP Strategy and Data Management Strategy is [available on our website](#).

2021-2022 GOALS

Our latest objectives reflect the important role that the Digital Supercluster plays in Canada's ongoing efforts to keep Canadians safe and healthy, while continuing to make a material, positive impact on the economic recovery. A clear priority for us is to bring to fruition the successful outcomes of our projects, while paving the path to accelerated investments to further support Canada's renewal and growth. With this in mind, we plan to support the digital transformation of Canada's key economic sectors – from healthcare to natural resources, as well as support Canada's innovative and growing digital industries.

- **Member Engagement.** With over 1,000 members and associates across Canada, we now focus our recruiting efforts to fill strategic gaps in the membership base. This includes adding national and global industry leaders who can serve as lead customers for innovative digital solutions as well as digital technology leaders who have the potential to scale into anchor firms in the ecosystem.
- **Ecosystem Impact.** Over the coming year, as projects advance and come to completion, we will leverage our portfolio to build Canadian IP data and assets that help grow our members and create widespread benefits in the innovation ecosystem. We will also position high performing projects for follow-on investment opportunities and international engagements. We will also strengthen our ecosystem by further supporting the scale-up of SMEs, developing international pathways for project outcomes and advancing our efforts in equity, diversity and inclusion.
- **Skilling and Talent.** We will advance the use of rapid skilling systems to reduce the time and cost it takes to develop job ready digital talent and teams for Canadian enterprise. This includes helping SMEs retain staff through upskilling, adding innovation leaders to help grow their business and making diversity & inclusion tools accessible to small businesses.

- **Systems and Team Development.**

We will continue to invest in software systems to help streamline and scale program operations. In addition, we will develop a formal learning and development program for our staff to help them acquire new skills and experience that strengthens our business and advances their careers.

- **New Initiatives for Economic Recovery.**

We will develop a Phase II Program Strategy with new digital leadership initiatives aimed at helping generate a resilient economic recovery that creates jobs and growth for Canadians and Canadian enterprises. This will represent a balanced approach between advancing health & wellness, economic transformation and reskilling at scale.

- [Read more in our Corporate Plan](#)



“Being at the forefront of cutting-edge innovation and watching how various organizations thrive and benefit from the Supercluster collaboration model fill each day with excitement and eagerness to work harder. I feel that we have just started and so much more can be done.”

**ARTYOM MAMZHIEV,
(ANALYST, STRATEGIC FORESIGHT)**



LOOKING BEYOND OUR BORDERS



A major aspiration of our Supercluster is to cultivate international opportunities for our Members and project teams to showcase their innovations and create market opportunities for their products and their organizations.

So far, more than 40 per cent of our project teams are exploring international opportunities and we continue to actively align our work with the work of other Government of Canada initiatives, including Global Affairs Canada, National Research Council of Canada's Industrial Research Assistance Program, and international organizations including EUREKA in Europe, InnovateUK and the Israel Innovation Authority.

We are participating in notable global events, including VivaTech in France, Switzerland's Intelligent Health AI and the Japanese Women's Innovation Network (J-WIN).

We are also working closely with the Asia Pacific Foundation of Canada to develop significant international partnerships in Asia through the Asia Business Leaders Advisory Council (ABLAC)

and continue to identify opportunities with Asian business leaders to improve Canada-Asia business engagement. In November 2020, we signed a Memorandum of Understanding with India's IITM-Pravartak Technologies Foundation, as a result of ideation workshops centered around the Precision Agriculture to Improve Crop Health project led by Terramera.

We also focus on stronger relationships with the United States through the Cascadia Innovation Corridor in order to enhance cross-border opportunities and accelerate a strong economic region along the Pacific Northwest. These international partnerships demonstrate our commitment to continue driving and building on the strong foundation for collaborative research and innovation, enabling growth and opportunities for our projects and Members.



Working with the Supercluster is an opportunity for a small company like Careteam to be connected to global players, develop solutions that are meaningful and leverage the full value of the innovation we have created. We've been able to raise more money, attract more employees, and get in the door of some significant organizations across Canada and the U.S. because they first heard of us through the Supercluster.



