

Corporate Plan 2022 - 2023

For the fiscal period ending March 31, 2023





Published by Canada's Digital Technology Supercluster.

Extracts from this document may be reproduced for individual use without permission, provided the source is fully acknowledged. However, reproduction in whole or in part for purposes of resale or redistribution requires prior written permission from Canada's Digital Technology Supercluster.

© Canada's Digital Technology Supercluster 2022

Table of Contents

Canada's Digital Technology Supercluster	4
1.1 Introduction.....	4
1.2 Vision, Mission and Values.....	6
1.3 Program Strategy	7
1.4 Development Path.....	11
Progress 2021-2022	13
2.1 Growing our Innovation Community	14
2.2 Delivering Our Programs	15
2.3 Strengthening our Ecosystem	19
2.4 New Funding	21
Performance Measurement	22
3.1 Financial Results	23
3.2 Key Performance Indicators	26
2022-2023 Goals and Objectives.....	27
4.1 Maintain the Momentum of our Innovation Community	28
4.2 Delivering on Outcomes of Programs.....	30
4.3 Strengthen our Ecosystem	32
4.4 Launch Program for Pan-Canadian AI Strategy Commercialization.....	34
4.5 Secure New Funding.....	35
Budget and 5-Year Program	39
5.1 Overall Budget 2022-2023	39
5.2 Risk Assessment and Mitigation Measures.....	43
5.3 Other Items.....	44

Canada's Digital Technology Supercluster

1.1 Introduction

The pandemic, climate change and expedited adoption of digital technologies have re-defined Canada's course and momentum for our future prosperity.

Canada's Digital Supercluster has been and will continue to be ahead of the curve - accelerating the development, deployment, and scaling of digital solutions to solve big issues while driving the growth of Canadian organizations and creating meaningful global leadership opportunities now and for years to come.

The Digital Supercluster accelerates the development and adoption of digital technologies that improve our health, protect our environment and drive productivity. Our innovation model combines demand-driven development, cross-industry collaboration, industry-led co-investment and a relentless commitment to deliver outcomes at speed. Through this, the Digital Supercluster is the launchpad for Canadian academia, researchers, entrepreneurs, industry leaders, governments and other community stakeholders to forge strategic partnerships, leverage commercial connections, secure anchor investments and build international trade relationships that will fuel growth, accelerate economic recovery, and secure Canada's prosperity – now and for generations to come.

The Digital Supercluster has co-invested in over 80 technology and talent building projects that position Canadian industry leaders, SMEs and academia at the forefront of sustainable natural resource development, digital healthcare and green business transformation. The Digital Supercluster's growing ecosystem of 1000+ members are unleashing bold, new research ideas and technology advancements to:

- Effectively anticipate and mitigate climate-related challenges, reduce carbon emissions and improve the environmental sustainability of natural resource development.

- Fight against COVID, provide better care and health outcomes, improve mental health and well-being, and drive the long-term economic viability of our healthcare systems.
- Digitally transform Canada’s traditionally strong industries such as aerospace, natural resources and agri-food to increase productivity, maintain global competitiveness and advance international opportunities.
- Support inclusive and equitable talent programs that bridge the development of transformative technologies, green jobs and the digitally skilled talent needed to drive them.
- Enable Indigenous partners and communities to adopt digital connectivity and cultivate digital talent leaders.

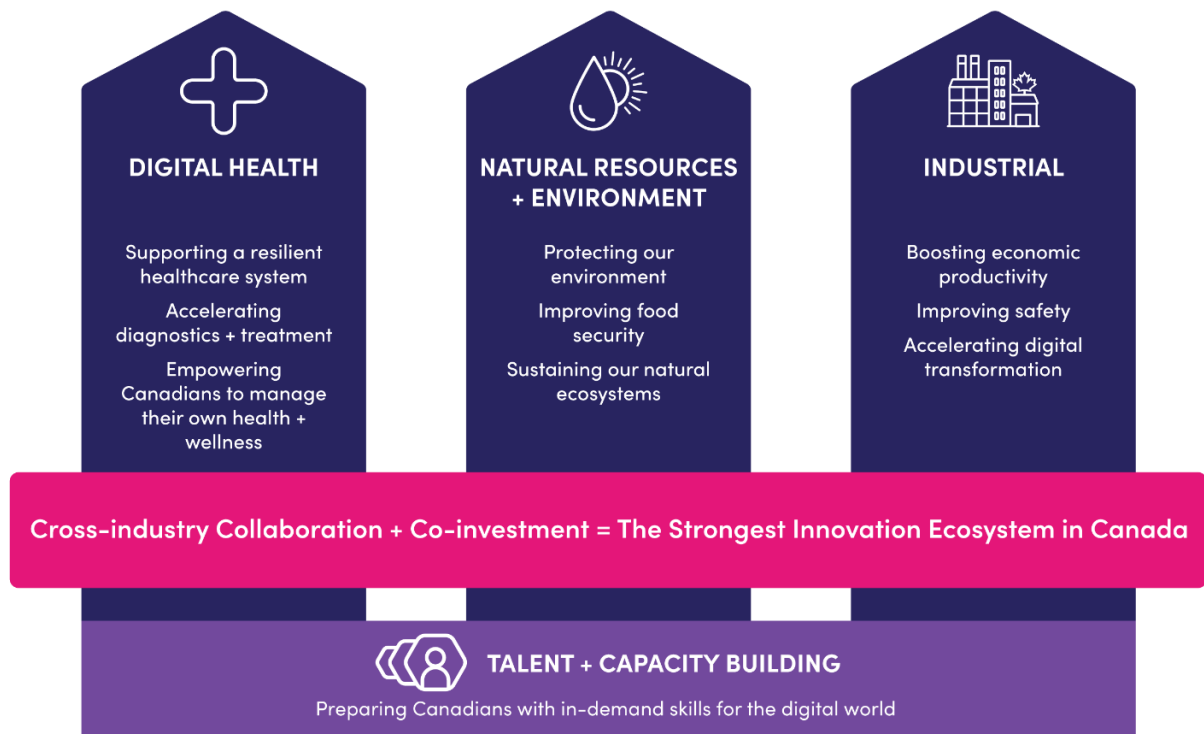


Figure 1: The Digital Technology Supercluster’s areas of innovation advancement

We are advancing Canada's competitive digital advantage and IP protection in AI and machine learning; quantum computing, bioinformatics and computational biology; genomics; data sharing, standardization and governance; data and immersive technologies; geospatial and hyperspectral imaging; sensors; smart devices; IoT and robotics.

1.2 Vision, Mission and Values

Our Vision

To position Canada as a global leader in digital technology through a Supercluster that unlocks the potential of data in the era of the intelligent enterprise.

Our Mission

- Create a critical mass of world-leading digital technology companies across Canada that develop and commercialize innovative products, platforms and processes;
- Transform Canadian industries sustainably through the digitization of business, prioritizing industry-specific needs, and delivering productivity gains and competitive advantages at the firm and industry levels; and
- Grow the economic benefits for B.C. and Canada by generating new companies, scaling existing firms, enabling performance improvements in Canada's sectors of strength, and positioning Canada as a global hub for digital technology innovation.

