



# Scaling up Canada's AI potential

ANNUAL REPORT  
2021 → 2022

**SCALE|AI**

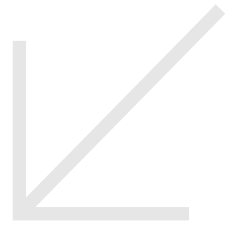
Scale AI is Canada's AI Global Innovation Cluster dedicated to building the next-generation supply chain and boosting industry performance by leveraging AI technologies. Scale AI acts as an investment and innovation hub that accelerates the rapid adoption and integration of artificial intelligence into supply chains and contributes to the development of a world-class Canadian and Québec AI ecosystem.

Scale AI invests in programs that support the implementation of concrete AI applications within companies, the emergence of future Canadian flagships in the sector, and the development of a skilled Canadian workforce.

Based in Montreal and funded by the federal and Quebec governments, the Global Innovation Cluster collaborates with more than 500 industry partners, research institutes, and other players in the AI sector.



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MESSAGES



# Message from the Minister of Innovation, Science and Industry

The honourable François-Philippe Champagne

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Investment in innovation is fundamental to growing Canada's economy and maintaining our position as a global innovation leader.



The Global Innovation Clusters, known as the Super-clusters during the period of this report, bring together businesses, academia, not-for-profit organizations, and governments to advance innovation at the speed of business. The clusters focus on highly innovative Canadian industries, including plant-based protein agri-food; advanced manufacturing; ocean-based industries; artificial intelligence; and digital technologies.

From the beginning, our government's investment in the clusters has been about finding new and innovative ways to build connections. By incentivizing collaboration and growing strong Canadian ecosystems, the Global Innovation Clusters are generating good, well-paying jobs across the country, developing a highly skilled and diverse workforce, and contributing to our economic recovery by creating stronger and more resilient economic growth.

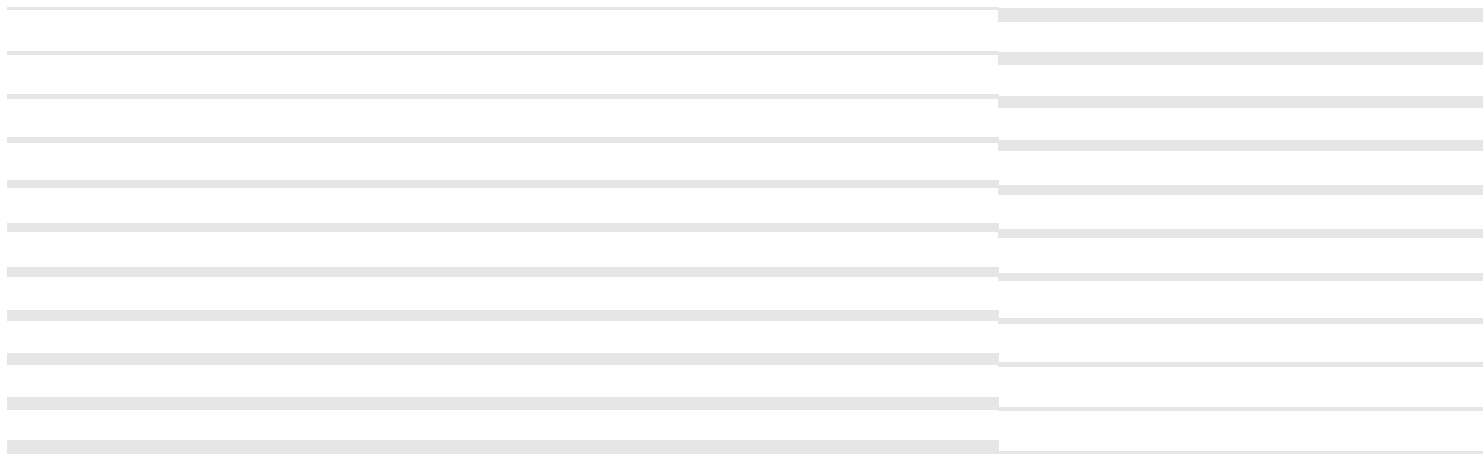
And the numbers speak for themselves. As of March 31, the clusters have approved more than 490 projects worth over \$2.1 billion and involving over 2,100 partners. This includes more than 80 COVID-19 response projects with a total investment of over \$225 million.

Our government will continue to build on the success of this collaborative model. Budget 2022 is proposing an additional \$750 million investment over the next six years to further support the growth and development of the clusters. We look forward to seeing the clusters grow their impact, including in key priority areas such as fighting climate change and improving supply chain resiliency.

Over the past four years, the clusters have supported innovators, researchers, and entrepreneurs to grow bold ideas into global opportunities through better access to experience and expertise, in turn advancing Canada's edge internationally. I am proud to see that each cluster is propelling innovation beyond our borders into the global market.

The Scale AI cluster in particular is positioning Canada's leadership in AI development. Over this past year, the Scale AI cluster has led cutting-edge projects: from using end-to-end AI and machine learning demand forecasting predictive models to increase process efficiencies and unlock capacities in Canadian businesses, to utilizing AI solutions to optimize patient clinical care to create a holistic model for more integrated, personalized and cost-efficient healthcare delivery.

Thank you to everyone involved with the Scale AI cluster for your perseverance during the challenges we have faced over the past year and for your commitment to strengthening our innovation ecosystems and helping to establish a diverse and skilled workforce ready for the jobs of the future.





# Message from the co-chairs of the Board of Directors

Hélène Desmarais and Louis Roy

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Almost five years ago, we responded to the invitation of the Government of Canada to imagine the best ways to support the development of artificial intelligence (AI), by and for Canadian companies, for the benefit of all Canadian society.

**More than a grant program, we imagined how to support the emergence of an entire ecosystem through collaboration between all players in the sector.**



This vision has been translated into a series of initiatives and investment programs that touch on all areas of AI development: talent training, the emergence of Canadian expertise and excellence in AI, the development of start-ups and SMEs, and the implementation of AI in all areas of the economy.

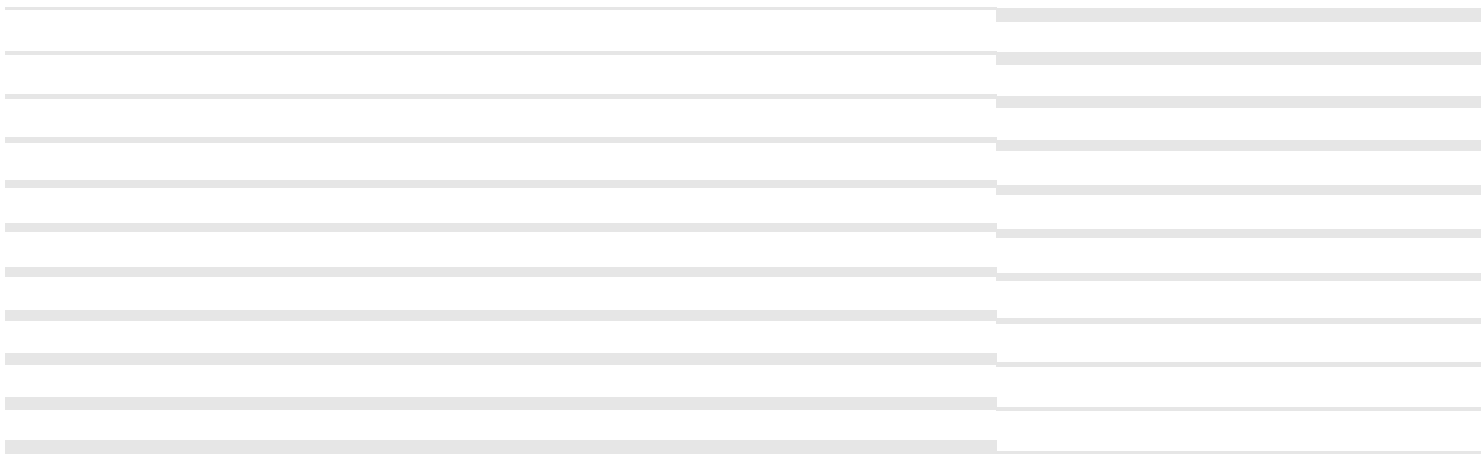
We have chosen to focus on applications related to the supply chain, a strategic link for all industries, especially in Canada. And we chose Montreal as the vibrant heart of AI in the country.

In the fourth year of our initial five-year mandate, the results confirm the relevance of our approach, which focuses on real needs in the field, on collaboration between researchers and companies, on synergies between entrepreneurs and investors, and beyond that, on ways to benefit all of society.

Since the launch of Scale AI, we have invested in projects that involve an average of 6 organizations, of which more than 64% are SMEs. In total, our portfolio of projects will create over 4,000 jobs in Canada and is expected to generate over \$9 billion in economic value by 2030.

More than that, every day, AI demonstrates its value in addressing challenges such as pandemics and labour shortages or shocks that affect all supply chains, in addition to helping to improve our environmental performance by optimizing production or transportation.

Therefore, it is no coincidence that governments have expressed their confidence in us and recognized our results. We are already at work, in partnership with the entire ecosystem, to continue the development of AI in Canada, accelerate its integration into Canadian businesses, support the management and delivery of care by health systems, equip Canada in the fight against climate change, and export our expertise around the world.





# A word from the CEO

Julien Billot

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In just a few years, AI integration has gone from experimental to established processes for many applications. Despite the pandemic, or perhaps somewhat because of it, the trend accelerates before our eyes with a record year for Scale AI and its partners, of course, but more broadly for the entire ecosystem.

The numbers speak for themselves, in fiscal year 2021–2022 alone, Scale AI deployed 409 initiatives across its seven programs for \$419M in investments. The 37 AI integration projects and 26 AI commercialization projects alone represent investments of more than \$353M, 84% of which was funded by companies, or more than \$1.80 for every dollar invested by Scale AI.



Moreover, Quebec has confirmed its position as a leader in AI, with most projects involving Quebec-based companies, partners, or researchers.

**Our programs are producing results we can be proud of.**

By reducing risks, facilitating the training of technicians, experts, and decision-makers, and stimulating collaborations between all actors in the ecosystem, we have contributed to exchanges between laboratories and companies that spur innovations and their deployment in the field.

And Scale AI evolves and grows with its ecosystem. Not only have we been able to design and deploy innovative programs, we have also improved and strengthened them over time to adapt to a changing context.

The issue of workforce and talent development is becoming increasingly critical because, in addition to the genius researchers and developers who invent AI solutions, we need more and more experts to deploy and operate them on a daily basis. We intervene at every stage of training to ensure the training of experts for our immediate and long-term needs.

In the same vein, the specific needs of the healthcare sector, whether for hospital procurement or home care management, are now an integral part of our project portfolios.

Improving environmental performance is also a key factor in the decision to implement AI projects in all industries.

These are all elements that we have integrated into our priorities and that will guide our work as we complete our first mandate and prepare for the transition to the future.







SCALE AI  
AT A GLANCE



# Scale AI at a glance

## Our mandate

Scale AI is one of five superclusters launched in 2019 by the federal government. The mandate is to foster connections, incentivize collaboration, and leverage Canada's outstanding research, technological, and business strengths to build a strong Canadian global AI ecosystem focused on supply chains in order to develop world-leading capabilities for the benefit of Canadians.

## Our vision

Canada has invested in advanced AI research for decades and is excelling at producing talents in AI. Now's the time to commercialize the breakthroughs, pushing boundaries and redefining what is possible with AI in the supply chain, to boost efficiencies and strengthen the core of all businesses.

Few companies have the ability or the expertise to develop and commercialize truly world-leading solutions on their own. By enabling partnerships and leveraging the power of collaboration, Scale AI encourages companies to build capabilities faster and more effectively than they would be able to achieve on their own.

## Our mission

Scale AI is Canada's AI Global Innovation Cluster dedicated to building the next-generation supply chain and boosting industry performance by leveraging AI technologies.

As a business-led consortium, Scale AI will drive economic growth, bolster Canada's leadership in the global innovation race, support the building of world-leading businesses, create highly skilled jobs, and accelerate the adoption of AI-powered technologies.

Scale AI contributes to developing an innovative, competitive, diverse and inclusive Canadian economy, focused on small and medium enterprises (SMEs).



# Scale AI at a glance

## Our network

Scale AI works to maximize the potential benefits of collaboration. Our ultimate goal is to maximize economic opportunities by connecting and strengthening collaboration among businesses, research centres, universities, and other supporting organizations, as well as experts from all regions of the country.

## Our purpose

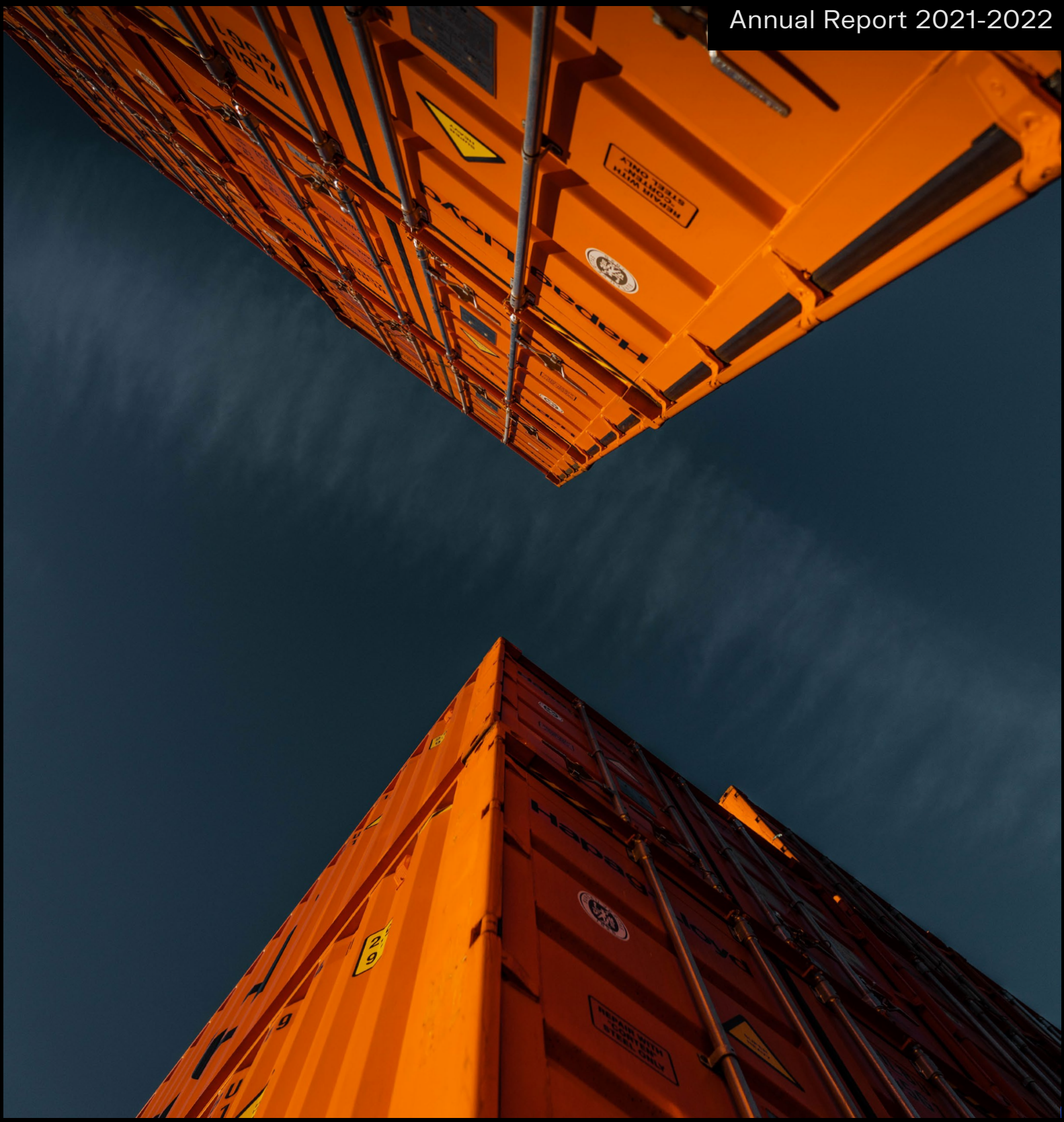
Scale AI is committed to building world-leading supply chain advanced AI capabilities in Canada.