**DR. ALEXANDRA T. GREENHILL, CEO & CHIEF
MEDICAL OFFICER OF CARETEAM TECHNOLOGIES**

FINANCIALS



DOWNLOAD 2020-21

Financial Statements and Independent Auditor's Report



DOWNLOAD 2020-21

Disclosure Letter

OUR PEOPLE

BOARD CHAIRS



DR. DIANE MCINTOSH
Psychiatrist and
Chief Neuroscience Officer
TELUS Health



NADINE LETSON
Assistant General Counsel
Microsoft Canada

BOARD OF DIRECTORS



ALEXA YOUNG
VP
Government and Public
Affairs, BC Council of
Forest Industries



AVVEY PETERS
Chief Strategy Officer,
Communitech, Managing
Director,
Communitech, Canadian
Digital Media Network



BOB CANTWELL
Managing Director
Boeing Canada
Operations



BRIDGITTE ANDERSON
President and CEO
Greater Vancouver Board
of Trade



BRUCE FORDE
CEO
Cambian Business
Services, Inc.



Carling Dick
Principal
Earnscliffe Strategy Group



CAROL ANNE HILTON
Founder and CEO
The Indigenomics
Institute



CHRISTINE BERKA
VP of Human Resources
UrtheCast



CHRISTINE LITTLE
ADM Small Business, Job
and Workforce,
Ministry of Jobs,
Economic Development &
Competitiveness Province
of BC



DARREN BARKER
Chief Digital Officer &
Senior VP,
Global Supply Chain
Canfor



FIONA DALTON
President and CEO
Providence Health Care



DR. GAIL MURPHY
Vice President, Research
and Innovation and
Professor of Computer
Science, UBC



GENEVIEVE PINTO
Partner
Renewal Funds



GREG CAWS
Advisor, Mentor
and Director
GCJE Projects Ltd.



HANDOL KIM
Co-Founder & CEO
Variational AI



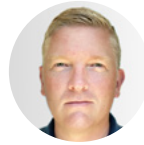
JAMES HURSTHOUSE
Chief Strategy Officer
AMPD Technologies



