

Committee of the Whole (2) Report

DATE: Wednesday, March 8, 2023 **WARD(S):** ALL

TITLE: VENTURELAB ANNUAL UPDATE

FROM:

Nick Spensieri, City Manager

ACTION: DECISION

Purpose

In accordance with the terms of the 2022-2026 partnership agreement between the City of Vaughan and ventureLAB, ventureLAB is providing an annual update on key activities and successes in 2022. This report seeks Council endorsement to continue the partnership with ventureLAB in 2023 to advance ongoing work to catalyze the growth and development of tech and innovation sector in Vaughan.

Report Highlights

- Economic Development has continued to work with ventureLAB, the provincially designated Regional Innovation Centre (RIC) for York Region, to enhance services for innovators and technology companies in Vaughan.
- In 2022, ventureLAB collaborated closely with Economic Development to build innovation capacity, drive job creation and economic growth, and generate an investment pipeline to attract top-tier tech companies from around the globe to Vaughan.
- In March 2023, ventureLAB will open a MedTech lab in Vaughan in partnership with Sterling Industries, which will catalyze the growth of Vaughan's medtech sector by attracting leading start-ups, supporting their growth and development, and raising the profile of Vaughan as a world-class destination for health innovation. This is a key steppingstone to a future ventureLAB facility at the Vaughan Healthcare Centre Precinct (VHCP).
- In 2023, ventureLAB will focus on deepening its presence in Vaughan by activating the MedTech lab and launching new initiatives to grow and build Vaughan's MedTech and automotive clusters.
- Given the past year's successes, the City should continue to deepen the partnership with ventureLAB and build on strategies and activities which support the growth and success of Vaughan's technology, MedTech and automotive tech sectors.

Recommendations

1. THAT Council receive ventureLAB's annual update (Attachment 2), evidencing the successful achievement of the key performance indicators set out in Schedule C of the ventureLAB/City of Vaughan 2022-2026 partnership agreement (Attachment 1); and
2. THAT, as per Section 4.4 of the ventureLAB/City of Vaughan 2022-2026 partnership agreement, Council approves the continuation of the partnership in 2023.

Background

Health and advanced manufacturing innovation are key emerging clusters in Vaughan's economy.

Innovation is a key emerging cluster in Vaughan's economy. There is an opportunity for Economic Development to catalyze economic growth by providing targeted support for

businesses in high-growth industries such as health technology, life sciences, auto technology, software and services, and technology hardware.

York Region is Canada's most dense tech hub, with 4 tech companies per 1,000 residents, and has the highest concentration of tech workforce in the Toronto-Waterloo corridor.

Vaughan is key to the future of York Region's innovation economy, linking the Cortellucci Vaughan Hospital to Canada's top universities and Toronto's renowned research hospitals via the Jane street transit corridor and the Vaughan Metropolitan Centre (VMC) transit hubs.

Growth in the technology sector is a key economic development opportunity and has a significant multiplier effect on the broader economy.

There is a significant opportunity to grow Vaughan's economy and to create jobs by enhancing the support and resources available to emerging companies in the tech and innovation sector. Studies of the multiplier effects in the United States reveal that for each new high-tech job in a city, five additional local jobs are created outside of the high-tech sector, both in skilled occupations (such as professional services and healthcare) and in unskilled occupations (such as retail and food services).

The growth of the innovation sector has a disproportionate effect on local economies. The innovation sector has the largest multiplier of economic sectors: about three times larger than that of manufacturing, for example. Investments in the innovation economy not only ensure the long-term competitiveness of the local tech sector but also produce significant economic growth across the local economy.

For Vaughan to continue its transition from a suburban to urban centre, it is important that Economic Development build local capacity to support emerging sectors within the local economy. Developing and expanding relationships with key innovation partners will help the City generate and retain economic benefits by enhancing support available to local SMEs.

Economic Development has continued to deepen its partnership with ventureLAB, the provincially designated Regional Innovation Centre (RIC) for York Region, to enhance services for innovators and technology companies in Vaughan.

ventureLAB offers advisory services, accelerator programming and access to critical equipment and resources to help technology companies raise capital, recruit and retain talent, commercialize new technology and intellectual property, and acquire customers. ventureLAB's mandate is to support the growth of globally competitive technology companies that grow to scale in York Region and Canada.