We aim to support industry-led innovation, increase investment in Canada, help scale up smaller companies into global competitors, and create new commercial opportunities to boost exports. Scale AI is generating good, well-paying jobs across the country and developing a highly skilled and diverse workforce.

## Our funding

Scale AI receives government funding coupled with contributions from the private sector. These funds are transformed into co-investment programs that allow us to identify collaborative intersectoral projects and provide them with ongoing support and funding to ensure their success.





HIGHLIGHTS  
2021-2022

# Highlights 2021-2022

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## When the AI ecosystem grows, Canadians benefit

<b>\$9B</b> direct value creation by 2030	<b>486</b> organizations actively participating in projects
<b>&gt;4,100</b> jobs created	<b>&gt;500</b> organizations involved in Scale AI's projects, programs and activities
<b>&gt;52,000</b> professionals, students, and youths trained	<b>&gt;150</b> member organizations guiding Scale AI's future

## A year of milestones

For all projects and programs



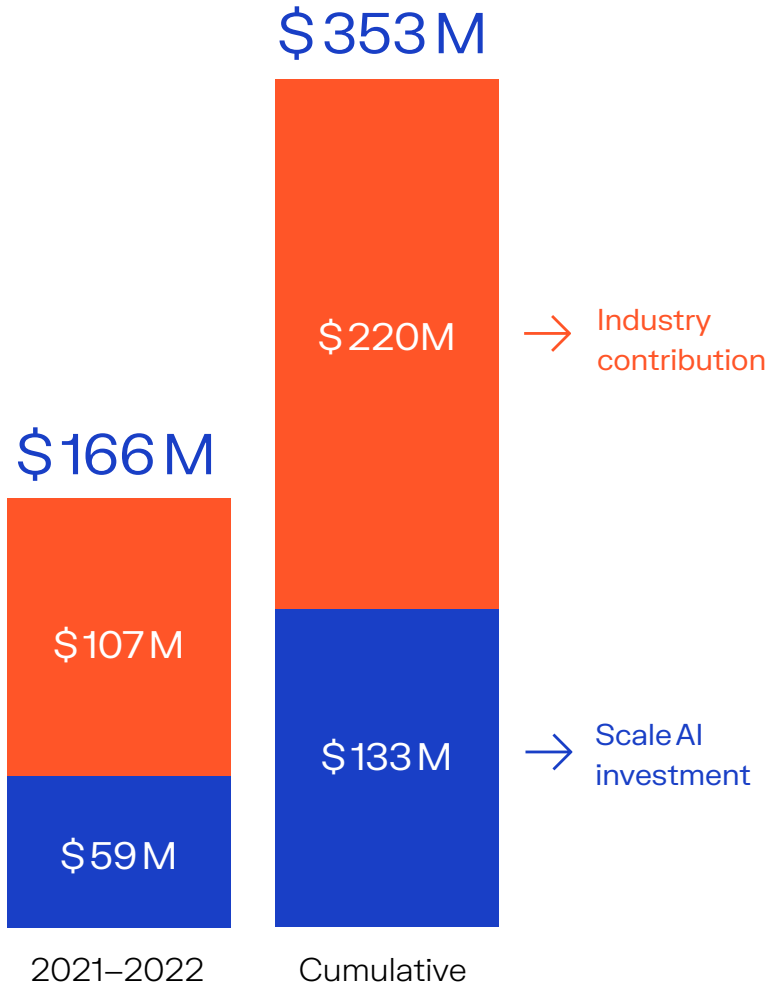
For a total of  
**64%**  
industry contributions

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**409**  
selected initiatives across seven programs that answer a pressing need



Supporting the implementation of industry-led collaborative projects



\$353M  
funding 81 projects

For every dollar invested by the government via Scale AI, the industry is investing

\$1.83

For a total of

62% industry contributions

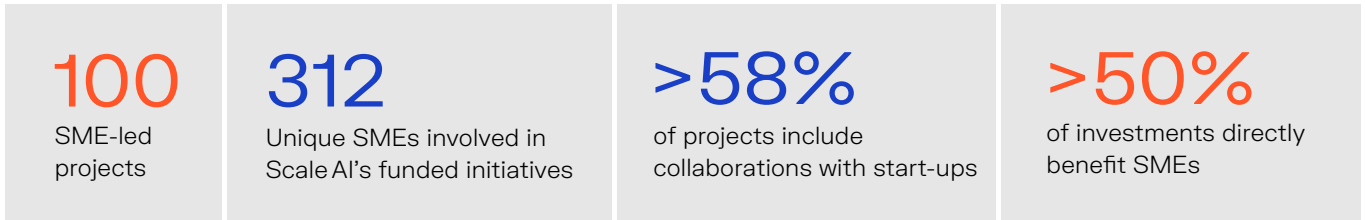
Supporting the flourishing ecosystem ... by channelling the power of innovation in academia

> 83% of projects involve academia or researchers

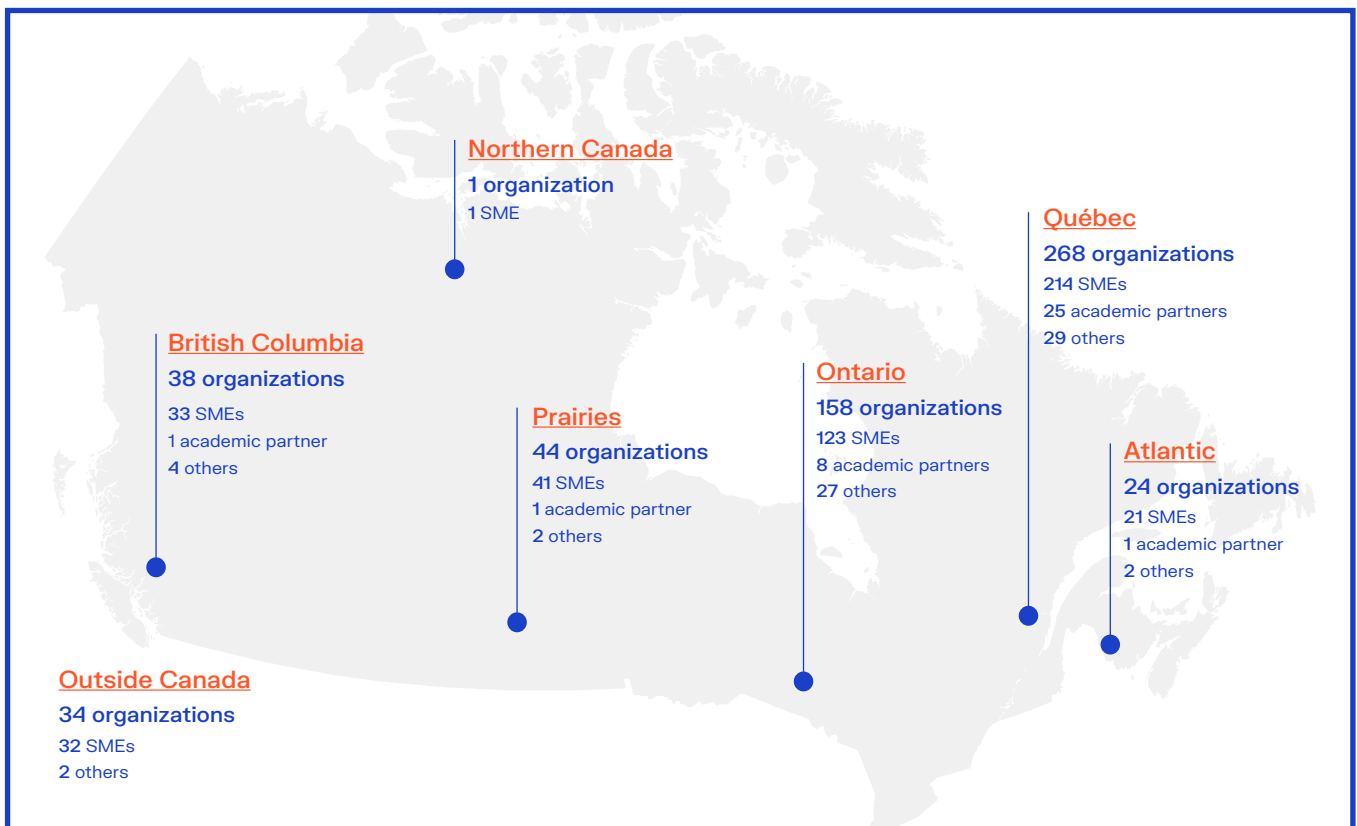
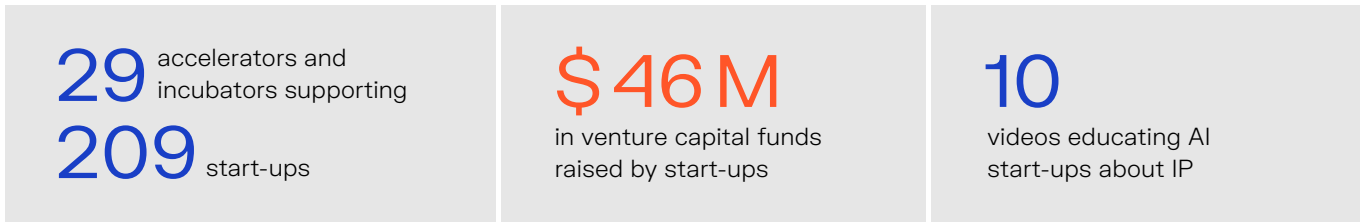
36 academic and research institutions are actively participating in Scale AI projects

... by maintaining the pace of acceleration for start-ups and SMEs

Supporting AI integration for SMEs and start-ups specializing in AI



ScaleAI provides financial incentives for the country's top incubators and accelerators to encourage them to support start-ups developing AI solutions for supply chains



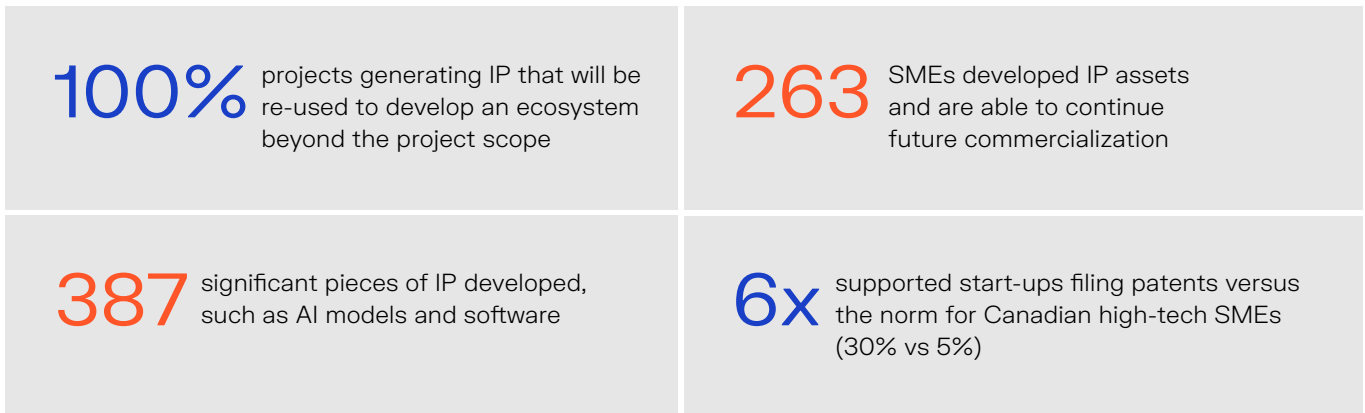
... by developing the workforce



... by connecting AI players and with the business community

- Fourth Edition of AI in action in Montreal, with over 40 panellists and 800 participants, an event that hosted the first-ever Quebec Excellence in AI Awards:
  - **Coveo**: AI company with the most international success
  - **XpertSea**: Quebec AI Start-up of the Year
  - **Optimization of Operating Room Planning (CHUM)**: Best AI Project for the Common Good
  - **Cargo2 AI Project (Port of Montreal)**: Best integration of AI in a product/service or business process
- Four AI events and more than 90 webinars to present Scale AI's different programs.
- The publication of the AI special report in La Presse, highlighting Scale AI funded projects
- The publication of 13 new posts on our blog about IP and collaboration in our ecosystem helped gather more than X new leads.

Amplifying Canadian IP







# Canadian economy: When the AI ecosystem grows, Canadians benefit

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## A unique ecosystem

Scale AI has created a new Canadian ecosystem with thousands of organizations collaborating and investing in the AI supply chain.

**486** organizations actively participating in projects

**>500** organizations involved in Scale AI's projects, programs and activities

### **Based in Quebec**

with a national reach. Headquartered in Montreal, with an ecosystem that spans the Quebec City to Waterloo corridor, Scale AI has seen rapid growth across the country

**>150** member organizations guiding Scale AI's future

## Generating significant benefits

Scale AI's investments are creating a new Canadian economy for intelligent supply chains, generating economic and environmental benefits.

**\$9B** direct value creation by 2030

**>4,000** jobs created

**>52,000** professionals, students, and youths trained

**138** organizations involved with Scale AI start-ups and SMEs commercializing more innovative supply chain solutions

## For a sustainable growth

The pandemic has exposed the consequences of inefficient supply chains. Scale AI has responded through projects that help secure medical equipment and optimize the movement of consumer goods and the global trade of metals and mining goods.

Scale AI has accelerated the growth of existing global value chains and emerging industries by creating high value-added activities such as

- Vertical farming and precision agriculture
- Autonomous robots for logistics and transportation
- Microsatellite manufacturing

AI provides opportunities for improving the sustainability of Canadian supply chains. Doing so is critical because, according to McKinsey, consumer supply chains account for more than 80 percent of greenhouse-gas emissions.

Scale AI helps build more innovative and efficient supply chains that benefit the environment. Investments improve sourcing, transportation routing, and quality management, which in turn makes Canada's supply chains more sustainable.

### The Scale AI impact

FORUM IA

“Scale AI gives concrete expression to our expertise in operational research. It gives us the tools to stand out even more in logistics and supply chains. These questions are crucial for the global economy.”

[Marie-Paule Jeansonne, CEO of Forum IA Québec, speaking to La Presse](#)



# Objectives and KPIs

## The year 2021-2022

Each year, we adapt our approach to reflect the changing environment to stay the course to reach our goals, considering our achievements and the lessons learned since we launched our programs.

For 2021-2022, we focused on the following outcomes, namely:

- Improving access to potential partners in AI and IP expertise for companies of all sizes across industries.
- Accelerating collaboration between large and small businesses to generate and maintain global AI expertise in Canada.
- Enhancing the competitiveness of key players in the Canadian supply chain ecosystem.

We have focused our efforts on six objectives, and we are happy to report that we successfully reached five of them, while the sixth is slowly but surely moving forward.

### **1) Support Canada's economic recovery through continued investments in innovative projects in key industry sectors**

The good news is that ScaleAI and its role are now known and recognized, which leads to contacts with organizations that are ripe to make the leap to AI and qualify for our programs.

In this fiscal year only, ScaleAI:

- invested **\$137M** via all our programs
- engaged **37%** of the total investment of ScaleAI and Industry (\$368M)
- reached **84%** of investments made to date (\$163M).

We have continued our focus in key strategic sectors like supply chain projects via logistic and transport process improvements and new AI solution deployments. We have also accelerated the development of AI in Health projects, a key industry sector.

### **2) Increase the size of the pipeline of projects outside of Quebec, and particularly in Ontario;**

While Montreal stays a significant hub of AI in Canada, we feel that interest is spreading across the country, as:

- **52%** of our project participants are located outside of Quebec, mainly Ontario, representing **49%** of all our investments
- **35%** of our projects involved researchers from outside Quebec, again mainly in Ontario.



**3) Grow the workforce development program**

We worked in partnership with the most qualified organizations to increase the offering of both public training programs and custom training projects supported by Scale AI across Canada, including an enhanced initiative for Quebec, with additional funding from the Ministère du Travail, de l'Emploi et de la Solidarité sociale du Québec.

We now have **63** custom training and are proud to say that we have **225** accredited public programs.

**4) Allocate the remaining research chairs funds;**

This project is moving forward but slower than expected. Establishing a research chair is complex, as universities must identify a suitable research focus and chairholder, as well as contribute a portion of their own funds.

