

Exploring Ways to Foster Innovation in
Technology Entrepreneurship through
Increased Participation of Women and
Immigrants

FINAL REPORT



genesis



Exploring Ways to Foster Innovation in Technology Entrepreneurship Through Increased Female Participation and Immigration Initiatives is a research project led by Genesis and funded by the NL Workforce Innovation Centre (NLWIC).

Established in 2017 by the Government of Newfoundland and Labrador and administered by College of the North Atlantic, NLWIC has a provincial mandate to provide a coordinated, central point of access to engage all labour market stakeholders about challenges, opportunities and best practices in workforce development. The Centre's goal is to promote and support the research, testing and sharing of ideas and models of innovation in workforce development that will positively impact employability, employment and entrepreneurship within the province's labour force and particularly underrepresented groups. Funding for NLWIC is provided by the Department of Immigration, Population Growth and Skills (IPGS) under the Canada-Newfoundland and Labrador Labour Market Development Agreement.

Genesis has provided this *Exploring Ways to Foster Innovation in Technology Entrepreneurship through Increased Participation of Women and Immigrants* Final Report to NLWIC as a project deliverable outlined in the Agreement signed on December 13, 2017 between College of the North Atlantic and Genesis. Under that Agreement, the Final Report and all other research project deliverables are the Intellectual Property of IPGS.

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1.0 EXECUTIVE SUMMARY:

Since November 2017, when the project was officially approved, Genesis has made significant progress in addressing the barriers to technology-based entrepreneurship that women and immigrant founders face. The research project, '*Exploring Ways to Foster Innovation in Technology Entrepreneurship through Increased Participation of Women and Immigrants*', ran side-by-side with the development and delivery of programming – facilitating a real-time intervention into the opportunities, challenges and barriers that were being uncovered.

From an activity perspective, Genesis was able to deliver workshops, speaker series and networking events on a monthly basis, with some events attracting as many as 150 participants. Although it is difficult to qualify which activities had the most direct impact on the portfolio of women and immigrant founders, it is sufficient to say that immense benefits were derived – both from a personal and a professional growth perspective.

The mere presence of the programming and Genesis' communication of its dedication to supporting women and immigrant founders acted as strong recruitment tools – encouraging more women and immigrant founders to choose Genesis as a place to incubate and accelerate their high-growth companies. Today, Genesis is proud to report that 33% of the client portfolio has a woman founder/co-founder and 42% has an immigrant founder/co-founder (with some overlap due to the intersectionality of three immigrant/women led companies). With continued focus on curated programming, ongoing research and assessment and dedicated diversity, equity and inclusion efforts, Genesis can reach 40% representation of women-led and 50% representation of immigrant led in the next two to three years.

The business case for increasing the number of women-led and immigrant-led technology start-ups is proven. The local technology sector is a \$1.6 Billion industry, with \$400k value to the provincial economy for every tech job created¹. **The industry is proven.** Women in Newfoundland and Labrador lead the country in growth in self-employment² and immigrants have a higher propensity than Canadian-born to start a business. **The focus on women and immigrants makes sense.** The objective now should be to address and remove as many barriers as possible to give these individuals the opportunity to thrive. **A diverse start-up community leads to a diversified economy.**

¹ <https://www.technl.ca/facts-and-figures/>

² TD Economics, 2015

2.0 RESEARCH SUMMARY

The research question derived from the project theme³ was:

What impact will the creation and expansion of targeted, innovative programming practises have on reducing the barriers to entry for marginalized groups in the technology sector and therefore increasing the number of companies with female and/or immigrant founders in Newfoundland and Labrador over a three-year span?

To effectively answer the question, Genesis had to research the barriers – specifically for women and immigrant founders. A summary of the outcomes is provided in Appendix A.

2.1. Immigrant Founders Barriers

Within the context of Newfoundland and Labrador, the barriers that impede entrepreneurship for immigrants and newcomers can be broadly categorized into two segments:

- Knowledge, language and connections (mostly internal to the individual),
- Gaps and limitations in the service/system infrastructure (mostly external to the individual).

There is some overlap amongst the segments as some aspects require both internal comfort/drive and external availability to thrive (building a network, for example).

It is evident that entrepreneurship is important to the health of the local economy and its diversification, yet Newfoundlanders and Labradorians rank below the national average in their propensity to start new businesses. Immigrants, however, are twice as likely to pursue entrepreneurship, when compared against those that are Canadian born. It is logical to assume then that, all things being equal, increased immigration would result in increased entrepreneurship – meaning more jobs, more wealth and increased productivity. Addressing the barriers should be a priority.

The barriers to entrepreneurship identified are not unique to the technology sector. Immigrants face challenges in starting a business in Newfoundland and Labrador regardless of the industry being targeted. There is evidence, however, that some of these barriers may be exacerbated in the technology sector – particularly around access to financing. On the flip side,

³ Exploring Ways to Foster Innovation in Technology Entrepreneurship through Increased Female Participation and Immigration Initiatives (2017)

however, many of the barriers have also been mitigated in the technology sector – particularly on support infrastructure and networking side through concerted efforts at Genesis.

