

ATTACHMENT A

Tech Nanaimo Final Report

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MID ISLAND
BUSINESS INITIATIVE



TECHNANAIMO

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Introduction

The importance of technology in a sustainable economic growth strategy cannot be understated. Technology is no longer just software and graphic design, but has grown into the foundation of many industries such as manufacturing, recycling, and energy production. With so many municipalities competing to attract clean tech based economic growth to their region, successful development of a strong and vibrant Tech Ecosystem requires determined, collaborative and innovative strategies over many years from all community partners.

**“The best time to plant a tree
was 20 years ago. The second
best time is now”**

Grassroots Community Building

In the absence of a cohesive Economic Development strategy for the City of Nanaimo, multiple volunteer organizations formed to develop and maintain the momentum and business attraction activities necessary for continued economic growth in our region. Two of these organizations include:

- **Mid Island Business Initiative (MIBI):** A volunteer not for profit society established and funded by local organizations in February 2017. MIBI's purpose is to raise the profile of the Nanaimo region to attract businesses and investment to the region;
- **Manufacturing and Technology Council (MTEC):** A volunteer council founded in 2017 led by Rebecca Kirk and supported by MIBI, MakerSpace and Planning Design Development Nanaimo. MTEC focused on exploring needs and implementing solutions to target economic growth around technology from software development through to high tech manufacturing.

Technology emerged as a key opportunity to attract companies and talent from the lower mainland to Nanaimo as MIBI worked through its own marketing and attraction initiatives. This focus on the Tech sectors supports the conclusion of "Inspire Nanaimo" a joint initiative of the City, VIU and Chamber. This initiative identified that the tech sector should be a target economic engine to leverage Nanaimo's high quality of life, and that Nanaimo could be a very attractive location for the mobile tech sector workforce.

In May 2019, MIBI and MTEC presented a joint request to Nanaimo City Council for funding to enable a short-term focused increase in MIBI's effort to explore the specific needs of the tech community and develop strategies to meet these needs in Nanaimo. In June 2019, the City of Nanaimo awarded a six month services agreement (Appendix A) with MIBI to complete this mandate. MIBI allocated the funds associated with the services agreement towards the contract engagement of Rebecca Kirk to lead this initiative.

Project Mandate

We have the opportunity to learn from multiple success stories across BC including Vancouver, Victoria and the Okanagan. Vancouver Economic Development's (VEC) report "How Vancouver Became A Hub For Technological Talent" identifies the key factor in Vancouver's success as a world class technology hub as their *"focus on talent & capital attraction & telling the City's story to investor groups"*.

The report *It Takes A Community*, by the Victoria Innovation Advanced Technology & Entrepreneurship Council (VIATEC), attributes *"Community Building over many years"* as the one defining factor in the successful growth of the City of Victoria's advanced technology sector.

Working from this knowledge, the plan presented to Nanaimo City Council described a one year approach to explore and develop strategies to address the following key challenges:

- 1 Difficulty recruiting and retaining new talent
- 2 Lack of coordinated support and access to information and resources
- 3 Lack of access channels to Venture Capital and other funding sources
- 4 Lack of tech and entrepreneurship community building strategies
- 5 Lack of a coordinated, focused strategy to train and retain home grown talent and attract more women, Indigenous people and immigrants

To enable short-term collaboration to address these challenges, MIBI formed the Manufacturing Technology Entrepreneurship Collaboration as a committee of MIBI. Terms of Reference for this committee are included in Appendix B. The members of the committee included:

Rebecca Kirk	Chair
Darren Moss	MIBI Board Liaison
John Hankins	MIBI CEO
David Witty	Community Member
Chris Beaton	Community Member
Kosta Arvanitis	Community Member

Creating an Identity

To facilitate stakeholder engagement, the committee required a sense of identity and permanence. Given the short-term nature of the initiative, and to maximize flexibility into the future, efforts were directed at developing a digital presence and brand in place of securing and paying for physical office space. The outcome of this was a branding of the committee, naming the group "TECH NANAIMO." Alongside the naming and branding, a social media presence and splash website were created. More detailed results of this process are summarized under the "Brand and Digital Presence" initiative.

The Pillars of a Tech Community

Though an initial plan for a full year was presented to council, the Services Agreement was issued for a six month term. Tech Nanaimo adjusted the strategy from the initial work plan presented to council to focus efforts on five key pillars:



Community Building (COM)

Explore how other regional have created the critical ecosystem and culture necessary to develop an environment for innovation, incubation and acceleration. Develop concepts to grow Nanaimo's tech community and continue to build its momentum



Talent Recruitment & Development (TAL)

Improve understanding of Nanaimo's tech companies current needs and explore programs and partnerships to help develop a talent pool to meet these and future needs



Access to Capital (CAP)

Explore existing financing options for tech companies and promote tech sector investment in the Nanaimo region to Government, investors and lending institutions.



Access to Information & Resources (INFO)

To develop the framework to create a one stop shop for access and distribution of information in the Nanaimo region to support existing tech companies and to attract start-ups and entrepreneurs to the region.



Awareness of Nanaimo & Region (AWARE)

Continue to engage with businesses to hear the story of their successes, share the advantages of living and working in the Mid Vancouver Island, and facilitate the present and future prosperity of our region



The above pillars align strongly with the findings of the VICEDA Technology Attraction Strategy prepared in December 2018. The final VICEDA report emphasized the importance of developing local talent to enable growth in the tech sector in parallel with building strong partnerships with different levels of government, supporting growth of existing companies and creating a strong sense of community/awareness with an interactive web-based presence.

Developing a Digital Hub

Early in the initiative, the committee explored how best to provide a one stop resource for access to information and supporting services for existing tech companies, and companies interested in exploring Nanaimo. As demonstrated by the success of Okanagan's "HitchHiker's Guide to Tech Start Up", providing a comprehensive, easy to access resource that connects tech industry with the resources they are searching for is critical to nurturing a strong tech ecosystem and attracting new growth.

Because a vibrant tech industry moves and changes quickly, coupled with a typical preference within the industry for fast, preferably mobile access to data, an interactive website was selected as the best method to deliver one stop shop information for Nanaimo. Respecting the limited term and budget of this initiative, Tech Nanaimo took the first steps by drafting a structure, format and budget for this proposed website, so it can be implemented after Nanaimo's economic development strategy is defined.

Technology Requires a Different Approach

Technology is now the foundation of most industries. Not only does it capture software and graphic design, but it is at the heart of our manufacturing, recycling, food production, energy systems, communications, vehicles, household appliances, and countless others. As Nanaimo develops its economic growth strategy, ensuring that technology is understood and supported will be critical to its success. Before successful strategies can be developed to attract and support regional tech sector growth, it is important to accept that the technology sector is unique and requires a different approach than other sectors. Below are a few key characteristics of the technology sector:



Education & Training:

Technology changes continuously and incredibly quickly. To develop the necessary workforce and to maintain their currency, new educational models are required. While new programs are coming on line, existing secondary and post-secondary facilities in our region do not yet adequately promote the potential of individuals looking to grow in the technology sector



Lifestyle:

Technology reaches across many industries, however there is a trend to be more mobile and have the ability to choose where you live first rather than move to where your work is. Nanaimo is very well situated to leverage this trend, however building a community to attract and support a tech workforce will take a deliberate and sustained commitment



Speed of Business:

The speed of change in technology creates a need for the entire industry to move and adapt very quickly. Nanaimo will need to develop processes, regulations and programs able to keep up to these demands, otherwise, opportunities will move on to other communities that are more adapted to meet this need for speed.



Risk Tolerance & Creativity:

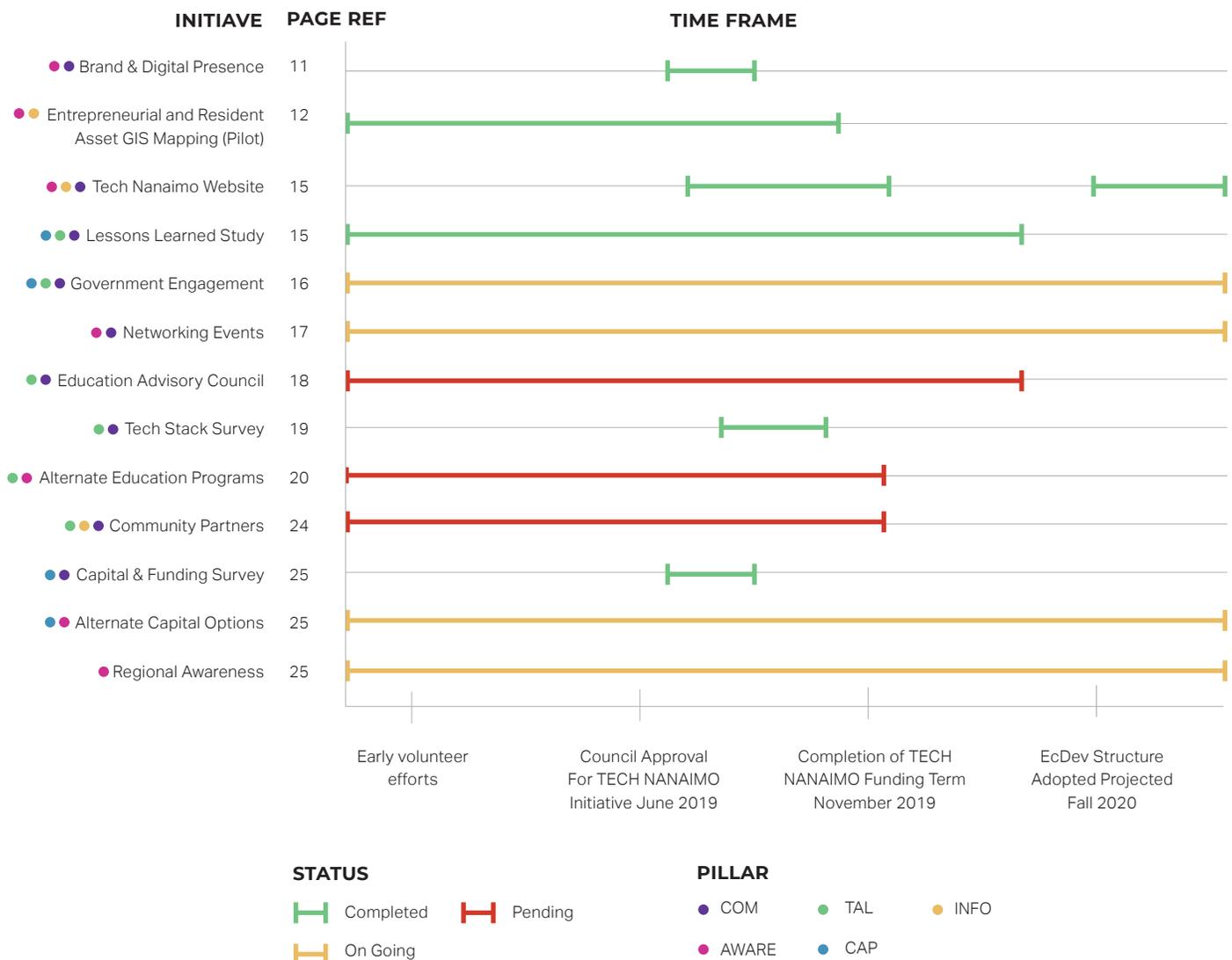
To succeed in the competitive and every changing world of technology, leaders need to be creative and be willing to take risks. Upstarts and companies positioning themselves for expansion need partners that understand and support these needs. Nanaimo will need to implement programs and develop private and public partners that understand and support this need. Nanaimo region to support existing tech companies and to attract start-ups and entrepreneurs to the region.

Many of the characteristics that are ingrained into successful tech entrepreneurs run contradictory to the robust processes and systems that are necessary for effective governance at different levels of government. These differences between tech entrepreneurs and government can lead to significant friction which can stall tech growth in a region. To successfully attract and nurture tech development in a region, government must develop creative solutions to enable and support the creativity and risk tolerance of the tech industries. This is discussed in more detail under the "Lessons Learned Study" initiative, however, these solutions often stem from government supporting an independent industry led organization that moves at the same pace as the industry.

Timeline of Activities

A critical part of this initiative involved discussions and meetings with a large range of stakeholders to learn from past experiences and take deliberate steps towards setting Nanaimo apart as a leader in the tech industry. All of the initiatives outlined below and the recommendations at the end of this report are based on the collaborative input from collaborators ranging from independent entrepreneurs through established BC tech centres and provincial government. A summary of the collaborators we worked with during this initiative and how their input/role aligns with the key pillars is included in Appendix C.