Our Charter of Values

Our innovation community is guided by core values that are the cornerstone of how members and participants interact and work together. These values are:

DIVERSITY. We embrace diversity and inclusion in everything we do.

TRANSPARENCY. We are transparent and open, candid, respectful in our communications and actions, and we promote a trustful environment.

COLLABORATIVE. We proactively collaborate, respecting and leveraging the value of different experiences and perspectives to drive agreement.

RESULTS FOCUSED. We are outcomes and results focused, knowing that through collaboration we will deliver meaningful, strong and positive results.

GREATER GOOD. We embrace the greater good and seek system-wide benefits.

BOLD. We are dynamic and innovative, pushing technology for maximum business and societal impact.

RESPECT. We keep our promises and, if there are conflicts, we declare them to maintain transparency and professional integrity.

1.3 Program Strategy

The COVID-19 pandemic accelerated how digital technologies are transforming our society and economy. We now know that the “digital economy” is no longer a subset of the economy.

There has been a rapid acceleration of digital technologies as a result of the pandemic. It is driving the creation of an innovation environment that is quite different from what has been experienced in earlier industrial revolutions where transformation and success resulted from leveraging mechanized production, electric power, electronics and information technology. Today’s digital transformation is not just about harnessing invention, rather, it is about learning to work with a convergence or fusion of technology that crosses physical, digital and biological boundaries. Today’s digital transformation demands a new kind of innovation enterprise.

As we did with our rapid response to COVID-19, we aim to harness the power of digital technology as a catalyst for economic recovery, renewal and a return to prosperity that supports the inclusion and digital skills development of youth and underrepresented communities.

Our Supercluster is founded on a collaborative model, bringing people and organizations together – some of whom have never met before. By exploring major industrial and societal challenges together within our innovation programs, project consortia are formed with the resilience to embrace the challenges and capture the opportunities that come with innovation in the digital age. At the heart of our model, and early successes, is

collective problem solving, discovering solutions with organizations and people with different perspectives, building meaningful relationships, learning to collaborate and through this, building teams that have trust, move fast, understand and embrace diversity of thought and experience, deliver exceptional results and are determined to drive Canada forward.

By not focusing on a single industry or sector, we create a unique space in which organizations that may not normally engage with each other can discover common goals and shared strategic interests. By leveraging the diversity of a broad base of participants, we capitalize on the assets, perspectives and capabilities of many organizations. This leads to cross-sector, inter-disciplinary programs that are attractive, at scale and relevant across multiple sectors and markets.

The following framework (Figure 2) illustrates how we develop programs that cut across economic sectors and platforms.

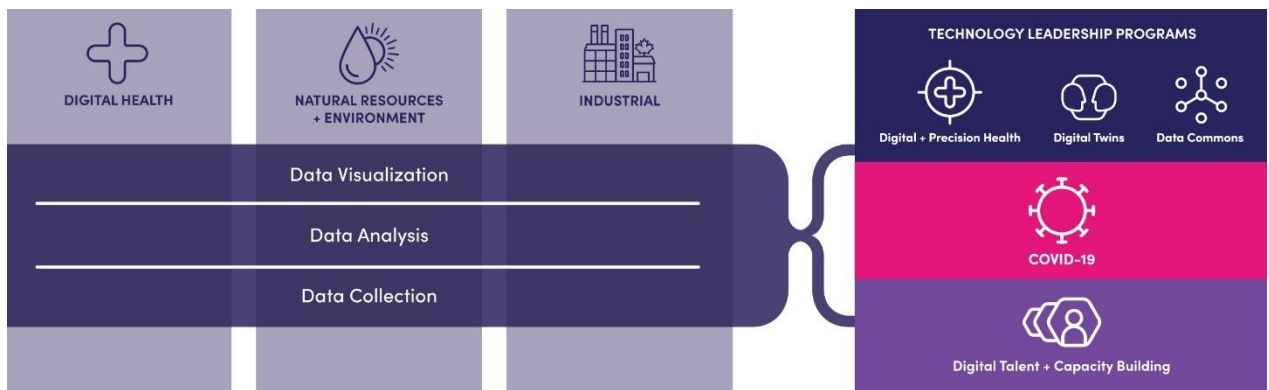


Figure 2: Program framework

We lead three active program streams. Our **Technology Leadership** program is focused on delivering data based and digital solutions to industrial and societal problems and where the outcome has a tangible global market leadership opportunity. Projects in these programs create value by catalyzing new products and services, new platforms, new ventures, connecting people across sectors and disciplines, attracting follow-on investments in multiple contexts, saving and creating jobs, developing talent and strengthening our region’s reputation for delivering meaningful, innovative digital solutions that work. Within our **Technology Leadership** program are:

Our **Precision Health** track aims to deliver precision health products and services across Canada and around the world to improve access to health services, better health outcomes and strong, resilient, adaptable, sustainable and inter-operable health delivery systems while empowering patients as the centre of care delivery.

Digital Twins is a track focused on creating real-time, virtual environments to model, simulate scenarios, analyze data, improve operational efficiency and further automate the management of complex production systems in sectors such as aerospace manufacturing, process manufacturing for composite materials, natural resource extraction and even complete food supply chains.

Our **Data Commons** track focuses on projects that will aggregate big data resources from multiple stakeholders into shared platforms with broad-based, globally relevant and world-leading protocols to enable building scalable data-value networks, advanced machine learning and innovative application development, and pave the way to an emerging global data economy.

Our **Capacity Building** program is about talent development. This program co-invests in innovative projects that help Canadian enterprises build job-ready, world-class, diverse, digital talent and teams. Investments are made in rapid skilling systems, leadership development and the growth of regional talent pools. This means companies can create well-paying jobs associated with the scaling and marketing of digital technologies here in Canada.

Our **COVID-19** program was created in March 2020 to intensely focus our experience and determination, combined with that of our member organizations, on developing digital solutions to the issues and problems created or exacerbated by the pandemic. Our call to action targeted digital technology solutions for:

- **Health system support:** Support our health authorities, hospitals and healthcare workers to manage resources and deliver high-quality care to patients.
- **Community health:** Enable Canadians, their families and friends to access care in their communities, in their homes and/or in remote locations, and to connect and support each other.
- **Safe living:** Enable Canadians to live safely and securely, and to access the support and resources they need, whether at home or at work.

- **Diagnostics and therapeutics:** Support the sharing of data, research and scientific developments, in addition to clinical trials to discover and deploy new COVID-19 vaccines, diagnostic tests and therapies.
- **Emergency response:** Help predict, plan and respond to any subsequent COVID-19 waves and other crisis situations.

An innovative digital workforce is also an inclusive workforce, so an important priority across all of our programs is to use innovation as a catalyst for equity, diversity and inclusion (EDI). We use innovation to create opportunities that bring women, Indigenous peoples, people of colour and other groups under-represented across our economy into all levels of the technology sector.