In 2022, Council endorsed a renewed partnership agreement between the City and ventureLAB for 2022-2026, for the purpose of expanding resources and support available to Vaughan-based technology companies. This partnership agreement focuses on advancing three strategic objectives:

1. Contribute to the Diversification and Competitiveness of Vaughan's Economy by building capacity for clusters in Health and Advanced Manufacturing.
2. Establish a ventureLAB facility in Vaughan.
3. Promote and profile Vaughan as a hub for entrepreneurship.

ventureLAB is a member of the Vaughan Healthcare Centre Precinct (VHCP) partnership and is contributing to efforts to develop the VHCP into an epicentre for excellence in healthcare and health technology.

As a VHCP partner, ventureLAB contributes to the technology development and commercialization, talent development and innovation goals of the VHCP partnership.

In March 2023, ventureLAB will open a new MedTech lab in Vaughan which will act as a critical magnet for supporting the growth of high-potential medical device companies and attracting them to Vaughan. The new MedTech lab is a significant step along the path to developing the VHCP and offers significant opportunities for entrepreneurs, healthcare practitioners, tech-sector talent and researchers to collaborate to advance the next generation of healthcare and health technology.

Previous Reports/Authority

[REGIONAL INNOVATION CENTRE \(VENTURELAB\) UPDATE – Committee of the Whole, Tuesday, May 07, 2019](#)

[Economic Development Strategic Business Plan 2020-2023](#)

[SUPPORTING VAUGHAN'S INNOVATORS – UPDATE AND NEXT STEPS – Committee of the Whole \(2\), Tuesday, February 8, 2022](#)

Analysis and Options

In 2022, ventureLAB delivered programs, services, and ecosystem development activities to build innovation capacity, drive job creation and catalyze economic growth in the city of Vaughan's technology and innovation sector.

ventureLAB has identified 3 key strategic objectives for the term of the 2022-2026 partnership agreement with the City of Vaughan:

1. Contribute to the Diversification and Competitiveness of Vaughan's Economy by building capacity for clusters in Health and Advanced Manufacturing.
2. Establish a ventureLAB facility in Vaughan.
3. Promote and profile Vaughan as a hub for entrepreneurship.

1. Contribute to the Diversification and Competitiveness of Vaughan's Economy by building capacity for clusters in Health and Advanced Manufacturing.

ventureLAB achieved 3 major capacity-building milestones in Vaughan in 2022:

1. Established a beachhead location in Vaughan at the Pierre Berton Resource library;
2. Secured provincial funding for and started the build of a dedicated MedTech Lab in Vaughan in Concord;
3. Executed a Memorandum of Understanding (MOU) with Mackenzie Health furthering the Vaughan Healthcare Centre Precinct.

These three milestones contribute to the longer-term goal of building capacity for the growth of Vaughan's health technology and advanced manufacturing clusters.

- **Vaughan Innovation Space:** To advance ventureLAB's footprint and impact in Vaughan, ventureLAB partnered with Vaughan Public Libraries to establish a beachhead location at the Pierre Berton Resource Library. This space allowed ventureLAB to provide advisory services, programming and workspace for tech entrepreneurs in Vaughan and to ensure that ventureLAB services were more locally accessible to founders. The beachhead location will now transition out of the Pierre Berton library once the Vaughan MedTech lab officially opens.
- **MedTech Lab:** ventureLAB has partnered with leading medical device contract manufacturer Sterling Industries to establish a State-of-the-Art MedTech Lab at Sterling's Vaughan facility. This new lab received \$2.5 in provincial funding and will become the site of ventureLAB's expanded Hardware Catalyst Initiative and

the MedTech stream of the program. The facility is expected to open with a ribbon-cutting event on March 6, 2023 and will include local and provincial government officials and ventureLAB's network of founders, industry and academic partners. The ventureLAB MedTech Lab and partnership with Sterling Industries and other leading companies in the hardware sector will propel Vaughan into the future of what is possible at the intersection of MedTech, AI and Hardware.

- **Vaughan Healthcare Centre Precinct:** As a next step in the partnership between the City of Vaughan, Mackenzie Health, York University and ventureLAB to develop the Vaughan Healthcare Centre Precinct (VHCP) into a world-class destination for health innovation, ventureLAB has executed a Memorandum of Understanding with Mackenzie Health to establish a permanent ventureLAB Vaughan MedTech Innovation Space in a future Mackenzie Health facility on the hospital expansion lands at the VHCP.