It is critical that Newfoundland and Labrador continue to build on the momentum that it is experiencing with the increased in international students and the increase in the number of immigrants pursuing technology entrepreneurship. The local technology sector is valued at \$1.6 billion with \$400k value to the economy with every job created⁴. The opportunity is undeniable.

Recruitment and retention is a priority area of focus. Initiatives like Genesis' Start up Visa program attract technology entrepreneurs from around the globe to Newfoundland and Labrador, but lack of resources constrains the enhancement of the program. On the retention side, it is not enough to recruit more newcomers to the province. There must be a concerted effort to ensure an equitable playing field and to nurture a sense of belonging. Progress toward equity and inclusion can be made through increased awareness and education. Moreover, these training and education efforts cannot be one-time events. Continual retention is achieved through continual skills enhancement.

2.2 Women Founders Barriers

Within the context of Newfoundland and Labrador, the barriers that impede entrepreneurship for women were quite similar to those that impede entrepreneurship for immigrants/newcomers and, considering intersectionality, some were identical or even exasperated.

- Knowledge and connections (mostly intrinsic)
- Gaps and limitations in the service/system infrastructure (mostly extrinsic)

Targeted programming to promote and support entrepreneurship among women can aid in closing the gender gap in entrepreneurship, resulting in more businesses and gains for the economy. Being an entrepreneur and having a successful business requires certain skills and knowledge. In general, women are more likely to believe that they lack the entrepreneurial skills needed to launch a business, and can find it difficult to access training and opportunities to overcome the skills barrier. Entrepreneurship training, coaching, and mentoring can aid female founders in developing the skills they need to successfully launch, grow, and maintain their business.

⁴ <https://www.technl.ca/facts-and-figures/>

While women entrepreneurs should have mentors from both sexes and a variety of backgrounds, it has proven important for women founders to have women mentors and role models specifically. These role models highlight that other women have done it and provide a real-life example for women who may be considering launching a business, showing the entrepreneur someone like them, that they can relate to, has done it before.

Locally, there is a lack of role models and mentors for women entrepreneurs since there are few women entrepreneurs and business leaders. A relationship between someone who is just starting their entrepreneurial journey and someone who has “been there, done that” can serve to have many benefits for potential and new entrepreneurs. Creating connections between experienced women entrepreneurs and those who new to entrepreneurship or considering it as a career path can help increase awareness of entrepreneurship as an option, impact attitudes around entrepreneurship and provide a source of support for a new entrepreneur. It also can increase perceived self-efficacy or a woman’s belief that she can also be an entrepreneur because she has seen another woman succeed.

Funding is the most significant service/system infrastructure limitation that women face. Women around the world are generally underfunded and underrepresented, which is especially prevalent in the technology sector. Female founders have a harder time accessing financing. This may be due to numerous factors including lower levels of entrepreneurial experience, stereotyping, or the sectors they choose to operate in. Female business owners also face a lack of awareness of all funding options, limited financial knowledge, and limited access to private investors.

2.3 Application to Other Sectors

As was previously mentioned, the barriers identified are not unique to the technology sector, however some may be exacerbated due to the overwhelming lack of diversity present in the industry – a widely researched phenomenon that has not progressed significantly in the past decade. Intrinsic barriers around connections, mentorship and confidence can be especially difficult to navigate when you are part of the ‘outsider’ group. It is difficult to ‘be it’ if you cannot ‘see it’. From a systems/services standpoint, access to financing is a barrier for women and immigrant entrepreneurs regardless of sector – especially when it comes to venture capital or traditional commercial banking. This stems from the concept that women tend to have less credit history and immigrants require Permanent Residency status to acquire loans.

Regardless, the recommendations presented in section 6.0 have wide-application and can be disseminated in a variety of sectors.

3.0 OVERVIEW OF NLWIC SUPPORT:

To facilitate the delivery of the research project objectives, NLWIC contributed significant financial resources covering fees associated with:

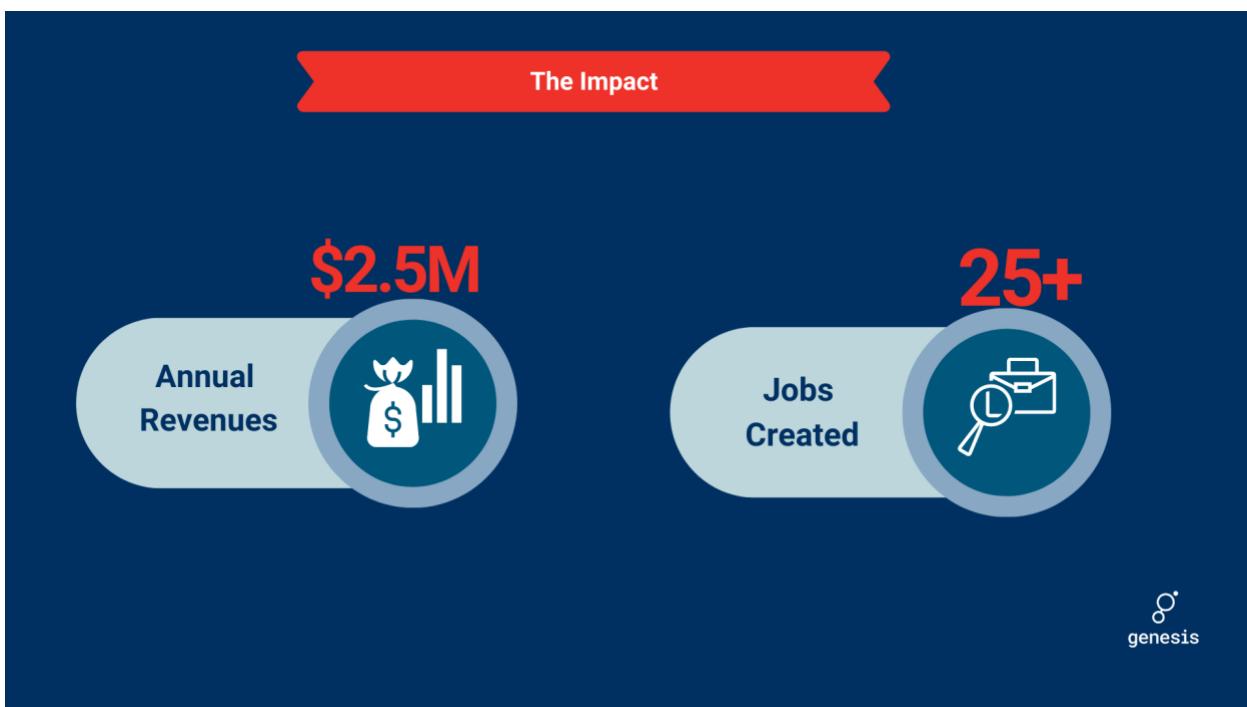
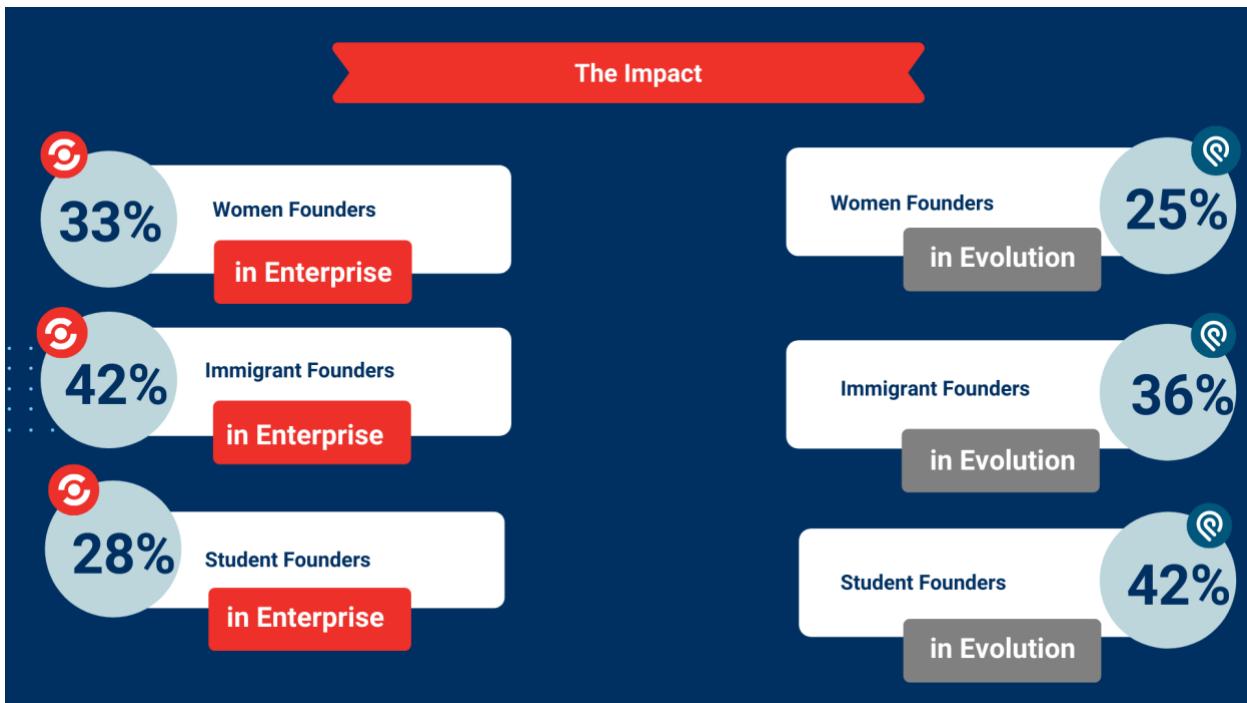
- Salary for a dedicated Genesis Account Manager
- Travel fund for women and immigrant-led companies
- Professional fees fund for women and immigrant-led companies
- Events fund for programming to address barriers identified
- Seed fund to provide additional seed financing to women and immigrant-led companies

The generous contribution had a profound impact on the level of support that the women and immigrant-led companies received. In absence of financial support for a dedicated resource, Account Management assistance would have been spread much thinner – restricting the one-on-one time allocated to addressing the barriers and lived-experiences that the women and immigrant founders were facing. The dedicated resource was able to draw insights and provide curated support that would otherwise been difficult to accomplish.