The following table distills the meetings, conversations and projects that formed the core of this project into discrete initiatives. Each initiative is intended to provide either an action item or background information for the economic development organization once it is in place. The table describes each initiative's connection to the five key pillars and its timeline. Following the table, each initiative is described in further detail.



Brand and Digital Presence

PILLARS: AWARE, COM

MTEC worked with Array Web & Creative to develop a brand and identity for this initiative. Early into this process, it was discovered that the MTEC domain was unavailable leading to a rebrand of MTEC to a highly searchable and easily identifiable name and brand.

TECH NANAIMO's mission is to serve, connect, and grow the Tech and Advanced Manufacturing sector in the Nanaimo region. Tech Nanaimo is the front door to a collaborative "one stop shop" access to information, resources, training and events. As part of the brand and initial digital media development the following assets were obtained/created:



Domain:

<http://technanaimo.ca>



Facebook Account:

<https://www.facebook.com/technanaimo>



Instagram Account:

<https://www.instagram.com/technanaimo>

Digital Logo



Business Cards



Currently the domain, logo and business card design have been transferred to the City of Nanaimo to enable its use in the future. We are working on having the Facebook and Instagram accounts transferred as well.

The above social media tools will integrate with the future website described under the “TECH NANAIMO Website” initiative. The success of these tools will be directly dependent on dedicated staff time to build momentum around events and relationships. Great tools only generate great results when put to use by skilled people.

Entrepreneurial and Resident Asset GIS Mapping

PILLARS: AWARE, INFO

In partnership with TECH NANAIMO, Planning Design Development Nanaimo (PDDN), a volunteer society, completed a pilot project to explore using a Geographical Information System (GIS) tool to:

- Track existing tech sector businesses and support services
- Provide an interactive guide for easy access to these services
- Facilitate cluster-based planning to guide future priorities. The ability to visualize existing clusters of tech businesses and support services provides a clear understanding of where growth is occurring and how new business can be recruited or placed to build on this existing momentum.

PDDN engaged Mark Mudryk, a student at VIU completing his Advanced diploma in GIS Applications, to explore a GIS mapping solution to achieve the above goals. Mark went above and beyond and donated significant volunteer hours to complete the project with an ever-growing scope. The pilot project resulted in a functional GIS map of existing Tech industry businesses in the downtown core. Due to constraints in available GIS information, this map is built on manual research completed by Mark and captures the following:

- 652 locations
- 10 Theme Layers
- 39 Groupings within the layers

While the data behind the map is static in this pilot, it effectively demonstrates how a reclassification of existing businesses and services can dramatically improve the usefulness of the City of Nanaimo's GIS system as a tool for Tech Sector business recruitment, planning and community growth.

The pilot GIS map can be viewed at: <https://www.google.com/maps/d/viewer?mid=1MCerR-skmiW8A696v9LPYimAOdrFEE8P&ll=49.17644256560284%2C-124.00101526080653&z=10> and a more detailed summary of the GIS data base and interface is included in Appendix D.

Key challenges and opportunities learned during the pilot project include:

CHALLENGE	OPPORTUNITY
Existing GIS data collection by the City of Nanaimo does not provide adequate detail to allow for meaningful representation of the Tech Sector Assets	Develop a supplementary Tech Sector survey to accompany City of Nanaimo business license renewals and collect additional data
Manual collection of GIS data is time consuming, unreliable and inherently inaccurate.	Leverage the City of Nanaimo's business license renewal process to collect GIS data in the City's robust GIS system and make available for external referencing
For Tech Industry to use this tool, the interface needs to be current and quickly accessible across all platforms	As part of the TECH NANAIMO website, develop an appropriate interface that polls the GIS data maintained by the City of Nanaimo.

TECH NANAIMO Website

PILLARS: AWARE, COM, INFO

A key component of TECH NANAIMO's success will be its ability to provide clear, concise and current information to attract new tech entrepreneurs and grow/support our existing tech community. Any interface that aims to achieve these goals needs to understand and respond to the needs of its target audience. For TECH NANAIMO, this audience demands clean, accurate and current information through a web presence and social media.

TECH NANAIMO worked with ARRAY Web & Creative to explore the information, layout and design of this website. Final development of the website is beyond the scope of this initiative and needs to take place after the City's final Economic Development Strategy is in place. To assist in the planning and budgeting during the formation of the final strategy, the following deliverables are included in Appendix E:

- Information architecture for the proposed website outlining its flow, user experience and content:
- Representative examples of the look and feel of the proposed website
- Key words analysis to guide the website development
- Budget for the different phases of the website development.

The community building portion of this website would integrate with the social media presence of TECH NANAIMO. The success of these tools will be directly dependent on dedicated staff time to build momentum around events and relationships. Great tools only generate great results when put to use by skilled people.

Lessons Learned Study

PILLARS: COM, CAP, TAL

In the goal of jump-starting Nanaimo's economic growth in the tech sector, connections were made with the following organizations to learn from their success and discuss what they see as the key factors to their region's success:

- VIATEC – Victoria Innovation Advanced Technology & Entrepreneurship Council
- Okanagan Innovation Centre (Kelowna)
- Calgary Economic Development: Captures Ecosystems & Export Development, Nucleus Calgary, and Start-up Calgary and Platform Innovation Centre, a multi-use space for everyone, learning, projects, makers, and community;
- CTAC: Camosun Technology Access Centre.



Each of these organizations plays a very different role in their region's successful cultivation of economic growth in their tech sectors, however there were some common themes that Nanaimo could leverage to find a smoother path to success:

- 1 Community and culture are key! Technology breeds more technology and innovation comes from the most unexpected areas. If Nanaimo does not successfully cultivate a diverse tech community and support system, it will be at a significant disadvantage compared to their neighbouring communities in their bid to attract tech talent. Creating a culture to support and grow a tech economy is non-linear, multi-faceted, requires all community leaders to work collaboratively to consistent goals and takes time. It requires a consistent community vision, alignment of education programs, adjustment of policies and regulations, support of existing tech businesses, consistent momentum building, creative lab spaces for all ages, social events, and more.
- 2 Partnerships with government and community partners that allow tech leaders the room to explore advancement, expansion and new ideas provide tech entrepreneurs with the necessary bridge to move forward. government and tech sector entrepreneurs work in different sectors and move a different speeds. Growth in all of the regions we connected with was attributed to strong partnerships that grew in confidence over time to create the independence and space needed for tech to grow. The sooner Nanaimo is able to grow strong community collaboration and partner with other levels of government to create this independent space, the sooner the City will begin to see growth in its tech sector
- 3 A consistent entity whose focus is on tech development is key to building momentum and consistent drive. This entity needs to also act as a bridge between government and the tech industry as both sectors operate in different ways and focus on different deliverables
- 4 Innovations in technology often involved expensive equipment that renders exploring new concepts cost prohibitive for smaller companies. Facilities such as CTAC (Camosun Technology Access Center) allow quick and cost-effective access to this equipment to enable smaller companies to explore, prototype and grow new advancements
- 5 As Nanaimo dedicates resources to create a strong, credible tech ecosystem, we may want to consider spending time and effort developing relationship directly with training and development resources they have found most effective for Startups, Scaling and preparing for Export rather than working through a general service provider such as Startup Canada
- 6 All contacts were very willing to share specific entities and resources they have had the most success with as Nanaimo decides on its focus and structure



Government Engagement

PILLARS: COM, CAP, TAL

Through outreach to the Provincial Government MIBI and TECH Nanaimo has had multiple meetings with the Right Honorable Bruce Ralston Minister of Jobs, Trade and Technology and MLA Sheila Malcolmson to engage in a discussion to encourage provincial support of tech growth in our region.

TECH NANAIMO hosted the Executive Director of Innovation and Policy for Minister Ralston's department for a half day tour of Nanaimo with introduction to local tech leaders and a meeting with city staff to better understand the collaboration that is growing in Nanaimo. The clear message that was received during that visit is that a collaborative approach including private enterprise, municipal government and other significant community leaders is a critical element in creating a successful tech ecosystem and that he was interested to monitor how our City works to develop approach to technology as part of our development economic strategy. He also showed support for growing technology through manufacturing, recycling or other more industrial implementation of technology. We currently have a follow up visit is planned for early 2020 where MIBI will be hosting a roundtable discussion with tech community leaders to further promote provincial support in our region.

Introductions have also been made to all the BC Trade Officers located in the USA to highlight Nanaimo as a region with great work/life balance and key transportation connections when discussing possible locations for US companies looking to establish a presence in Canada.

While these meetings with the BC Government officials and staff help to educate decision makers on Nanaimo's goal to continue growth in our tech sector, they are only the start of the necessary momentum. Continued lobbying and determined effort from all community leaders is required to continue growing this momentum.

Networking Events

PILLARS: COM, AWARE

To continue building momentum around the tech culture and community in Nanaimo, TECH NANAIMO worked with community partners to enable and encourage regular networking events. Growing momentum for these events will take dedicated effort over time beyond the scope of this initiative. Our early exploration of events in the tech community reinforced the absolute need for regular social and networking events to support local tech workers and grow our sense of community. Some of the events TECH NANAIMO partnered in include:

- **Round Table Lunch & Learn:** Met with and aligned local subject matter experts to lead short focused discussions to fill knowledge gaps around immigration law, IP, Trademarks and Patents
- **YPN Hosted Tech Event:** One night networking event involving Real Estate Webmasters, Ldrly Games and Innovation Island with a presentation by tech companies discussing their experience in setting up tech companies in Nanaimo.
- **"A New U" Reading Circle:** Reading Circle led by Ken Hammer with 12 -15 participants to examine the training concepts and strategies explored in book "A New U" by Ryan Craig. This book explores and supports the Last Mile Training theory as an alternate approach to educating our future workforce.

Based on the demonstrated need for consistent networking and stronger coordination of events within the tech community, Sarah Bromley Sarah launched the Facebook Group "Nanaimo & Area Tech Talk," which serves as a launching point to spread awareness of local tech events and news. After founding this group, Sarah partnered with Input Cowork to offer a monthly Tech & Design meetup. Five successful meetups ran through 2019, with speakers on topics such as UX Design with Figma, to Startup Funding. These initiatives build on Sarah's long-standing commitment to supporting our region's tech community. She has been Vice Chair with Innovation Island, founded the local chapter of Canada Learning Code and runs drop in STEM (Science, Technology, Engineer and Mathematics) programs for kids and parents at MakerSpace. It is Sarah's belief that in order to build a successful and vibrant technology industry, you need to have a well connected base community.



Education Advisory Council

PILLARS: COM, TAL

To support the efforts of developing relevant training the Education Advisory Committee established in early 2019 worked in partnership with TECH NANAIMO to help identify training opportunities and develop strategies to respond to tech sectors current and future needs. The inaugural council was comprised of the following members:

- Rebecca Kirk
- John Hankins
- David Witty
- Chris Beaton

The membership of this committee brought together different levels of academia, local tech industry and private tech training providers to collaborate on identifying training opportunities. Members of this Education & Training Team included:

- Original Education Advisory Council Members plus
- School District 68
- VIU
- Intraworks
- Real Estate Webmasters
- Input Logic
- Lighthouse Labs

The partnership developed and completed the tech stack survey described below to help improve our understanding of current industry needs.

Tech Stack Survey

PILLARS: COM, TAL

In partnership with the Education Advisory Committee, TECH NANAIMO developed and oversaw a survey of existing tech-based companies to better understand:

- The sector they work in
- Programming languages, frameworks they currently use
- Software tools they currently use
- Desired Co-op skillsets
- Current demand for employees and level of experience they are looking for.

The survey was sent to 65 local companies and received 27 responses. The detailed summary from the survey is included in Appendix F. The key takeaways from the survey include:

- Nanaimo currently has a significant number of tech based companies that need to be supported and connected
- While there is a large variety of different programming and software tools being used, there are strong trends to allow educators to align students with these trends
- There is a strong demand for additional skilled labour, however the majority of employers are looking for a level of practical experience greater than 3 years, reinforcing the need for practical based education programs that generate graduates with a higher level of practical experience
- The results of the survey were communicated back to all participants. Below is a comment from Graham White at VIU that demonstrates how the tech stack survey assisted in their program analysis:

“The results of the survey were very positive for us, VIU have been working on an expansion proposal for our ITAS diploma at VIU and the results were really a reinforcement for us of our own research and discussions with industry. The types of programming languages and frameworks the tech companies indicated they use in the survey are in alignment with what we already have in our curriculum, or will be added with the proposed enhancement.”