We currently have **4** chairs allocated out of 10. Our team is working with our academic partners to adjust our strategy to take full advantage of this area of AI development in Canada.

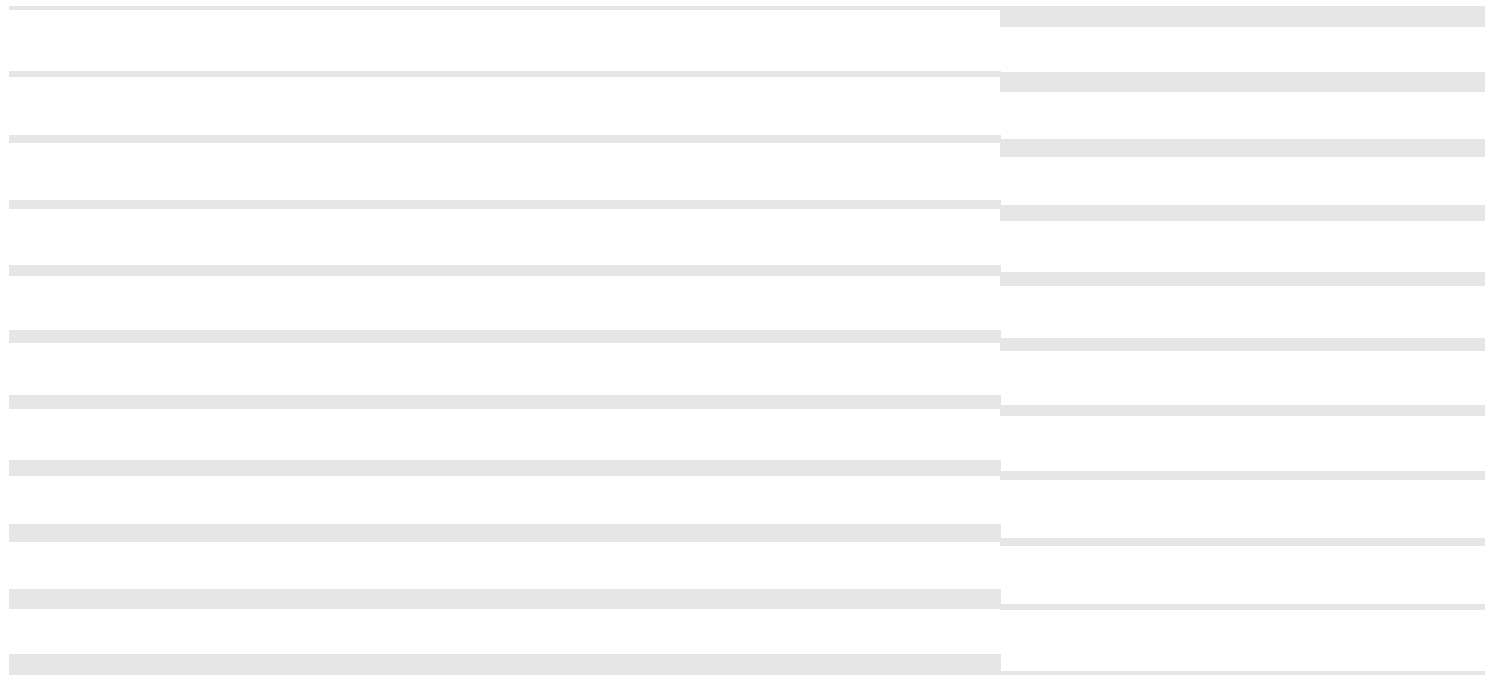
**5) Accelerate the deployment of intellectual property resources for SMEs and;**

AI-specific IP education has been central to our communications with the ecosystem this year. We shared our knowledge widely with researchers and entrepreneurs through producing **13** blog pieces on IP and several educational videos.

Our team is also providing expertise to our partners as part of our investment programs.

**6) Continue to support the development and strengthening of the Canadian AI ecosystem by connecting industry, academia and startups through all our investment streams.**

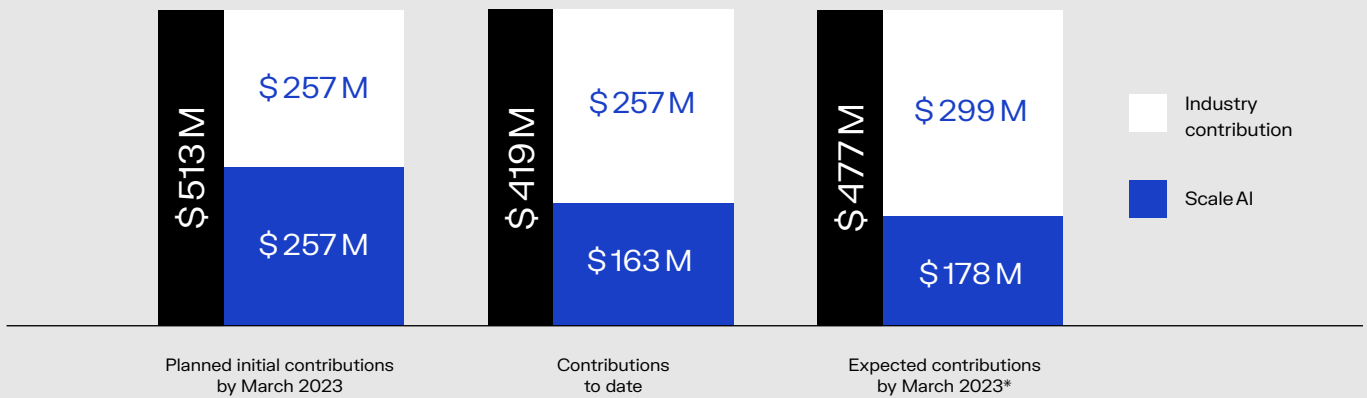
Each of our projects this year has demonstrated the strong synergies that exist between our startup community, now at 209 startups in AI applied to Supply Chain projects, the academia and the industrial project leads.



Five-year perspective (2018-2023)

Now that Scale AI has reached the fourth year of its first five-year mandate, we are confident that we will achieve our goals as measured by job creation, IP, training, and start-up creation KPIs. Given the investment and project implementation cycle, financial impacts will materialize gradually and continue to grow over the longer term.

The \$267M in private investments by industry to date already exceeds our initial plan of \$257M, reflecting Scale AI's ability to effectively trigger private sector co-investment. This dynamic is driving a higher-than- anticipated funding ratio of \$1.6 industry dollars for every \$1 of Scale AI funding invested.



	INVESTMENTS				WORKFORCE	ACCELERATION
	Highly qualified jobs created	New IP assets generated	Revenue growth for Canadian firms	Cost savings for Canadian firms	People trained	Start-ups supported
Projected actual impact by March 2023 <sup>2</sup>	~9K	387+	~100M	~20M	~5.3K	~275
Commitments from approved projects by March 2023	~1K	450+	282M	55M	29.2K <sup>2</sup>	300


1. Based on internal estimates and target achievement rates of completed projects

2. Includes public training (27,532) and custom training (1,687) programs.

Public training represents total theoretical capacity of all public training programs approved; total number of participants expected to differ.

# Success stories: the benefits of AI for organizations


## A look at Kruger’s project | Manufacturing

<b>THE PROJECT</b>	<p><b>Sherbrooke AI digital twin</b></p> <p><b>Partners:</b> Kruger Products, BCG, Osedea, Vooban, Polytechnique Montréal, Université Laval</p> <p><b>Total investment:</b> \$25.5 million</p>	
<b>THE CONTEXT</b>	<p>AI is helping Kruger Products — a Canadian company founded in 1904 that has become one of the most diversified family-owned companies in North America — improve operations, from planning to predictive maintenance.</p>	
<b>THE PROBLEM</b>	<p>Manufacturers all have the same challenge: maintaining uptime. Disruptions cause delays and reduce output, while shutdowns can prove extremely costly. And on high-speed, high-frequency production lines, maintaining quality is paramount.</p>	
<b>THE SOLUTION</b>	<p>The company’s Sherbrooke plant, which opened in 2021, is equipped with North America’s most advanced Through Air-Drying tissue machine. Kruger has created a digital twin of its supply chain: a virtual model that uses real-time data augmented with predictive and prescriptive AI capabilities. This model replicates the entire supply chain, from raw material procurement and production planning to equipment maintenance, risk management, logistics, and delivery of finished products.</p>	
<b>THE IMPACT</b>	<p><u>Forecasting customer demand:</u> Aside from optimizing the performance of Kruger’s tissue converting lines, this AI solution can help forecast demand, by anticipating the consumer demand for different types of products. A changeover requires planning to reduce equipment downtime. This tool simulates scenarios to anticipate the knock-on effects of new directions.</p> <p><u>Predicting problems and equipment failure:</u> With the help of sensors, AI will also make predictions that can reduce downtime or quality defects. Kruger is building machine learning algorithms to learn how to anticipate and predict when issues will arise. These capabilities can also enable predictive maintenance on equipment, parts, or components. With AI, repairs, replacements, and maintenance can occur before an issue arises.</p> <p><u>Optimizing production capacity:</u> AI allows plant managers and operators to make adjustments and boost operational efficiency at every link along the facility’s supply chain. Better asset management will optimize changeovers, speed up production, and adapt to fluctuations in supply and demand, all while cutting costs.</p>	
<b>NEXT STEPS</b>	<p>To take this learning even further, Kruger has established a Center of Excellence (CoE) at its Sherbrooke facility and its headquarters in Montreal. The CoE will help upskill employees to develop their own AI capabilities and train others. Kruger also plans to develop new operations and technology roles at the Sherbrooke facility to support its on-site AI specialization and seamlessly integrate AI into its operations.</p>	

“The strategic intent is to make Sherbrooke a beacon within Kruger before rolling out the new AI capabilities across the company’s industrial network. From there, Kruger has the capacity to become the global benchmark for AI adoption in the pulp & paper and manufacturing industries.”

— **Dino Bianco**, Chief Executive Officer, Kruger Products

## A look at Canadian Tire’s project | Retail

<p><b>THE PROJECT</b></p>	<p><b>Planogram optimization solution</b></p> <p><b>Partners:</b> Canadian Tire, IVADO Labs, Spacefile International Corp.</p> <p><b>Total investment:</b> \$5 million</p>	
<p><b>THE CONTEXT</b></p>	<p>Before the pandemic, Canadian Tire, one of Canada’s largest, most recognized retailers, started looking at whether they could use AI to optimize their planogram solution and make better use of their data. As part of their mandate, the Canadian Tire team uses advanced analytics and artificial intelligence to solve complex problems, including enhancing product placement in stores to reduce cost, maximize sales, and improve the overall customer experience.</p>	
<p><b>THE PROBLEM</b></p>	<p>Prototypical planograms are generated every one to two years for limited store sizes due to the complexity and expense of the exercise. Store staff have to manually fit the planograms to individual stores based on the layout of the space and on customer demand. Moreover, Canadian Tire has historically lost sales due to stockouts, which cause customers to feel disappointed in the brand. Finally, the inability to reset planograms in real time results in higher inventory costs for over or under ranged products.</p>	
<p><b>THE SOLUTION</b></p>	<p>That’s where AI and the computing power of a cloud environment have a crucial role to play. Canadian Tire was looking to optimize product placement based on specific features and constraints, such as responding to local market needs, seasonality, store space, inventory supply, and desired assortment, all in an effort to improve the customer shopping experience.</p>	
<p><b>THE IMPACT</b></p>	<p>The AI-based planogram optimization project is expected to streamline store operations and increase sales by meeting local customer demand — AI allows stores to provide the right product mix in the right place at the right time. Each dealer has the option to automate product placement principles, enabling them to answer local demand, seasonal needs, and storage space in a much more dynamic manner.</p> <p>Working with advanced technologies like AI also helps attract and retain highly skilled talent.</p>	
<p><b>NEXT STEPS</b></p>	<p>Canadian Tire is continuing to build out custom planograms and is working with six dealers to test the technology in their stores.</p>	

### The ScaleAI impact


CANADIAN TIRE

“We like bringing in an ecosystem of partners, not just working with a third party, but also leveraging the ScaleAI ecosystem. ScaleAI helps ensure that artificial intelligence continues to thrive in Canada, that our AI talent stays here, and helps us build AI products collaboratively with other organizations. It’s a great partnership.”

— [Cari Covent, Vice-President, Data Strategy, Insights Enablement and Artificial Intelligence, Canadian Tire](#)




## A look at Port of Montreal’s project | Transport and logistics

<p><b>THE PROJECT</b></p>	<p><b>Port logistics optimization tool</b></p> <p><b>Partners:</b> Port of Montréal, MGT, TerMont, Canscan, El Systems</p> <p><b>Total investment:</b> \$2.7 million</p>	
<p><b>THE CONTEXT</b></p>	<p>The Port of Montreal is the second-largest port in Canada, serving the Quebec, Ontario, and U.S. markets. The Port is overseen by the Montreal Port Authority (MPA), and acts as an intermodal hub, with a dockside rail network that connects directly to Canada’s two national rail networks, CP and CN.</p>	
<p><b>THE PROBLEM</b></p>	<p>The Port of Montreal has been working with ScaleAI to build a “smart port” that will seamlessly facilitate the movement of containers through a complex network of information exchanges between the Port’s numerous stakeholders. But at the start of the pandemic, the Port shifted its focus to dealing with the humanitarian needs of the time. Using an algorithm that identifies targeted cargo as soon as it leaves its port of origin, the Port developed a logistical tool to help supply chain partners prioritize the delivery of personal protective equipment (PPE) and medical supplies.</p>	
<p><b>THE SOLUTION</b></p>	<p>The result is CargO2ai, a humanitarian logistics tool developed in the spring of 2020 through a partnership between the Port of Montreal, CargoM, Termont, MGTP, Scale AI, and IVADO Labs to help supply chain partners expedite the processing and delivery of PPE, medication, and medical equipment. CargO2ai uses AI to efficiently identify and prioritize the critical cargo that Canadians need to avoid supply delays and stock shortages during precarious economic and public health situations. In this framework, the MPA acts as a landlord and a rail coordinator, while the two terminal operators — which combined operate four international terminals — are its partners on the ground, handling cargo, supported by two railways and the trucking community. Another critical partner in this operation is CargoM, a logistics cluster that rallies the major stakeholders in Montreal’s logistics industry.</p>	
<p><b>THE IMPACT</b></p>	<p>So far, the Port of Montreal and its partners have processed 5,800 critical cargo containers, and counting, for humanitarian purposes. With its partners, the Port has been recognized for its efforts, winning The Lighthouse Award in Information Technology for CargO2ai at the 2021 American Association of Port Authorities (AAPA) Annual Awards.</p> <p>The project has improved communications between stakeholders, which will have long-term positive impacts on transport and logistics. In addition, the project has helped to significantly speed up data reception in the sector.</p> <p>At the C-suite level, the project has also contributed to corporate responsibility efforts while improving supply chain velocity. Managers were able to increase the discipline of their data exchange, which will ultimately help stakeholders reduce cargo delays and overall dwell time while maximizing the output of the port’s logistics hub.</p>	
<p><b>NEXT STEPS</b></p>	<p>While this project was developed for the Port of Montreal, it can be shared under the funding principles of Scale AI, which encourages the use of algorithms based on Natural Language Processing and open-source technology. Trucking companies, freight forwarders, shipping lines, charterers, and operators have the opportunity to use the system and help it reach its full potential.</p>	

### *The ScaleAI impact*

<p>MPA</p>	<p>“This project is another critical milestone in our progress towards the ‘smart port’ vision we are implementing. It will benefit all stakeholders involved in the chain, reducing cargo delays and overall dwell time while maximizing global throughput to our major logistics hub.”</p> <p>— Daniel Dagenais, Vice-President, Operations, Montréal Port Authority</p>
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## A look at AlayaCare’s project | Healthcare

<p><b>THE PROJECT</b></p>	<p><b>Applied AI for home care</b></p> <p><b>Partners:</b> AlayaCare, CBI Health Centre, Bien Chez Soi, IntegraCare, Polytechnique Montréal</p> <p><b>Total investment:</b> \$1.7 million</p>	
<p><b>THE CONTEXT</b></p>	<p>AlayaCare is a home care software platform that supports the delivery of quality home care worldwide through technology. The business already relies on AI to simplify home care planning and management services for specialized agencies, and now plans to take things a step further by using predictive modelling to optimize scheduling, routing, and staffing operations.</p>	
<p><b>THE PROBLEM</b></p>	<p>The sector is suffering from a shortage of home care professionals. Just as our need for home care is peaking, trained workers are leaving the industry in droves.</p>	
<p><b>THE SOLUTION</b></p>	<p>AI-powered optimization technologies are the solution to this disconnect. AI can match home care professionals to availability to ensure these trained workers have full schedules and their services are used most efficiently. At the forefront in this field, AlayaCare is leading a project to develop an AI-informed software platform that gives home care agencies better planning and management tools to optimize and prepare the home care workforce to meet the growing demands of Canada’s aging population.</p> <p>By creating efficiencies in scheduling, time reporting, clinical documentation, and patient monitoring, this innovative software will enable home care providers to deliver best-in-class services to improve client outcomes in Canada.</p>	
<p><b>THE IMPACT</b></p>	<p>The benefits of using AI to optimize home care scheduling are wide-ranging. Not only do these technologies reduce healthcare costs, they result in better patient care with improved outcomes. These benefits also extend to home care workers by alleviating the stress on overall health care services, which results in higher home care worker retention rates.</p>	
<p><b>NEXT STEPS</b></p>	<p>As this project is implemented, AlayaCare will continue to pursue its mission to bring home care into the future by equipping home care professionals with the technology needed to deliver better outcomes.</p>	

### *The ScaleAI impact*

ALAYACARE

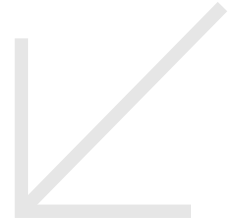
“We put technology to work to provide clients with key business insights to increase efficiency and better deploy resources. Using AI, optimization, and machine learning technologies, we build a bridge between what our clients need and what science can deliver.”