Value Capture

While every program has projects with a set of target outcomes, as projects move through various stages toward project completion, there are multiple pathways that create benefits for both project participants and the ecosystem at large. We have learned through our members that success is multi-dimensional, including but not limited to:

- **Scaling:** This includes providing the opportunity, pathway and successes in attracting follow-on investments from multiple sources, growing market share through customer acquisition and reaching international markets.
- **Developing SMEs:** We can (and do) help to accelerate the growth of small and medium enterprises (SMEs) by connecting them to large organizations, intellectual property (IP) expertise, new markets and customers, as well as those with potential sources of risk capital, where appropriate.
- **Research Commercialization:** We help organizations leverage existing investments in research and innovation centres of excellence to translate and evolve scientific discoveries into products and services that can be used in industry and other domains domestically and exported globally.
- **Connecting People:** Through multiple forums created and curated through our Supercluster, we support relationship building that fosters capabilities and expertise leading to new business partnerships, customers and jobs.

- **Job Creation:** Every element of what we do with and for our stakeholders includes our commitment to protect, expand and create meaningful job opportunities for Canadians. This has never been more important than during COVID-19 where, through our projects, we were able to help companies save and create meaningful and critical jobs for their employees and for the continued success of the business.
- **Economic Productivity:** We bring together small and large companies from diverse sectors, government and academia to solve problems in a way better than any one organization could do on its own.
- **Reputation:** We are seeing the early results of our projects and our member organizations' successes, which are beginning to attract international recognition for Canada as a place where innovative, meaningful and pragmatic digital solutions can be delivered in a trusted and reliable environment.

1.4 Development Path

As outlined in our [Strategic Plan 2018-2023](#), the evolution of our Supercluster was planned from the outset to be comprised of three stages: a two-year stage of “initiating collaboration”, followed by three years where our Supercluster would leverage the first stage and focus on “accelerating innovation”, then progressing to a five-year stage of “enhanced performance and sustainability”.

This deliberate structured approach continues to provide a solid foundation for our planning, engagement and expectation setting with our stakeholders. We have established good business systems and provided people and organizations time to initiate collaboration. Simultaneously, we are driving ambitious outcomes while developing organizational foundations, systems and approaches (Figure 3).



Figure 3: Digital Technology Supercluster roadmap

We are in “Stage Two” - *Accelerating Innovation*, and with COVID-19 impacting and accelerating much of what we do, we expect this stage to continue through the upcoming fiscal year ending March 2022 and beyond into 2023.

When the pandemic started to impact Canadians at the start of 2020, we worked with our partners in the Ministry of Innovation, Science and Industry (ISED), and together made a commitment to help Canadians respond to the greatest health and economic crisis in a generation. With the drive and determination of our members, together we are playing an important role in helping Canada’s fight against the virus. Projects in our COVID-19 program include the virtual delivery of health services, expanded access to mental health services, greater access to fresh, healthy food, the discovery of technologies that will support a safe reopening of businesses and society, and so much more.

Our Supercluster’s work to date and what is planned in the coming year is an important part of supporting Canadians as together we continue to navigate the evolution of COVID-19 and prepare for economic recovery and return to growth. This public-private investment opportunity will set the stage for a robust, inclusive, digital and sustainable economy that will be recognized and respected around the world, and which will deliver success, optimism and prosperity for Canadians today and for future generations.

Progress 2021-2022

We have created a portfolio of digital innovations worth more than \$300 million while growing a pan-Canadian innovation community of nearly 1100 organizations. We attracted industry leadership and community engagement, building a momentum that allowed us to achieve many of our five-year goals well ahead of schedule.

Our collaborations are creating more than \$1.4 billion in revenue potential for Canadian companies, saved and created more than 2,500 jobs during the pandemic and built momentum, pride and excitement in the future of Canadian innovation.

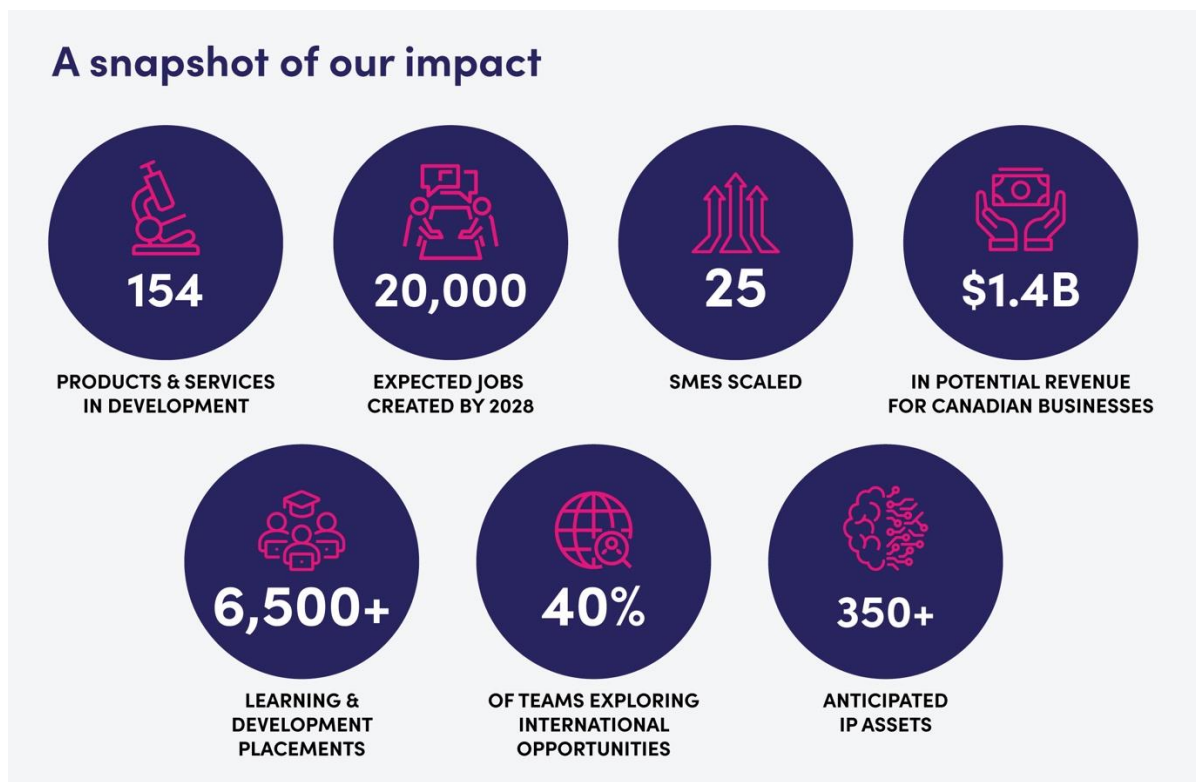


Figure 4: Digital Technology Supercluster impact

During this past year 2021-2022, we oversaw the successful completion of 31 projects in our portfolio (not including capacity building) while contracting an additional 9 technology leadership and 11 capacity building projects. With over 80 projects in our portfolio, we

are seeing success in commercializing research and driving digital innovation as a catalyst for sustained, cross-sectoral economic growth.

2.1 Growing our Innovation Community

As outlined in our prior year's [Corporate Plan](#), our goal was to recruit and retain an engaged membership base and foster meaningful engagements with stakeholders. Over the past year, we have steadily grown our community of collaborating members which now includes close to 1100 diverse organizations across the country. We expanded our membership across Canada and now have close to half of all members recruited from outside of British Columbia.