In addition to these capacity-building efforts, ventureLAB has provided advisory services and accelerator programming to Vaughan-based technology start-ups to help them grow, attract investment and retain talent.

2022 Portfolio Metrics:

- **Companies Served:** 6 Vaughan start-ups participated in ventureLAB programs in 2022 and 20 unique Vaughan based start-ups were served by ventureLAB advisors.
- **Capital Raised:** Vaughan-based companies supported by ventureLAB raised \$1.25M in 2022
- **Jobs Created:** Vaughan-based companies supported by ventureLAB created 17 new jobs in 2022
- **Revenue Generated:** Vaughan-based companies supported by ventureLAB generated \$1.45M in revenue

2. Establish a ventureLAB facility in Vaughan.

Vaughan Innovation Space

ventureLAB's new satellite location at the Pierre Berton Resource Library in Vaughan opened in the summer of 2022. ventureLAB leveraged this space to expand its presence in Vaughan and to provide local and direct support to Vaughan-based tech entrepreneurs.

To activate the Pierre Berton space, ventureLAB:

- branded the innovation space with decals;
- executed a social media marketing campaign to drive awareness of and use of the space;
- hosted office hours and a Demo Day in October to attract the local start-up community and activate the space;
- participated in Vaughan Small Business Week (Oct 17- 21, 2022) by hosting a ventureLAB Open House and introductory session in the Pierre Berton Resource Library for York Region tech founders interested in engaging with the Vaughan Tech Ecosystem.

The library space was a necessary and important first step in growing and building ventureLAB's presence in Vaughan.

MedTech Lab at Sterling

ventureLAB secured a \$2.5 million investment from the Government of Ontario through the Ontario Together Fund to establish a MedTech-specific stream of its Hardware Catalyst Initiative (HCI) in partnership with Sterling Industries. The new lab will focus on meeting the unique hardware and semiconductor needs of healthcare companies and will also be the site for delivery of hardware-specific programs and services.

In 2022, ventureLAB focused heavily on acquiring the necessary equipment and resources to build and launch the MedTech Lab. In 2023, ventureLAB's focus will be on growing its presence in Vaughan by attracting MedTech and Automobility start-ups to participate in the HCI program and access the MedTech lab. ventureLAB will continue to build the HCI brand across Canada to attract high-potential start-ups to the lab and to continue to build and grow the MedTech and advanced manufacturing clusters in Vaughan.

In October 2022, ventureLAB released a call for MedTech companies to apply to Cohort 5 of HCI. Of the 11 companies that were admitted into the highly competitive 2-year program, 5 are MedTech companies that will utilize the Vaughan MedTech lab.

3. Promote and profile Vaughan as a hub for entrepreneurship.

In 2022, ventureLAB deployed several marketing and promotional activities to raise the profile of Vaughan as a hub for tech and entrepreneurship, including:

- Established a dedicated website presence for the Vaughan innovation space:
<https://www.venturelab.ca/innovation-space>

- Participated in Small Business Week October 2022.
- Deployed promotional campaigns to activate the Pierre Berton space, including:
 1. A promotional one-pager to raise awareness of the new space and services available in Vaughan
 2. Paid LinkedIn marketing campaigns promoting the Vaughan innovation hub as a coworking, collaboration and meeting space for technology entrepreneurs, with more than 13,000 overall impressions.
 3. Hosted a Vaughan Small Business Week event to raise awareness of ventureLAB services in Vaughan and to promote Vaughan's tech ecosystem, including organic promotion on Instagram, LinkedIn, Twitter and Facebook.
- Supported the staff mission to WebSummit in November 2022, meeting with several international companies on behalf of Vaughan
- Participated in the Collision Conference 2022 VHCP announcement
- Co-authored, with Mayor Bevilacqua, the Innovating Canada article: [The Next Generation of Health Innovation Emerges in the City of Vaughan](#)

In 2022, ventureLAB documented several success stories with Vaughan-based technology companies.

Mech Solutions

Mech Solutions provides one stop services for all 3D printing needs, including 3D printing retailing, 3D printing service, 3D education, mechanical design, simulation, and 3D printing related software. Cloud 3D Print is a R&D project under Mech Solutions. It is a cloud-based software and hardware platform that links up 3D printing workspace and lets users manage the project workflow in a web browser, mobile apps from anywhere around the world.