— Naomi Goldapple, Head of AlayaLabs at AlayaCare



ACTIVITIES  
AND ACHIEVEMENTS  
2021-2022

# Activities and achievements 2021-2022



## A year of milestones

In just a few short years, the understanding and adoption of AI have taken a strategic step forward.

When Scale AI was launched, we supported the efforts of “early adopters,” organizations taking risks to lead the way in AI and whose results point to them as role models.

Since then, the pool of organizations interested in, preparing for, and deploying AI solutions has grown. We are gradually reaching a critical mass that will mark the transition to an early majority of users, confirming the essential nature of AI in many areas of business and the economy.

The successive shocks of the pandemic, the conflict in Ukraine, and the global labour shortage highlight the relevance of AI to address issues that affect supply chains across industries.

And Scale AI is here to answer questions, facilitate interactions, and support companies that are ready to make the leap to AI.

### A cohesive offering

Scale AI’s programs work in unison, providing organizations with end-to-end support and access to expertise and resources that fuel their growth.

**409** initiatives across seven programs that answer a pressing need

### Our portfolio

Scale AI has partnered with Canadian business leaders to accelerate their AI investments and dramatically improve the performance of their supply chains.

More than \$353M has been invested in projects supported by Scale AI. Of this amount, \$220M was committed by the private sector and \$133M by Scale AI.

In other words, for every dollar Scale AI invests in its programs, an average of \$1.55 is invested by the private sector. The ratio rises to \$1.88 for industry-led collaborative projects.



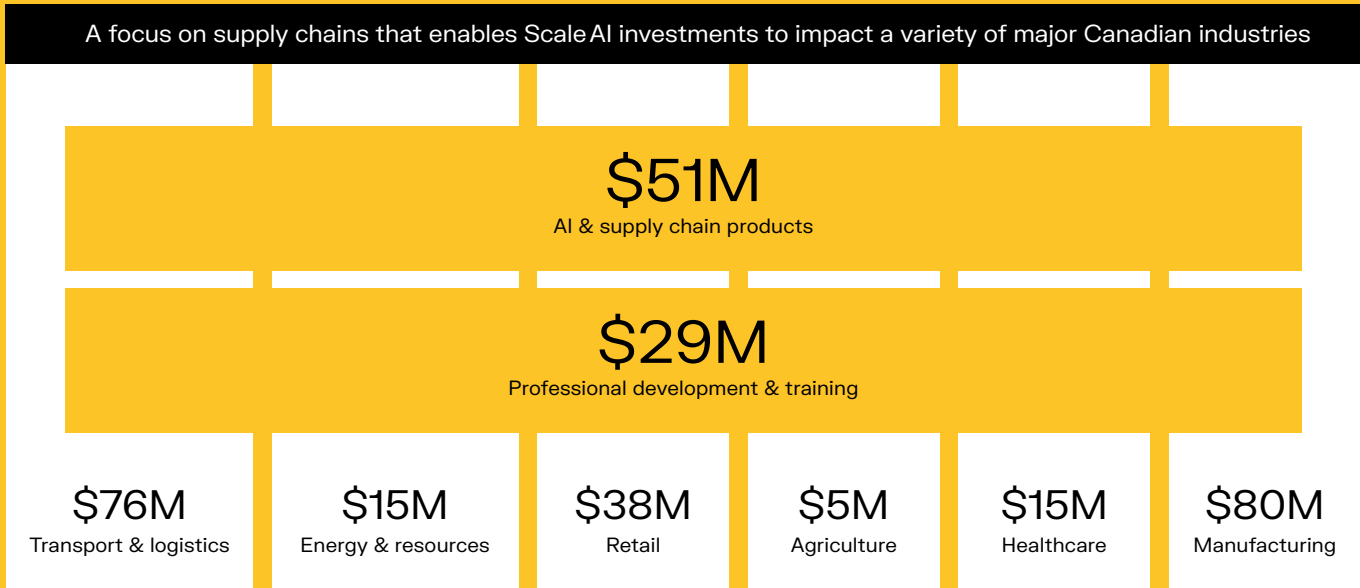
**400+** projects

- Highly collaborative
- 5 partners per project on average
- 83% involve professors or universities

**73%** SMEs

- 400+ SMEs involved in projects
- 25% under 50 employees

A focus on supply chains that enables Scale AI investments to impact a variety of major Canadian industries



## A remarkable footprint in Quebec

**48%**

of participants are located in Quebec

**51%**

of investments are made in Quebec

**65%**

of projects involve researchers in Quebec

# Supporting the implementation of industry-led collaborative projects

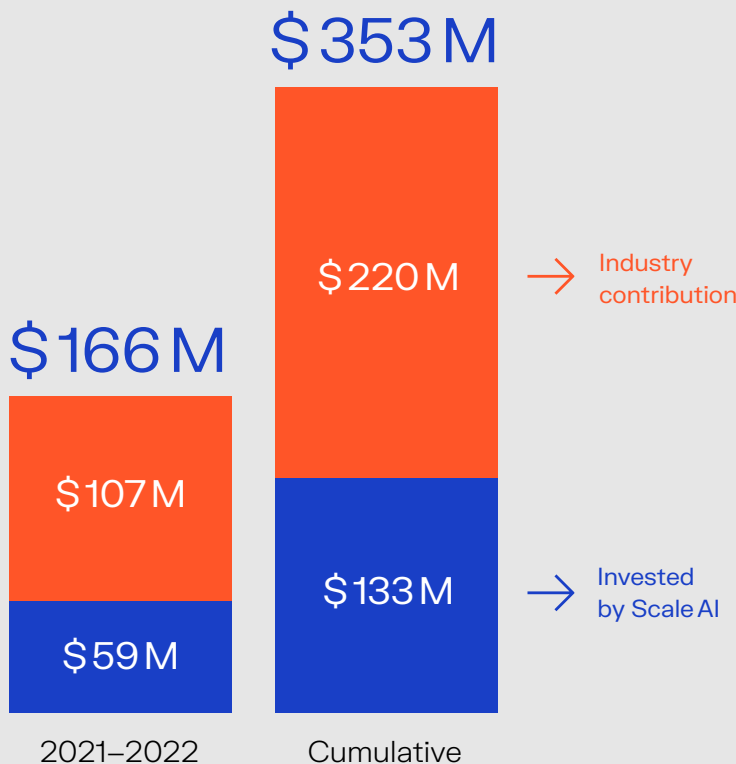
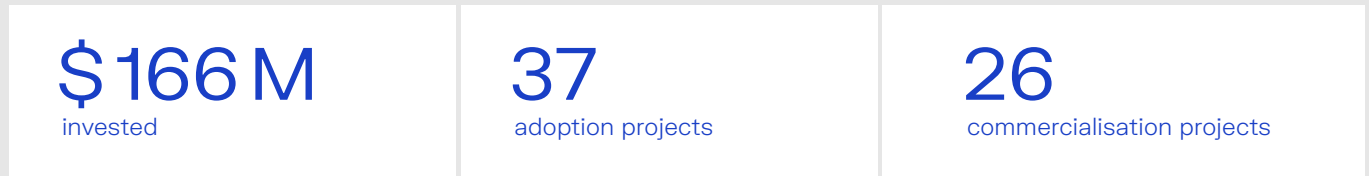
Two Scale AI programs support organizations ready to integrate and deploy AI solutions:

→ The adoption program promotes the diffusion of AI-powered supply chain solutions across industries.

→ The commercialization program supports tech and solutions providers by improving and scaling their core AI offerings.

## Our impact in 2021–2022

Scale AI has partnered with Canadian business leaders to accelerate their AI investments and dramatically improve the performance of their supply chains.



For every dollar invested by the government via Scale AI, the industry is investing

**\$1.83**

For a total of

**62%**

industry contributions

Scale AI's leadership and knowledge of the ecosystem have helped form new partnerships between organizations tackling shared challenges:

246 SMEs supported

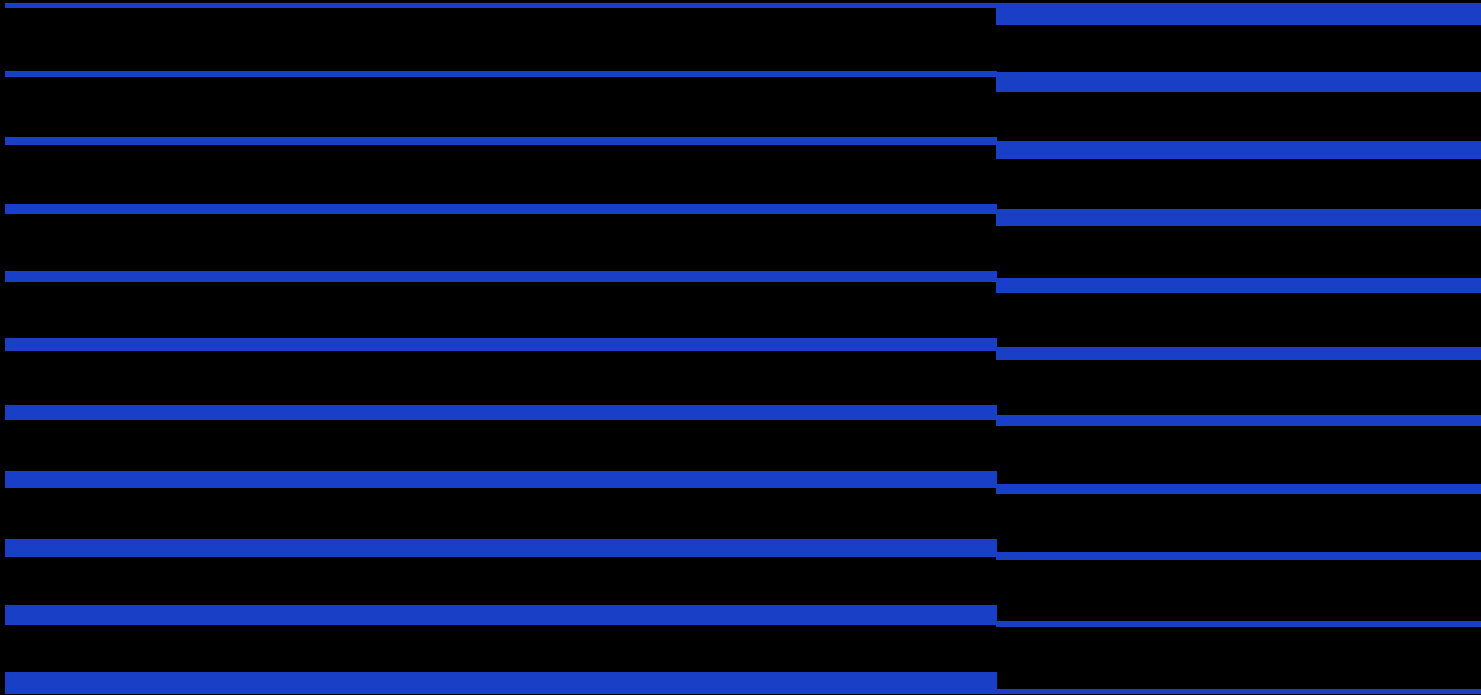
>78% of projects with more than four participants

The impact for each organization creates ripples throughout the economy:

4,100 jobs created

\$2K direct added value

387 intellectual property assets generated



# AI projects powered by Scale AI

Scale AI's investments are financed by the Government of Canada and, for projects in Quebec, partially by the Government of Quebec. The specification "including Quebec" identifies these projects and the distribution of funds.

## Cognitive capabilities for aero-engines' aftermarket

Partners: Pratt & Whitney, McKinsey & Company Canada, MOOV AI, Cognitive Group, Standard Aero Limited Winnipeg, Vector Aerospace Engine Services-Atlantic Inc, Schaeffler, Paradigm Orillia Technology, Meloche

Pratt & Whitney Canada supports the broadest, most diverse fleet of aircraft engines in its industry, with more than 13,000 operators and nearly 65,000 engines in service. Customer trends that require increasingly faster global logistics coupled with complex supply chains and demand variability make AI a natural next step to deliver speed and availability.

Scale AI's investment  
**\$7.3 M**

(Including Quebec: \$1.5M)

Total investment

**\$23.5 M**

Status: **In progress**

## Predictive analytics for aviation

Partners: Bombardier, Globvision, IVADO Labs

Aircraft maintenance falls into two broad categories: scheduled activities that occur at specific intervals and unscheduled activities when aircraft parts need repairs. Aircraft maintenance is typically composed of largely scheduled activities at specific intervals and unscheduled activities when aircraft parts need repairs. Bombardier's Aftermarket team aims to transform its core approach and culture from traditional maintenance to condition-based monitoring and preventive maintenance. The project's goal is to enable a more proactive approach to maintenance, limit aircraft downtime, reduce "Aircraft on Ground" (AOG) costs for Bombardier aircraft, and provide unique state-of-the-art maintenance support to customers.

Scale AI's investment  
**\$5.8 M**

(Including Quebec: \$1.1M)

Total investment

**\$11.7 M**

Status: **In progress**

## AI-powered supply chain model focused on demand, from suppliers to customers

Partners: London Drugs Limited, Deloitte, TAP, Sanctuary AI, Atlantia

As it continues its digital transition, London Drugs Limited is proceeding with upgrades to its infrastructure, core merchandising capabilities, supply-management processes, and pricing. AI-driven data processing enables improvements in forecasting for suppliers while mitigating shortage risk and losses from unsold or unproductive inventory. It also reduces the need for its teams in the field to perform certain specific, labour-intensive tasks.

Scale AI's investment  
**\$3 M**

Total investment

**\$13.8 M**

Status: **In progress**



### Dealer support system driven by AI-powered data estimation

Partners: Home Hardware, ThinkMax Consulting Inc., Optimus SBR Inc., Theory and Practice Business Intelligence Inc., Deloitte LLP, Manifold Data Mining Inc.

Home Hardware Stores Limited is Canada's largest Dealer-owned hardware, lumber, building materials, and furniture home improvement retailer with close to 1,100 stores across the country. Considering the scale with which Home Hardware operates, the variability of lead times between vendors, distribution centres and franchisees, the company will use AI to bring in forecasting capabilities at distribution centers and leverage data to inform decisions on promotions.

Scale AI's investment  
**\$2.9 M**

Total investment  
**\$11.6 M**

Status: **Starting up**

### Improving Save-On-Foods' supply chain through AI-based demand forecasting

Partners: Save on Foods, D-Wave Systems, ThoughtsWin Systems, White Box Analytics, OpsGuru, Deloitte

A strategic opportunity assessment of Save-On-Foods identified two high priority opportunities to improve customer service and operational efficiency: demand forecasting and scheduling of ecommerce deliveries. With the expertise of multiple service partners, Save-On-Foods will build and integrate several AI solutions to develop a demand forecasting model with the overall goal of ensuring the right products are in the right place, at the right price for their customers. Additionally, an optimization algorithm will automate scheduling of ecommerce deliveries to improve productivity and align with customer demand.