Our priority throughout the past year was to recruit and retain members that lead to stronger collaborations and more ambitious project undertakings. We were successful in attracting new customer/adopter members in the areas of digital health (health service providers, hospitals, wellness companies and insurance companies) as well as in natural resources and environment (mining, agriculture and environmental companies). This was a critical part of developing a robust ecosystem of collaborators.

Our member community is highly engaged. Through the year, we hosted ideation workshops in the areas of Digital Marine, Digital Health and Getting to NetZero. We now have more than a third of our members involved in active projects.

With the successful completion of many of our projects, we hosted a series of “Demo Days” with the goal of showcasing the outcomes and attracting new customers, partners and investors to scale-up the opportunity. Our projects are attracting international interest from the UK, Europe, Southeast Asia, India and the US in the areas of genomics ([COVID Cloud](#)), cancer detection ([Project ACTT](#)), AI-powered wound care ([Telewound Care](#)), world health guidelines ([Global Clinical Network for Infectious Diseases](#)), environmental monitoring ([Protecting our Oceans](#)) and biometric solutions for the workplace ([Healthy Access](#)).

Our specific objectives for the year were:

OBJECTIVE	ACHIEVEMENT	
Recruit and retain an engaged member base		Completed as planned
Foster meaningful engagement with key stakeholders		Completed as planned
Support organizations that can scale and build pathways to export and international success		Completed as planned

2.2 Delivering Our Programs

Digital productivity and innovation are critical to Canada’s success. We accelerate the development and adoption of digital solutions that keep Canadians healthy, drive economic productivity and mitigate impacts of climate change. We bring digital innovation from concept to market - creating a space where Canadian innovators, industry leaders, researchers and governments produce digital solutions together better than any one of them could do alone.

We harness the power of collaboration to drive Canadian innovation. We curate and co-invest in the development, deployment and scaling of Canadian-made technologies. In doing so, we attract private-sector investment, develop digital talent and skills, and ultimately enhance our performance in digital innovation and R&D.

Our approach creates a “network effect” — a powerful phenomenon where the number and diversity of participants, the speed of activity, the focus on delivering results and the relationships formed through the Supercluster produces fast and effective products and services, Canadian IP, customer relationships, investment opportunities and domestic and export potential far greater than other approaches to innovation.

Each participant in our collaborative innovation model contributes to driving results:

- **SMES** bring digital expertise and agility. They benefit from a fast track to customers, relationships with industry leaders forged in the crucible of delivering outcomes, support for protecting IP, demands for accountability and results, and follow-on investments to build out solutions and grow faster.
- **INDUSTRY LEADERS** bring industry knowledge, influence, investment, and experience. They benefit from increased competitiveness, the discovery of digital-first solutions, exposure to new thinking, relationships with innovative leaders and accelerated R&D.
- **ACADEMIA** brings ideas and talent. They benefit from the speed of industry, the ability to take research prototypes out of labs and into ‘real life’ applications and exposure to diverse partners across multiple sectors.
- **GOVERNMENT** brings policy, investment, and potential customer opportunities. They benefit from reduced risk in investments, faster results, and a more sustainable, resilient and prosperous Canada.
- **NOT-FOR-PROFITS** bring social responsibility and community purpose. They benefit from advancing research and having input on the design of technology for social good.
- **CANADIANS** bring passionate demands for faster and better digital innovations, stronger global competitiveness, and a return to economic prosperity. Canadians benefit from the fast development and deployment of real-world solutions that support environmental sustainability, improved health and well-being, a faster post-pandemic recovery, equitable opportunities for all, and a better quality of life founded on the ‘upheaval’ of the traditional approaches to innovation.

We have drawn upon a pan-Canadian innovation community and co-invested in more than 80 digital innovation and capacity building projects, creating a \$300+ million investment portfolio. We have supported the development of Canadian-made and Canadian-owned IP that supports the objectives of the Government of Canada's IP Strategy, providing a framework that allows collaborating partners to successfully commercialize IP (including from academic partners) and SMEs to fully leverage and grow their background and foreground IP. We have supported the development of more than 500 IP assets across our portfolio.

Cycle 4 Call for Technology Leadership Projects

Through the past year, we activated our Cycle 4 call for Technology Leadership projects, committing \$30 million across eight new projects and leveraging nearly \$50 million of industry investment.

Second Call for Capacity Building Projects

At the same time, we completed our second call for Capacity Building projects, committing \$10 million and leveraging nearly \$40 million of partner investments.

\$20 Million Additional Funding in Budget 2021

Although we were fully committed in our fund as of March 31, 2021, we were awarded an additional \$20 million as part of additional funding that was provided to the Supercluster Program in Budget 2021. We are deploying this as part of Cycle 5, a targeted call for investment in technology solutions that will address big challenges in healthcare, industrial productivity and climate change. For this call, we aim to select 5 momentum building projects. These are follow-on investments from previously approved projects and new projects from organizations that were part of our COVID program. With the conclusion of our Cycle 5 call, we will have an investment portfolio that will exceed \$370 million comprised of \$153 million of investment from the Government of Canada.

34 Projects Completed

During the past year, we successfully managed 34 projects to completion including 6 technology leadership, 25 COVID-19 and 3 capacity building projects. At the same time, we added 8 new Cycle 4 projects, 5 new Cycle 5 projects and 11 new Capacity Building projects.

The continued effects of the COVID-19 pandemic slowed the ramp-up of 19 projects in our portfolio. This was largely the result of extended timeframes to recruit qualified talent in order to execute on the project deliverables. As noted in the financial results section, we forecast an underperformance in project claims for our fiscal year 2021-2022 due to two main factors – the accelerated pace of claims for our prior fiscal year ending March

31, 2021, and the slower than expected ramp up of projects in our portfolio as a result of COVID-19.

In terms of our objectives pertaining to IP and data, we have leveraged a portfolio of more than 80 projects to connect and drive IP and data synergies across and between projects. This past year, we worked in partnership with the Innovation Asset Collective on a series of IP seminars, with a focus on IP education and IP strategies. At the same time, we began the promotion of our IP Registry, a resource for collaboration of IP assets that now includes more than 150 IP assets that allows Supercluster members to explore licensing or partnership opportunities with owners of newly created Canadian IP.

We upgraded our website, our Community Portal and our internal systems to better support the scaling of our own operations. We implemented the first stage of new collaboration tools and have plans for more robust capabilities in the future.

In terms of our achievement to our objectives for the year:

OBJECTIVE	ACHIEVEMENT
<p>Work with projects teams to deliver on project outcomes</p>	<p>● Completed 34 projects as planned</p> <p>Extended flexibility to 9 Technology Leadership projects due to the effects of COVID pandemic</p> <p>Expanded scope and funding to 10 high performing projects to deliver on additional outcomes in 2022/23</p>
<p>Support consortiums in realizing the full potential of their IP and data assets</p>	<p>● Completed as planned</p>
<p>Invest in new systems to streamline and scale program operations</p>	<p>● Partially completed</p> <p>New project and portfolio systems</p>

	Partial completion of collaboration tools
--	---

2.3 Strengthening our Ecosystem

One of our key objectives is to strengthen the overall ecosystem in Canada, creating linkages that didn't previously exist and fueling a hyper-connectedness of research, development and commercialization activity that can lead to a virtuous cycle of innovation, investment and talent attraction to transform Canada into a global hub of digital technology innovation.