JILL TIPPING
CEO
BC Tech Association



JOCK FINLAYSON
Executive Vice President
BC Business Council



JOHN HITSMAN
Senior Business
Development Manager
Microsoft



MARKO GASIC
VP Planning &
Improvement
Mosaic Forest
Management



MAX BLOUW
President
The Research Universities'
Council of British
Columbia



MURRAY THOM
VP of Software and Cloud
Services
D-Wave



NEETI JESSA
Lawyer



SHANE SABATINO
President, TELUS Employer
Solutions
TELUS Health



DR. STEVE SLATER
VP, Strategic Initiatives
Terramera



STEWART BECK
President & CEO
Asia Pacific Foundation



SUE PAISH
CEO
Digital Technology
Supercluster



TOMER LEVY
VP Global R&D, Enterprise
Imaging
Change Healthcare

OBSERVERS



CORRIE BARCLAY

ADM, Health Sector IMIT Division,
Ministry of Health
Province of BC



ANDREA JOHNSTON

ADM, Innovation, Science and Economic
Development Canada
Government of Canada

LEADERSHIP TEAM



SUE PAISH

CEO
Digital Technology
Supercluster



BILL TAM

Co-Founder & VP
Business Development
and Partnerships



EVGUENI LOUKIPOUDIS

Chief Technology
Officer



GINA ARSENS

Chief Financial Officer



KAREN MCCLURE

Vice President, Project
Management and
Implementation



SUZANNE GILL

VP, Government Relations
& Public Affairs



SHAWN GERVAIS

Director,
Strategic Foresight

LEGAL COUNSEL



AUDITOR



OUR PARTNERS AND COMMUNITY



ASSOCIATES

221A
3AG Systems Inc.
3vGeomatics Inc.
A Way Home Canada
A&K Robotics Inc.
Aberrant Designs Inc.
Accelerate Okanagan
Accenture
Acclaim Health
Accreon
Accuras Inc.
AceAge inc
Acquired Insights Inc.
adaptech group
Adenda Media Inc.
Aditum Health
adMare Bioinnovations
Advanced Quality Systems
Aequilibrium Software Inc.
Aerial Technologies Inc.
AescuRobot Inc.
Agartee Technology
Agriculture & Agri-Food Canada (AAFC)
Agvesto
Agyle Intelligence
AI Forte Solutions
Ai-Genetika
AIB Innovations Ltd
AiDANT Intelligent Technology
Air Clarity Solutions
aiSight Inc.
AIZen Experiences Inc.
Alberta Blue Cross
Alberta Innovates
Alex AN Test
Alex AN Test 2
Alleviate Physiotherapy
Allevio Healthcare Inc.
Alpine Building Maintenance
AltaML
AnalysisWorks
Analytix Studio Inc.
Animism Studios
Anomotion Interactive Inc.
Antenna Consulting Ltd.
Ants Labor Ltd.
AOT Technologies
AP Tech Solutions
Apex Systems INC
App-Scoop
APPIX Project Inc
Applied Informatics for Health Society
Applied Pharmaceutical Innovation
Applus+
Appnovation
Aptum
Aquatic Life Ltd.
Archiact Interactive Ltd.
Artia Enterprises
Assure QA Consulting Services Ltd
ASTC Science World Society
Astra Smart Systems
AstraZeneca
ATCO
Athabasca University
Athan Inc
Attabotics
Attaverse Inc.
Audacia Bioscience
Augurex Life Sciences Corp.
AUREL SYSTEMS INC
Autism Speaks
AVA Technologies Inc.
Avalon Holographics Incorporated
AVATO
Axis Forestry
Aycoutay Technologies
Ayogo
Badhouse Ventures
Baune Ecosystem Inc.
Bayer AG
Bayshore Health
BC Cancer Research
BC Centre for Ability
BC Children's Hospital Research Institute (BCCHR)
BC College of Nursing Professionals
BC Colleges
BC Parks Foundation
BC Platforms Inc
BC Post Secondary Network
BC Tech Association
BCNET
Bending Time
Berryhill Foods Inc
Best Buy
BGC Engineering Inc.
Big Bang Analytics Inc
Big Bear Software
Big Idea Lab Inc.
Bio-Helix Co., Ltd.
Bioenterprise Corporation Canada
bioLytical Laboratories
BioSymetrics
BirdView Insight Inc.
Blackbird Interactive Inc.
Blockchain Infrastructure Research
Blockscale Solutions Inc.
Bloom Care Solutions
Bloombase Canada Inc.
Blue Silver Shift IT Services Inc.
Blueprint ADE
Bluerover Inc.
Boehringer Ingelheim Chemicals Inc
Boreal Wellness Centres Inc.
Bowhead Health
BrightCoast Solutions, Inc.
BuiltSpace Technologies Corp.