Scale AI's investment  
**\$2.8 M**

Total investment  
**\$7.2 M**

Status: **Starting up**

### AI-powered satellite constellation production

Partners: MDA, Connektica Solutions, Mafina Solutions, IVADO Labs

MDA is seeking to transform its supply chain operations by leveraging artificial intelligence (AI) to support the volume production of its space products. The solution will optimize supply chain inventory, manufacturing schedules and performance during the production of the satellites and their subsystems.

Scale AI's investment  
**\$2.8 M**  
(Including Quebec: \$0.5M)

Total investment  
**\$5.7 M**

Status: **In progress**

### Canard Bleu

Partners: Flybits, TD Bank, CEVA Freight Canada Corp., Abell Pest Control, Ryerson University, mimik

In response to the continued digital transformation of the financial services sector, Flybits is developing connections between supply chain actors through financial institutions, including its partner TD Bank. The "Canard Bleu" project will allow members to boost supply chain visibility and collaboration without the need to share personally identifiable data.

Scale AI's investment  
**\$2 M**

Total investment  
**\$9.2 M**

Status: **In progress**

## AIoT fulfillment

Partners: Attabotics, Canadian Tire, Microsoft, Intel technology of Canada ULC, AltaML and Amii

Attabotics has developed an innovative 3D robotic goods-to-person storage system that offers automated retrieval and real-time order fulfillment. By reducing a company's warehouse needs by 85% and reducing labour costs by 75%, Attabotics' solution enhances logistics and inventory management. Adding AI (machine learning and operations research) to the command and control of the robotic solution makes the Attabotics offering more efficient while maximizing throughput and uptime.

Scale AI's investment  
**\$2.5 M**

Total investment  
**\$7 M**

Status: **In progress**

## The DAL-IA

Partners: Logibec, CHUM, Moov AI, Chaire de recherche Hanalog

Logibec's DAL-IA project (Artificial Intelligence for Management, Supply and Logistics) aims to develop a solution that prevents inventory run-out in hospitals through improved consumption forecasting of more than 50,000 essential products. The solution will also offer availability predictions regarding potentially delayed or incomplete orders. It will be incorporated into Logibec's existing material resource management solution, already in use in more than 70% of healthcare facilities in Quebec.

Scale AI's investment  
**\$2.4 M**  
(Including Quebec: \$0.5M)

Total investment  
**\$5.7 M**

Status: **Starting up**

## AI integration within the supply chain ecosystem

Partners: Distribution JRV, Nuvoola, Idéo Concepts, AGD Express Verchères, Rio Tinto Fer et Titane, Université de Moncton, École de Technologie Supérieure de Montréal

Distributions JRV are established experts in selling and distributing specialized equipment and services for the mining industry in Quebec and Labrador. Although equipped with modern systems, they are looking for ways to improve their demand forecasting and inventory replenishment to support their growing business. For this reason, JRV has developed a multi-year roadmap in collaboration with Nuvoola to help modernize various areas of their business, including demand forecasting and inventory replenishment decisions.

Scale AI's investment  
**\$2.3 M**  
(Including Quebec: \$0.5M)

Total investment  
**\$5.4 M**

Status: **Starting up**

## Ancillary revenue management platform

Partners: Plusgrade, IVADO Labs, Air Canada, WestJet

Plusgrade, a leading ancillary revenue platform for the global travel industry, is looking to leverage an AI-powered solution to provide a suite of indicators, predictions and recommendations that will boost passenger engagement, reduce perishable inventory, and maximize the value of offers and overall revenues.

Scale AI's investment  
**\$2.3 M**  
(Including Quebec: \$0.5M)

Total investment  
**\$5.2 M**

Status: **Starting up**

### AI-driven retail sales demand forecasting

Partners: Bombardier Recreational Products, IVADO Labs, Performance NC, Motor Sports World, Energy Powersports.

A global leader in the world of powersports vehicles, propulsion systems, and boats, BRP sells its products in over 120 countries through a network of dealers and distributors. BRP is looking to bolster its supply chain processes, starting with improved demand forecasting, as part of its commitment to fully leveraging AI to drive business growth. This project aims to develop predictions using advanced AI algorithms, generating insights for critical decision-makers and supply chain stakeholders at BRP.

Scale AI's investment  
**\$2.1M**  
 (Including Quebec: \$0.4M)

Total investment  
**\$4.4M**

Status: **In progress**

### AI for exploration and development of critical raw materials

Partners: Enersoft, Kirkland Lake Gold, Rio Tinto, Fireweed Zinc, Tech-X Resources, Yukon Geological Survey, Ontario Geological Survey

The metals and mined mineral supply chain affects nearly all industry sectors as it supplies physical inputs necessary for the manufacture of countless goods and the delivery of most services. To meet future demand, mining companies need to allocate and utilize scarce resources and equipment as efficiently as possible to discover and develop new mineral resources, essential for the global energy transition. This requires a detailed geological understanding of mineral deposits of new sites that AI can support.

Scale AI's investment  
**\$1.6M**

Total investment  
**\$7M**

Status: **In progress**

### AI-Based quality control and machine analytics

Partners: Crosswing inc, Shield Medical Products, The Design Quantum, York University, Big Nano, LifeCycle Revive, Performance BioFilaments, Kimberly-Clark, Innomar Strategies, Cardinal Health

The project will deliver a comprehensive quality control system that will leverage both AI and machine learning through computer vision to increase quality standards and production outputs. This system will also integrate IoT and sensor data into a machine analytics module that compiles and analyzes telemetry to enable predictive maintenance. The transformative benefits of the technology can be realized across broader markets such as clothing and accessories manufacturing. By design, this solution will be rapidly deployable without the need for specialized resources such as data scientists and machine vision engineers.

Scale AI's investment  
**\$1.6M**

Total investment  
**\$5M**

Status: **In progress**

## AIStotle

Partners: SemiosBIO Technologies Inc., Laughing Coyote Orchards, IVADO Labs

As the leading precision-farming platform and the world's largest independent agtech provider, Semios is focused on simplifying the grower's experience by bringing important, interrelated crop data into one easy-to-use platform. Leveraging a network of sensors that provide more than 500M data points measuring climate, soil moisture, insect, and disease activity daily, Semios applies big data analytics and machine learning to reduce and mitigate crop risks for growers. The weather is the primary driver of crop and pest development, which makes granular, accurate, and reliable forecasting that is hyper-localized to an orchard's unique conditions imperative.

Scale AI's investment

**\$1.6 M**

(Including Quebec: \$0.2M)

Total investment

**\$3.5 M**

Status: **In progress**

## Prediction and optimization of rental assets stock and transportation

Partners: Location d'outils Simplex, Kamco Construction, Équipement Mathieu, Mind in a box, CGI, Maya HTT

Simplex is specialized in tool and equipment rental in multiple sectors such as construction, industrial, manufacturing, government, events and movies. The project aims to maximize the offer by optimizing the inventory and transport planning. It focuses on two essential parts of the Simplex supply chain: inventory, by predicting the availability and dispatch needed, and transport, by estimating the likelihood of success of each pick-up, delivery, or transfer within a queue of potential activities.

Scale AI's investment

**\$1.3 M**

(Including Quebec: \$0.3M)

Total investment

**\$2.7 M**

Status: **In progress**

## Project Galactic

Partners: Ravel by CF, Coveo Solutions Inc., Gensquared Inc., Konrad Group Inc., Matt and Nat SE, The Silver Mountain LTD, QE Home | Quilts Etc., Ann-Louise Jewellers Ltd.

The rapid increase in e-commerce has driven massive digital and supply chain transformations for every retailer. Customers expect to have full visibility and access to a retailer's inventory no matter the channel and location. To meet these expectations, Ravel by Cadillac Fairview's innovation team, has developed an app that gathers, standardizes, and recommends millions of consumer products across hundreds of Canadian retailers in 18 CF shopping centres. Project Galactic builds upon a previously-funded ScaleAI project in order to improve search, the most critical for connecting shoppers with retailers.

Scale AI's investment

**\$1.2 M**

(Including Quebec: \$60K)

Total investment

**\$5.3 M**

Status: **In progress**



## AI for energy supply chain feedstock optimization

Partners: Tidewater, Validere, Nova Analytics, Queen's University

Trillions of dollars of commodities change hands multiple times in the Canadian and global energy supply chains with little real-time visibility into their attributes. The resulting inefficiencies increase energy costs and emissions across the world's largest supply chain. Tidewater has partnered with Validere to use an AI-powered, universal data layer that consolidates and augments multiple data sources into a single source to make better operational, commercial, and ESG decisions. The best course of action can now be determined at a system level by sourcing the appropriate feedstocks for all supply chain steps. This results in better financial decisions, reduced energy costs for Canadian consumers, and a tangible reduction in greenhouse gas emissions.

Scale AI's investment  
**\$1.2M**

Total investment  
**\$3.6M**

Status: **Completed**

## Apollo.AI

Partners: Ray-Mont Logistics International, Volume Freight, IVADO Labs, Faimdata

Ray-Mont Logistics is an essential link in the international and domestic North American supply chain. Ray-Mont already relies on AI to optimize its transloading terminal operations. The Apollo.AI Project will enhance its decision support systems by recommending customers' quotations based on transportation and transloading capacity as well as forecasting costs. Every day, Ray-mont helps dozens of major exporters and importers across North America and answers many customers' orders. These involve complex routing and multi-modal transportations plans which induce uncertain situations. The AI-based decision support system will enable better customer service and a more accurate estimation of the completion of the orders.

Scale AI's investment  
**\$1.2M**  
(Including Quebec: \$0.2M)

Total investment  
**\$2.5M**

Status: **In progress**

## Supply chain optimization platform

Partners: Adastr, Taiga Building Products, Lowe's Canada

The building materials distribution supply chain is fragmented and has manual business processes that are heavily reliant on human capital. The overall goal of this initiative is to use data inputs that are readily available in disparate systems and use advanced AI techniques to solve three of the most pressing bottlenecks in the building materials supply chain: accurate demand forecasting, maximizing truck loads, and optimizing warehouse layouts.

Scale AI's investment  
**\$1.1M**

Total investment  
**\$2.8M**

Status: **In progress**

### Staff optimizer and two-way product recommender for e-commerce

Partners: Kognitive Tech Inc., IVADO Labs, Roy Foss, Cellcom

Kognitive Tech, a leading e-commerce enterprise, is excited to be adding their first AI capabilities to their software suite. This project is designed to build scalable personalization capabilities for retailers. The developed tools will first provide retailers their clients' clustering, scoring, and prioritization in real time and with machine learning insights that capture demand and help optimize store resources (e.g., required staff at a given time). A product recommender will subsequently provide product and service recommendations for the relevant customers' clusters based on expected customer needs and available inventory.

Scale AI's investment  
**\$1M**  
(Including Quebec: \$90K)

Total investment  
**\$2.9M**

Status: **In progress**

### Smart platform for optimizing agricultural yield

Partners: Adastra, GoodLeaf Farms, University of Guelph, SunGro, Johnny's Selected Seeds

Using LED lighting and multiple plant beds stacked on top of each other, vertical farming enables year-round indoor local produce farming. The goal of this project is to enable Adastra and GoodLeaf to jointly develop a smart platform that captures operational growth measurements and image-based data. This information will be used to optimize yield and crop quality.

Scale AI's investment  
**\$1M**

Total investment  
**\$2.5M**

Status: **In progress**

### Self-learning route optimization

Partners: Routific Solutions, Flashbox, Flourist

Routific Solutions is a route optimization and delivery management platform for SME delivery businesses, currently working with 1,300+ customers all over the globe. Last-mile delivery businesses will use a route optimization solution to plan their delivery routes, but there is currently no existing solution that also incorporates predicted traffic patterns for time-of-day and day-of-week. By incorporating traffic patterns and driver behaviours, this solution will help more accurately estimate the travel times, which will allow for increased delivery efficiencies.

Scale AI's investment  
**\$0.9M**

Total investment  
**\$2.4M**

Status: **In progress**

### Supply chain insights and optimization

Partners: AMG Medical, KPI Digital, Alpine Pacific Agencies, GDK Marketing Inc

AMG Medical Inc. manufactures and distributes home healthcare and medical professional products across North America. In response to rising consumer demand, the objective of this AI project is to improve purchasing and sales decisions across AMG's supply chain. The proposed solution integrates with AMG's existing technology solutions to provide better insights to decision makers across the organization.

Scale AI's investment  
**\$0.9M**  
(Including Quebec: \$0.2M)

Total investment  
**\$2.3M**

Status: **Starting up**

## AI-powered vehicle operations suite

Partners: Canada Drives, Infostrux Solutions, ADESA Canada, UBC Sauder School of Business, Canadian Black Book, ProCogia

Through a combination of technology and empowered customer service, Canada Drives enables consumers to shop, purchase, finance and sell vehicles entirely online. To provide this value and convenience, Canada Drives must predict market prices and reconditioning costs to provide accurate and fair prices to sellers and buyers, and to optimize our supply chain. Canada Drives will use the ScaleAI funding to acquire intelligence in the form of data and machine learning models, fund the development of consumer-grade solutions, and deepen its relationships with ecosystem partners.

Scale AI's investment  
**\$0.9M**

Total investment  
**\$2.2M**

Status: **In progress**

## Predictive modelling and optimization algorithms for home care delivery

Partners: AlayaCare, CIUSSS du Nord-de-l'Île-de-Montréal, Bien Chez Soi, Polytechnique Montréal

AlayaCare enables home care providers across the world to improve their patient care delivery through technology. The company already relies on AI to simplify home care planning and management services for specialized agencies. AlayaCare now plans to take things a step further by using predictive modelling to optimize scheduling, routing, and staffing operations.

Scale AI's investment  
**\$0.8M**  
(Including Quebec: \$0.2M)

Total investment  
**\$1.7M**

Status: **In progress**

## Industrial video analytics for manufacturing efficiency

Partners: Pacefactory inc, Magna International, University of Guelph, Alberta Machine Intelligence Institute (AMII), the University of Québec at Rimouski, Toyota Motor Manufacturing Canada, Dupont Sustainable Solutions

Industrial video analytics uses computer vision, AI, and machine learning technologies to study the motion patterns of production processes and identify opportunities for improvement or help explain non-standard unexpected losses of time or motion. Current continuous improvement techniques are manual, time-consuming, and not very effective. Using AI to process large amounts of data, Pacefactory, along with its consortium partners, seeks to develop advanced video analytics solutions and processes to solve some of the costliest production problems in manufacturing.

Scale AI's investment  
**\$0.7M**

Total investment  
**\$2M**

Status: **In progress**

## Precision harvest

Partners: McCain, Fiddlehead, Resson, Riverview Farms Corp., CP Farms Ltd, Swansfleet Alliance, Valley Farms

The aim of this proposal is to harness the power of data and predictions to give farmers better tools to manage their crop proactively and diminish the impact of changes in weather. The project will help growers sequence their fields for harvest against objective criteria like canopy health and wet spots to maximize yield. Rephrase the text as follows: The aim of this proposal is to harness the power of data and predictions to give farmers better tools to manage their crop proactively and diminish the impact of changes in weather. The project will help growers sequence their fields for harvest against objective criteria like canopy health and wet spots to maximize yield.

Scale AI's investment  
**\$0.75 M**  
 (Including Quebec: \$17K)

Total investment  
**\$1.8 M**

Status: **In progress**

## AI-based NDT platform for improving productivity across the steel sheet products supply chain

Partners: InspecTech Analygas Group, Impact AI, QA Consultants, TWB Company, Magna International, Royal Military College of Canada

InspecTech, Impact AI, and QA Consultants are developing an AI-based quality control system for industrial environments. The goal of this project is to develop an AI-based model that will reduce scrap and improve productivity across the steel sheet products supply chain. The focus for this project is on the midstream welding of steel tailor-welded blanks.