Graham White, ITAS Instructor, Vancouver Island University

Alternate Education Programs

PILLARS: AWARE, TAL

The landscape of education is changing and the necessity to offer education options that provide avenues tailored to diverse student demographics will be critical to developing the workforce necessary to support technology into the future. These education options will need to reach past the standard student catchment and find ways to greatly increase engagement for women, people immigrating to Canada, indigenous communities, and students not aligned with standard education paths. Reaching and supporting the talents of these students will be the key to meeting the demands of the tech economy. Programs are needed that:

- Excite students to explore technology at a young age;
- Offer options to divert students towards practical applications during secondary;
- Have diverse options to appeal to an increasingly diverse student population;
- Offer condensed practical curriculums that allow early entry into the workforce;
- Creative coop programs that support strong university graduates;
- Adapt quickly as industry needs change;
- Align with regional goals for specific technological growth.

The World Economic Forum published an article entitled How small cities are luring tech jobs away from metropolises this article included a section on education

“Cities can try to address any gaps by working with schools, colleges, nonprofits and the private sector to provide appropriate STEM education for school children, training for existing residents and a steady flow of adequately trained college graduates.”



Nanaimo is fortunate to have strong educational base to build from and has education leaders that are open to conversation and adjustment. Below are alternate programs that were explored as possible ways to augment our existing educational options. Further exploration of these programs with the Education Advisory Committee is required to determine what programs are best suited to developing the talent Nanaimo will need once the economic strategy is developed:

- **VIU Program Alignment:** MIBI coordinated DigiBC presentation to Vancouver Island University (VIU) to develop programs to support the animation and gaming industry. VIU has established a working group to explore how the many existing resources that VIU currently offer fit with pathways described as ‘in demand’ through DigiBC and can be meaningfully grouped and demonstrated to interested existing learners and prospective learners (as well as prospective employers) as being appropriate preparation for work in that sector. VIU currently offers much of what industry employers are looking, however the courses are not under a specified single program title or degree/diploma credential. VIU’s goal at present is to identify sustainable practices that support the intersection of this industry locally with learners who have chosen VIU and may or may not have considered this sector as an attainable goal (at all or more specifically in this region). This is an ongoing project.
- **Think Tank Pilot:** Think Tank Training Centre based in Vancouver is dedicated to providing relevant, current, and effective training that will ensure a realistic opportunity for employment. Think Tank specializes in the latest software, techniques, and technologies in order to cater to the needs of the film, television and video game industries. Their number one priority is to open the door for their students to attain that first job. Through first rate instructors, curriculum, a state-of-the-art facility, and their mentorship program, students are given every advantage available in order to make a smooth transition from student to trained working professional.

Think Tank Training Centre has been running a pilot program with a couple of high schools in BC and one in Manitoba. Think Tank is currently looking to expand the pilot to select schools on Vancouver Island. The pilot gives motivated high school students access to cutting edge 3D training through Think Tank’s Online program platform “Portal”. The goal of these pilots is to allow these students to learn independent of a trainer and evaluate the level of understanding they can attain with this very challenging curriculum. Students will have access to videos, assignments, forums and feedback via Portal.

Think Tank Training Centre was recently ranked by industry professionals as the number one training institution worldwide from a pool of over 500 schools. Think Tank’s graduates work on world class titles such as “Game of Thrones”, “Star Wars”, “Marvel” and a host of triple A video titles.

- **Play to Learn:** Through a new collaboration between The Learning Partnership, Electronic Arts and DigiBC students in British Columbia will have an opportunity to further their coding abilities while they learn to problem-solve, apply critical thinking and collaborate to build video games in their classrooms.

The exciting partnership with Electronic Arts supports TLP's Coding Quest, Canada's largest classroom-based coding program. Thousands of students in Grades 4 to 6 across British Columbia will benefit from the experiential learning program that aligns with school curriculum and aids teachers in the development of core student competencies that prepare them for life and work. Coding Quest focuses on Science, Technology, Engineering and Math (STEM) education and incorporates computational thinking, language arts, visual arts and social studies. Through this engagement with Electronic Arts participating students will also gain invaluable exposure and access to mentorship from industry professionals.

The Learning Partnership is able to deliver this high value program at no cost to students through the generous support of partners like Electronic Arts and DigiBC. Last year, Coding Quest reached more than 10,000 students in 180 schools across British Columbia.

- **IndigiGeeks:** IndigiGeeks aims to empower the curiosity of aboriginal youth. Young Metis, Inuit, and First Nations are already digital content consumers but with the tools IndigiGeeks offers they can become content creators and unleash their creative potential digitally.

Historically, indigenous curiosity, creativity, and storytelling has been the cornerstone of Canada's cultural heritage. As part of DigiBC's commitment to Truth and Reconciliation and in compliance with the established-on screen protocol best practices, we look to bring these young storytellers into the creative technology conversation in BC. Our cultural future is digital, and it won't be fully Canadian without these voices and their stories, and IndigiGeeks invites indigenous youth to transition from consumers to creators of digital media.

This new program was piloted in Nanaimo on November 27th, 2019 at the Tsawalk learning centre. 27 learners were invited to participate in building a basic video game in a game engine called "Game Maker". 26 out of the 27 students were engaged with the project and completed one level of Pac Man.

DigiBC is currently in the process of applying to fund this program throughout the province.

- **Lighthouse Labs:** Lighthouse Labs was recruited to be part of the Education Advisory Committee to support the development of training programs to support the needs of the Nanaimo Tech sector. Lighthouse Labs was created in 2013 by a team of software developers with a passion for code, mentorship, and education. Their mission: to continuously find the best ways to train the next generation of developers and transform the way tech education is delivered.

The next stage is to foster this relationship and arrange relevant courses and boot camps to be hosted by Lighthouse Labs in Nanaimo.

- **7 Gate Academy:** 7 Gate Ventures is considering running its 7 Gate Academy programs in Nanaimo. The 7 Gate Academy is designed for experienced individuals who are looking to expand their technical knowledge on Emerging Technologies. Throughout the course period, students will go over a curriculum which is designed with the collaboration and inputs of the industry. At the end of the course period, graduates will have the chance to demonstrate their gained knowledge to the community.

Each course will have a defined objective as the Academy is focusing on developing talents to join corporate and startup community. The Course durations are between 5 weeks and 9 weeks

- **Immigrant Entrepreneurs & Diversity:** To help support entrepreneurs immigrating to Canada and encourage them to explore Nanaimo as their new home, MIBI is working with a Vancouver based Venture Capital company who are registered with the Canadian Government's Startup Visa Program.

This program aims to facilitate the immigration of innovative entrepreneurs to Canada who in turn will create great companies that will enhance the job market, provide export opportunities and R&D advancements. Through a partnership with Canada's Venture Capital and Private Equity Association, the federal government has so far designated a handful of Venture Firms as eligible partners in the Startup Visa Program.

Nanaimo is now on this Venture Capital company's radar and they are actively looking to recruit immigrant entrepreneurs to place in Nanaimo. It is important that Nanaimo have systems in place to provide strong and timely support the first successes of this program as their experience will determine our ability to attract other immigrant entrepreneurs.

- HR Tech:** MIBI is supporting HR Tech to identify individuals in Nanaimo’s tech community that could feature in their Diversity and Inclusion Tech Project. The purpose of this project is to increase the attraction, retention and advancement of women, Indigenous peoples, people with disabilities, newcomers to Canada, and individuals who identify as LGBTQ/2S in addition to all under-represented groups in skilled occupations in B.C.’s technology sector. The project will implement several pilot diversity, inclusion and indigenization strategies to recruit, retain and support career development in these professions.

Raising awareness of local success stories raises awareness of the Nanaimo region which in turn could result in other individuals exploring relocation to Nanaimo.
- Last Mile Training:** Training a workforce to meet the current and future needs of technology is a challenge across North America. The concept of Last Mile Training is a faster and cheaper way to produce qualified talent in a short amount of time using an intense “Bootcamp” approach. It has a 90% plus success rate of placing graduates into “good paying first jobs” without the burden of large student loans. The book “A New U” by Ryan Craig explores and supports the Last Mile Training theory as an alternate approach to educating our future workforce.

Community Partners

PILLARS: COM, INFO, TAL

During this initiative, many of our community partners provided input, participated in events and expressed interest in playing an active role in nurturing Nanaimo’s tech community and its growth. Below are some of the partners whose continued involvement will add significant value in the next stages of the program:

- First Nation Technology Centre
- Central VI Multicultural Society
- Innovation Island
- Chamber of Commerce
- Community Futures
- VIU
- SFN

There are also a number of formalized organization across the province and country whose experience and connections may prove useful once the final strategy is adopted. Below are some of the organizations we connected with during this initiative:

- BC Tech Association
- Canadian V C Private Equity Association
- Canadian Advanced Technology Alliance (Policy Advocacy)
- Digi BC
- Mitacs – VIU is an Associate Member
- MaRs (National Resource for Innovation/ Tech)
- Futrepreneur
- Small Business



Capital & Funding Survey

PILLARS: COM, CAP

TECH Nanaimo connected with a large number of potential sources for capital for tech companies at different stages of their corporate growth. A summary of these discussions is included in Appendix G and this summary outlines the different funding bodies and what stage of tech company development they have an interest in participating in.

Alternate Capital Options

PILLARS: COM, CAP

To support access to capital for entrepreneurs and start ups MIBI has explored and developed relationship with two Venture Capital funds:

- 7 Gate Ventures: Vancouver based Venture Capital firm who have visited Nanaimo on multiple occasions meeting with Business and Community leaders and Vancouver Island University. Through this relationship 7 Gates is open to investing in island companies to bring immigrant entrepreneurs to Nanaimo, support VIU to bring Iranian students to attend VIU and host training in Nanaimo through their 7 Gate Academy.
- Vancouver Island Venture Acceleration Fund (VIVA): MIBI is exploring the potential and appetite to either re-ignite VIVA or create a new island focused VC. VIVA was launched in May 2014. The fund represented the first dedicated investment fund targeting early-stage, high-growth technology companies on Vancouver Island. It has though been idle in raising funds and putting out calls for proposals.

The challenge facing an island focused VC fund is the low number of island entrepreneurs and start ups that are investment ready.

Regional Awareness

PILLARS: AWARE

This initiative provided additional resources to expand MIBI's efforts in promoting regional awareness off of Vancouver Island with a specialized group of contacts. By reaching out to Venture Capital companies and organizations that provide training, we are actively promoting the current Tech scene in Nanaimo and signaling our desire to grow Tech in our community. Hosting events in Vancouver plays an important role in raising our regional awareness. Each event reaches new corporate decision makers and expands our reach into the Vancouver market. MIBI's mail out marketing campaign targeted at companies in the lower mainland has contained to reinforce this message. MIBI was requested to host a panel discussion at last year's HR Tech summit which attracts the Tech HR leaders across BC to learn about the latest trends and discuss challenges. This forum helped to share the Nanaimo story to a new demographic.



Leadership Change

Rebecca Kirk's passion for tech sector development in Nanaimo was a key driver in the formation and operation of TECH NANAIMO. Her volunteer efforts in the years leading up to the collaboration with MIBI and her approach to guiding Nanaimo forward during this collaboration have informed the lessons learned and the content of this report.

Unfortunately, near the end of this collaborative initiative irreconcilable differences developed between Rebecca and MIBI that led to her resigning from her contract position with MIBI and stepping away from her role at TECH NANAIMO. With Rebecca's resignation, the committee formed by MIBI dissolved and MIBI took on preparation of the final report and continued the ongoing initiatives.

During the preparation of this report, MIBI combined the initiatives, collaborations, and information from Rebecca's work on the project with ongoing work and discussion with industry participants.

Findings and Recommendations

Growing the tech community in Nanaimo and developing a sustainable economic growth strategy go hand in hand, particularly if our goal is to create family sustaining jobs in alignment with accepted environmental goals. Technology is now the foundation of so many industries that without developing a supported tech community that can meet the needs of whichever sectors Nanaimo chooses to pursue, we will find ourselves unable to attract employers who are dependent on a tech focused workforce. Currently Nanaimo has tech leaders competing at a world class level, however our tech community is under celebrated, under supported and has significant challenges finding adequate workforce to maintain current levels, let alone expand.

As discussed in this report, successfully growing a robust and vibrant tech community needs a focused long-term effort and requires collaborative and aligned effort from our community leaders. Throughout this initiative, and through MIBI's ongoing research, we confirmed that effort is required in each of the following five pillars to develop a resilient tech community:

-  Community Building
-  Talent Recruitment & Development
-  Access to Capital
-  Access to Information & Resources
-  Awareness of Nanaimo & Region



Nanaimo is currently developing a cohesive approach to economic development and this presents a unique opportunity for the City and its partners to develop cohesive vision to integrate a strong technology community into our economic future.