Our ecosystem model simultaneously supports the scale-up of SMEs and enhances the competitiveness and productivity of Canadian companies in multiple economic sectors. This has also led to international opportunities in key digital innovation jurisdictions including the US, UK, Europe and Asia.

Our model is illustrated below:



Figure 5: Digital Technology Supercluster model

Supporting the Scaling of SMEs

Throughout the past year, we have continued to support the scaling of SMEs. Our projects involve an average of 3 SMEs connecting them to customer/adopter opportunities that in many cases would not have been realized otherwise. These collaborations have led to new investments in these SMEs with more than 45% of organizations expecting to receive follow on investment from Canadian or international investors. As an example, [Swift Medical](#) leveraged the success of their Telewound Care project to raise \$44 million in venture financing - funds the ambitious Canadian SME will use to create more digital devices and usher in a new era of clinical precision.




SMEs are also finding success in export markets with 45% of organizations expecting to access new global markets and international export destinations. We showcased the successful outcomes of several of our projects and as a result, we are seeing opportunities with new customers, partners and investors to further scale-up the opportunity.

Promoting Equity, Diversity and Inclusion

We also built upon our success in our Capacity Building program to further our objectives in equity, diversity and inclusion. In our Cycle 2 of Capacity Building projects, we further invested in promoting women and underrepresented groups in the fields of data science and artificial intelligence through our follow-on investment in [Athena Digital Leaders](#). We also invested in three indigenous-led projects aimed at building digital skills in the areas of [broadband networks](#), [clean energy](#), digital filmmaking and storytelling.

Our approach continues to focus on creating partnerships with employers, educators, learning and development technology companies and community organizations to build job ready, world-class talent and teams.

In terms of our achievement to our objectives for the year:

OBJECTIVE	ACHIEVEMENT	
Support the scale-up of SMEs		Completed as planned
Develop international pathways for project outcomes		Completed as planned
Further our efforts in equity, diversity and inclusion		Completed as planned

2.4 New Funding

One of our objectives this past year was to capitalize on our momentum, support Canada's economic recovery efforts and solidify new funding from the Government of Canada. In support of this objective, we prepared a proposal for renewed funding for five years. The decision to renew the program however was deferred and in Budget 2021, the Government of Canada invested an additional \$60 million into the existing program of which our Supercluster received \$20 million.

OBJECTIVE	ACHIEVEMENT	
Secure new investment with the Government of Canada		Partially completed Awaiting details of Budget 2022

Performance Measurement

Over the past four years, we have drawn upon a pan-Canadian innovation community that now includes more than 800 private-sector organizations, 57 of Canada's top research and postsecondary institutions, leading non-profit organizations and some of Canada's most significant industry partners including CAE, Canfor, Lululemon, LifeLabs, MDA, Providence Healthcare, Teck Resources and TELUS.

We have supported the development of Canadian-made and Canadian-owned IP. As well, we have demonstrated an approach to operationalizing the objectives of the Government of Canada's IP Strategy, providing a framework that allows collaborating partners to successfully commercialize IP (including from academic partners) and SMEs to fully leverage and grow their background and foreground IP.

Through our Capacity Building program, we have also invested in projects with innovative approaches to talent development, practical learning, development placements and connection pathways to employment. In partnership with industry, we are investing more than \$40 million to create 6,500 learning and development placements related to the digital skills and innovation leadership that is essential to driving successful digital transformations.

We have momentum. We earned the trust of industry, government and academia, and forged new R&D collaborations that capitalize on our diversity advantage - engaging organizations of different sizes and diverse areas of expertise. Industry has responded enthusiastically and have invested at a multiple of 1.2x our investment.

Already, we have met or exceeded many of our five-year targets well ahead of plan.

ISI Key Performance Indicators	Digital Supercluster 5 Year Goals	Achievement to Date	Result
Number of funded collaborative projects	35	82	Exceeded
Dollar value of investment committed by Private Sector	\$200M	\$178M	On Track
Number of companies participating	500 organizations	1067	Exceeded
Increase in participating organizations	30 to 500	30 to 1067	Exceeded
Number of products or processes developed	50 new products/ services	154 new products/ services	Exceeded
Employment growth	13,500 jobs	20,000 jobs projected by 2028	Exceeded
Extent activities are aligned with ecosystem			
<ul style="list-style-type: none"> • Build powerful partnerships and alliances • Scale up SMEs 	200 partnerships 25 SMEs scaled	389 partnerships 25 SMEs scaled	Exceeded On Track
<ul style="list-style-type: none"> • IP & data 		566 foreground IP assets expected	

As of January 2022

3.1 Financial Results

Table 1: Program Investment Summary (\$ in millions)

	Forecasted Cumulative Commitment to March 2023	Forecasted Cumulative Investment to March 2023
Industry and External Commitments	161	103
Supercluster Co-Investment	94	73
Total Technology Leadership Projects	255	176
Industry and External Commitments	23	12

Supercluster Co-Investment	13	13
<hr/>		
Total Capacity Building Projects	35	25
Industry and External Commitments	184	115
Supercluster Co-Investment	107	85
<hr/>		
Total Technology Leadership & Capacity Building Projects	291	200
Industry and External Commitments	27	32
Supercluster Co-Investment	62	60
<hr/>		
Total COVID-19 Projects	89	92
Industry and External Commitments	211	147
Supercluster Co-Investment	169	146
<hr/>		
Total Projects	380	292
<hr/>		

There is a variance between the time that projects are selected for co-investment and the time that funds are invested and disbursed by the Supercluster and Members. The disbursement of Supercluster co-investment funds is based on successful completion of project milestones that occur throughout the life of projects, rather than being disbursed

upfront on the date of the commitment. This is one of the critical differences between our Supercluster model and the investment/funding models that exist in other programs.

Table 2: Statement of Revenue and Expenditures (\$ in millions)

	Forecasted Year Ended March 2022	Budgeted Year Ended March 2022
<i>ISI Project Funding (Note 1)</i>	34.6	55.3
<i>Member Project Funding</i>	3.5	2.6
<i>Province of BC Project Funding</i>	0.7	2.7
<i>AI Project Funding (assume 90% of total)</i>	-	-
Project Revenue	38.9	60.6
<i>ISI O&A Funding (Note 1)</i>	5.1	5.1
<i>Member O&A Funding</i>	2.2	2.3
<i>Province of BC O&A Funding</i>	0.5	0.5
<i>AI O&A Funding (assume 10% of total)</i>	-	-
O&A Revenue	7.8	7.9
Total Revenue	46.7	68.5
Program Expenses		
<i>Technology Leadership and Capacity Building Program</i>	15.3	24.6

<i>Internal cost allocation</i>	2.5	2.6
Technology Leadership and Capacity Building Program	17.7	27.2
COVID-19 Program	23.6	36.1
AI Program	-	-
Total Program Expenses	41.4	63.3
Net Revenue in Excess (Below) Program Expenses	5.3	5.2
Corporate Programs and Management Expenses	5.3	5.2
Revenue in Excess (Below) Expenses	-	-