builtstream Inc.	CheckingIn	Communitech
BujiBui Inc.	Chevron Canada Resources	Compression.ai
Business Development Bank of Canada	Cinchy	CompuClever Systems Inc.
Buy Low	Cincinnati Reds Stadium	Conair Aviation Group Inc.
CAE Inc.	Cipangu Operations	ConnectionPoint Systems Inc.
Caera Health Inc.	Cisco Systems Canada Co.	Connectus Global
Caliber Data Labs	City Media	Consensas, Inc.
Cambridge Brain Sciences	City of Abbotsford	Construction Foundation of BC
Camosun College	City of Fort St. John	Contextere
Canada Foundation for Innovation	City of Lethbridge	Convergence Concepts Inc
Canada Si-Han Education Technology Inc.	City of Nanaimo	Convergent Manufacturing Technologies Inc.
Canadian Air Mobility	City of North Vancouver	CoPilot AI
Canadian Blood Services	City of Richmond	Correct-AI Inc.
Canadian Frailty Network	City of Stratford	Corsac Technologies Corporation
Canadian Health Advocates Inc.	City of Surrey	Cosm Medical
Canadian Mortgage and Housing Corporation	City of Toronto	Countable Web Productions
Canadian Observatory on Homelessness	City of Vancouver	County of Simcoe
Canadian Partnership Against Cancer	City of West Vancouver	Covarian
Canadian Photonic Industry Consortium	CityAge Media Inc.	Crater Labs Inc.
Canadian Shield Data Center	Clarius Mobile Health	Cream Productions Inc.
Canadian Sports Nutrition Inc.	Clifford Albert Medical Services	Creatusbio
CannScript	Clinisys EMR Inc.	CrewDriver
Captova Technologies Inc	Cloud DX	CrossWing Inc.
Cardio Comm Solutions	CloudConstable Incorporated	Cryptek Labs
Caredove	Cloudworks Consulting Services Inc.	CryptoMill Technologies Inc.
Cast Analytics Inc.	Coalese Health Systems Incorporated	CTAP Inc.
Cellula Robotics Ltd.	Coanda Research & Development Corporation	CTRS Solutions Ltd.
Censeopharm Consulting Inc.	Cobalt Intelligence Inc.	CubeWerx Inc.
Central 1 Credit Union	Cobalt Strategy Group	CubicFarm Systems Corp.
Centre for Excellence in Mining Innovation (CEMI)	CodeCast	Cue North Consulting Inc.
Centre of Excellence in Next Generation Networks- CENGN	CodeZero	CuePath Innovation
Centre of Genomics and Policy, McGill University	CognisantMD	Curate Mobile Ltd.
CENTREPOINT	CollabMachine	CUTRIC
Centurion Defence	Collabofide Inc.	CX Solutions
Chartwell Long Term Care Home	Colleaga	Cybel Sciences
	College of New Caledonia	CytoGnomix Inc
	College of the Rockies (COTR)	DaganTech Inc.
	CommandWear Systems Inc.	Daiya Foods
	CommForms Secure Forms Inc.	Dapasoft Inc.
	Commit	Darwin Labs Inc.
		DarwinAI Corp

Dataload Test Account	ElmCor Solutions Corp.	Fraser NW Division of Family Practice
Datamap Inc	Empower Health	Fremtidmedia
Datifex, Inc.	Empower Operations Corp.	FreshWorks Studios
DBA wtfast – AAA Internet Publishing Inc.	Eptelligent Solutions Ltd.	Fujitsu Intelligence Technology
delecta Technologies Inc.	Enso	Fuse42 / Cannabis & Hemp Innovation Centre Inc.
Deloitte	Environmental Criminology Research Inc. (ECRI)	FuseForward
Destination BC	Envisioning Labs Corporation	FUSIONpresents AMDI Ltd.
Diabetes Digital Media Canada	EPIC Semiconductors	FYBR Solutions
Diagramics	ETG Consulting Inc	GE Digital
Digi117 Ltd	Ethelo Decisions Inc.	General Fusion
DigiBC	Eva Western Canada Coop	Generate Software Inc
Digital Health Circle	Eventbase Technology	GenerationsE Software Solutions, Inc.
Digital Lab at British Columbia Children's Hospital	Evolve Strategies Corp.	GenoLife
Digitalist Canada	EXAR Studios	Geoscience BC
Dimensional Strategies Inc.	EXO Insights Corp	Global Alliance for Genomics & Health
Direction X Corporation	Experis Inc (ManpowerGroup)	Global Media (Sample)
Disrupted	Expeto Wireless Inc. (Expeto)	Global Synergy Management Corp.
DIYARCANADA INC	Eyexpo	Globiness Inc.
Domain7	FACIT Inc.	GNW Trust/Centre for Digital Media
DragonFly MedTech Inc	FCV Labs Inc.	Go2 Productions
Drive CX	FCV Technologies Ltd.	Government of Canada (Environment and Climate Change Canada)
Drizti Inc.	Federal Emergency Management Agency (FEMA)	Gray Wolf Analytics Inc.
e-Cobalt	Female Funders	Groundswell Group
Eagle Ridge Hospital Foundation	Finite Helical Dynamics Inc.	GrowSafe Systems
Easily	Fintelics Technology Inc	GuildOne Inc.
Eastern Ontario Regional Laboratory Association (EORLA)	First Nations Education Foundation	Hack Hub
Eat Fresh Pizza	First Nations Health Authority	Halcyon Scientific Corp
eBuyNow eCommerce Ltd	FitCompete	Happipad
eChart Healthcare	Flair Technology Inc	Hatch
Ecometrica (Canada) Limited	Flash Forest Inc.	Hatfield Consultants Partnership
Economic Development Cowichan	Flashana Technologies Inc.	HeadCheck Health Inc.
Ecopia Tech Corproation	Flex Alert Company Ltd	HealthChain Inc.
Edelman Public Relations Worldwide Canada Inc	Forcen	HN Consultants Ltd
Edmonton Police Services	Foresight CAC	Holland Bloorview Kids Rehabilitation Hospital
EELO Solutions Inc.	Forest Technology Systems Ltd (FTS)	Hootsuite Inc.
Electronic Arts (Canada), Inc.	Forge Experience Design	HR MacMillan Space Centre
Elevate Consulting Inc.	Fortinet Technologies ULC	HR Tech Group
Eli Science Inc.	Foundry Spatial Ltd.	
Eli Technologies Corp.	FPIInnovations	
	Fraser Health Authority	