Mech Solutions joined ventureLAB in October 2020 as part of the Pre-Accelerator Program. Since then, with intensive weekly advisory on the technical and business development, Mech Solutions has made great progress in the past year: steadily increased their revenue, secured several Letters of Intents from prospective customers, gone into beta version of their software hardware integration, secured partnership with printer manufacturer for mass production, and grew their team by 50%.

In April 2022, Mech Solutions was accepted into ventureLAB's Accelerate AI (AAI) Cohort. Through AAI ventureLAB has been accelerating Mech Solutions' development and commercialization, helping attract and retain talent, customer acquisition, access to capital and technological development, with efficient mentorship and access to the Hardware Lab.

SmartCocoon

Providing a micro zoning climate control system that can control each room's temperature in the existing residential houses. The system can save on energy by regulating the airflow in the ducting system also will improve the comfort level of the homeowners.

SmartCocoon is a Vaughan based start-up that is part of ventureLAB's capital investment program. With support from ventureLAB, SmartCocoon doubled their core staff from 2 to 4 full-time employees in 2022. The team now comprises a total of 11 employees. Smart Cocoon generated \$250,000 in reported revenue in Q2 2022.

VCycene

Vcycene is bringing the "green kitchen" to every home by providing cooking lovers and gardening lovers with a better solution to deal with kitchen waste. Unlike other at-home composter devices, Virgo Composter™ turn kitchen waste to mature ready-to-use organic fertilizer, not just actual dirt.

Vcycene joined HCI Cohort 4 in May 2022. Since joining the program, Vcycene has started a research project with Seneca Applied Research. The company grew from 4 to 7 full-time staff within a year (2021-2022) and they have now closed 2 rounds of private funding.

Waygo

Waygo uses computer vision to revolutionize how people interact with indoor spaces. The mobile app offers users an AR-based indoor experience complete with turn-by-turn directions to indoor points of interest, purchasing options in stores - even virtual ads and promotions.

Waygo has partnered with grocery stores, malls, arenas, airports and more to make this possible. The company offers real-time consumer data with actionable insights that they do not currently have access to, as well as SDK packages to include Waygo's technology into their own solutions.

Waygo's employee size increased from 6 to 8 between 2021 and 2022.

In 2022, ventureLAB documented success stories in the MedTech sector which exemplify the type and caliber of company which will be attracted to Vaughan by the new MedTech lab and by HCI programming.

Able Innovations

Able Innovations' ALTA Platform™ focuses on solving the problem of patient transfer in

healthcare today. Where transfers are usually made with three to four health care providers, this technology allows the transfer of patients using only a single operator. This reduces contact between patient and health care workers, limiting risk of infection spread, the burden of time and manpower needed, and the amount of health care worker accidents and injuries. Able Innovations has leveraged hardware to modernize and improve patient health and safety, as well as the health and safety of health care workers in hospitals in an elegant win-win situation.

During COVID-19, with health care staff shortages, Able Innovations' technology gained traction alleviating the toll - both physical and temporal - of the job. Limiting the amount of human resources needed to perform transfers increases frontline workers' safety and gives them back precious time resources while simultaneously reducing some of the physical labour involved to make supine transfers. As part of ventureLAB's Capital Investment Program, Able Innovations gained valuable investment and advisory support and pitched during the MedTech Demo Day.

Enertics

Enertics provides an early health monitoring, diagnostics and predictive maintenance solution of electrical assets, used by industrial and utility customers, with a goal to maximize their life and to minimize the unplanned downtime and associated costs.

Since joining HCI Cohort 2, Enertics has secured \$2M in sales for 2022 and has expanded partnerships with manufacturing and process industry and equipment suppliers.

Child Health Imprints

Child Health Imprints applies IoT, artificial intelligence, and predictive analytics to make an early diagnosis of critical diseases in neonates.

Child Health Imprints became a ventureLAB client in April 2022 as part of ventureLAB's Capital Investment program. The Capital Investment Program has connected the company with Canadian hospitals and partners, helped them navigate the Canadian market and business ecosystem, and guided them to refine their value proposition. Child Health Imprints' solutions are installed in 27 hospitals across 3 countries including India, Singapore, and South Korea. Now, they're getting established in the US and Canadian markets, including a partnership with Toronto's Mount Sinai Hospital. They have also raised \$2,000,000 and have \$50,000 in revenue.