3.2 Key Performance Indicators

Table 3. Performance Indicators

	2021-2022		
	<u>Forecast</u>	<u>Target</u>	<u>Variance</u>
# of organizations engaged	1100	1000	+100
# of members	96+	80	+14
# of associates	960+	900	+60
# of members/associates in projects	390+	350	+40
# of contracted/pending project investments	87+	82	+4
Cumulative project investments awarded	\$370M	\$320M	+\$50M
Total industry investment	\$200M+	\$170M	+\$30M
Supercluster co-investment awarded	\$150M+	\$142M	+\$8M

2022-2023 Goals and Objectives

Our goals and objectives for the upcoming fiscal are set against a backdrop of 1) fulfilling the balance of our commitments in our Contribution Agreement and 2) leveraging the impact of our efforts as part of Canada's goal to **build back better** – sustainably, inclusively and digitally. We have proven our ability to bring together organizations to develop solutions to real issues, introducing companies to their first customers and creating a collaborative environment where the agility and innovation of smaller organizations complements the experience and depth of larger enterprises and the perspective and horizon of post-secondary partners.

Our investments are aligned with the goals of keeping Canadians safe and healthy, fighting climate change and protecting our environment, and creating new green economy opportunities for ALL Canadians. We play a critical role in economic recovery by helping Canadian enterprises invest in the development, deployment and scaling of digital solutions while also providing those solutions to accelerate the digital transformation of our economy and society. Our investments will have a material positive impact on attracting the private sector investment that will be essential to any economic recovery effort.

In the past four years, we have surpassed many of our five-year goals. By the end of March 2022, we expect to commit investments to more than 86 industry-led digital technology projects to advance our leadership in health, address climate change, drive economic productivity and build digital skills. Our project portfolio will continue to increase as we advance our Cycle 5 calls and expect that this will be reflected in the time period between the time of writing and the end of our fiscal year. In addition to our existing programs in Technology Leadership, COVID-19 and Capacity Building, we will be commencing a new program to support the Pan-Canadian Artificial Intelligence Strategy.

A clear priority for us for fiscal 2022-2023 is to see to fruition the successful outcomes of our project portfolio while paving the path to new investments to further support Canada's goal of building back better. In this coming

fiscal year, we will be seeking a renewal of funding from the Government of Canada, to continue to amplify and expand our successes to date in commercializing research and driving digital innovation as a catalyst for making sure our communities are safe, healthy and inclusive, fighting climate change, moving forward on a path of reconciliation and growing an economy that works for everyone.

Our goals for 2022-2023 include:

- Maintain the momentum of our member community
- Deliver on the outcomes of programs
- Strengthening our ecosystem
- Launch Program in the new Pan-Canadian AI Strategy Commercialization
- Secure new funding

4.1 Maintain the Momentum of our Innovation Community

To maintain and support our growing innovation community, we need to continue to foster collaboration opportunities that can bring together partners as our investment programs mature. This will require a combination of new funding, collaboration opportunities on IP and data, and mission/challenge-oriented solutioning that can foster sustained engagement across our membership.

Our goals and objectives in sustaining our innovation community in the coming fiscal year consist of:

- Retaining an engaged membership base, and
- Fostering meaningful engagements with stakeholders.

Recruiting and Retaining an Engaged Membership Base

Our Supercluster is founded on creating new innovations through ambitious collaborations among members and stakeholders. This coming year, continuing to foster a highly engaged member community is a key success factor in collaborative innovation. Our engagement model provides opportunities for members to connect and participate in ideation forums, thought leadership sessions, networking programs and project development workshops. We've seen the success of more collaborations that grow the ecosystem and capitalize on new project opportunities. The outcomes of these project collaborations allow us to further support organizations that can scale and build pathways to export and international success. Over the past three years and especially over the past year, we have attracted a pan-Canadian member community that now numbers more than 1,000 organizations. While the approach of an open, inclusive membership model has worked in favour of building size and scope, we will be refining our focus in the upcoming year with a focus on recruiting and retaining members that can drive the outcomes that will be essential to Canada's economic recovery effort.

Fostering Meaningful Engagement with Stakeholders

We plan to deepen our relationships with key ministries within the Government of Canada as well as the Government of BC as key stakeholders. With the successful completion of projects as well as the opportunity to forge new initiatives that support the priorities of government, we plan to bring together strong, positive relationships across organizations to fuel new collaborations in digital innovation.

With the support of new funding streams, we want to build on our momentum. This includes:

- Working with the federal Ministry of Innovation, Science and Economic Development, secure new Phase II funds and a renewed five-year mandate to drive further success in the development and deployment of digital innovations towards health, climate change, economic recovery and digital skills.
- Supporting the federal Ministries of Health, Natural Resources, Environment and Climate Change, Small Business, Workforce Development, and others to help

them succeed in their commitment to grow a clean, sustainable and digital economy.

- Engaging with the Province of BC to further invest in our Supercluster and help it succeed in the delivery of its new Economic Plan. The economic plan will build on B.C.'s long-standing advantages and reflect people's values to build a sustainable, inclusive and innovative future
- Exploring partnerships with other provinces and territories in investing in and leveraging collaboration opportunities

4.2 Delivering on Outcomes of Programs

As we enter our fifth year of operation, our focus will be on delivering on the outcomes of our program investments and paving the way for further success domestically and internationally.

Our programs have helped mobilize private-sector investments by creating a unique approach to collaborative innovation by designing, piloting and completing preliminary scale-ups of innovative technologies and then deploying them widely to benefit Canadians. Our program focus allows us to co-invest with industry in developing world-leading technologies and companies while simultaneously driving the digital transformation of traditional sectors and supporting the scale-up of SMEs.

In 2022-2023, we will manage our program and project investments to successful conclusion and continue to build interconnections among complementary projects. We note that there are some projects which extend beyond March 31, 2023, and we will work with the Government of Canada to explore flexibility to continue these projects into 2023-2024.

We are excited about a future that sees a renewed funding foundation, new partnerships with the Government of Canada and other partners, as well as the opportunity to continue to build on the success we have driven over the past four years.

For the coming fiscal year, we will:

- Manage our program and project investments to successful outcomes.
- Communicate and promote the success of our programs and projects.
- Support consortiums in realizing the full potential of their IP and data assets.

Manage our Program and Project Investments to Successful Outcomes

We saw that in the previous fiscal year (2021-22), projects were slower to ramp up than expected as a result of three main factors:

- Issues related to the COVID-19 pandemic.
- Delays brought on as a result of the challenge in recruiting tech talent resulting in slower ramp-up of projects.
- Supply chain issues and in particular the sourcing of electronics including semiconductors.

As a result, a key focus for us in 2022-23 will be to support projects in accelerating their efforts.

Our priority is to support project teams to successfully complete their projects and to promote the outcomes (products, services and processes) to broader audiences including international partners. This includes:

- Supporting project consortiums in accelerating their project progress to remediate the slowdown caused by the pandemic.
- Ensuring the timely disbursement of co-investments in support of projects.
- Promoting the IP registry that will increase the amount of disclosure related to newly created IP and allow Supercluster members to explore licensing or partnership opportunities with owners of newly created IP.