Scale AI's investment  
**\$0.7 M**

Total investment  
**\$2.1 M**

Status: **In progress**

## ML tool for supply policies

Partners: Logistik Unicorp, InMind, SimWell, Ville de Montréal, Dristex, Polytechnique Montréal

Logistik Unicorp provides managed clothing services for large organizations and governmental agencies internationally, managing over 159k SKUs across its entire client base. The level of customization offered by the company implies that 90% of SKUs have varying and intermittent demand profiles. Current demand forecasting accuracy is insufficient, leading to suboptimal material and information flow with suppliers, which contributes to variability in deliveries and difficulty to manage inventory. This project aims to develop a data-driven approach to supply management. This will help lower storing and handling fees, penalties for late deliveries, and supply management costs.

Scale AI's investment  
**\$0.7 M**  
 (Including Quebec: \$0.1M)

Total investment  
**\$1.5 M**

Status: **In progress**



### Holistic grocery promotions optimization suite

Partners: Loblaws Inc., Flipp, IVADO Labs

Promotions planning has a significant impact on the supply chain of the grocery business. Loblaws is implementing AI solutions to recommend tailored promotion strategies, based on the understanding of consumers' habits and expectations. The AI analysis helps determine the best promotional plans and pricing approaches for each site cluster.

Scale AI's investment  
**\$0.7M**  
 (Including Quebec: \$20K)

Total investment  
**\$1.7M**

Status: **Completed**

### Developing an AI-driven platform for last mile delivery and home installation

Partners: Quick Contractors, Canadian Tire, Genaire Transport, Tech Consultants Group (TCG)

QuickContractors.com Inc. has partnered with Canadian Tire Corporation Ltd. to develop a SaaS AI platform that combines real-time data and AI to optimize last mile delivery and product installations for large Canadian retailers. The company is developing an intelligent platform with robust optimization capabilities that will synthesize existing and real-time data inputs, including inventory availability, delivery carrier details, delivery locations, GSP, and contractor skill levels to improve capacity planning, scheduling, and logistics of over 5,000 national contractors and delivery agents.

Scale AI's investment  
**\$0.65M**

Total investment  
**\$2M**

Status: **In progress**

### E2E ML-based demand forecasting

Partners: Unilever Canada, Larus Technologies, SOSICIP

Because it offers everyday consumer products to retailers across the country, Unilever's supply chain is central to its success. By utilizing internal and external data, the end-to-end and machine learning based demand forecasting solution, developed by Unilever Canada's collective intelligence and AI/ML analytics strategic partner (Larus Technologies) and supported by SOSICIP consortium smart computing platforms, ensures optimal forecasting for Unilever.

Scale AI's investment  
**\$0.5M**

Total investment  
**\$2.2M**

Status: **In progress**

# COVID-19 projects

At the end of March 2020, ScaleAI responded to the government's call for projects to support artificial intelligence (AI) innovations to help our nation get through this crisis. For administrative reasons, we were unable to include this COVID-19 project in the 2020-2021 annual report.

## Optimization of the central operating room booking team

Forecasting and optimizing surgery schedules with a predictive and prescriptive decision support solution for the central operating room booking team, that will recommend a joint optimized schedule for all of MUHC surgeons while leveraging statistical models to account for constraints such as beds availability, overtime risk and shared resources. Additionally, a separate simulation-based tool will be developed to help MUHC as a strategic decision support system and guide longer horizon strategic decisions by leveraging statistical information on historical data and patient backlogs.

McGill University Health Centre (MUHC)

Investment from Scale AI

**\$1.5M**

## The Scale AI impact for companies

### RAY-MONT LOGISTICS

“Scale AI has been a key partner in enabling Ray-Mont to launch two projects that will be instrumental in our growth, and the completion of which will result in the creation of several hundred permanent jobs in Canada. These projects, carried out with the support of Scale AI, illustrate how AI contributes to business success. Indeed, the support of the AI Global Innovation Cluster has allowed us to distinguish ourselves in the AI ecosystem, and even allowed us to present our accomplishments at scientific conferences, notably the CORS 2021 conference.”

— [Charles Raymond, CEO, Ray-Mont Logistics](#)

### PRATT & WHITNEY

“We’re excited about developing our AI capabilities, which, combined with decades of innovation, will position us with an enduring competitive advantage throughout every aspect of our business.”

— [Maria Della Posta, President, Pratt & Whitney Canada](#)

### McCain

“The Scale AI funding and the process to secure this funding have expanded our aspiration around the timing and scope of this modelling concept. The investment has also encouraged us to tap into the Scale AI ecosystem and we are excited that we have brought other great Canadian SMEs such as Fiddlehead into the Scale AI ecosystem as well. The funding reduces the risk profile of the immediate and necessary investments in analytical horsepower, which we have been trying to advance on our own for several years, accelerating time to market and time to benefits.”

— [Caroline Morissette, VP Global Data & Analytics, McCain](#)

### MEA

“With encouragement from Scale AI, Montreal-based Maritime Employers Association connected with other Canadian ports and maritime associations to share lessons learned and other know-how IP from their project.”

— [Maritime Employers Association](#)

### CONNECT&GO

“It is difficult to find trainers able to meet the specific needs of businesses. Scale AI helped dozens of organizations, like Connect&GO, Ludia, and Rheinmetall Canada find the AI trainers and courses that suit their needs.”

— [Connect&GO](#)

## The Scale AI impact for AI providers

ADASTRA

“The Scale AI ecosystem provides an opportunity to collaborate with new organizations. Scale AI played a crucial role in connecting us with other vertical farms that are interested as potential future adopters.”

— Abdul Naeem, Account Manager, Adastra

IVADO LABS

“Scale AI is an important enabler for the commercialization of research in the field of AI applied to supply chains. We have seen firsthand how Scale AI encourages companies to seek out and leverage the Canadian research ecosystem.”

— Andrea Lodi, Founder and Scientific Director, IVADO Labs

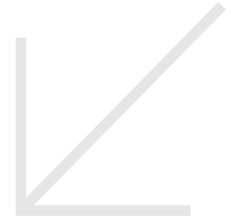
MOOV AI

“Scale AI developed an offering that supports companies through every step of their AI journey. This allows AI service providers like Moov AI to guide customers such as Logibec and Exfo from discovery to delivery:

- First, Scale AI funding allows business leaders to learn about concrete applications of AI for their industry.
- Then, ideas that show the highest potential can be rapidly tested and deployed within their organization.
- Lastly, workforce training and knowledge transfer ensure the new solutions and processes are used to their full potential.”

— Moov AI

# Supporting the flourishing ecosystem



The prosperity and vitality of an ecosystem is contingent on interactions between interdependent players. In this spirit, Scale AI's involvement targets complementary areas of intervention.

## ... by channelling the power of innovation in academia

Scale AI has strengthened ties between researchers, academia and industry.

> 83% of projects involve academia or researchers

In total, 36 academic and research institutions are actively participating in Scale AI projects, including Canada's flagship AI institutes, which include:

- **Vector:** A key partner in the delivery of our Workforce Development program. Scale AI is also collaborating on Vector's FastLane program to foster AI capacity building in Canadian SMEs.
- **Amii:** Scale AI is funding Amii's first AI start-up accelerator stream, Supply Chain AI West. Applied researchers from Amii are also directly involved in three of Scale AI's industry investment projects.
- **Mila:** A participant in many industry investment projects funded by Scale AI. Prof. Yoshua Bengio (founder of Mila) is a member of Scale AI's Board of Directors.
- **IVADO Labs:** IVADO and Mila conduct fundamental and applied research in very diverse domains. Their main mandate is academic research, training, and technology transfer of projects with a technology readiness level (TRL) that ranges from 1 to 5. IVADO Labs executes industrial projects with a focus on the supply and with

TRLs ranging from 4 to 9. IVADO Labs brings together researchers in machine learning, operations research, and natural language processing from across Mila and IVADO to commercialize real-world solutions and to convert research into applicable business solutions across Canada.

Thanks to this extensive collaboration, Canadian businesses have access to the largest community of the world's most prominent research scientists. This enables them to leverage the latest research in applied machine learning to bolster their knowledge acquisition and the most up-to-date knowledge in operations research to support the development of their R&D and commercial projects.

These exceptionally strong relationships provide Canada with an unparalleled advantage on the global stage. Scale AI's central role in the Canadian AI research ecosystem empowers the organization to expand the scope of new AI developments by funding key commercialization projects.



## Collaborating with Canada’s best academic institutions

# 36

academic and research institutions are actively participating in projects,

**including 8 university-based start-up accelerators and incubators and 4 research chairs led by world-class researchers in AI for supply chains:**



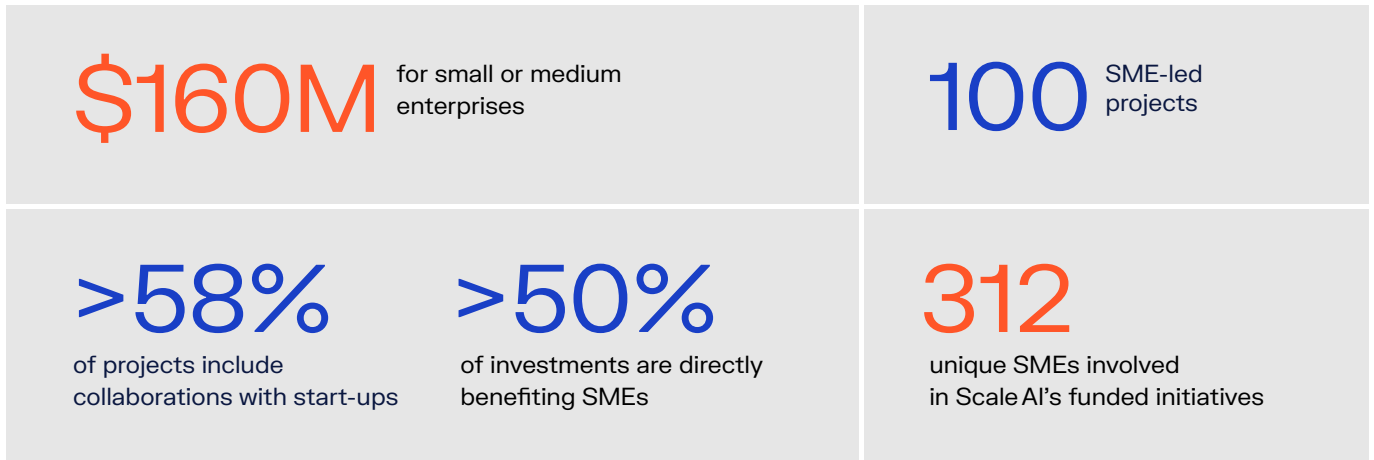
- Alberta Machine Intelligence Institute (AMII)
- Cégep de Drummondville
- Cégep de Jonquière
- Cégep de Trois-Rivières
- Cégep Édouard Montpetit
- Cégep Sainte Foy
- College d’Alma
- Collège Maisonneuve
- Collège O’Sullivan de Québec
- Concordia University
- Centre de Recherche Informatique de Montréal (CRIM)
- Dalhousie University
- Douglas Mental Health
- University Institute
- École De Technologie Supérieure (ETS)
- École en Réseau
- École des sciences de la gestion de l’UQAM (ESG)
- HEC Montréal
- IVADO
- McGill University
- Mila
- Montréal Heart Institute
- Polytechnique Montréal
- Queen’s University
- Ryerson University Simon
- Fraser University
- UHN Princess Margaret Cancer Centre
- Université d’Ottawa
- Université de Montréal
- Université de Sherbrooke
- Université Laval
- University of Guelph
- University of Québec at Rimouski
- University of Toronto
- University of Waterloo
- Université du Québec à Chicoutimi (UQAC)
- York University



# ... by maintaining the acceleration pace for start-ups and SMEs

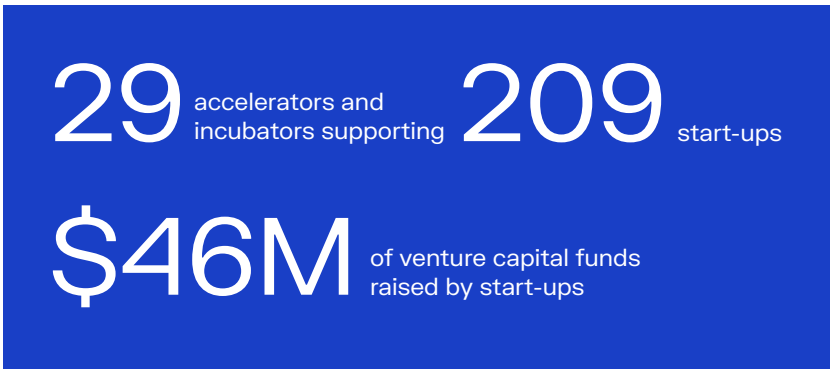
Scale AI has been a pillar of growth for SMEs by providing vital support both financially and by connecting them to others in the AI ecosystem.

## Supporting AI integration by SMEs and start-ups and SMEs specialized in AI



Supporting Canadian start-ups through funding and connection building with key partners is essential to ensuring the continued growth of the ecosystem — now more than ever.

- Scale AI provides financial incentives for the country's top incubators and accelerators to encourage them to support start-ups developing AI solutions for supply chains.



*The Scale AI impact*

PRETECKT

“Scale AI has played a vital role, directly and indirectly, in helping Preteckt increase the value of its predictive maintenance software product. The Scale AI project will have helped us more than double the value our software can produce, which will help us grow our commercial footprint in Canada and beyond.”

— Ken Sills, CEO, Preteckt

NEXT AI

“Scale AI’s partnership with Next AI — Toronto has changed how NEXT Canada understands the supply chain and the vast number of industries emerging start-ups and technologies can impact by providing supply chain solutions. Scale AI’s support has provided visibility to the Next AI — Toronto cohort and has challenged these ventures to consider how their technologies can be adapted to impact massive sectors like the supply chain.”

— Kyle Winter, CEO, Next AI—Toronto

## ... by developing the workforce



No matter their level of interest and enthusiasm, most organizations aren't ready to launch their first AI project. There is a real and urgent need to build awareness of careers in AI and prioritize training.

Four Scale AI programs have helped develop the skills and diversity of the current and future workforce in AI:

→ The Custom training program encourages organizations looking to develop their employees' skills and knowledge.

→ The Public training program improves access to AI training offered by teaching institutions.

→ The Youth Awareness program promotes interest in STEM careers.

→ The Research chairs program attracts and retains some of the world's greatest AI scientists.

### Filling the industry demand for leading edge AI research.

To attract and retain some of the world's greatest AI scientists, Scale AI has launched a series of ambitious research programs to develop the next generation of AI experts.

These programs bring Scale AI's inherently collaborative approach to academia and our workforce development programs, resulting in the creation of four research chairs across Canada AI's hubs in Montreal and Toronto:

→ The Scale AI Research Chair in Artificial Intelligence for Urban Mobility and Logistics at HEC Montréal, held by Professor Carolina Osorio

→ The Scale AI Chair in Data Science for Retail at McGill University, held by Professor Maxime Cohen

→ The Scale AI Chair in Data-Driven Supply Chains at Polytechnique Montréal, held by Professor Thibaut Vidal

→ The Data-Driven Algorithms for Modern Supply Chains at the University of Toronto, held by Professor Elias Khalil

*The Scale AI impact*

ERICSSON

“When Ericsson was creating its Global AI Accelerator in Montreal, we came to Scale AI for help to realize our ambitious training plan. Scale AI facilitated our collaboration with HEC Montréal, IVADO, and other universities to train hundreds of Ericsson employees. The support in securing AI expertise outside of our organization is beneficial to our business and to the world-class researchers we have been partnered with, including Andrea Lodi, Emma Frejinger, Yossiri Adulyasak, Jean-François Cordeau, and Louis-Martin Rousseau at IVADO Labs.”

— Ericsson



# ... by connecting AI actors together and with the business community

---

Despite the cancellation of some in-person activities due to the pandemic, the ScaleAI team continued to engage with members to facilitate discovery and communication between them. We continued our community and business outreach efforts through webinars and ensured that the public, as well as our industry partners, were kept informed through various digital initiatives.

## Fourth Edition of AI in Action in Montreal

On April 8, 2022, ScaleAI teamed up with the Chamber of Commerce of Metropolitan Montreal and Forum IA Québec to celebrate the Quebec and pan-Canadian artificial intelligence ecosystem. Nearly 800 participants gathered, both virtually and in-person, to listen to some 50 panelists discuss the state of the sector, the future of AI, and concrete business applications for AI solutions.