General Approach:

Based on our research and findings, incorporating the following recommendations into the economic development structure will help to achieve a robust economic development model for the City of Nanaimo that leverages technology as a key component into the future:

1. Encourage collaborative participation of all community leaders in the economic development structure
2. Focus economic development strategies on the broader view of the technology sector; including manufacturing, fabrication, industrial operations, shipping and recycling
3. Identify the technology sectors where Nanaimo can offer a competitive advantage and establish a specific focus. Narrowing the City's focus will improve its ability to align talent development, marketing and capital raises with the overall vision
4. Continue to actively support a dedicated TECH Nanaimo organization as part of the City's overall economic development strategy

TECH Nanaimo Organization:

To position the future TECH Nanaimo organization for success, we recommend the City of Nanaimo:

1. Plan for adequate staff to accept responsibility to support the existing tech community and lead initiative necessary to nurture a tech ecosystem that addresses the five pillars described in this report. While staffing needs will adjust over time, we recommend the City of Nanaimo consider the following as the initial staffing commitment:
 - a. Director level staff to lead high level initiatives, develop partnerships and lead the organization
 - b. Staff or contract marketing, event planner and social media manager. It is important that adequate budget be allocated for the first to create necessary momentum in the community. After momentum and participation is created the time commitment necessary to maintain it will decrease

2. Create a governance structure for Tech Nanaimo that encourages external community input, possibly via a committee, to help develop the strategic plan to guide the services provided by the organization;
3. Create a structure that has adequate independence to access funding from both private and government bodies;
4. Create a framework that allows TECH Nanaimo adequate independence to develop into an organization capable of reacting with the speed and risk tolerance of the tech sector;
5. Position TECH Nanaimo to act as the bridge between the tech sector and government and maintain a strong connection with City Economic Development entity;
6. Develop and support the comprehensive TECH Nanaimo website outlined in this report as the digital one

Interim Initiatives:

We recommend the City of Nanaimo move the following initiatives forward in parallel with the current economic strategy discussions to continue momentum growth and to better position TECH Nanaimo to react quickly when the economic strategy is complete:

- GIS data collection: Form short term task force to develop a survey to accompany the next business license renewal mail out and input into the City GIS system as describe in "GIS Mapping" initiative above. This data collection will be necessary to enable the GIS page on the TECH Nanaimo website once it goes into development;
- Support the continuation of the Education Advisory Council to explore avenues to align our local education options to increase engagement of students not aligned with standard education paths and to help meet the needs technology as a cornerstone of industry;
- Support grass roots groups who are organizing networking events with financial assistance and planning assistance for potential round table discussions and conferences to maintain momentum in tech community

We trust the above provides a cohesive summary of the activities and recommendations that were enabled by the City's short-term injection of financial support to maintain momentum in our tech community while the long-term economic development strategy is developed. Please do not hesitate to contact MIBI to discuss any aspect of this report.

Sincerely,

Robert Moss, John Hankins



CITY OF NANAIMO

SERVICES AGREEMENT

for

Economic Development Services

with

Mid-Island Business Initiative

Agreement Number: 2416

THIS AGREEMENT dated for reference the 12TH day of JUNE, 2019.

BETWEEN:

CITY OF NANAIMO
455 Wallace Street
Nanaimo, BC
V9R 5J6

(the "City")

AND:

Mid-Island Business Initiative
201 – 155 Skinner Street
Nanaimo, BC
V9R 5E8

(MIBI)

WHEREAS

- A. MIBI has the capacity and experience to provide economic development services;
- B. The City desires to have MIBI provide the services as outlined in the attached MIBI proposal; and
- C. MIBI is willing to perform such services for the City in accordance with the terms and conditions contained in this Agreement.

NOW THEREFORE, in consideration of the promises and mutual covenants herein contained, the parties hereto agree as follows:

ARTICLE 1 DEFINITIONS OF TERMS

1.0 Definition of Terms

The following terms when used in this Agreement shall have the meaning indicated:

- a) "**Effective Date**" shall mean June 1, 2019.
- b) "**Intellectual Property Rights**" shall mean, with respect to any data, device, or other asset of any kind, all copyright, patent, trade secret, moral, termination, authorship and other proprietary rights relating to any such data, device, object code, source code or other asset including without limitation, all rights necessary for the worldwide development, manufacture, modification, enhancement, sale, licensing use, reproduction, publishing and display of such data, device, object code, source code or other asset.
- c) "**Marks**" shall mean any and all trademarks, trade names, service marks or logos owned or licensed by either party for use by MIBI.
- d) "**MIBI proposal**" means the proposal provided by MIBI as attached in Schedule A.
- e) "**Promotional Materials**" shall mean all marketing, advertising, and promotional materials in all media, created or developed by or on behalf of one of the parties relating to or associated with this Agreement.
- f) "**Term**" shall mean the period from the Effective Date to the date of Service Completion, December 31, 2019.
- g) "**Termination**" and "**Terminated**" shall mean the expiration or other proper cessation of this Agreement strictly in accordance with the terms hereof.

ARTICLE 2 APPOINTMENT

- 2.0 The City hereby appoints MIBI to address the Tech Sector Attraction Challenges in the community through the Manufacturing, Technology and Entrepreneurship Council as outlined in Schedule A of this agreement.
- 2.1 The City further appoints and selects MIBI to provide these services from June 1, 2019 until December 31, 2019.

ARTICLE 3 CITY COVENANTS

- 3.0 The City covenants and agrees that changes to the existing scope of work as needed for additional economic development services shall be negotiated in good faith.

ARTICLE 4 MIBI SERVICES

- 4.0 MIBI covenants and agrees
- a) to provide tech attraction services for the period of June 1, 2019 until December 31, 2019;
 - b) to dedicate the resources necessary to deliver the services as indicated in the MIBI proposal as attached in Schedule A;
 - c) to provide monthly activity reports that include progress made and financial updates, by the 15th day of each month of this agreement; and
 - d) in the event of early termination of this agreement under Section 7.0, 7.1 or 7.2, the remaining unexpended funds as granted by the City, shall be reimbursed to the City in their entirety.
- 4.1 SCOPE AND PERFORMANCE OF ECONOMIC DEVELOPMENT SERVICES
- MIBI shall continue implement and continue to provide the services as outlined in the MIBI proposal as attached in Schedule A;
- 4.2 The parties may, subject to the written consent of MIBI and the City, agree to future additional services to be provided by MIBI to the City. If the City requests future additional services from MIBI, MIBI shall promptly prepare an additional services proposal for the City's consideration. Unless otherwise agreed to by the parties, MIBI shall prepare the proposal at no additional charge to the City.
- 4.3 Within thirty (30) days of the earlier termination or expiration of this Agreement, MIBI shall prepare and deliver a summary report detailing the actions taken throughout the term of this Agreement, and stating any rationale for actions taken, and recommended modifications based on the success of failure of MIBI's economic development initiatives.

ARTICLE 5 COMPENSATION

- 5.0 The City shall grant MIBI the sum of \$48,000.00 inclusive for the delivery of economic development services for the Term of this Agreement.
- 5.1 MIBI shall not exceed the total sum of the grant without prior written consent of the City and unless specifically authorized by amendment to this Agreement.

- 5.2 The grant as indicated in Article 5.0 is the entire compensation for MIBI for the performance of the services under this Agreement.
- 5.3 MIBI shall be paid for their services through three equal draws of \$16,000, commencing on June 1, 2019, with the second draw on September 30, 2019 and the final draw on December 31, 2019.
- 5.4 The City will withhold partial payment of five thousand dollars (\$5,000) until such time as all agreed upon deliverables have been received and reviewed as acceptable by the City.

ARTICLE 6 PROPRIETARY RIGHTS, INCORPORATED MATERIAL, GRANT OF LICENSE

PROPRIETARY RIGHTS

- 6.0 The City exclusively owns all intellectual property rights, including copyright in:
- Received Material that MIBI receives from the City; and
 - Produced Material, other than any Incorporated Material.
- 6.1 Upon the City's request, MIBI must deliver to the City, documents satisfactory to the City that irrevocably waive in the City's favour any moral rights which MIBI or employees of MIBI) or a sub-consultant (or employees of a sub-consultant) may have in the Produced Material and that confirm the vesting in the City of the copyright in the Produced Material, other than any Incorporated Material.

INCORPORATED MATERIAL

- 6.2 Upon any Incorporated Material being embedded or incorporated in the Produced Material and to the extent that it remains so embedded or incorporated, MIBI grants to the City:
- a non-exclusive, perpetual, irrevocable, royalty-free, worldwide license to use, reproduce, modify and distribute that Incorporated Material; and
 - the right to sublicense to third-parties the right to use, reproduce, modify and distribute that Incorporated Material.
- 6.3 The City has no responsibility to assist MIBI in the prosecution of any copyright infringement action or other litigation pertaining to the right of Intellectual Property Rights or Marks.

GRANT OF LICENSE

- 6.4 The City hereby grants MIBI during the Term a non-exclusive non-transferrable license to use the City's Marks for the sole purpose of fulfilling its obligations under this Agreement and in marketing materials and presentations for this purpose. In using the City's Marks hereunder, each party acknowledges and agrees that
- the City's Marks shall remain the sole property of the City;
 - nothing in this Agreement shall confer MIBI any right of ownership in the City's Marks or Promotional Materials; and
 - MIBI shall not at any time contest the validity of the City's Marks.

Except as specifically provided in this Agreement, MIBI shall not have the right to use any Mark or Promotional Materials of the City, or to refer to the City directly or indirectly, in connection with any product, promotion or publication without the prior written approval of the City. MIBI hereto agrees that upon termination of this Agreement all rights granted to MIBI in relation to the City's Marks shall immediately terminate and revert to the City.

ARTICLE 7 TERMINATION

- 7.0 Either party may terminate this Agreement for any reason by giving thirty (30) days' written notice of termination.
- 7.1 The City may, at its own option, upon five (5) days written notice, terminate this Agreement should MIBI hereto:
- a) admit in writing its inability to pay its debts generally as they become due;
 - b) make a general assignment for the benefit of creditors;
 - c) institute proceedings to be adjudicated a voluntary bankrupt; or consent to the filing of a petition of bankruptcy against it;
 - d) be adjudicated by a court of competent jurisdiction as being bankrupt or insolvent;
 - e) seek reorganization under any bankruptcy act, or consent to the filing of a petition seeking such reorganization, or
 - f) have a decree entered against it by a court of competent jurisdiction appointing a receiver, liquidator, trustee or assignee in bankruptcy or in insolvency covering all or substantially all MIBI's property or providing for the liquidation of MIBI's property or business affairs.
- 7.2 In the event that MIBI commits a material breach of its obligations under hereunder, the City may, at its option, terminate this Agreement by written notice of termination specifying such material breach; provide, however, that if such default is subject to cure, then such notice shall be subject to a twenty (20) day cure period from the date thereof, and if MIBI cures such default prior to the expiration of such period, termination shall not take place.
- 7.3 The obligations of the parties under this Agreement that by their nature would continue beyond expiration, termination or cancellation of this Agreement (including, without limitation, the warranties, indemnification obligations, confidentiality requirements and ownership and property rights) shall survive any such expiration, termination or cancellation.
- 7.4 The failure of either party to insist upon strict performance of any of the terms or provisions of this Agreement, or to exercise any option, right or remedy herein contained, shall not be construed as a waiver or as a relinquishment for the future of such term, provision, option, right or remedy but the same shall continue and remain in full force and effect. No waiver by either party of any term or provision shall be deemed to have been made unless expressed in writing and signed by such party.

ARTICLE 8 INDEMNIFICATION

- 8.0 Commencing on the Effective Date and throughout the Term, MIBI shall indemnify, defend and save harmless the City and all of its elected and appointed officials, officers, employees, servants, representatives and agents (collectively the "Indemnitees") from and against all claims, demands, causes of action, suits, losses, damages and costs, liabilities, expenses and judgments (including all actual legal costs) for damage to or destruction or loss of property, including loss of use, and injury to or death of any person or persons which any of the Indemnitees incur, suffer or are put to arising out of or in connection with any failure, breach or non-performance by MIBI of any obligation of this Agreement, or any wrongful or negligent act or omission of MIBI or any employee or agent of MIBI.
- 8.1 The City shall have the right through counsel of its choice at MIBI's expense, paid monthly, to control the defence or respond to any Claim made against the City against which the City is indemnified pursuant to Article 8.0. Under no circumstances shall the City be required to suffer a liquidated loss



or be obligated to seek recovery from third parties, but save for those exceptions, the shall use commercially reasonable efforts to mitigate their losses. This indemnification shall survive the expiration or termination of this Agreement.