Communicate and Promote the Success of our Programs and Projects

In the past year, we focused on broadening our communications and outreach efforts to promote the impact of our projects and the benefits to Canada. This has helped to increase the awareness of our Supercluster and the positive impacts in driving economic recovery and digital transformation.

As part of our objectives for next year, we will seek to extend our marketing and communications efforts to further amplify the success of our programs and projects.

Support Consortiums in Realizing the Full Potential of their IP and Data Assets

As projects deliver their outcomes, we will continue to support project teams in realizing the full potential of their IP and data assets. This includes:

- Promoting the IP registry that will increase the amount of disclosure related to newly created IP and allow Supercluster members to explore licensing or partnership opportunities with owners of newly created IP.
- Promote data sharing across private and public sector. This includes data sharing models that best fit collaborative and ecosystem development (such as open data, data sharing arrangements and data collectives/commons).

With a portfolio of more than 80 projects, we will explore IP and data synergies across projects. This may include supporting project teams in identifying adjacent opportunities, new datasets and collaborations and introducing new industry partners to extend the applicability of projects into other industry applications.

4.3 Strengthen our Ecosystem

As we have in prior years, we will continue to strengthen the overall ecosystem in Canada, transforming it into a global hub of digital technology innovation and data-related research, development and commercialization. This includes hyper-connectedness, extraordinary collaboration and inclusion, and a virtuous cycle of innovation, investment activity and talent attraction that results in accelerated venture creation, scale-ups and high-paying job creation. This coming year, we intend to

continue our focus in:

- Supporting the scale up of SMEs involved in our projects,
- Developing international pathways for project outcomes, and
- Furthering our efforts in equity, diversity and inclusion in the context of the digital economy.

Support the Scale up of SMEs

Over the past four years, we have demonstrated that our SME members have been able to leverage their participation in our Supercluster in raising their profile, raising follow-on investment, growing their talent pool, acquiring new customers and expanding to new markets including international markets.

We will continue to support our SME members in scaling up their opportunities. In our previous year, we piloted our DemoDay program as a mechanism for showcasing projects and consortiums. This has led to new business opportunities including international partnerships. We also continued to promote the success of projects through our marketing and media activities which has bolstered the fund-raising efforts of many of our SME members.

In this next year, we will further support SME scale-up by promoting the adoption of successful project outcomes, connecting SMEs to new market channels, industry partners and customers. In addition, we will help to support SMEs in creating pathways to recruiting and developing the talent that they need to successfully scale.

Develop International Pathways for Project Outcomes

In concert with promoting project outcomes to domestic market opportunities, we will also target international opportunities in key complementary markets. In particular, we will focus on identifying international collaborators to further invest in scaling the technology outcomes and adoption.

Through the past several years, we have worked closely with our partners at the Asia-Pacific Foundation, NRC-IRAP, the Trade Commissioner Service and Invest in Canada

to establish a framework for engaging international partners. We have showcased our projects and members at more than a dozen international conferences in Europe, the US and Asia and have developed partnership opportunities as a result. Our continued focus will be in key digital innovation jurisdictions, including Cascadia, UK, Israel, India and Southeast Asia.

Further our Efforts in Equity, Diversity and Inclusion

Through our Capacity Building Program, we will continue to invest in increasing the breadth and depth of our country's digital talent pool, emphasizing equity, diversity and inclusion across all projects and proposals to help more Canadians participate meaningfully in the digital economy.

Among our key activities will be:

- Promoting our commitment to the 50/30 Challenge with Members and as part of our projects,
- Working with organizations to increase and encourage an understanding of the positive relationship that exists between increased diversity and organizational performance, and
- Co-creating opportunities with individuals in underrepresented groups, with a particular focus on racialized communities, women, and Indigenous Peoples.

4.4 Launch Program for Pan-Canadian AI Strategy Commercialization

The Government of Canada will provide up to \$125 million over five years to support the commercialization of artificial intelligence innovations through a new Supercluster Commercialization Stream, part of a broader \$443.8 million investment in the Pan-Canadian Artificial Intelligence Strategy (PCAIS), which was originally launched under the Innovation and Skills Plan in 2017.

The purpose of the PCAIS Commercialization Stream is to accelerate the translation of AI science and research into commercial innovations that generate economic and social

benefits for Canadians. Specifically, the PCAIS Commercialization Stream will make investments to build AI commercialization through Canada's Superclusters by:

- Building a shared competitive advantage for the cluster, including positioning it as a world-leading innovation ecosystem.
- Advancing a range of business-led innovation and technology leadership activities that will boost performance and Canada's competitiveness in areas of economic strength.
- Generating new products, processes and services and positioning firms to scale, integrate into global value chains, and become global market leaders; and
- Fostering a critical mass of growth-oriented firms, and strengthening connections and collaborations between private, public and academic leaders pursuing private-sector led innovation and commercial opportunities.

With a project portfolio that now includes over 50 projects that involve AI in current or potential future stages of development, we are well positioned to mobilize on the goals of the PCAIS Commercialization Stream. At the time of this writing, we are proposing funding from the Government of Canada of up to \$50 million in support of this new program which will be leveraged with industry investments to realize a portfolio of more than \$100 million. If successful, we expect to sign a new Contribution Agreement which will extend current program oversight mechanisms to this new program stream. As of the time of this writing, we have not included the budget associated with the PCAIS stream.

4.5 Secure New Funding

One of our key objectives this coming year is to capitalize on our momentum, support Canada's economic recovery efforts and solidify new funding from the Government of Canada. Building on our experience to date, new funds will be invested in new programs that are focused on helping Canada to build back better by:

- Improving the health, well-being and safety of all Canadians.

- Supporting environmental sustainability and addressing the impacts of climate change.
- Expediting economic recovery by improving productivity and competitiveness of Canadian industry.
- Moving us forward on reconciliation with Indigenous peoples.
- Creating job opportunities and building Canadian digital talent.

These investments will build on the themes of digital leadership in health, fighting climate change, developing sustainable natural resources and accelerating the digital transformation of Canadian industry. Our future program focus will include:

Digital Health: Healthy Canadians Build a Healthy Economy

- **Improving access to health services:** Building on Canada's commitment to expand internet connectivity, we will accelerate the delivery of reliable digital access to diagnostic tools and services, wellness strategies, therapies and coordinated care across disciplines and geographies. Through solutions such as safe 'aging at home', we can reduce pressure on long-term care facilities and improve the healthy lifespan for all Canadians.
- **Mental health:** One in five Canadians experience a mental health episode every year. Less than half of these citizens have access to mental health services. The economic burden of the mental health crisis in Canada is estimated at \$51 billion per year and the pandemic has further exacerbated the issue. Digital solutions play an important role in delivering improved access, personalization, expertise, family support and employer guidance.
- **Healthcare resilience:** Digital platforms and technologies will accelerate effective, trusted and controlled sharing of health data, reducing service duplication and enabling the development of new treatments, diagnostics and therapies. Our collaboration model is a proven path to addressing interoperability and access issues. We will drive solutions for Canadians to securely access and share their personal health data across systems. We will also enable anonymized,

aggregated data as a rich resource for research and innovation, leading to better patient outcomes, healthcare efficiencies, new economic opportunities and better public health across the country.