Huawei Technologies Canada Co.,Ltd.	InteraXon Inc.	LaSalle College Vancouver
Hydra Energy Corporation	INTERFACE Health Society	Launch Academy
Hypercare Inc.	Interior Health Authority	Layer 6 AI
i-Open Technologies	Interpix Design Inc.	Legal Aid Ontario
IBI Group	Invakor Technologies Inc	Lendified
IBM Canada Ltd.	InventCanada Innovations Inc.	LevellingUp
ICanHelpN Inc	Inventu Research Inc.	Lifeceycle Inc
Icebreak Consulting	Inverted AI	Lifeguard Digital Health Inc.
iClinic Systems	Invitae	Lifelabs
iClipse Technologies Inc.	Invixium Access Inc.	Light House Sustainability Society
ICTUS Audio	Invoke Media Inc	Lighthouse Labs Inc.
IFIVEO CANADA INC.	IP Centric Systems Inc	LimeSpot Solutions Inc.
Illumina	IPIO	Limestone Analytics
Immigrant Employment Council of BC (IECBC)	Island Coastal Economic Trust	Lion's Gate Hospital
Immigrant Services Society of BC	IT Collaborative Inc.	Living Lakes Canada
iModX – International Model Exchange	Jennifer Tongol 888 Inc.	LivNao Technologies
IMPART investigator team Canada/ CardioVascular Research New Brunswick (CVR-NB)	Joule Inc.	Locumunity
In Nature Robotics Ltd.	Juuga Marketing	LoginRadius
Indoc	Kaizen Technology	London Health Sciences Centre
Infonet Blaise Pascal	Khure Health Inc.	Lower Columbia Initiatives Corporation
Information & Communications Technology Council	Kinduct	Ludare Games Group Inc.
InfoStages Advisors	KisoJi Biotechnology Inc.	Lunge Systems
Infusion Edutainment AI&VR&AR Tech Development Ltd.	Klue Labs Inc	Luxsonic Technologies Inc
Innovate BC	Koan Designs LTD	Lyn Brooks & Associates
Innovation Boulevard	Kognitive Marketing	Magnetar Games Corporation
Innovation Central Society	Koi Research Group	Major Tom Agency
Innovation Island	Koolblock Inc.	Manawa Networks
INO (Institut national d'optique)	Koonkie Inc.	Mannarino Systems & Software
InputHealth Systems	Kootenay Association for Science and Technology	Mannin Research
Inscape Studios	Kootenay Career Development Society	Maple Communications Group Inc.
InSite Information Systems	KPMG LLP	Mappedin Inc
Institute for Personalized Therapeutic Nutrition	Krate Distributed Information Systems	Mara Technologies Inc.
Integrative Concussion Research Inc.	Kwantlen Polytechnic University (KPU)	Marion Surgical Inc
Intelligent Haptronic Solutions Inc.	Kwixand Solutions	MarketMarche
Intelligent Traffic Equipment Marketing Ltd.	LA County Sheriff's Office	MarkiTech LocateMotion
	Labarge Weinstein LLC	MaRS Discovery District
	LanceSoft	Maryland Hospital
	Langara College	Mastercard
	Larry Kozak Consulting	Matidor.com
		MBS Techservices Inc.
		McGill University