ARTICLE 9 ASSIGNMENT

9.0 MIBI shall not assign or transfer or permit the assignment of this Agreement without the prior written consent of the City.

ARTICLE 10 RENEWAL

10.0 This Agreement may be renewed upon:

- g) the issuance by the City of a notice of renewal ("Notice of Renewal") to MIBI at least three (3) months prior to end of the Term or any renewal period thereof; and
- h) the written acceptance of the Notice of Renewal by MIBI within sixty (60) days thereafter.

ARTICLE 11 MISCELLANEOUS

11.0 Each party warrants, with respect to itself, that neither the execution of this Agreement nor the finalisation of the transactions contemplated hereby shall violate any provision of law or judgement, writ, injunction, order or decree of any court or governmental authority having jurisdiction over it; result in or constitute a breach or default under any indenture, contract, other commitment or restriction to which it is a party or by which it is bound; or require consent, vote or approval which has not been taken, or at the time of the transaction involved shall not have been given or taken. Each party covenants that it has and will continue to have throughout the Term, the right to enter into this Agreement and perform its obligations hereunder.

11.1 Wherever in this Agreement the consent of approval of the City or MIBI is required, such consent or approval shall not be unreasonably withheld or delayed, shall be in writing and shall be executed by a duly authorised representative or agent of the party granting such consent or approval. Except to the extent otherwise provided herein, if either the City or MIBI fail to respond within thirty (30) days to a written request by the other party for a consent or approval, such consent or approval shall be deemed to have been unconditionally given.

11.2 This Agreement shall be construed under and shall be governed by the laws of the Province of British Columbia and venue for any action or proceeding related to or arising out of this Agreement shall be in British Columbia.

11.3 Heading of Articles and Sections are inserted only for convenience and are in no way to be construed as a limitation on the scope of the particular Articles or Sections to which they refer. The parties acknowledge that each party and its counsel have reviewed this Agreement and that the normal rule of construction to the effect that highlights ambiguities are to resolved against the drafting party shall not be employed in the interpretation of this Agreement or any amendments or exhibits hereto

11.4 Notices, statements and other communications to be given under the terms of this Agreement shall be in writing and hand delivered against receipt or sent by certified registered mail, postage prepaid, return receipt requested:

To the City:
City of Nanaimo
455 Wallace Street
Nanaimo, BC V9R 5J6
Attention: Deputy Director, Community Development

To MIBI:
201 – 155 Skinner Street
Nanaimo, BC
V9R 5E8
Attention: Mike Delves, Treasurer

- 11.5 This Agreement, together with other writings signed by the parties expressly stated to be supplemental hereto and together with any instruments to be executed and delivered pursuant to this Agreement constitute the entire agreement between the parties and supersedes all prior understandings and writings.
- 11.6 This Agreement may be executed in two or more counterparts, each of which shall be an original but all of which shall together constitute one and the same agreement.
- 11.7 If for any reason it becomes necessary for a party to initiate any legal or equitable action to secure or protect its rights under this Agreement, the prevailing party shall be entitled to recover from the non-prevailing party all costs incurred by it, including without limitation, reasonable attorney’s fees at all trial and appellate levels.

IN WITNESS WHEREOF, the City and MIBI have caused this Agreement to be executed.

CITY OF NANAIMO by its authorized signatories

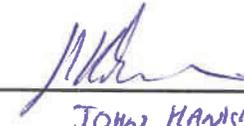
Name: _____

Title: _____

Mid-Island Business Initiative by its authorized signatories

Name: 
ROBERT I. MOSS

Title: Director

Name: 
JOHN HAWKINS

Title: CEO.

Manufacturing Technology & Entrepreneurship Council (MTEC)

Current Problem:

In the Nanaimo and Central Island Region, seeking information and access to programs, funding, services and support is scattered and uncoordinated. There is a lack of diversity and Indigenous participation. These weaknesses create an environment of lost opportunities, slow and fractured economic development, weaker sectors, and leaves new and emerging MTEC entrepreneurs struggling to be seen, disconnected and frustrated. Creating a one stop shop **“front door”** entry model allows for the building of a thriving and resilient ecosystem **with the heart of the organization being a regional Innovation Centre in downtown Nanaimo.**

Key Challenges:

- 1) **difficulty recruiting and retaining new talent**
- 2) **lack of coordinated support and access to information and resources**
- 3) **lack of access channels to Venture Capital and other funding sources**
- 4) **lack of tech and entrepreneurship community building strategies**
- 5) **lack of a coordinated, focused strategy to train and retain home grown talent and attract more women, Indigenous people and immigrants.**

Solution:

Be the **“front door”** for companies and entrepreneurs’ to access a **“one stop shop”** that will drive focused, coordinated development of a strong community ecosystem.

- 1) Host Roundtable opportunities with Government, VIP guests, and experts from the Financial/Venture Capital, Legal, Export/Import, IP, and other related sectors.
- 2) Complete a detailed survey to find out the Tech Stacks of our local companies to facilitate more targeted advanced education training and workshops
- 3) Coordinate industry related Job Board, coordinate access to recruiting agencies, facilitate representation at industry job fairs and conferences
- 4) Collaborate with other key stakeholders to attract industry conferences and notable speakers
- 5) Work with stakeholders to facilitate job shadowing, co-ops, internships and diversification
- 6) Host community building social events that would include product showcasing and pitching events which also supports talent retention and inclusion of diverse talent

Method:

MTEC will coordinate closely with the Mid Island Business Initiative (MIBI), MakerSpace, and other key stakeholders listed below.



MIBI is a partnership between: 1) Vancouver Island University 2) Nanaimo Port Authority 3) Nanaimo Airport Authority 4) Coastal Community Credit Union 5) Harmac Pacific 6) MNP 7) Harris Auto Group 8) Inuktun 9) Ramsay Lampman Rodes 10) Moss Financial Group 11) Kristo Zorkin Group 12) Integral Wealth 13) Island West Coast Developments 14) Heli Jet 15) Array Studios 16) Nanaimo Organic Waste 17) Seaspan Ferries- with the mandate of attracting new companies and corporate satellite offices to the Mid Island region.

MakerSpace is a membership supported, diverse, shared incubator and creative space that features such interests as Robotics, 3D Printing, Coding, Electronics, Engineering, Woodworking and Metalworking.

MIBI – recruitment of new companies and corporate satellite offices to the mid island region and helps facilitate those migrations.

MTEC – supports the long term sustainability, growth, talent recruitment and retention, training, connectivity, and vibrancy of the ecosystem. (Connections will also be established with the Cascadia Innovation Corridor and the Digital SuperCluster to look for opportunities)

MakerSpace - provides shared incubation space, equipment, mentoring and training for inventors and tinkerers; delivers Science Technology Engineering and Math (STEM) training to children sparking interest in future technology careers; partners with **Canada Learning Code**. ([Talent development](#))

Greater Nanaimo Chamber of Commerce – Promotes business in greater Nanaimo and brings the concerns of the business community to all levels of government through advocacy, policy proposals, and lobbying. Also a collaborative partner for speakers, roundtables, and events of shared interest.

Nanaimo Aboriginal Centre - Focuses on education, culture and family. Through collaboration on education opportunities, skills training, and events, MTEC will actively support reconciliation efforts, and nurture inclusivity and diversity in the tech and entrepreneurship ecosystem. ([Talent development](#))

School District 68 – delivers the **Career Pathways' INSPIRE** program by **Career Cruising with a tech specific stream** giving high school students opportunities to find their career passions and interests by connecting directly with employers for real world experience and mentoring. ([Talent development](#))

Vancouver Island University – opportunities for VIU Interns to participate in the development of MTEC and for student participation in events that will connect them to opportunities throughout the ecosystem. Collaboration between MTEC and VIU will be ongoing as VIU looks for ways to increase the scope and capacity of its Computer Science, Engineering and ITAS Departments. ([Talent development](#))

Innovation Island – delivery of the **BC Venture Acceleration Program**, a structured venture development program that helps early-stage entrepreneurs in the central and northern island region grow their companies.

Planning Design Development Nanaimo – long established Board of volunteer experts focused on the revitalization of downtown Nanaimo and other projects that promote vibrancy and sustainability. PDDN will devote time and human resources to help develop the downtown Nanaimo ecosystem that will attract technology companies and entrepreneurs; will develop GIS Asset Mapping in collaboration with Major Project students from VIU's ITAS Department and the City ([Talent development](#))

Vancouver Island Regional Library – VIRL will provide creative event and training space. Also offer an inviting and supportive area for Home Based Business and Laptop Warriors coming out of the isolation of basements and garages to gather, build community, support each other, and become established in the ecosystem to grow their companies. ([Talent development](#))

Goals Year One:

- 1) Research and Develop the “**Hitchhikers Guide to Technology and Entrepreneurship in the Nanaimo/Mid Island Region**”. The Hitchhikers Guide will be a comprehensive guide to all resources, infrastructure and support agencies for Technology and Entrepreneurship in the Mid Island. (Intern Support)

HITCHHIKERS GUIDE – Will be a living document evolving with sector needs and changes. It will be housed on the MIBI website and available in hard copy in the MTEC office. Categories that will be populated with local, regional and provincial resources will include:

Anchor Tech Companies	Finding Capital
Incubators and Accelerators	Community Volunteer Organizations
Co Working Spaces	Supportive Government Funded Agencies
Indigenous Supports	Vancouver Island University Resources
Coding Education	Development/Design & Marketing Resources
Finding a Job / Finding Talent	Start-up and Laptop Warrior Hangouts
Hosting Services	Events and Conferences
Legal Resources	Meetups
Financial Resources	Immigrant and Newcomer Supports

1st Year Goals continued:

- 2) Survey Tech and Advanced Manufacturing companies to establish baseline economic indicator data (Intern Support)
- 3) Identify Training needs and develop an Inclusive Tech Training Strategy (MIBI Support)
- 4) Facilitate Sector Community Building Events (MIBI Support)
- 5) Solidify Government, Industry Service Provider, and Stakeholder Relationships
- 6) Create a dynamic and ongoing Social Media Campaign (Intern Support)

TALENT RECRUITMENT SUPPORT

- **Representation at Student and Industry Job Fairs**
- **Representation at Industry Conferences and Roundtables**
- **Find or Create opportunities to recruit Indigenous talent**
- **Quality Job Board & Job Posting Exposure**
- **Current Human Resource Practice and Compensation Information (Radford / Fosster)**
- **Meeting with newcomers, relocaters and potential relocaters to promote our region, our sectors and member companies**
- **Lure packages including website links and video to share with candidates from other locations**
- **Promoting our local story to writers, reporters and media outlets for maximum exposure**

TRAINING AND PROFESSIONAL DEVELOPMENT OPPORTUNITIES

Targeted to industry, start-ups and emerging entrepreneurs and would be delivered in collaboration with; existing local organizations in areas of their expertise, or invited experts, and would include:

- Data Science – Big Data – Data Analytics – What is it and how can it help my business?
- The Power of Blockchain, understanding Blockchain, transition to using Blockchain
- Virtual Reality applications – understanding Augmented Reality – Office of the future?
- Artificial Intelligence – A basic understanding, current applications, what's next?
- Bridging the dichotomy between technology and humanity to improve our business.
- Scaling your operation
- Social Marketing Platforms
- Personal and Corporate Reputation – Identity – Values – Authenticity
- Succession Planning
- Attracting Talent and Diversity in the Workplace
- Corporate Social Responsibility
- Speaker and Panel Series
- Supply Chains
- The Art of Curating – Information, Content, Merchandise, Online presence
- Looking after the Customer – Customer Experience
- Leadership vs. Management
- Project Management for Beginners
- Coaching and Mentoring
- Search Engine Optimization

Benefits to Industry Sectors and the Regional Ecosystem:

- Promote, Increase the Visibility and Showcase Local Companies and Product Launches
- Networking and community building in a rich inclusive and diverse ecosystem
- Prospecting, recruiting and retaining new and diverse talent for the Region
- Hitchhikers Guide to Technology and Entrepreneurship in the Nanaimo Region
- Roundtables (with Government, Industry, and Experts)
- Leverage opportunities offered through the Cascadia Innovation Corridor and the Digital Supercluster
- Training and Professional Development
- Exposure to Venture Capital Firms and other Financing options
- Media Exposure
- Marketing Opportunities
- Market/Sector News Updates and Trends (Local- National – Global)
- Showcase Various Sector Opportunities
- **Access** to information and experts in: Immigration, Intellectual Property/Trademark, Branding, Legal Issues, Financial Blueprinting, Importing/Exporting, Trade & Investment, and Marketing
- **Access** to resources that showcase and promote our regional lifestyle, local diversity, and our vibrant industry ecosystem. These would include Regional Economic Data/Indicators, Videos and Lure Packages
- **Students:** rich environment for students to have opportunities to connect with industry for Job Shadowing, Internships, Co-op positions; participate in training and professional development opportunities, opportunities to develop and deliver workshops in areas of learned expertise
- Other ways to build community and add social richness would be offered such as: Reading Circles, Pitch Nights, Pecha Kucha, Product Launches, Start-up Nanaimo, Nights for sharing disasters (known globally as F__k Up Nights), unConferences, Giving Back to Community Events.