This annual meeting allowed us to measure the progress of a strong, dynamic, and flourishing ecosystem. It was also an opportunity to forge new ties between key players in Quebec's industrial sectors. This fourth edition of AI in Action concluded with the presentation of the first Quebec Excellence in AI Awards, an award designed to highlight the role of various organizations in the deployment of AI in Quebec and abroad.

**800+**  
participants

**50+**  
panelists



The 2022 winners of the first-ever Quebec Excellence in AI Awards are:

- **Coveo** – AI company with the most international success
- **XpertSea** – Quebec-based AI start-up of the year

- **Optimization of Operating Room Planning (CHUM)** – Best AI project for the common good
- **Cargo2 AI Project (Port of Montreal)** – Best integration of AI in a product, service, or business process

### Continuing the conversation to grow the ecosystem

ScaleAI continued to solidify its position as a leader in the AI ecosystem by facilitating conversations and collaborations that encourage the growth of the ecosystem. These initiatives include:

- More than **90 webinars** to present ScaleAI's different programs.
- The publication of the **AI special report in La Presse**, highlighting a number of ScaleAI funded projects

- The publication of **12 new posts** and **10 new videos** on our blog and **website** about intellectual property and collaboration in our ecosystem.
- Sharing exciting news and updates on our social platforms, which generated more than **335k impressions combined**.
- **61K unique visit** to our website creating **104 leads** from our 4 white papers and **762 leads** for our webinars

### The ScaleAI impact

CCMM

“Artificial intelligence in Quebec and Canada must now move to a new stage in its development. We must enter a phase of industrialization and democratization, implementing AI solutions in a growing pool of businesses.”

— [Michel Leblanc, President and CEO, Chamber of Commerce of Metropolitan Montreal](#)





AMPLIFYING  
CANADIAN IP

06

# Amplifying Canadian IP



Throughout its existence, Scale AI has challenged its members to leverage generated intellectual property for the collective benefit of the ecosystem.

## 100%

projects generating IP will be re-used to develop the ecosystem beyond the original project scope

## 263

SMEs developed IP assets and are able to progress toward future commercialization

## 387

significant pieces of IP developed, such as AI models and software

## 6x

more supported start-ups are filing patents than the norm for Canadian high-tech SMEs (30% vs 5%)

It may seem ironic, but the power behind artificial intelligence is actually human intelligence. Although a trained AI model or algorithm is the end product of a supply chain AI adoption project, it is human skill and ingenuity that go into tailoring the precise AI solution and IP critical for ecosystem growth.

At its core, each supply chain AI project is about solving specialized problems unique to the adopter's business. The road to selecting a suitable AI algorithm and deploying a successful business application is laden with challenges, including organizing training data, engineering the data features of the model, optimizing the training of the AI models, and ultimately, integrating AI solutions into improved business processes.

As the AI specialists overcome each hurdle, the knowledge and experience they gain—their IP—expands the capabilities available for future projects.

And as the adopting businesses work with AI, often for the first time, they improve their employees' skill sets, enhance their global competitiveness, and lower their internal barriers to further AI adoption—all of which are forms of valuable practical IP.

When it comes to IP, the key ecosystem benefit of Scale AI projects is the growing body of IP related to AI know-how and expertise.

Businesses frequently protect valuable IP as trade secrets and confidential information to help build their global competitive advantage. To a lesser extent, patents can provide supplemental protection where truly novel methods are developed.



To benefit from generalized project learnings without jeopardizing business competitiveness, the AI ecosystem can leverage know-how IP by encouraging actors to transfer the lessons they have learned.

Helping members recognize that their know-how and learnings are IP, to be protected and leveraged, is a high priority.

## Our IP objectives

We believe that entities capable of systematically identifying and protecting their most important IP are more successful in scaling their businesses.

**With this philosophy front and centre, we have four main IP objectives:**

1. **Improve IP literacy.** Businesses must understand why and how to integrate IP strategy into their business strategy. Our AI-focused, digestible IP training, which is made up of a 12-part IP video series and our IP Without Jargon blog, provides practical, actionable guidance to build members' confidence in their abilities to harness IP as an everyday business tool.
2. **Protect IP.** We work with our members to ensure they protect and leverage their IP appropriately, according to customized IP strategies.
3. **Support SMEs.** We strive to improve our SMEs' ability to strategically identify and manage their IP by providing customized guidance.
4. **Create opportunities for leverage.** Our Innovation Registry, accessible to members via our portal, provides a meaningful line of sight into our projects to foster future synergies and leverage IP. All of our projects' foreground IP is included in the Registry.

## Creating an exclusive IP registry

Scale AI's IP registry, which describes our industry-led projects, is available to all Scale AI members.

The goal of the registry is to encourage possible future synergies between members and generate new business opportunities for our SME members.

**Other IP success indicators include:**

- Our IP and data strategies continue to operate as intended, supporting the objectives set out in our corporate plan with full executive support. No updates have been made to these strategies this year.
- No member disputes regarding IP have been referred to the dispute resolution mechanism referenced in Subsection 15.2(e) of the Contribution Agreement.
- 4 SME members have requested independent IP expertise or advice through the mechanism referenced in Subsection 15.2(f) of the Contribution Agreement.
- 3,000 ecosystem members have benefitted from Scale AI's AI-specific IP training videos and articles.



The Scale AI impact

MOOV AI	<p>“Scale AI has challenged project members to go outside of their comfort zones when it comes to IP. As a result, many large client organizations have allowed SME service providers, like Moov AI, Maxa AI, and Inmind to commercialize generated IP outside their Scale AI project.”</p> <p>— MOOV AI</p>
BCF VENTURES	<p>“Accelerators benefit greatly from Scale AI’s new and enhanced IP supports to start-ups, like the the BCF Ventures ‘IP Office Hour’ program.”</p> <p>— BCF Ventures</p>
KINAXIS	<p>“To help us leverage the competitive advantage we gained out of our investment, we filed 7 patent applications coming out of our Scale AI project. Patenting our AI and software technologies is a crucial step to helping us compete on the global stage. Today, the IP that we generated in our Scale AI project is also integrating into solutions for other verticals such as consumer packaged goods and possibly life sciences.”</p> <p>— Kerry Liu, EVP Product Management &amp; Innovation, Kinaxis</p>



## Data protection and security

Scale AI has implemented the necessary measures to protect the data and confidential information it possesses.

We ensure data security through security and cybersecurity measures that provide protection against intrusion into and hacking of our computers and information systems.

These measures include:

- 2-factor authentication to improve security and reduce the risk of unauthorized access
- VPN and firewall to manage systems access, email encryption, scanning, filtering, and anti-phishing
- An operating system and security patch update manager that automatically pushes updates to all Scale AI computers to ensure they are continuously up to date
- A remote-control software that can deactivate lost or stolen Scale AI computers
- Employee training tailored to recognizing threats and using best practices for data protection

PRIORITIES 2022-2023,  
AND BEYOND

07

Next year will mark the end of Scale AI’s first five-year mandate. Based on the successful rollout of our programs and the number and quality of projects received, we are well on our way to achieving every goal we set out to achieve from the start, not to mention a few more we added along the way in response to the pandemic.

The results speak for themselves: Canada is a recognized international leader in AI. Thanks to our talent pool, the effectiveness of government strategies and investments, and the favourable financial and regulatory environment for AI company development, Canada is ranked 4th in AI among the world’s leading countries according to Tortoise’s 2021 Global Index.

The federal government has already announced the renewal of Scale AI’s mandate as Canada’s global

innovation cluster in artificial intelligence. We are also in the midst of developing a renewed mission statement for our second mandate.

The year 2022–2023 will be dedicated to this transition. Our teams are busy both completing all existing projects and programs and preparing for the next phase. We have initiated an analysis based on the lessons learned over the past few years that will help update and expand our programs in line with our new goals.

Global Ranking	Talent	Infrastructure	Operating environment	Research	Development	Government strategy	Commercial	Total
USA	1	4	35	1	1	17	1	1
China	24	1	6	2	2	2	2	2
United Kingdom	3	23	24	5	11	11	4	3
<b>Canada</b>	<b>7</b>	<b>15</b>	<b>5</b>	<b>10</b>	<b>10</b>	<b>1</b>	<b>6</b>	<b>4</b>
Israel	5	29	14	7	9	45	3	5
Singapore	4	8	55	4	14	15	5	6
<b>Quebec</b>	<b>12</b>	<b>34</b>	<b>17</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>7</b>	<b>7</b>
South Korea	28	6	32	12	3	7	15	8
The Netherlands	6	9	10	15	8	33	18	9
Germany	11	13	30	6	12	10	8	10
	<b>Implementation</b>			<b>Innovation</b>		<b>Investment</b>		

Numbers indicate global ranking for each category  
Source: Tortoise Global AI Index - December 2021

MINISTER OF INNOVATION

“Scale AI’s mandate is part of a long-term vision. After having contributed to developing the AI ecosystem on a solid foundation, we want to continue our efforts to support innovation, job creation, and the adoption of technologies derived from artificial intelligence for sustainable growth. It is in this spirit that we are pushing the mission of global innovation clusters to support the promotion of Canadian companies and increase the value of our intellectual property.”

— The Honourable François-Philippe Champagne, Minister of Innovation, Science and Industry of Canada

The achievements of the last few years have also motivated the will to continue the collaboration with the Government of Quebec within the framework of the Quebec Research and Innovation Investment Strategy.

The confidence of governments alongside that of our members and the academic and industrial communities encourages us to remain agile and innovative. This attitude will continue to enable us to anticipate the needs of the AI ecosystem and promote the adoption of AI where it can contribute the most.

**Our priorities will include:**

- Strengthening the ecosystem by putting our world-class companies front and center
- Private sector engagement by maintaining the ratio of corporate to ScaleAI investment at the current level of 1.8:1
- Adding to our focus on supply chains by also developing projects focused on health tech
- Projects with the greatest impact not only for the companies involved but for their community, industries, and our society as a whole
- Projects and initiatives that contribute to a green economy and the reduction of greenhouse gas emissions
- Initiatives to engage youth in data science studies at the college and university level, leading to a career in AI, particularly for underrepresented groups

The results of the past year, and even more so the impact of our efforts over the past five years, motivate us to pursue our efforts to build and grow a vibrant and sustainable AI ecosystem in Canada.









## Board of Directors 2021-2022

- 
- André Beaulieu  
Bell Canada
  - YOSHUA Bengio  
Mila
  - Hubert Bolduc  
Investissement  
Québec
  - Elza Brunelle-Yeung  
Bombardier Business  
Aircraft
  - Martha Crago  
McGill University
  - HÉLÈNE Desmarais  
Co-Chair of the Board,  
Scale AI
  - Anu Dodda (Anuradha)  
Thomson Reuters
  - Thierry Dorval  
Norton Rose Fulbright  
Canada LLP
  - Jody Fitzpatrick  
Sobeys
  - Marc Gilbert  
The Boston Consulting  
Group (BCG)
  - Deborah Hall Lefevre  
Alimentation  
Couche-Tard
  - Michel Leblanc  
Chambre de  
commerce du  
Montréal métropolitain
  - Andrea Lodi  
École Polytechnique  
de Montréal,  
IVADO Labs
  - Isabelle Marcoux  
Transcontinental Inc.
  - David Markwell  
Loblaw Companies  
Limited
  - Michel Patry  
IVADO, Fondation HEC  
Montréal
  - Miriam Pozza  
PwC
  - Denise Robert  
Cinémaginaire
  - Louis Roy  
Optel Group
  - Gilles Savard  
École Polytechnique  
de Montréal
  - Solmaz Shahalizadeh  
Backbone Angels
  - Geneviève Tanguay  
Ange Québec
  - Luc Vinet  
IVADO
  - Mary Wells  
University of Waterloo
  - Galen Weston, Jr.  
Loblaw Companies  
Limited and George  
Weston Limited

## Executive Committee

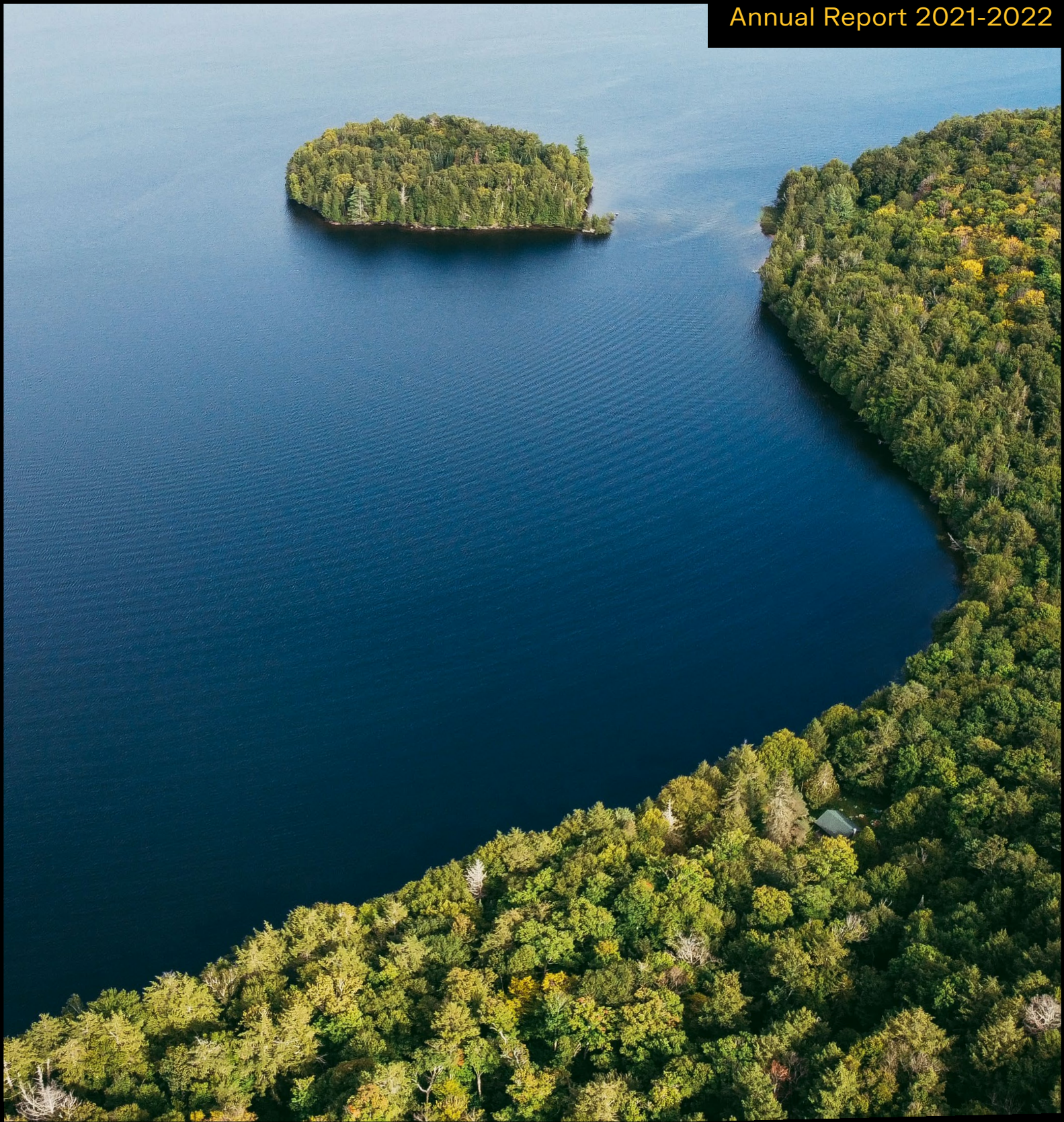
- HÉLÈNE Desmarais  
(Chairwoman)
- Julien Billot (CEO)
- Andrea Lodi
- Gilles Savard
- Michel Patry

## Executive Team

- Julien Billot  
Executive
- Serge Massicotte  
Technology
- Albert Caponi  
Finances
- Todd Bailey  
Legal & IP
- Clément Bourgogne  
Strategy
- Isabelle Turcotte  
Marketing &  
Communications







FINANCIAL  
REPORT



## Results

### ScaleAI for the year ended March 31, 2022

	2022 \$ in 000	2021 \$ in 000	2020 \$ in 000
<b>REVENUE</b>			
Contributions - Government	36,995	25,584	6,336
Membership fees	1,182	624	203
Registration fees for conferences	-	-	58
Interest income	162	262	552
	<b>38,339</b>	<b>26,470</b>	<b>7,149</b>
<b>EXPENSES</b>			
Salaries and social charges*	3,116	2,595	1,885
Professional fees	905	837	1,511
Marketing and promotion	282	330	605
Software	116	277	310
Rental charges	111	111	389
Events	37	102	407
Insurance	18	13	12
Office expenses	9	10	22
Training	10	6	6
Interest and bank charges	8	3	3
Conventions	-	1	15
Travel and meal expenses	6	1	32
Exchange loss (gain)	5	(5)	1
Bad debt	2	-	3
	<b>4,625</b>	<b>4,281</b>	<b>5,201</b>
Contributions related to projects**	<b>(31,777)</b>	<b>(20,644)</b>	<b>(549)</b>
<b>EXCESS OF REVENUE OVER EXPENSES</b>	<b>1,937</b>	<b>1,545</b>	<b>1,399</b>

\*The executive team salaries are between \$274K and \$399K for the 2021-2022 fiscal year. Compensation for one employee exceeded \$300,000 for the year. Unfunded eligible costs in 2021-2022, under the Innovation. Superclusters Initiative, include \$155K and are covered by Quebec Government and ScaleAI membership.