MCI Solutions	MuseFind	Okanagan College
McMaster University	Mustel Group	OLA Display
MedChart	MUUTAA	Olo Health
Medtronic Canada	Nano-Lit Technologies BC	OMx Personal Health Analytics Inc. (O/A DrugBank)
Meewasin Analytics Inc. (dba Mighty Oaks)	National Collaborating Centre for Infectious Diseases (NCCID)	OneFeather Mobile Technologies Ltd.
Meira Consulting Inc.	National Research Council of Canada (NRC)	Oneir Solutions
Memorial University of Newfoundland	Nedieon	Ontario Brain Institute
MEMOTEXT	NetraMark Corp	Ontario Genomics
Menten AI Canada, Inc	NeuronicWorks Inc.	Ontario Institute for Cancer Research
Merck Canada	New Ventures BC Society	OPEN
Mercury Guides Co	NexJ Health Inc.	Open City Network
Meridian Farm Market	Next Billion Social Inc.	Open Digital Delivery Foundation
Metabolomic Technologies Inc.	Next Decentrum	OPEXC Inc.
Metallic Brain	Next Generation Microbiology Inc.	OpsGuru
Metanaut	Next Step VRtual Ltd.	Optimy.ai
Metonym Enterprises	Nextleaf Solutions Ltd.	Orange Oranges Technologies Ltd
MHealth Global	NextUp Care	OrigamAi
Michael Smith Foundation for Health Research	Niagara Health System	Origami XR
Mikata Health	Nineteen.ai (Ensemble Ventures)	OrpheusKey Research & Development Inc.
mimik Technology Inc	Nomadic Pictures	Owl Labs Inc.
MineSense Technologies	Norima Consulting Inc.	P&P Optica
Minivillage Group Inc.	Nortal AS	Pacific Autism Family Centre Foundation
Mission City Pizza	North Island College	Pacific Blue Cross
MistyWest	Northeastern University (Vancouver Campus)	PAI Health Inc
Mitacs	Northworks IP	Pandos Intelligence Inc.
MLDSAI Inc.	Norton Rose	Panevo
MNP	NovaResp Technologies Inc	Panvion Technology Corp.
MOBIA	Novateur Ventures Inc.	Paper Leaf Design Ltd.
Mobile Angel. Inc.	Novex Delivery Solutions	Paradox Learning
Modest Tree	NPower Canada	Paramed
Moj.io Inc.	ntwist inc	Partners In VIP Nursing
Mojo Group Services Inc.	Numinus Wellness Inc.	Patriot One Technologies Inc.
Morneau Shepell	Nurse Next Door	Peloton Technologies Inc.
Motive.io	Nutriva Group	PenderFund Capital
Motryx	Nuvis Technologies Inc.	Petra Data Science
Mount Royal University	Nxtgen Care	Peytec Inc.
MoviWear	NZ Technologies Inc.	PHEMI Systems Corporation
movmi Shared Transportation Services Inc	OARO (Nodalblock Holdings Canada Inc)	Photonic Signatures
MRM Proteomics Inc.	Ocalink	