Resources may include but are not limited to:

- BC Technologies Industries Association
- National Research Council
- Western Economic Diversification Canada
- MakerSpace
- Angel Forum
- Build In Canada Innovation Program
- Manufacturing Association of Vancouver Island
- Nanaimo Aboriginal Centre
- Aboriginal Tourism Association of BC
- Naut sa mawt Tribal Council
- Petroglyph Development Group
- Tourism Vancouver Island
- Canadian Association of Family Enterprise
- Greater Nanaimo Chamber of Commerce
- Venture Acceleration Program
- V I Regional Library
- Community Futures
- Start Up Canada/Nanaimo
- Vancouver Island Film Commissions
- Vancouver Island Public Relations and Communications
- Vancouver Island Financial Advisors
- Island Farmers Alliance
- Islands Wine Growers Association
- Island Artisans Association
- VIATEC, VICEDA, ICET, VIEA
- Digi BC
- Trade and Invest BC
- Creative BC
- Founders Institute
- Sustainable Development Technology Canada
- Industry Canada
- Small Business BC
- Export Development Canada
- GreenTech Exchange
- Mentorship BC
- National Research Council
- Innovate BC
- BC Tech Summit
- BC Tech Co-op Grants
- Industry and Innovation Group BC

Concluding remarks by Dr. David Witty, Ph.D., MRAIC, FCIP, RPP : The tech sector is composed of a very mobile population that is seeking quality work environments and experience as well as a high quality of life. There is ample evidence to confirm that the 'creative class' including the tech sector is locating in communities where built environment, cultural, economic, environmental and social considerations address the tech sector employee's needs. Quite simply, tech sector workers are 'fussy' and discerning. They choose where they will live (and work) carefully. That mobility and willingness to move to preferred places that are attractive from a quality of life perspective are important factors in determining where to develop a tech hub and employment focus.

Vancouver Mid-Island, particularly Nanaimo, provides an ideal location to focus tech supports and investment. The Chamber of Commerce initiated Successful Cities in 2010 to explore how the links between built environment, cultural, economic, environmental and social well-being affected Nanaimo's long term health as an attractive city for emerging companies. That work led to the creation of *Inspire Nanaimo*, a partnership between the Chamber, City and Vancouver Island University. *Inspire Nanaimo* identified that the tech sector should be a 'target' economic engine because Nanaimo has a high quality of life and is a very attractive location for the mobile tech sector workforce. Quite simply, the tech sector workforce is different: it likes funky, open office spaces, biking to work opportunities, easily accessible outdoor recreation opportunities, cultural experiences, interesting social places and spaces, a laid back atmosphere and affordable housing. Nanaimo has all of that and more that provides an appealing destination for the tech sector workforce and those who invest in it.

Insurance Policies

Prior to the commencement of the Services MIBI must provide to the City, a certificate(s) of insurance or other evidence, which satisfies the City that the required insurance has been acquired and is in force.

A. General Requirements

All required insurance will be endorsed to provide the City with thirty (30) days advance written notice of cancellation or material change restricting coverage. All of the MIBI's insurance policies will be primary and not require the sharing of any loss by the City or any insurer of the City.

B. Comprehensive General Liability

Comprehensive General Liability Insurance in an amount not less than two million dollars (\$2,000,000.00) all-inclusive per occurrence, against damage to property on an all-risk occurrence basis. The insurance will include cross liability and severability of interests such that the coverage shall apply in the same manner and to the same extent as though a separate policy had been issued to each insured. The insurance will include, but not be limited to: premises and operators liability, broad form products and completed operations, owners and consultants protective liability, blanket contractual, employees as additional insureds, broad form property damage, non-owned automobile, contingent employers liability and broad form loss of use and personal injury, and the City will be added as an additional insured.

C. Motor Vehicle Insurance

Motor Vehicle Insurance, including Bodily Injury and/or Death and Property Damage in an amount no less than two million dollars (\$2,000,000.00) all-inclusive per accident with the Insurance Corporation of British Columbia on any licensed motor vehicles of any kind to be used to carry out the work.

D. Waiver of Subrogation

The policy will contain a waiver of subrogation hereby waiving all rights of recourse against the City for loss or damage to the MIBI's property.

MIBI acknowledges that any requirements by the City as to the amount of coverage under any policy of insurance will not constitute a representation by the City that the amount required is adequate and MIBI acknowledges and agrees that the MIBI is solely responsible for obtaining and maintaining policies of insurance in adequate amounts. The insurance policy coverage limits shall not be construed as relieving MIBI from responsibility for any amounts which may exceed these limits, for which the MIBI may be legally liable.

Additional Insurance

The Contractor shall place and maintain, or cause any of its Sub-contractors to place and maintain, such other insurance or amendments to the foregoing policies as the City may reasonably direct.

Business Licence

MIBI agrees to obtain and maintain throughout the Term a valid City of Nanaimo business license or intercommunity licence. The cost of a business license is the sole responsibility of MIBI.

Other Licences and Permits

MIBI is solely responsible for all licensing and permits as required by law to provide the Services as they relate to this agreement.

WorkSafe BC

MIBI and any approved sub-contractors must be registered in good standing with WorkSafe BC, in which case WorkSafe BC coverage must be maintained for the duration of the Contract. MIBI agrees and shall:

Contract Number 2416



- (a) Provide at its own expense the necessary WorkSafe BC compensation coverage for all its employees and partners employed or engaged in the execution of the Services;
- (b) Remain current with all assessment reporting and payments due there under and shall comply in every respect with the requirement of the WorkSafe BC Act and Regulations; and
- (c) Be solely responsible for to ensure that all sub-contractors have proper WorkSafe BC coverage.

MIBI will ensure compliance with and conform to all health and safety laws, by-laws or regulations of the Province of British Columbia, including without limitation the Workers Compensation Act and Regulations pursuant thereto.

Freedom of Information and Protection of Privacy Act

MIBI acknowledges that the City is subject to the *Freedom of Information and Protection of Privacy Act* of British Columbia and agrees to any disclosure of information by the City required by law.

Dispute Resolution Procedures

In the event of any dispute between the parties arising out of or in connection with this Agreement, the following dispute resolution process will apply unless the parties otherwise agree in writing:

- (a) the parties must initially attempt to resolve the dispute through collaborative negotiation;
- (b) if the dispute is not resolved through collaborative negotiation within 15 Business Days of the dispute arising, the parties must then attempt to resolve the dispute through mediation under the rules of the British Columbia Mediator Roster Society; and
- (c) if the dispute is not resolved through mediation within 30 Business Days of the commencement of mediation, the dispute must be referred to and finally resolved by arbitration under the Arbitration Act.

Unless the parties otherwise agree in writing, an arbitration or mediation under section 12.1 will be held in Nanaimo, British Columbia.

Unenforceability

If any provision of this Agreement is invalid or unenforceable, it will be severed from the Agreement and will not affect the enforceability or validity of the remaining provisions of the Agreement.

Force Majeure

- (a) "Event of Force Majeure" means one of the following events:
 - (i) a natural disaster, fire, flood, storm, epidemic or power failure,
 - (ii) a war (declared and undeclared), insurrection or act of terrorism or piracy,
 - (iii) a strike (including illegal work stoppage or slowdown) or lockout, or
 - (iv) a freight embargo
 if the event prevents a party from performing the party's obligations in accordance with this Agreement and is beyond the reasonable control of that party; and
- (b) "Affected Party" means a party prevented from performing the party's obligations in accordance with this Agreement by an Event of Force Majeure.

An Affected Party must promptly notify the other party in writing upon the occurrence of the Event of Force Majeure and make all reasonable efforts to prevent, control or limit the effect of the Event of Force Majeure so as to resume compliance with the Affected Party's obligations under this Agreement as soon as possible.

Minimum Rate of Pay

The Collective Agreement between the City of Nanaimo and Canadian Union of Public Employees, Local 401, Article 31-Contract or Sub-Contracts says that:

Every contract made by the Employer for construction, re-modeling, repair, or, demolition of any municipal works or for providing any municipal service or function shall be subject to the following condition:

“Minimum rate of pay for work performed under this Contract or under Sub-contract shall be classified in the current Agreement between the City of Nanaimo and Canadian Union of Public Employees, Local 401.”

Failing to come to a mutual agreement may be cause for the contract to be cancelled.

Position Title	Rate Per Hour
Economic Development Officer, Level 14	\$43.39, as of 2016

Manufacturing Technology Entrepreneurship Collaboration (MTEC)

Terms of Reference

Date: 2 April 2019

The Manufacturing Technology Entrepreneurship Collaboration (MTEC) is a committee of the Mid Island Business Initiative (MIBI) formed to develop solutions to the challenges prospective employers are describing to MIBI as resistance points to their moving to our region or expanding their existing presence. With its private business representation and volunteer involvement, MTEC is uniquely positioned to engage with community partners in developing long-term solutions that leverage existing infrastructure and build momentum throughout our community.

1. Mandate

MTEC is a working committee that reports regularly to the MIBI Board through the Committee Chair and the MIBI Board Liaison to develop solutions to the challenges prospective employers are describing to MIBI as resistance points to their moving to our region or expanding their existing presence.

MTEC will prioritize collaboration with community partners and leveraging existing infrastructure to engage our community in economic development.

MTEC will work on both short-term and long-term strategies to position our region as a leader in supporting current and future needs of private business.

MTEC's will initially focus on developing strategies to address the following challenges:

- Connected & informed
- Local talent pool:
- Community building for new & existing businesses:
- Access to capital:

MTEC's areas of priority can be modified to suit current needs with approval from MIBI Board.

2. Committee Structure

MTEC will make every reasonable effort to maintain a committee within the following restrictions:

- i. MTEC shall be comprised of:

Position

- 1 Chair person
- 1 MIBI Board liaison
- 1 MIBI Chief Executive Officer
- Volunteer members
- Up to a maximum of 10 members, inclusive of the Chairperson, MIBI Board liaison and MIBI Executive director;

Initial Member

Rebecca Kirk
Darren Moss
John Hankins
David Witty, Chris Beaton

- ii. Sub Committees may be created at the discretion of MTEC in support of on-going initiatives in addition to the committee membership limits set out in 2.i.