The allocation of a professional fees fund was another notable help. The majority of the companies used the fund to assist with legal-related costs, which can be quite burdensome for technology start-ups. Legal fees come in the form of Shareholders Agreements, intellectual property, incorporation, etc. and is often under-estimated during the business plan development process.

Access to financing is widely touted as one of the most significant barriers to entrepreneurship for women and immigrants, regardless of industry. The NLWIC seed fund was combined with the wider Genesis micro fund to give the women and immigrant-led founders the initial support needed to boost their ventures. This access to cash was critical to many start-ups.

3.1 OVERVIEW OF NLWIC IMPACT:



- Prior to 2015, Genesis had 0% representation of women in the portfolio.
- In the three -year incubation period between 2015-2018, five women founders/co-founders entered the portfolio; two went on to graduate; one withdrew and two ceased operations.
- Since 2018 the representation of women in the portfolio has been steady – with all on track to graduate and thrive.
- The percentage of immigrant-led companies continues to grow.
- Client engagement surveys show that the sense of inclusion and belonging at Genesis is strong.
- Through the Start-up Visa program, Genesis receives approximately fifteen applications per month, with a conversion rate of approximately 20% to further due diligence.

4.0 HIGHLIGHTS:

Genesis has had the opportunity to experience first-hand the value that can be derived when women-led and immigrant-led technology start-ups are supported. Some of the most notable highlights during the three -year project period include:

- Granville Biomedical Inc. receives Health Canada approval to manufacture novel nasal swabs⁵
- Women and immigrant-led start-ups secured significant provincial government investment⁶
- Castr breaks Genesis record in reaching the \$1M in annual reoccurring revenue in year one
- Milksta Brew receives a deal on CBC's Dragon's Den⁷

4.1 Granville Biomedical Inc.

Granville Biomedical Inc. joined the Genesis portfolio in 2019. Granville started as a women's health tech company, specializing in the design of anatomical models and procedural task

⁵ <https://www.thetelegram.com/business/local-business/st-johns-company-gets-health-canada-approval-for-covid-19-testing-swab-559288/>

⁶ <http://entrevestor.com/home/entry/four-nl-startups-share-about-800k>

⁷ https://www.cbc.ca/dragonsden/m_pitches/milksta-mommy-brew

trainers to enhance healthcare training, advance patient education, and innovate device demonstration. The company's novel anatomical training models have been used to rehearse routine exam and surgical procedures within Canada, US, Europe and West Africa. Educators have traditionally used anatomically inaccurate demonstration methods, such as cow tongues and car washing sponges to simulate female anatomy, which have created significant training gaps between academia and patient care.

With the onset of Covid-19 (March 2020), Granville Biomedical embraced an opportunity to design a novel biocompatible nasopharyngeal (NP) swab for molecular (PCR) and antigen (Rapid) testing purposes. Through extensive scientific testing at the National Microbiology Lab in collaboration with the National Research Council, the Granville Swab™ has proven to have optimal specimen collection efficacy when compared to existing nasopharyngeal flocked swabs. Patient comfort was prioritized with the design of a novel hollow tip that ensures sufficient sample collection. Paired with a thin, flexible handle and scored break point, the Granville Swab™ also creates ease of use for healthcare providers by creating workflow efficiencies.

Christine Goudie and Crystal Northcott (co-founders) are both from Newfoundland and Labrador; the company is a fully female team of researchers, designers, and engineers—a rarity for the technology industry in Canada. Goudie says it's something they're very proud of, and it proves that women can step into the sector and make a huge impact. She says it bodes well for the future of diversity in the tech sector. They want to encourage that and inspire women or diverse founders of all ages to take that risk, blaze their own trail, and carve the path for themselves.

NLWIC Impact:

The Granville team has availed of many of the programs and supports made available through NLWIC funding, some of which include:

- Participation in Women in Tech (WIT) Leadership Workshop (functional leadership skills for founders).
- Participation in Women in Tech Peer Group; strategy session contributor and International Women's Day keynote (2021) – helping to shape the future of WIT in Newfoundland and Labrador.
- Dedicated Diversity Success Manager was able to connect Granville to numerous funding sources – i.e., BDC Venture Fund, Provincial Government (DIET), Learnsphere (ACOA), private investment.

- NLWIC supported networking and mentoring sessions facilitated relationship building between Granville and a number of important Stakeholders, including Eastern Health Living Labs.
- NLWIC supported professional fees budget covered a portion of the legal and public relations related costs associated with attaining Health Canada approval.