Pillar Science	QuantoTech	Saint Elizabeth Health Care
Platoi Industries Inc.	Quantum Data Technologies Inc.	Salesforce Canada
Plotly	Quebec Network for Research on Aging (QNRA)	Salu Health Gauge
Plurilock Security Solutions Inc	Queen's University	Salus Technologies Inc
Polstaif Innovation	QuestUpon Inc.	SanEcoTec Ltd.
Popul8 Analytics Ltd	R-Brain Analytics	SAP
PORTAGE LEGAL SERVICES	R.J. McGregor & Associates	Saskatchewan Health Authority (SHA)
Portfolio by OpenRoad AutoGroup	Radical I/O Technology	SaskTel
Postmates	Raven Indigenous Impact Foundation	Save on Foods
POWERSHIFTER Media Corp.	Raymond James Ltd.	Schneider Electric
Powertech Labs Inc.	RDP Associates	School District 10 (Arrow Lakes)
PragmaClin	Real Time Medical	Science Fair Foundation of British Columbia
Precision Analytics	RealDecoy Inc	SDI – Strategic Decisions Institute Inc.
Precision NanoSystems Inc.	Reinsurance Group of America (RGA)	SE Health
Precision OS Technology	ReliablyME	Second Spring Digital Inc.
Premiere Suites	Remedy Clinical	Selkirk College
Prepr Foundation	Response Biomedical Corp.	Selkirk Systems Inc
Press'nXPress	ResponsiveAds (Canada)	Semaphore Solutions, Inc
Prizm Media Inc.	RESEAU Centre for Mobilizing Innovation	Seneca Sense Technologies Inc.
ProCogia	Revera	SensoDrive Technology
Professional Aboriginal Testing Organization Inc. (PLATO Testing Inc.)	RiggerTalk	Server Cloud Canada Inc.
Professional Quality Assurance Ltd.	Riipen Inc.	SFU VentureLabs and the Innovate Incubate Network of Canada (I-INC)
Progressive Fusion Solutions	Riskthinking.AI	Shaddari Inc
Prolucid Technologies Inc.	Roche Diagnostics	Shailah Interactive
ProMIS Neurosciences. Inc.	Rogers	Shift Health Paradigms Ltd. (Tickit Health)
PROOF Centre of Excellence	ROSe Telehealth	ShookIoT Inc.
Propel Solutions	Routific	Sidekick Interactive
Provincial Health Authority Parent	Royal Bank of Canada Insurance (RBCI)	Sierra Systems Group Inc.
Public Outreach Group	Royal Columbian Hospital Foundation	Sierra Wireless
Punch Reviews Inc.	RPC	Sigma Healthtech
Punchcard Systems	RuListing Inc.	SimplyCast
Purpose Five	RUNWITHIT Synthetics Inc.	Sinclar Group Forest Products Ltd.
QiiQ	Rural Coordination Centre of BC (RCCBC)	Singular Software Inc.
QReserve	Ryerson University	SKIO Music Inc.
qualiTEAS Inc.	Safe Software	Skybox Labs
Quanser Inc	Safelii Inc	Sleepcare Technologies Inc.
Quantaloop Technologies inc	Sagesse	SmartShare Solutions Inc.
Quantified Citizen		SMS Equipment
Quantitive Imaging for Personalized Cancer Medicine		