3. Roles and Responsibilities



As part of their mandate and on-going activities, MTEC will:

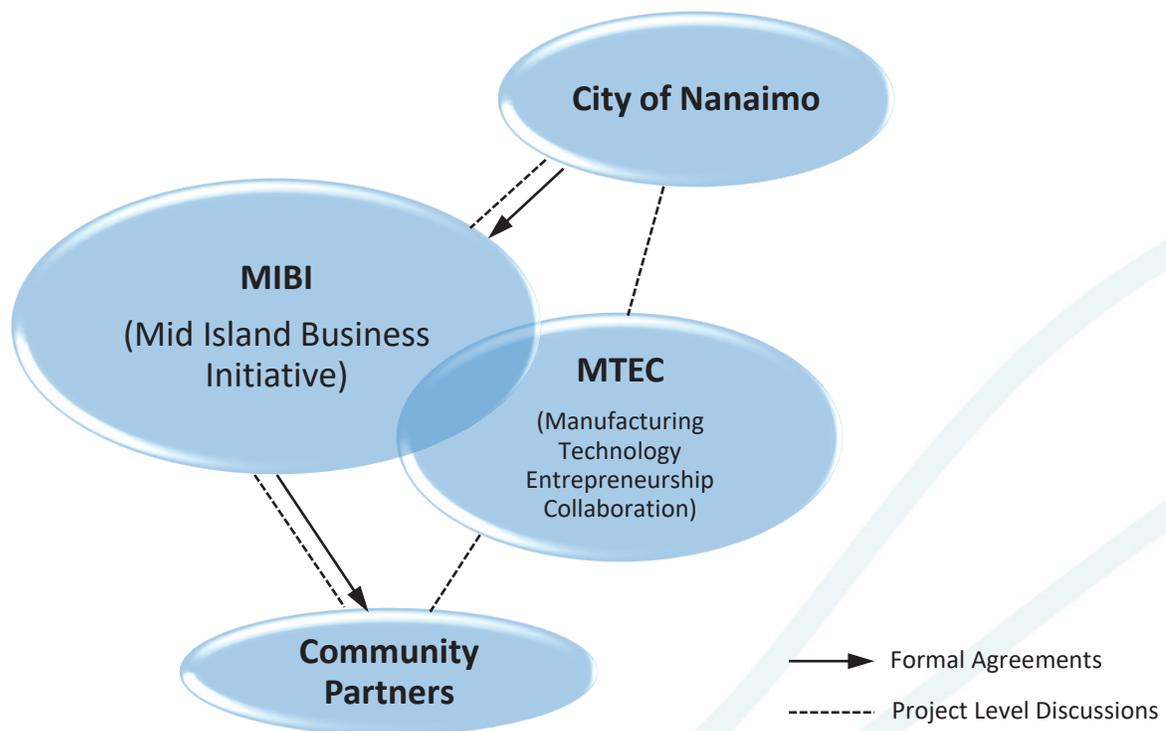
- i. Maintain effective communication with the MIBI Board;
- ii. Manage, prioritize and coordinate committee activities in support of the committee mandate;
- iii. Manage & recruit committee members, including succession planning;
- iv. Prepare and maintain records of all MTEC Committee meetings. All records will be available for review by request through the MIBI Board;
- v. Prepare and maintain high level strategy plans for initiatives and strategies that map goals back to MTEC's core mandate;
- vi. Manage funds allocated to MTEC by the MIBI Board;
- vii. Work with the MIBI Board to implement action items and strategies adopted by the MIBI Board;
- viii. Review and update MTEC Terms of Reference for MIBI Board review and approval as required.

In support of the MTEC's activities, the MIBI Board will:

- ix. Maintain effective communication with MTEC;
- x. Work with MTEC to implement action items and strategies adopted by the MIBI Board;
- xi. Update MTEC on any new initiatives or mandate changes adopted by the MIBI Board.

4. Communication

In support of MTEC's mandate and on-going activities, the committee will communicate directly with external parties however formal agreements will remain with MIBI as outlined below:



- i. MTEC's external communication structure is generally as follows:
 - Committee Chair:
 - Coordination of external communication;
 - Special presentations to the MIBI Board;
 - Point of Contact for committee.
 - MIBI Board Liaison:
 - Maintain effective two way communications between MTEC and the MIBI Board;
 - Provide monthly reports to the MIBI Board of ongoing MTEC activities.
 - Committee Members:
 - As required by committee activities and approved by the Committee Chair.
- ii. For any external meeting or discussion that is intended to address MTEC funding, programming, partnerships or other structural level discussions, the following members are to be advised of the meeting and have the opportunity to participate:
 - i. MTEC Chair;
 - ii. MIBI Executive director;
 - iii. MIBI Board liaison.

5. Budget and Fundraising:

MIBI will monitor and maintain control of all accounting for MTEC.

In support of MTEC's specific projects and initiatives, MTEC will:

- Prepare project level budgets for submission to MIBI Board for approval;
- Manage project level budgets;
- Provide regular budget reports to the MIBI Board;
- Work with MIBI on any fundraising or grant requests that are for the benefit of MTEC's projects or initiatives.

6. Paid Positions

MIBI may assign funds and resources to create paid positions in support of MTEC's mandate at the Board's sole discretion. The responsibilities, compensation and terms for paid positions will be captured in the agreement for each position.

7. Terms

MTEC will adhere to the following terms at all times:

- i. All membership terms to be rotating terms as determined by the MIBI Board with input from the MTEC;
- ii. All committee level decisions will be undertaken through a consensus approach
- iii. For all MTEC Committee decisions, Quorum will be defined as 50% of the current committee membership plus one;
- iv. MTEC will meet at least 8 times annually;
- v. Meeting participation via telephone or digital conferencing is acceptable;
- vi. Voting via e-mail is acceptable;

Collaborator In Person Meetings	Affiliation	Community Building	Information	Talent Development	Financial Resources	Status
Rosemary Bonanno	Vancouver Island Regional Library -VIRL- CEO	✓	✓			Ongoing
Anthony Martin	VIRL- Branch Manager	✓	✓			Ongoing
Jonathon Bigelow	VIRL- Tech Coordinator	✓	✓			Ongoing
Jason Kuffler	VIRL- Marketing	✓	✓			Ongoing
Ken Hammer	Start-up Nanaimo Reading Circles	✓	✓	✓		Ongoing
Sarah Bromley	Ladies/Canada Learning Code	✓	✓	✓		Ongoing
Phil Stiller	Ocean EXP- Board Intraworks IT Talent Development Team	✓		✓		Ongoing
Gara Pruesse	VIU-Chair, Comp Science	✓	✓	✓		Ongoing
Jeff Keen (not in person)	Okanagan Innovation Centre Co-Founder		✓			Ongoing
Drew Vincent	Okanagan Accelerator Invest Kelowna		✓			Ongoing
Amrit Manhas	Economic Development City of Nanaimo	✓	✓			Ongoing
David Witty	VP & Provost VIU-retired TN Advisory Team TN Talent Development Team	✓		✓		Unofficially Ongoing
Derek Beeston	Career & Technical Dept. School Dist. 68 TN Talent Development Team	✓		✓		Ongoing
Steve Holmberg	SD 68 Tech Coordinator	✓				As needed
Tracey Unger	Cloudhead Games	✓				Ongoing

Collaborator In Person Meetings	Affiliation	Community Building	Information	Talent Development	Financial Resources	Status
Hussein Hallak	Launch Academy Blockchain Training		✓	✓		Ongoing
Brenda Bailey	DIGI BC - CEO		✓	✓	✓	Ongoing
Jean-Guy Niquet	Eastside Games - LDRLY	✓	✓			Ongoing
Jolynn Green	Community Futures - CEO	✓	✓	✓	✓	Ongoing
Clayton Bromley	MakeTime for Kids – Co-Founder	✓	✓	✓		Ongoing
Paris Gaudet	Digital Supercluster ACETECH - CEO		✓			Ongoing
Evelyn Boegh	Mosaic IT - ED	✓	✓			Ongoing
Marc Gervais	Mosaic IT TN Talent Development Team	✓	✓	✓		Ongoing
Line Robert	Island Coastal Trust - CEO		✓		✓	Ongoing
Kim Smythe	Chamber of Commerce-CEO	✓	✓	✓		Ongoing
Dominique Legault	Blockchain Intelligence Group	✓	✓			Ongoing
Chuck Loewen	VI Conference Centre - CEO	✓	✓			Ongoing
Karen Bannister	Tourism Nanaimo	✓	✓			Ongoing
Brian Dick	VIU Chair - Engineering	✓	✓			As needed
Vy Luu	Real Estate Webmasters TN Talent Development Team	✓	✓	✓		Ongoing
Kosta Arvanitis	WBRecreation – Founder Microsoft Senior Developer TN Advisory Team	✓	✓	✓		Ongoing
Victor Goodman	Ec Dev Officer - Lantzville					

Collaborator In Person Meetings	Affiliation	Community Building	Information	Talent Development	Financial Resources	Status
Min. Bruce Ralston	MLA- Ministry of Jobs Trade & Technology (JTT)		✓	✓	✓	Ongoing
Nathan Nankivell	Executive Director – Planning and Innovation- JTT Ministry		✓	✓	✓	Ongoing
Greg Goodwin	Executive Director – Design Coordination & Outreach JTT Min		✓	✓	✓	Ongoing
Trudy Rotgans	Executive Director-Post Secondary Programs – Ministry of Advanced Education Skills & Training (AEST)		✓	✓	✓	Ongoing
Dean Goodman	Executive Director – AEST – Post Secondary System Policy and Liaison Branch		✓	✓	✓	Ongoing
Susan Burns	Director – AEST –Technology Arts & Sciences Education		✓	✓	✓	Ongoing
Sheila Malcolmson	MLA – Nanaimo Region		✓		✓	Ongoing
Chris Beaton	Nanaimo Aboriginal Centre – ED & TN Advisory Team	✓	✓	✓		Ongoing
Irene Dorsman	Angel Forum - CEO		✓		✓	Ongoing
Emmanuelle Barras	Western Diversification – Program Director		✓		✓	Ongoing
Graham White	VIU – Information Technology & Applied Systems – Chair TN Talent Development Team	✓	✓	✓		Ongoing
Shawn Adrian	Input Logic - Co Founder	✓	✓			Ongoing
Gavin Vickery	Input Logic - Co Founder	✓	✓			Ongoing
Adelaide Russell	Input CoWork - Manager	✓	✓			Ongoing
Angie Barnard	The Network Hub - Owner	✓	✓			Ongoing
Cory Landels	CL Creative & Communications - Founder	✓				Ongoing

Collaborator In Person Meetings	Affiliation	Community Building	Information	Talent Development	Financial Resources	Status
Remy Hall	Lighthouse Labs – Western Canada Director TN Talent Development Team		✓	✓		Ongoing
David Marsh	Advanced Business Match Director of Sales	✓	✓			Ongoing
Maynard Harry	Advanced Business Match Co-Founder	✓	✓			Ongoing
Chris Cathers	Indigenous Consulting & Training	✓	✓	✓		Ongoing
Lauren Kelly	First Nations Technology Centre A/Director, Skills Development		✓	✓	✓	Ongoing
Jennifer Fowler	VI Multicultural Society - CEO	✓	✓	✓		Ongoing
Kathleen Kiely	Canadian Federation of Independent Business – District Manager	✓	✓			Ongoing
Janine Joyce	Scotia Bank (SB) – Branch Manager	✓	✓		✓	Ongoing
Cody Smith	SB- Small Business Manager	✓	✓		✓	Ongoing
Erin Walsh	SB- Small Business Manager	✓	✓		✓	Ongoing
Colby Scott	RBC – Business Account Manager	✓	✓		✓	Ongoing
Jordan Van Thiel	CIBC – Associate Commercial Banking	✓	✓		✓	Ongoing
Yuri Ahuja	ImmaCan – Immigration Law	✓	✓			Ongoing
Stephen Burri	Island IP Law – Patents, Trademarks, IP Protection	✓	✓			Ongoing
Colin Dobel	Inuktun Services – General Manager (now retired)	✓	✓			Ongoing

Collaborator In Person Meetings	Affiliation	Community Building	Information	Talent Development	Financial Resources	Status
Tod Gilbert	VMAC - President	✓	✓			Ongoing
Mike Hooper	Nanaimo Airport – President & CEO	✓	✓			Ongoing
Keith Granbois	Nanaimo Airport – CFO & Security	✓	✓			Ongoing
Mike Davidson	Nanaimo Port Authority - COO	✓	✓		✓	Ongoing
Walter Anderson	Nanaimo Port Authority - Tech	✓	✓			Ongoing
Kari Gordon	Creative Destruction Lab- Director of Programming Ecosystem & Export Development – Director, Calgary Economic Development Startup Calgary – Calgary Economic Development – Executive Director		✓			Ongoing
Sonja Bronstein	Nucleus Accelerator, now Platform Calgary, Director of Operations Assembly CoWork Tech & Innovation Hub, Dir. of Ops				✓	Ongoing
Laurie Bienert	Young Professionals Nanaimo (YPN) Vice- President	✓	✓			Ongoing
Sarah Dion	YPN – Professional Development Director	✓	✓			Ongoing
John Tait	Work BC – Job Developer – Community Development	✓	✓	✓		Ongoing
Courtenay Ndiaye	Business Development Bank Senior Account Manager –Innovative Commercial Finance	✓	✓		✓	Ongoing
Andrea Rosato-Taylor	Publisher Ladysmith Chronicle – Introduction to Ladysmith Ecosystem	✓	✓			Ongoing
Sean McConkey	Camosun College – Manager of Camosun Technology Access Centre (CTAC)		✓			Ongoing
Jamie VanDenBosshe	CTAC – Associate Director		✓			Ongoing
Dan Gunn	Victoria Innovation Advanced Technology & Entrepreneurship Council (VIATEC) - CEO		✓			Ongoing