4.2 HYKE

HYKE, a platform that analyzes consumers' subconscious purchasing behaviour to increase consumers' buying power and replace loyalty point programs, entered the Genesis Enterprise program in early 2019. In early 2021, HYKE was one of three immigrant-led Genesis companies that secured significant investment from the Provincial Government - ~\$103k provincial grant. This contribution is a testament to the Government's belief in these emerging ventures.

HYKE is the brainchild of Sid Eskand and Trung Trinh, two immigrants who hold PhDs from Memorial University. They are on a mission to revolutionize customer engagement and become a leader in consumer-centric data analytics.

NLWIC Impact:

- Being relatively new to Newfoundland and Labrador, Sid and Trung relied heavily on Genesis' support to build relationships, get connected with mentors and expand their networks for business development. In absence of dedicated Account Management resources (supported by NLWIC funding), HYKE may not have received the level of one-on-one support that they did (and continue to) receive.
- As a data-driven platform, HYKE required significant runway to gather the amount of data necessary to initially fuel the technology – which equates to time and money. The micro fund allocation was a significant help, both in terms of cash flow and leverage.
- In Q1 2021, through professional fees support from NLWIC, Genesis launched a series of intercultural competency training sessions, delivered by Dr. Cristina Fabretto. HYKE was able to avail of the training to enhance skills in the areas of intercultural communication, team development and negotiation.

4.3 Nucliq Biologics

Nucliq Biologics joined Genesis in 2020 and is another of the three immigrant-led Genesis portfolio companies to secure significant funding from the Provincial Government in early 2021.

Nucliq was awarded ~\$82k to help develop its ‘Gut Check’ kits. The kits help people assess their gut microbiome through the provision of a simplified gut health report, detailing information about personalized food and customized probiotic recommendations for customers and doctors. Simplified in the value proposition to the patient, the approach incorporates next generation sequencing platforms and machine learning to generate proprietary databases – a novel way to compare and uncover the gut microbiome.

Founders Nikitha Kendyala and Purvikalyan (Purvi) Pallegar aim to improve the quality of life of patients while reducing their dependency on antibiotics. In early 2021, Nucliq received Health Ethics Board approval for their ground-breaking research. Trials begin in April 2021.

NLWIC Impact:

- Significant legal work was required prior to obtaining Health Ethics Board approval. The NLWIC professional fees fund significantly bolstered the financial support that Genesis was able to provide.
- Nikitha was an active participant in the Women in Technology Leadership Workshop. In the intimate group setting with Genesis’s peers, Nikitha was able to obtain personalized support and guidance – which would have been difficult to obtain otherwise. As an immigrant woman her mentorship network is limited, so the expertise provided by Jess Chapman was welcomed. Moreover, as a mother to two small children, co-founding a venture with her husband, having the flexibility to coordinate session timing with Ms. Chapman was greatly appreciated.
- Nikitha and Purvi benefited significantly from the dedicated Account Management that the NLWIC contribution afforded. The acceleration of their concept relied heavily on Eastern Health support and navigation through the funding programs available. These activities required significant Genesis Account Management attention.

4.4 Castr

Castr joined the Genesis portfolio in late 2019 and was the fastest company in Genesis’s 23+ year history to reach the milestone of \$1 million in annual reoccurring revenue. Castr achieved this milestone in year one of the program – a phenomenal accomplishment for any technology start-up.

Castr was founded by a husband wife duo (Govinda and Asha), originally from India, who came to Newfoundland and Labrador, fell in love with the province and decided to call it their home. With a high-growth potential technology start-up brewing, they applied for Permanent Residency through Genesis’ Start-up Visa program and joined Genesis as an Enterprise

company. Their success and their admiration for the province is inspiring to the entire Genesis portfolio.

Castr is an all-inclusive streaming platform with two main/unique functions: multi-streaming and user-controlled livestreaming. Users include a reputable line-up of global brands: Microsoft, PBS and the United Nations (to name a few). The company currently has over 200,000 streamers using the platform.

NLWIC Impact:

- Genesis, through its dedicated diversity resource (Account Manager), was able to provide the founders with significant integration support, adding a personal touch to the otherwise technical start-up support that an accelerator/incubator would provide. Having not studied in the province (as many other immigrant founders had), Newfoundland and Labrador was somewhat foreign to them. Dedicated support at Genesis helped them to ease the culture shock and integrate in a way that allowed them to also focus on growing their business.
- The interpersonal approach that Genesis has embodied has been noticed by other Start-up Visa candidates as well, with a recent founder commenting that he can sense the feeling of being welcomed in every conversation that he has with Genesis – it's beyond a business transaction; it's the feeling of belonging.
- Asha and Govinda have also applied for Permanent Residency via the Start-up Visa program and are awaiting acceptance.

4.5 Milksta Brew

Miksta Brew, founder Lian Delos Reyes, joined Genesis in 2020 and gained significant traction right away. Lian, originally from the Philippines, developed Milksta Brew as a solution to an issue that she was experiencing herself – reduced milk supply post-delivery of her son. Her biotechnology combines a blend of proven (natural) lactation aids, including a plant that is commonly consumed in her native country – where lactation issues are very uncommon.