SnapPea Design	Tehama Inc.	TriVue Services Inc. (Operational arm of Esplanade Ventures)
Society for Canadian Women in Science and Technology	TEKsystems	TrojAI Inc.
Softmax Data Inc.	TeleVIP	Trulioo Information Services Inc.
SofTx Innovations Inc.	TeraMach, A Pivot Company	Trusty Ox Systems Ltd.
Solid State AI	TerraTap Technologies Inc.	Tsunami Solutions
SouthLake Hospital	Tesera Systems Inc	TTT Studios
Spare Labs Inc	Texavie Technologies Inc.	TWG
Spartan Controls	Thales Digital Solutions	Unbounce
Speakbox	The Artificial Intelligence Network of British Columbia (AInBC)	Universal Telematics Solutions Corp
Spectrum MD	The Canadian Special Operations Forces Command (CANSOFCOM)	University Health Network
Sphere	The ClearView Group – Solutions for Health	University of Alberta
Spreevel Inc.	The Dymond Group Inc.	University of Calgary
Springboard Atlantic Inc.	The Hospital for Sick Children (SickKids)	University of North Dakota (UND)
SRA Academy	The Ottawa Hospital	University of Ottawa
Stambol Studios Inc.	The University of Western Ontario (UWO)	University of Saskatchewan
Stardust Trading Post (Trixie Berkel)	The Verna J Kirkness Science and Engineering Education Program	University of Toronto (UofT)
Stark Enterprises	Theory and Practice	University of Windsor
Starling Minds	Thin Air Labs	Vancouver City Savings Credit Union (Vancity)
Steampunk	Think Research Corporation	Vancouver Co-op Radio
Stitch Media	Think Technologies	Vancouver Coastal Health (VCH)
Storyline Associates Incorporated	ThisIsMeInVR	Vancouver Computer Vision Ltd
Strata Health	Thompson Rivers University	Vancouver Economic Commission (VEC)
Strategic Decisions Institute – SDI Inc	ThoughtWire	Vancouver General Hospital
StratumAI	Thunderbird Entertainment	Vancouver Prostate Centre
Strider RPA	Thynkli	Vancouver School Board (VSB)
Strongpoint	Traction Guest Inc.	Vancouver VIP College (VCC)
Sun Life	Traction on Demand	VanHack Technologies Inc
Sunnybrook Research Institute	Trailmark Systems	Veative Labs
Suprema	Training Works Inc	Vector Institute
Swift Medical	TrampolineLab	VEERUM Inc
Swiftsure Spatial Systems Inc.	TransLink	Venture for Canada
Tacit Design Strategy	Trendigo IMS Inc.	Vicinity Jobs Inc
TalentMarketplace	Trent University	Victoria Innovation, Advanced Technology and Entrepreneurship Council (VIATEC)
TDB Consultants Inc.	TribalScale	VIP Futures Development Corporation of Thompson Country
Tech-Knows Services Inc.	Trillium Heath Partners (THP)	Virtro Entertainment Inc
Technical Safety BC	Triptech Engineering and Software Services LTD	Visual Defence Inc.
TECTERRA INC.	TRIUMF Innovations	Vital Biosciences Inc.
Tectonic Strategy Inc		
TeejLab Inc.		
Teekay Shipping		

Vital Mechanics Research Inc.
Vividdata Visualization Inc.
VMG Strategic Technology
Vox Pop Labs Inc.
Walleye Networks Inc.
Weever Apps
WELL Health Technologies Corp.
Wellness Pharmacy Group
WeITel Incorporated
Wescana Pharmacy Group
Western Industrial Solutions
WestGrid
Wewerke Design Inc
Windset Farms

Wisebox Solutions Inc.
Women's Health Research Institute
Workhorse EAM
World Health Organization (WHO)
WZMH Architects
xD Analytics
Xerus Medical Inc.
XIVIX Systems Inc.
XOMBO
Xtract Technologies Inc. (Xtact AI)
Yactraq Online, Inc.
Yave Incorporated

YLH Advisory Group Inc.
YodelME
York University
Youth Culture Inc.
Yumebau Inc.
Yuser Inc.
Yvette Wells Management Consultant
ZeroKey Inc.
Zilia
zipBoard Tech
Zu.com
Zymeworks Inc



Over this past year, you have advanced transformative projects, from the Point of Care Ultrasound that delivers real-time diagnostic results for COVID-19 patients in rural and remote health care settings to the Canadian Tech Talent Accelerator that offers training programs to low-income, diverse young Canadians. Thank you for your continued dedication to building a strong foundation for collaborative research and developing world-leading innovation ecosystems across Canada. Your accomplishments over the past year demonstrate the incredible possibilities that we can achieve when we work together.



**THE HONOURABLE FRANÇOIS-PHILIPPE
CHAMPAGNE, MINISTER OF INNOVATION,
SCIENCE AND INDUSTRY**



Canada's Digital Technology Supercluster thanks its funding partners, including the Government of Canada through the Innovation Supercluster Initiative and funding commitments made by our members. We would also like to thank the people who assisted in developing our 2020-2021 Annual Report, including Canada's Digital Technology Supercluster team, Board of Directors and members, Switchboard PR and spark*advocacy.