In light of 2022's successes, the City should continue to deepen the partnership with ventureLAB and build on strategies and activities which support the growth and success

of Vaughan's technology sector, with a particular focus on the medtech and automobility tech sectors.

2023 Outlook

In 2023, ventureLAB will focus on deepening its presence in Vaughan by activating the MedTech lab and continuing to grow and build Vaughan's MedTech and automotive clusters. New initiatives in 2023 will include sector-specific roundtables focused on MedTech and the auto sector, as well as innovation challenges to facilitate ecosystem connections and leverage business collaboration opportunities. ventureLAB is also planning to launch a joint co-marketing plan with Economic Development, focused on promoting and attracting companies to the region.

Specific activities to grow the MedTech and auto tech clusters in Vaughan in 2023 include:

- Opening and promoting the innovation space and MedTech Lab at Sterling Industries (Ribbon Cutting on March 6, 2023);
- Vaughan Founder & Industry Round Tables focused on connecting MedTech SME's and industry leaders;
- Hosting investment office hours to attract new ventureLAB clients;
- Hosting investment workshops for ventureLAB's Capital Investment Program;
- Collaborating with Vaughan Economic Development to host Demo Days and foster sector-specific networking for clusters including AI, MedTech, and automobility; and
- Deploying joint marketing and communications initiatives to attract clients to the MedTech space and help build the local MedTech cluster in Vaughan;
- Developing a joint communications plan to raise the profile of the VHCP among industry audiences;
- Leveraging the relationship with ARC at the Sheba Medical Center to advance healthtech collaboration, attract international MedTech companies to Vaughan, and drive MedTech commercialization;
- Supporting Vaughan's application for Ontario Vehicle Innovation Network (OVIN) funding;
- Leveraging connections in the advanced manufacturing and automobility sectors to build and support Vaughan' automotive cluster; and,
- Co-creating a model for Vaughan's support as a partner/sponsor in ventureLAB's annual Hardtech to participate and support in automotive and MedTech-related activities.

Financial Impact

In 2022, Council endorsed a renewed partnership with ventureLAB for 2022-2026. In accordance with the terms of this partnership, ventureLAB reports annually to Council on the three key objectives of the agreement in order to secure approval for the continuation of the partnership.

For 2024-2026, Economic Development will work with Finance to submit a 2024-26 budget request (either operating or project/capital funding) to meet the requirements for the continuation of this partnership agreement in accordance with the payment schedule set out below.

Year	Payment
2022	\$55,000
2023	\$75,000
2024	\$100,000
2025	\$125,000
2026	\$150,000

Broader Regional Impacts/Considerations

Vaughan is uniquely positioned to develop thriving MedTech and automobility tech sectors by building on existing regional partnerships, expanding resources and support for emerging industry leaders, and attracting new companies to invest in Vaughan’s clusters.

Many other municipalities in the GTHA are responding to economic trends by making significant investments in assets and partnerships to support the innovation sector and secure long-term economic prosperity.

Continued investments in expanded services, resources and physical spaces for Vaughan’s technology companies will help Vaughan remain competitive relative to other hubs in the Region. Vaughan is uniquely positioned, by virtue of its prime location and access to transportation corridors within the GTA, density of highly skilled talent, and advancement of strategic initiatives such as the VHCP, to develop dense and prosperous MedTech and automobility tech clusters.

Conclusion

In 2022, ventureLAB delivered services and programs to build innovation capacity, drive job creation and economic growth, and generate an investment pipeline to attract top-

tier tech companies from around the globe to Vaughan. In light of last year's successes and the opportunities to expand on this partnership, particularly with the establishment of ventureLAB's MedTech lab in Vaughan, there is an opportunity to continue collaborating to catalyze the growth of Vaughan's technology ecosystem, particularly in the medtech and automobility tech sectors.

With Council approval, Economic Development will continue the partnership with ventureLAB in 2023.

For more information, please contact: Raphael Costa, Director, Economic Development, ext. 8891

Attachments

1. ventureLAB/City of Vaughan Partnership Agreement (2022-2026)
2. ventureLAB Annual Update Presentation, March 8, 2023

Prepared by

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Approved by

A handwritten signature in black ink, appearing to read 'Nick Spensieri', with a long horizontal line extending to the right.

Nick Spensieri, City Manager