In Q4 2020, Lian was invited to pitch her venture to CBC's Dragon's Den, where she gained the attention of Manjit Minhas. She was also successful in bringing more attention to the great work being done in Newfoundland and Labrador and within Genesis.

NLWIC Impact:

- Lian has been an active participant in the intercultural competence training covered through the professional fees fund under NLWIC. She has benefited immensely from this training, particularly around team development and communication challenges. She was able to put her new skills into action in real-time – an extremely valuable takeaway.
- The NLWIC financial contribution had a direct impact on Lian’s ability to pitch to *Dragon’s Den*. She utilized funds from the travel allocation to cover a portion of her related expenses, which is a welcomed gift for any start-up.
- Lian also benefited immensely from the small group WIT Leadership sessions – availing of the flexibility in timing and personalized DISC assessment to accelerate her leadership development as a founder and CEO.

An overview of the remaining companies that have benefited from NLWIC support can be found in APPENDIX B.

5.0 CONCLUSION

As identified in the two reports previously submitted to NLWIC (Barriers to Technology Entrepreneurship for Women and Barriers to Technology Entrepreneurship for Immigrants), there are a number of challenges that women and immigrants face in starting businesses in Newfoundland and Labrador, many of which are not industry specific but are often exacerbated by the general lack of diverse representation in the broader technology sector. Simply Google search ‘technology entrepreneur’ and the first hit reveals ‘5 Remarkable Tech Entrepreneurs You Must Know of’ – all of which are white males. This is a pervasive challenge.

The barrier identifying reports developed by Genesis go beyond identifying the barriers, however. They also put forward a number of recommendations – tactical ways to mitigate the challenges. These range from the development of an investment strategy to attract more angel investment to the province to a more intentional strategy around diversity, equity and inclusion training and accountability metrics for service providers in the entrepreneurial ecosystem. Genesis is already making great strides in both of these arenas, plus many more, through the support of NLWIC. It is important to continue to build on this momentum. The work that has already been done has proven to be effective. It should not stop there and Genesis is looking forward to continued collaboration with NLWIC.

The ~\$497k contribution from NLWIC has already resulted in \$2.5M in annual revenues for those companies directly benefiting from the programs, in addition to the creation of over 25 jobs. That return on investment is undeniable. Genesis believes that those results are just the beginning of what is to come for women and immigrants in the portfolio.

Beyond the quantifiable impacts, the programming and assistance that Genesis has been able to provide through the support of NLWIC has made a significant impact on changing the perception of the province as a viable place to start a tech company, as well as the perception of who can become a technology entrepreneur. Genesis, and the province as a whole, is gaining more visibility on the world stage. More and more women are reaching out to join Genesis' Women in Tech Peer Group; more immigrants are inquiring about the Start-up Visa program. Awareness is increasing and awareness is a vital step toward action.

Mathias Neilson, CEO of Oliver POS (Genesis portfolio company) and immigrant to Newfoundland and Labrador, sums it up best. He told Entrevestor that moving to St. John's was one of the best moves he ever made. He went on to say:

*"I love it. I've got two children and a house, and I'm really settled, and it's one of the best ecosystems for start-ups that I've ever seen."*⁸

We need more stories like that. We need more people from diverse backgrounds starting high-growth companies in Newfoundland and Labrador. To do that, we must be able to effectively support them. Diversity is the outcome. Inclusion is the action. Genesis appreciated NLWIC's continued support along this journey.

6.0 RECOMMENDATIONS

There are a number of ways to address the challenges faced by many women and immigrants/newcomers who are interested in pursuing entrepreneurship in Newfoundland and Labrador. It is in the best interest of government, industry, non-profit, and education to work together to provide an integrated approach – one that connects the dots and works collaboratively toward achieving common objectives. We should all be sharing a consistent message – one that positions Newfoundland and Labrador as a welcoming and supportive environment to do business. The data speaks for itself – we need more immigrants to come to the province and create employment and more women to help fill the skills gap and leverage future opportunities.

⁸ <https://www.saltwire.com/business/local-business/entrevestor-st-johns-based-oliver-pos-aims-to-triple-its-rate-of-sales-379743/>

Tactical recommendations include:

- Within organizations that are providing entrepreneurship and start-up support (Memorial Center for Entrepreneurship, Genesis, Newfoundland and Labrador Organization of Women Entrepreneurs, amongst others), advisors should be knowledgeable about the intricacies of starting a business for immigrants/newcomers and well-versed in how to navigate the pathway – ultimately delivering a version of concierge service,
- Service providers and support organizations, like those referenced above, should come together in a workshop to define the pathway(s) and share best-practices for guiding immigrants/newcomers through the process of starting-up,
- The support provided by these support organizations has to be effectively communicated to immigrant/newcomer groups to ensure that they are aware of the concierge service. This may require collaboration with, and direct messaging to, the Association for New Canadians, Office of Internationalization (MUN), Immigrant/Newcomer community groups, etc.,
- The City of St. John's Local Immigration Partnership hosted a successful virtual fair/tradeshow in January 2021, highlighting the various groups offering services to immigrants/newcomers. A similar approach could be taken to highlight the entrepreneurship pathway,
- Skills enhancement in diversity, equity and inclusion (DEI) is critical. There are undeniably misconceptions about immigrants/newcomers that need to be addressed head-on. Bias exists within program development and delivery and occurs at all stages in the entrepreneurial pathway. Education and training increases awareness – the first step in addressing the issue. Education and training should not be a one-time occurrence, but rather continual and evolving. Any organization or individual tasked with program/service development and delivery in the immigrant/newcomer entrepreneurship space should undergo mandatory DEI training,
- Cross-cultural communication training should be available to service providers and support organizations dealing directly with immigrant/newcomer groups. Likewise, this training should also be provided to aspiring immigrant/newcomer entrepreneurs to help increase confidence in local business acumen,
- A curated mentorship/networking program could be developed for immigrants/newcomers to facilitate meaningful connections – similar to the Connector program rolled out across Atlantic Canada,

- The ‘You are Here’ Event in Q4 2020, a partnership between Genesis and ANC to highlight success stories of local immigrant entrepreneurs, was a successful event with over one hundred and twenty virtual attendees. A robust marketing/communications strategy to call attention to the stories of local immigrant entrepreneurs is required to provide inspiration and mentorship opportunities,
- A concerted effort to attract more investment to the province, especially in the form of angel investment for early- stage start-ups.
- There have been ongoing efforts across Canada and in NL to increase the number of females involved in STEM and to grow the number of women who launch technology companies. Implementing programming to support women tech founders and mitigate the barriers that they face is an important step to meeting the goal of increased involvement,
- Promoting successful female entrepreneurs can serve to reach and influence other female entrepreneurs, reach potential future entrepreneurs, and continue to shift social attitudes towards female founders. Highlighting female entrepreneurs in the technology sector, a traditionally male-dominated sector, can serve to counter gender stereotypes and provide examples for other women to potentially become technology entrepreneurs,
- Network development initiatives can significantly support women entrepreneurs. Fostering connections will lead to a strong network of peers, mentors, and advisors who will support entrepreneurs as they grow their business. Promoting and supporting the development of a female founder’s network will provide women with an invaluable and important source of knowledge, skills, and tools,
- Re-introducing entrepreneurship to the curriculum in grade schools or having sessions on entrepreneurship will help promote entrepreneurship as a potential career from an early age, provide youth with the basics they need to become an entrepreneur and expose youth to entrepreneurs so they can see firsthand someone who isn’t following a traditional career path.

7.0 DISSEMINATION PLAN

The opportunities and challenges identified throughout the research project and presented in this, and accompanying, reports will be leveraged to fuel future program development, recruitment and retention strategies, as well as advocacy work. The reports themselves will not be overtly disseminated, beyond internal stakeholder use.

Throughout the duration of the three- year project the insights guided program development. As an agile organization, Genesis was able to develop and adapt programming as opportunities and challenges arose. As the team became increasingly aware of the social capital disconnect for women entrepreneurs, as an example, a peer group was established – bring together 200+ women in the technology sector to mentor, network and collaborate. These findings will continue to shape programming for years to come.

The learnings from the project have shaped, and will continue to shape Genesis recruitment and retention efforts for incubator/accelerator clients. The team's enhanced appreciation for the intrinsic barriers that immigrant/newcomers face led to a revamp of Genesis' Start-up Visa Application process – initiating more targeted recruitment, bias-mitigated evaluation and inclusive language.

Genesis continues to expand its advocacy efforts in increasing the number of, and success of, women and immigrant/newcomer technology start-ups in the province. The information gathered via the research project helps to validate the statements made through advocacy platforms. For example, Genesis, in collaboration with TechNL, WRDC, Provincial Advisory Council on Status of Women and other related groups have come together to form a Women in Technology advocacy effort with a focus on recruitment and retention. The learnings from this project fuel that conversation.

8.0 DELIVERABLES

Please refer to APPENDIX C and APPENDIX D

9.0 DISCLAIMER

There are no sensitivities with respect to the sharing of information presented in this report.

APPENDIX A: Research Summary Presentation

(see attached email)

APPENDIX B: Additional Client Profiles

Creatros Technologies Inc:

The Creatros team, Arif, Monjur and Ashley, have created the ‘SkillsHawk’ application – a tool that facilitates unbiased employee selection for project teams, promotes efficient use of employee skills and optimizes decision making at the project allocation phase. This software is ideal for technical development teams and organizations with diverse project management requirements. Creatros has gained traction locally as well as internationally.

Oliver POS:

Brainchild Mathias Nielson has developed a POS solution for WooCommerce (ecommerce for websites), making WooCommerce more efficient and helping retailers control inventory and conduct other tasks from a single platform. The software has taken off and is now used in over 90 countries around the world. The Oliver POS team is growing – frequently adding new positions.