Sustainable Natural Resources and Fighting Climate Change

Digital innovation can drive new approaches that mitigate the effects of climate change, create sustainable, meaningful, carbon-neutral growth.

- **Resilient forestry:** Using data and digital tools to manage and optimize forestry assets, supply chain operations and the ecological health of forests, including their critical role in carbon sequestration and sustainability.
- **Low impact mining:** Deploying digital solutions and platforms to drive new approaches that reduce the footprint on mined areas and the need for traditional costly infrastructure, while improving global competitiveness and export opportunities for critical resources.
- **Ecosystem health:** Leveraging digital tools as well as earth, soil and water data to predict, assess, monitor, manage and mitigate the effects of natural resource development on the environment.

Growing Digitally Powered Industries: Canada's Foundation for Growth

- **Industry-led digital transformation:** Driving economic growth through digital solutions to enable new business models, new products, supply chains and productivity gains in key industries including aerospace, construction, transportation, and retail.
- **Empowering small- and medium- sized businesses:** Strengthening the digital capacity of SMEs (the backbone of the Canadian economy) and local economies, supporting and encouraging the innovators, and leading digital adoptions across small businesses to allow them to “seize on new technologies and permanently alter consumer preferences to attack markets and build brands in entirely new

ways”¹.

- **Rapid skilling:** Accelerating access to rapid digital training, skilling and leadership so Canadians thrive in the digital age and Canadian employers have access to the best talent on the planet.

¹ <https://www.newswire.ca/news-releases/canada-s-economic-recovery-needs-a-small-business-rebound-891800576.html>

Budget and 5-Year Program

The Supercluster business model consists of income streams from Members, the Province of BC and the Innovation Superclusters Initiative (ISI) Program. The funds are then applied toward:

- Project investments in our Technology Leadership programs
- Project investments in our COVID-19 program
- Project investments in our Capacity Building program
- Corporate programs and management

The following chart illustrates the source and uses of funds over the five-year period.

Table 4: Program Sources and Uses Overview

	Members	ISI	Total
Technology Leadership Program	160	87	247
Capacity Building Program	30	5	34
COVID-19 Program	21	62	83
	211	153	365
Corporate Programs & Management	16	19	36
Total	227	173	400

5.1 Overall Budget 2022-2023

In the next fiscal period ending March 31, 2023, we plan to have progress against prior year selected projects as well as completing contracts with Cycle 5 Technology Leadership projects selected at the end of March 2022. In addition, we anticipate launching additional investment cycles in the fall of 2022 to coincide with anticipated new funding. Our internal costs are planned to remain relatively consistent year over year plus the anticipation of additional investments in technology to scale our operations.

Table 5: Statement of Revenue and Expenditures (\$ in millions)

	Budget Year Ended March 2023	Forecast Year Ended March 2022
Revenue	\$60.1	\$46.7
Program Costs	2.3	2.5
Technology and Capacity Building Programs	48.9	17.7
COVID-19 Program	5.7	23.6
Net	\$54.6	\$41.4
Corporate Programs and Management	\$5.5	\$5.3
Revenue in Excess (Below) Expenses	-	-

Table 5a: Statement of Revenue and Expenditures

	Budgeted Year Ended March 2023
<i>ISI Project Funding (Note 1)</i>	42.4
<i>Member Project Funding</i>	5.6
<i>Province of BC Project Funding</i>	4.3
<i>AI Project Funding (assume 90% of total)</i>	-
Project Revenue	52.3
<i>ISI O&A Funding (Note 1)</i>	1.9
<i>Member O&A Funding</i>	5.4
<i>Province of BC O&A Funding</i>	0.5
<i>AI O&A Funding (assume 10% of total)</i>	-
O&A Revenue	7.8
Total Revenue	60.1
Program Expenses	
<i>Technology Leadership and Capacity Building</i>	46.5

<i>Internal cost allocation</i>	2.3
Technology Leadership and Capacity Building	48.9
COVID-19 Program	5.7
AI Programs	-
Total Program Expenses	54.6
Net Revenue in Excess (Below) Program Expenses	5.5
Corporate Programs and Management	5.5
Revenue in Excess (Below) Expenses	-

Note 1: ISI Advance Requirement

<i>ISI Funded Project Expenditures</i>	42.4
<i>ISI Funded O&A Expenditures</i>	1.9
<i>Less: Unused ISI funding as at April 1, 2022</i>	20.0
Net ISI Advance for FY2022/23	24.3

Table 6: Anticipated Contributions Collected from Other Sources

	Budgeted Year Ended March 2023
Industry Contribution towards Eligible Project Costs (Microsoft)	2
Project Management Fees	4
Membership Fees	1
Province of BC Contribution	2

Interest Income	0
Total	8

Table 7: Anticipated Industry Matching Funds

	Budgeted Year Ended March 2023
<i>Industry Contribution towards Technology Leadership Projects (Note 2)</i>	45
<i>Industry Contribution towards Capacity Building Projects (Note 2)</i>	4
<i>Industry Contribution towards Covid- 19 Projects (Note 2)</i>	5
Total Industry Contribution towards Eligible Project Costs (based on project cost claims)	54
Project Management and Membership Fee contribution towards Eligible Project Costs (based on project cost claims)	4
Project Management and Membership Fee contribution towards O&A	5
Total	64

5.2 Risk Assessment and Mitigation Measures

With respect to the 2022-2023 Corporate Plan, we have assessed the risks together with the mitigation measures as follows:

Risk	Mitigation Measure
1. The Supercluster does not attract additional funding from the Government of Canada to renew its plans after March 2023	We are preparing a proposal for additional investment through the Pan-Canadian AI Commercialization Stream. In addition, we are engaging with the Government of Canada to increase the support for and likelihood of recapitalization. We will also explore opportunities with provincial governments, private sources of capital and other funding agencies.
2. The delivery of project outcomes is slower than planned, resulting in a delay in Supercluster revenue and co-investment payments.	We are working closely with projects that are slower to ramp up to accelerate their progress. We are also actively monitoring and adjusting our forecasts of project spending so that any potential issue is identified as far in advance as possible. In cases where we have underspent funds, we will redirect such funds towards top-up funding for successful projects. We will continue to work with ISED to identify areas of flexibility within the program.

Risk

3. Our ability to demonstrate and communicate the value of a Supercluster innovation model impacts our ability to attract and maintain members.
4. Service levels and member satisfaction are compromised due to cumbersome processes around selection, contracting, claims and reporting on projects and slower-than-planned staffing.

Mitigation Measure

We are intentionally recalibrating our focus on retaining and attracting members with the highest potential to both deliver and receive value from our Supercluster model. In other words, we will be looking at the quality and potential outcomes from each member rather than on the number of members in the organization. We will be developing Member Success Plans for every member during the year.

We have continually reviewed, improved and adjusted every element of our operations to address any issues and we continue to do this as part of being a 'learning organization'. We have implemented new systems and methods to further streamline project related processes. We also have established a cost-effective recruitment strategy to support our efforts.

5.3 Other Items

As required, we confirm that we have no amounts owing to the Crown.