\*\*These contributions represent reimbursements of eligible project costs approved by ScaleAI. Summary of Industry Matching Funds for 2021-2022 total \$31.1M.

For administration purposes, ScaleAI's official name is: ScaleAI - Canadian Artificial Intelligence Supercluster

**SCALE AI –  
Canadian Artificial  
Intelligence Supercluster**

**Financial Statements  
March 31, 2022**

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Cash Flows	7
Financial Position	8
Notes to Financial Statements	9 - 13



## Independent Auditor's Report

To the Directors of  
SCALE AI – Canadian Artificial  
Intelligence Supercluster

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Raymond Chabot  
Grant Thornton LLP  
Suite 2000  
National Bank Tower  
600 De La Gauchetière Street West  
Montréal, Quebec  
H3B 4L8

T 514-878-2691

### Opinion

We have audited the financial statements of SCALE AI – Canadian Artificial Intelligence Supercluster (hereafter "the Organization"), which comprise the statement of financial position as at March 31, 2022, and the statements of operations, changes in net assets and cash flows for the year then ended, and notes to financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Organization as at March 31, 2022, and the results of its operations and its cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

### Basis for opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report. We are independent of the Organization in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Responsibilities of management and those charged with governance for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Organization's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Organization or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Organization's financial reporting process.

### **Auditor's responsibilities for the audit of the financial statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Organization's internal control;
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management;
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Organization's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial

statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Organization to cease to continue as a going concern;

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

*Raymond Chabot Grant Thornton LLP*<sup>1</sup>

Montréal  
June 21, 2022

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<sup>1</sup> CPA auditor, public accountancy permit no. A136560

# SCALE AI – Canadian Artificial Intelligence Supercluster Operations

Year ended March 31, 2022

	<u>2022</u>	<u>2021</u>
	\$	\$
<b>Revenues</b>		
Contributions		
Government grants (Note 3)	<b>36,995,071</b>	25,584,196
Membership revenues	<b>1,182,407</b>	624,150
Interest income	<b>161,051</b>	246,684
Other	<b>480</b>	15,000
	<u><b>38,339,009</b></u>	<u>26,470,030</u>
<b>Expenses</b>		
Salaries and employee benefits	<b>3,115,996</b>	2,594,646
Professional fees	<b>904,955</b>	837,639
Marketing and promotion	<b>282,160</b>	329,936
IT expense	<b>115,493</b>	276,573
Rental expense	<b>110,961</b>	110,857
Events	<b>37,096</b>	102,583
Insurance	<b>18,495</b>	12,890
Office supplies and expenses	<b>8,449</b>	9,926
Training	<b>10,006</b>	6,198
Interest and bank charges	<b>8,224</b>	3,122
Conventions	<b>21</b>	1,234
Travel and meals	<b>5,937</b>	439
Exchange loss (gain)	<b>4,565</b>	(4,742)
Doubtful accounts	<b>2,363</b>	
	<u><b>4,624,721</b></u>	<u>4,281,301</u>
	<b>33,714,288</b>	22,188,729
Contributions to projects (Note 7)	<b>(31,776,931)</b>	(20,643,686)
<b>Excess of revenues over expenses</b>	<u><b>1,937,357</b></u>	<u>1,545,043</u>

The accompanying notes are an integral part of the financial statements.

## SCALE AI – Canadian Artificial Intelligence Supercluster Changes in Net Assets

Year ended March 31, 2022

	<b>2022</b>			2021
	<u>Restricted for rental expense</u> \$	<u>Restricted for future projects</u> \$	<u>Unrestricted</u> \$	<u>Total</u> \$
Balance, beginning of year	111,109		4,149,758	4,260,867
Excess of revenues over expenses			1,937,357	1,937,357
Internal restriction (Note 8)	<u>555,545</u>	<u>4,000,000</u>	<u>(4,555,545)</u>	
Balance, end of year	<u>666,654</u>	<u>4,000,000</u>	<u>1,531,570</u>	<u>6,198,224</u>

The accompanying notes are an integral part of the financial statements.

# SCALE AI – Canadian Artificial Intelligence Supercluster

## Cash Flows

Year ended March 31, 2022

	<u>2022</u>	<u>2021</u>
	\$	\$
<b>OPERATING ACTIVITIES</b>		
Excess of revenues over expenses	1,937,357	1,545,043
Net change in working capital items and deferred government grants	<u>(3,266,206)</u>	<u>15,123,250</u>
Cash flows from operating activities	<u>(1,328,849)</u>	<u>16,668,293</u>
<b>INVESTING ACTIVITIES</b>		
Investments	<u>(193,000,000)</u>	<u>(238,000,000)</u>
Disposal of investments	<u>196,000,000</u>	<u>208,000,000</u>
Cash flows from investing activities	<u>3,000,000</u>	<u>(30,000,000)</u>
<b>Net increase (decrease) in cash</b>	<b>1,671,151</b>	<b>(13,331,707)</b>
Cash, beginning of year	<u>1,901,726</u>	<u>15,233,433</u>
Cash, end of year	<u><u>3,572,877</u></u>	<u><u>1,901,726</u></u>

The accompanying notes are an integral part of the financial statements.



# SCALE AI – Canadian Artificial Intelligence Supercluster

## Financial Position

March 31, 2022

	<u>2022</u>	<u>2021</u>
	\$	\$
<b>ASSETS</b>		
Current		
Cash	3,572,877	1,901,726
Trade and other receivables (Note 4)	342,632	458,617
Prepaid expenses		7,640
	<u>3,915,509</u>	<u>2,367,983</u>
Long-term		
Investments (Note 5)	<u>48,000,000</u>	<u>51,000,000</u>
	<u>51,915,509</u>	<u>53,367,983</u>
<b>LIABILITIES</b>		
Current		
Trade payables and other operating liabilities (Note 6)	11,915,475	2,365,516
Deferred membership revenues	<u>380,395</u>	<u>41,517</u>
	<u>12,295,870</u>	<u>2,407,033</u>
Long-term		
Deferred government grants (Note 7)	<u>33,421,415</u>	<u>46,700,083</u>
	<u>45,717,285</u>	<u>49,107,116</u>
<b>NET ASSETS</b>		
Restricted for rental expense (Note 8)	666,654	111,109
Restricted for future projects (Note 8)	4,000,000	
Unrestricted	<u>1,531,570</u>	<u>4,149,758</u>
	<u>6,198,224</u>	<u>4,260,867</u>
	<u>51,915,509</u>	<u>53,367,983</u>

The accompanying notes are an integral part of the financial statements.

On behalf of the Board,

*Ailène Desmarais*

Director

*Richard Z*

Director

# SCALE AI – Canadian Artificial Intelligence Supercluster

## Notes to Financial Statements

March 31, 2022

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### **1 - GOVERNING STATUTES AND PURPOSE OF THE ORGANIZATION**

The Organization, incorporated under the Canada Not-for-profit Corporations Act, aims to build the next generation of supply chains in Canada by optimizing the use of artificial intelligence technologies. It is a not-for-profit organization under the Income Tax Act.

### **2 - SIGNIFICANT ACCOUNTING POLICIES**

#### **Basis of presentation**

The Organization's financial statements are prepared in accordance with Canadian accounting standards for not-for-profit organizations.

#### **Accounting estimates**

The preparation of financial statements requires management to make estimates and assumptions that affect the amounts recorded in the financial statements and notes to financial statements. These estimates are based on management's knowledge of current events and actions that the Organization may undertake in the future. Actual results may differ from these estimates.

#### **Revenue recognition**

##### *Contributions*

The Organization follows the deferral method of accounting for contributions. Under this method, contributions restricted for future period expenses are deferred and are recognized as revenue in the year in which the related expenses are incurred. Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

##### *Membership revenues*

Membership revenues are recognized as revenue in accordance with the agreement between the parties as services are provided, when the fees are fixed or determinable and collection is reasonably assured. The liability relating to the received but unearned portion of membership revenues is recognized in the statement of financial position as deferred membership revenues.

##### *Interest income*

Investment transactions are recorded on the transaction date and resulting interest revenues are recognized using the accrual method of accounting.

All interest revenues are not subject to externally imposed restrictions and are recognized in the statement of operations.

# SCALE AI – Canadian Artificial Intelligence Supercluster

## Notes to Financial Statements

March 31, 2022

### 2 - SIGNIFICANT ACCOUNTING POLICIES (Continued)

#### Financial assets and liabilities

##### Initial measurement

Upon initial measurement, the Organization's financial assets and liabilities are measured at fair value, which, in the case of financial assets or financial liabilities that will be measured subsequently at amortized cost, is increased or decreased by the amount of the related financing fees and transaction costs.

##### Subsequent measurement

At each reporting date, the Organization measures its financial assets and liabilities at amortized cost (including any impairment in the case of financial assets).

With respect to financial assets measured at amortized cost or using the cost method, the Organization assesses whether there are any indications of impairment. When there is an indication of impairment, and if the Organization determines that, during the year, there was a significant adverse change in the expected timing or amount of future cash flows from a financial asset, it will then recognize a reduction as an impairment loss in operations. The reversal of a previously recognized impairment loss on a financial asset measured at amortized cost or using the cost method is recognized in operations in the year the reversal occurs.

### 3 - CONTRIBUTIONS

	<u>2022</u>	<u>2021</u>
	\$	\$
Government grants		
Operating		
Federal government		
Innovation Superclusters Initiative	<b>3,198,797</b>	3,019,770
Provincial government		
Ministère de l'Économie et de l'Innovation	<b>2,000,000</b>	2,000,000
Emploi-Québec	<b>19,343</b>	(79,260)
	<u><b>5,218,140</b></u>	<u>4,940,510</u>
Projects		
Federal government		
Innovation Superclusters Initiative	<b>25,537,265</b>	18,066,763
Provincial government		
Ministère de l'Économie et de l'Innovation	<b>5,705,665</b>	2,332,390
Emploi-Québec	<b>534,001</b>	244,533
	<u><b>31,776,931</b></u>	<u>20,643,686</u>
	<u><b>36,995,071</b></u>	<u>25,584,196</u>

# SCALE AI – Canadian Artificial Intelligence Supercluster

## Notes to Financial Statements

March 31, 2022

### 4 - TRADE AND OTHER RECEIVABLES

	<u>2022</u>	<u>2021</u>
	\$	\$
Trade accounts receivable (a)	323,609	441,826
Accrued interest	18,057	16,791
Sales taxes receivable	966	
	<u>342,632</u>	<u>458,617</u>

(a) As at March 31, 2022 and 2021, there is no allowance for impairment. The amount of the impairment loss related to the trade accounts receivable is \$2,363 for the year (nil in 2021).

### 5 - INVESTMENTS

	<u>2022</u>	<u>2021</u>
	\$	\$
At amortized cost		
Guaranteed investment certificates, 0.32%		5,000,000
Guaranteed investment certificate, 0.41%		13,000,000
Guaranteed investment certificate, 0.33%		10,000,000
Guaranteed investment certificate, 0.43%		10,000,000
Guaranteed investment certificate, 0.49%		13,000,000
Guaranteed investment certificate, 0.64%, maturing on April 14, 2022	20,000,000	
Guaranteed investment certificate, 0.88%, maturing on May 16, 2022	20,000,000	
Guaranteed investment certificate, 0.50%, maturing on April 22, 2022	5,000,000	
Guaranteed investment certificate, 0.72%, maturing on April 22, 2022	3,000,000	
	<u>48,000,000</u>	<u>51,000,000</u>

### 6 - TRADE PAYABLES AND OTHER OPERATING LIABILITIES

	<u>2022</u>	<u>2021</u>
	\$	\$
Accounts payable and accrued liabilities	10,998,577	1,573,907
Salaries and vacation payable	916,898	725,315
Sales taxes payable – government remittances		66,294
	<u>11,915,475</u>	<u>2,365,516</u>

# SCALE AI – Canadian Artificial Intelligence Supercluster

## Notes to Financial Statements

March 31, 2022

### 7 - DEFERRED GOVERNMENT GRANTS

	<u>2022</u>	<u>2021</u>
	\$	\$
Provincial government operating grant (a)		
Balance, beginning of year	4,000,000	6,000,000
Amount recognized in operations	<u>(2,000,000)</u>	<u>(2,000,000)</u>
Balance, end of year	<u>2,000,000</u>	4,000,000
Federal government project grants (b)		
Balance, beginning of year	24,804,163	5,948,306
Amount recognized in operations	<u>(28,736,062)</u>	<u>(18,066,763)</u>
Amount received relating to the following years	<u>23,716,403</u>	<u>36,922,620</u>
Balance, end of year	<u>19,784,504</u>	24,804,163
Provincial government project grants (b)		
Balance, beginning of year	17,895,920	20,393,583
Amount recognized in operations	<u>(6,259,009)</u>	<u>(2,497,663)</u>
Balance, end of year	<u>11,636,911</u>	17,895,920
	<u>33,421,415</u>	<u>46,700,083</u>

(a) The provincial government deferred operating grant represents unused resources which, as a result of external restrictions, are recognized as contribution revenues to a pre-established calendar.

(b) The federal and provincial deferred project grants represent unused resources which, as a result of external restrictions, are intended to cover future contributions to projects.

### 8 - NET ASSETS

#### Restricted for rental expense

The sums allocated to this reserve are used to meet the future costs of rental expense. During the year, the Organization allocated to this reserve an amount of \$555,545 (no allocation in 2021).

#### Restricted for future projects

The sums allocated to this reserve are used to pay contributions to future projects. During the year, the Organization allocated to this reserve an amount of \$4,000,000 (no allocation in 2021).

### 9 - COMMITMENTS

The Organization has entered into a long-term lease agreement expiring in March 2023 which calls for lease payments of \$111,109 for the rental of office spaces.

The Organization has also committed, according to project agreements signed before March 31, 2022, to make contributions to artificial intelligence, COVID-19 and acceleration projects for amounts totalling respectively \$66,195,284, \$919,212 and \$2,447,037 (total of \$69,561,533).

# SCALE AI – Canadian Artificial Intelligence Supercluster

## Notes to Financial Statements

March 31, 2022

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### **10 - FINANCIAL INSTRUMENTS**

#### **Credit risk**

The Organization is exposed to credit risk regarding the financial assets recognized in the statement of financial position. The Organization has determined that the financial assets with more credit risk exposure are trade accounts receivable, since failure of any of these parties to fulfil their obligations could result in significant financial losses for the Organization.

#### **Market risk**

The Organization's financial instruments expose it to market risk, in particular, to interest rate risk, resulting from its investing activities.

#### *Interest rate risk*

The Organization is exposed to interest rate risk with respect to financial assets bearing fixed interest rates.

The guaranteed investment certificates bear interest at fixed rates and the Organization is, therefore, exposed to the risk of changes in fair value resulting from interest rate fluctuations.

#### **Liquidity risk**

The Organization's liquidity risk represents the risk that the Organization could encounter difficulty in meeting obligations associated with its financial liabilities. The Organization is, therefore, exposed to liquidity risk with respect to all of the financial liabilities recognized in the statement of financial position.



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