North Star Payroll:

Leah Murphy, founder of North Star Payroll, never once considered herself to be a tech entrepreneur. She identified as a Payroll Specialist, until she decided to take an inefficiency in current payroll solutions into her own hands! Leah has developed a novel platform for payroll solution integration, targeted toward accounting firms and companies with multiple divisions. She is currently in beta stage with seven early adopters.

Aquafort AI:

Aquafort, under the direction of co-founders Bo Simango and Ali Alfosool, is an AI technology company that provides predictive data analytics through computer visioning and machine learning. The software is designed to lower production costs, improve the availability of sustainable sources of fish and reduce the environmental impact of fish production. Aquafort recently gained traction in Norway.

Report Mate:

Report Mate, co-founders Holly and Jeremy, are the newest addition to the Diversity Portfolio at Genesis – having joined in Jan 2021. Report Mate offers a secure, web-based platform to facilitate subject-matter expert reports with the use of artificial intelligence. Their first target in the medicolegal sector.

Notification API:

Notification API, whose co-founders are Zahand Seifi and Mohammad Asadi, provides ‘notifications-as-a-service’ option which simplifies the process of building out notification systems for software companies, and makes it easy for multiple teams to work on notifications together!

NexxBarr:

Nexxbar, co-founded by Ross O’Keefe, Christa Steeves and Michael Shelly, has developed a one size fits all self-treatment tool to replace foam rollers, therapy balls, and hand-held massage devices.

Additional Companies with a female and/or immigrant founder to whom Genesis has provided Business Development support from NLWIC research project funding as of March 31, 2021:

AS Works

PowerHV

Polyamyna

Sucseed

MetricsFlow

Skizee

IMMI

Leggy Moose

EventRyno

Help Me Order

APPENDIX C: Deliverables

Date	Action Item
April 1, 2018	Female-led companies are connected to the Women in Tech peer group
April 25, 2018	First Genesis Enterprise Selection Committee meeting with SUV clients currently outside of Canada – 3 companies from outside Canada pitched
May 14, 2018	First SUV clients currently outside Canada accepted into the Genesis Centre
June 15, 2018	Immigrant-led companies are given letter of support for the Start-up Visa Program
June 15, 2018	Immigrant-led companies already in NL are connected with partners (ANC/RIAC)
June 30, 2018	Completion of Environmental Scan
June 30, 2018	Advisory Board
June 30, 2018	Information and processes of Seed Capital are provided to potentially eligible companies
July 30, 2018	Company founders are notified and awarded seed capital of \$10,000/company
August 31, 2018	Research on barriers to Women in Technology and Female Founders
October 15, 2018	Potential launch of a Female Accelerator Program by the Genesis Centre
October 31, 2018	Research on barriers faced by Foreign Founders
November 30, 2018	New programming or changes to existing programming is recommended based on results of research and experience working with female and foreign founders
December 15, 2018	Summary report on new companies in the incubator is presented to stakeholders, including an analysis of how the programming will attribute to decreasing barriers.
January 7, 2019	First SUV companies accepted from outside of Canada are admitted into the incubator and onboarding begins (this date may move depending on when the client can move to Canada. Many of the services and programming that Genesis offers must be completed face-to-face so their three year term at Genesis will begin when they arrive in the country.)
January 7, 2019	Immigrant-led companies who are moving to Canada through SUV are connected with partners (ANC/RIAC)
Ongoing	Companies are tracked via internal metrics and their progress is documented relative to total companies in Genesis. Research question is tested based on the results of primary and secondary research.
Ongoing	Call for applications and programming is targeted to female and foreign founders with the aim of increasing the diversity of founders in the Genesis Centre. Results are added to and compared on an ongoing basis.
December 31, 2019	Synthesis report based on milestones and key company metrics.
January 1, 2020 to December 31, 2020	On-going business development support of 15 female or immigrant-led companies through the incubator
March 15, 2021	Report to stakeholders regarding the success of the companies based on industry metrics relative to other portfolio companies and answer to the research question.
March 31, 2021	Synthesis report update
Onwards	Graduation of companies from the three-year incubation model, continuous intake of companies into the streams.

APPENDIX D: Checklist

NLWIC Requirements for Final Report: Checklist

Name of Proponent Organization: Genesis

Title of Research Project: **Exploring Ways to Foster Innovation in Technology Entrepreneurship through Increased Participation of Women and Immigrants**

Requirement	Included (yes/no/NA)	Requires Revisions (yes/no/NA)
NLWIC boilerplate	yes	No
Executive Summary	yes	No
*Recommendations for policies, programs and/or service delivery models	yes	No
*If and how this research could be applied to other sectors	yes	No
*Dissemination plan post ending of the research project	yes	No
*Any sensitivities with respect to the dissemination of the Final Report and deliverables	yes	No
*Deliverables – listed and described	yes	No
Other:		

*This information to be included in the body or in an appendix of the final report