Collaborator In Person Meetings	Affiliation	Community Building	Information	Talent Development	Financial Resources	Status
Matthew Dunstan	City of Nanaimo – Manager of IT Application Services	✓	✓			Ongoing
Farbod Haggi	ClinicBox – Boston, Massachusetts - Founder Talent Development Team	✓		✓		Ongoing
Elodie Bouthors	Globethik – Paris, France – Co Founder	✓				Ongoing
Jean-Guy Niquet	Eastside & LDRLY Games- Operations Lead	✓	✓	✓		Ongoing
Inja Ma	Seamor Marine - CEO	✓	✓	✓		Ongoing
Robin Li	Seamor Marine - COO	✓	✓	✓		Ongoing
Koren Bear	VIU – Professional Development & Training – Program Coordinator	✓	✓	✓		Ongoing
Planning Design Development Nanaimo (PDDN)	Downtown Cluster Development	✓	✓			Ongoing
Mark Mudryk	VIU GIS Student – GIS Mapping Downtown Entrepreneurial Cluster (PDDN)	✓	✓			Ongoing
MakerSpace Nanaimo	Community Workshop – Technology, Engineering, 3D Printing, Electronics, Robotics	✓	✓	✓		Ongoing
Vancouver Island & Coastal Economic Developers Association (VICEDA)	Connection to other communities on Vancouver Island. Opportunity to learn about initiatives, challenges, resources, success stories etc.	✓				Ongoing
Vancouver Island Economic Alliance (VIEA)	Provides opportunities for communities, First Nations, businesses, and other key stakeholders to collaborate on broad-based economic development programs.		✓			Ongoing

Community Building: Open to participating in Roundtables, Meetups, Lunch & Learns, Industry Events, Surveys building out the Ecosystem

Information: A supportive inventory of resources for local entrepreneurs and start-ups to access critical information – also used for attraction

Talent Dev. : Provide training programs, workshops, mentoring, partner with TN Talent Dev Team to create training programs to fill gaps

Financial Resources: Venture Capital, Angel Investors, Loans, Grants, Scholarships, Bursaries, Training Funding etc.

Google My Maps: Entrepreneurial and Resident Asset Map of Nanaimo

Link to map: <https://www.google.com/maps/d/viewer?mid=1MCerR-skmiW8A696v9LPYimAOdrFEE8P&ll=49.17644256560284%2C-124.00101526080653&z=10>

MAP STATISTICS:

The map currently has 652 locations, 10 theme layers, and 39 groupings within those layers.

Location amounts:

Business Services		Financial Services	
Group	# of Locations	Group	# of Locations
Marketing	42	Accounting Services	36
Print Shops	21	Banks and Credit Unions	29
Shipping and Couriers	12	Development Finance institutions	2
Immigrant Services	9	Total:	67
Education & Training	5		
Coworking Spaces	4	Graphic Design	
Indigenous Services	4	Group	# of Locations
Accelerators	2	Graphic Design	18
Total:	99	Website Design	28
		Total:	46



Networking/Public Spaces

Group	# of Locations
Libraries	5
Event Space	4
Makerspace	1
Total:	10

Health

Group	# of Locations
Pharmacies	33
General Medical Clinics	11
Medical Labs	8
Total:	52

Personal Services

Group	# of Locations
Childcare	65
Hair Salons	46
Dry Cleaning	5
Laundromats	5
Total:	121

Transportation

Group	# of Locations
Car Rentals	7
Ferries	7
Seaplanes	5
Helijet	1
Total:	20

Fitness & Outdoor

Group	# of Locations
Fitness Gyms	18
Kayak Rentals	3
Boat Rentals	2
Yoga	23
Total:	46

Food & Beverage

Group	# of Locations
Coffee Shops	38
Pubs	22
Downtown Restaurants	20
Bars	5
Nightclubs	5
Total:	90

Realty/Housing/Accommodation

Group	# of Locations
Residential Realtors	73
Hotels & Motels	22
Commercial Realtors	6
Total:	101

Missing Layers:

The map does not have all restaurants in Nanaimo, only downtown restaurants. Bed and breakfasts are not included in the Hotels and Motels group. A group for Dental Clinics is also not on the map.

Accuracy of Information:

All information is pulled off google searches, the information is only as accurate as March 2018 business information that was present on googles directory.

Introduction

Nanaimo is poised for growth in the technology sector, and with guidance and support from our community, is ready to take off as a next-to-Vancouver hub for startups, satellite offices and remote tech workers. In order to build and grow this community, a single point of reference which can serve as a guide to the technology community is needed. This guide would connect new or prospective members of Nanaimo's tech industry with resources, talent, capital, events, and more. MIBI has contracted Array to provide a foundational plan for this guide, and we have included our findings and suggested structure in this report.

Summary of Recommendations

Rather than a print guide or a standard static website, a fully dynamic website that offers the most up to date information is the best solution for this digitally engaged community. The tech community moves quickly, and expects interactive and engaging digital platforms for sharing and connecting within their chosen community. The website needs to be constantly fresh, always showing the current state of business, support services, and community events and organizations. Due to this, data feeds and user submission will be an important part of the site. Additionally, we strongly recommend a part time admin support role dedicated exclusively to updating site content with upcoming events and community news, encouraging organizations to get listed on the site, and ongoing social media broadcasting on behalf of Tech Nanaimo. The aim is that this would snowball and encourage community members to self-engage and post on the site, so this role could be slowly reduced in time and cost, while maintaining critical mass & momentum. However, no one will engage with an empty site, so initially a person will need to do the legwork to ensure the site is frequently updated, current, and a truly helpful resource.



Website Structure

Building on the community research and work completed by Tech Nanaimo and MIBI, and extending upon the five pillars of:

- Access to Capital
- Talent Recruitment & Development
- Community Building
- Access to Information & Resources
- Awareness of Nanaimo & Region
- Array recommends the following structure to begin building a digital hub for economic development of our tech sector. This website structure would ask visitors to self identify as:
 - An Individual Tech Worker
 - A Business Operator

A Venture Capital Funder or Support Organization

The visitor would then be recommended web content that supports the typical needs / pains of that audience.

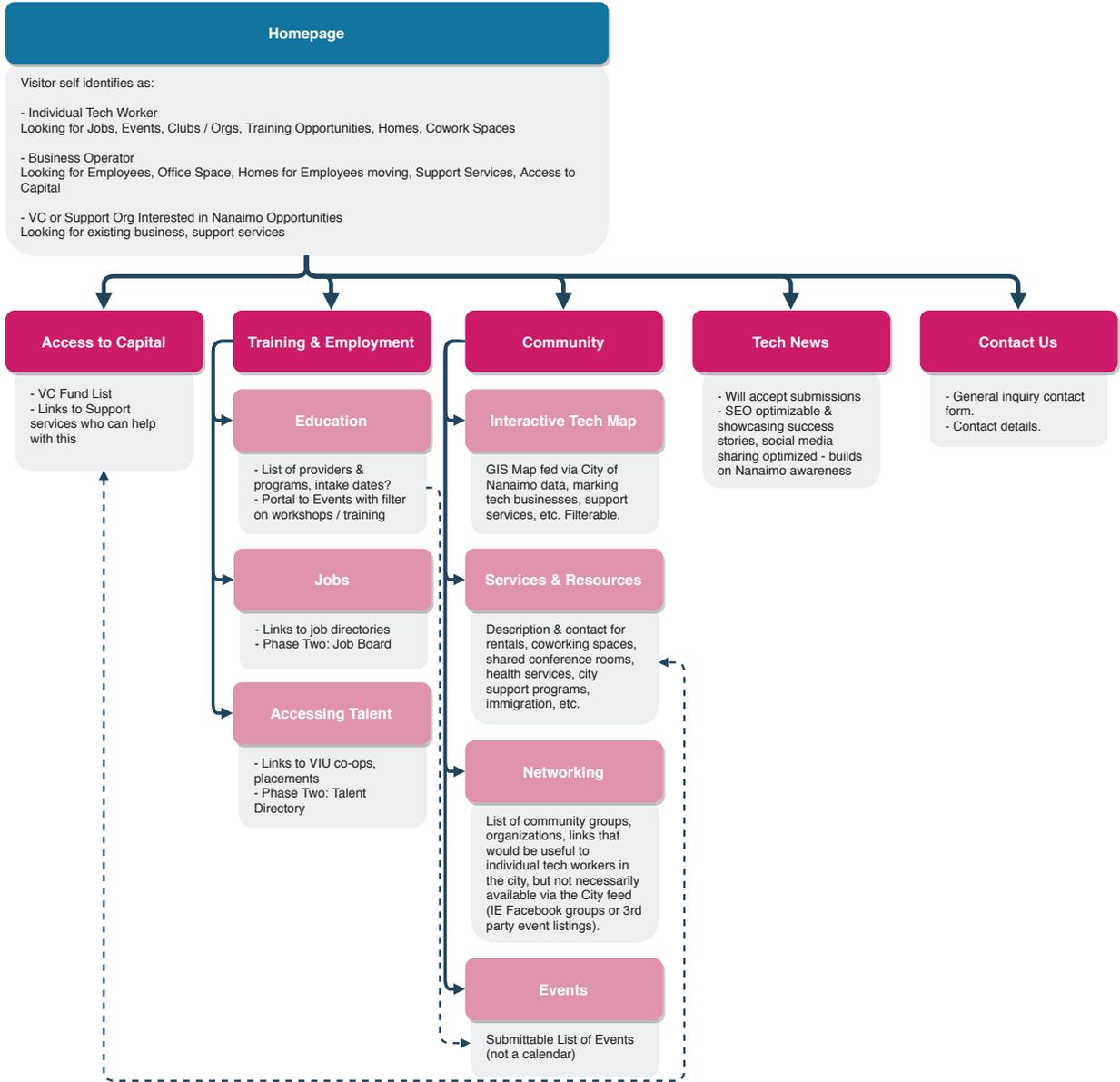
For example, tech workers are usually looking for jobs, community, training, and living / work spaces, while business operators are more likely looking for Employees or access to capital.

The website would provide a one stop shop for tech events, resources, and a full business / service database, with data fed by the City of Nanaimo's tech & GIS teams. The recommended structure includes initial phase recommendations for a 'minimum viable product' to achieve the primary goals identified by MIBI and Tech Nanaimo. We have also included some "Phase Two" recommendations - features that are not critical to the success of this web guide, but would be excellent & valuable additions, should Tech Nanaimo or another city organization receive second round funding to do so.



Information Architecture

Below, please see the structure suggested for the new website.



Implementation Timeline

The entire web process generally takes about six months, start to finish, on a project of this size. Should the city decide to move forward with this project, it would kick off as follows:

MONTH ONE

Week One	Meeting #1 - Discovery Meeting, Review Project Schedule & Completion of Briefing Documents
Week Two - Three	Needs Analysis, Site Content Analysis & Inventory Gathering: Logo, Brand Standards, Existing Copy & Photography Information Architecture & Keyword Analysis Revised & Approved Tech Nanaimo staff starts gathering data for events, support services, other site

MONTH TWO

Week Four	Site Overall Concept & Home Page Design Begins
Week Five - Six	Meeting #2 - Home Page Concept for Review

MONTH THREE

Month Eight	Inside Page Design Begins
Week Nine - Ten	Inside Page Reviewing, Proofing, Revisions & Approval

MONTH FOUR

Week Twelve	Programming Begins - coordination with city for feeds
Week Fifteen	Programmed Website Sent for Review

MONTH FIVE

Week Sixteen	Testing & Revisions
Week Nineteen - Twenty	Staff CMS Training & Content Insertion.

MONTH SIX

Week Twenty	Final Testing & Content Revisions, Final Approval
Week Twenty Two	Full Website Launch (pending final approval & content)

POST LAUNCH

Three Months Post Launch	Post Completion Review & Service Agreement Plan with Negotiation
First 6 - 12 Months Live	Tech Nanaimo staff member ensures ongoing updates to events, organizations, news and other critical dynamic data. This is crucial for a minimum of 6 - 12 months, with the aim that organizations and events would begin to post and update this data themselves as the site becomes recognized as a community tool.



Suggested Budget - Phase One

TOTAL INVESTMENT SUGGESTED: \$19,500 - 24,500

Design & Copywriting

- Visual concepts, up to two rounds of revisions, completion of page by page design
- Up to 8 hours of copy refinement of headlines & positioning messages, including keyword integration and editing for consistent narrative tone.

Website Programming

- Core CMS Setup (WordPress)
- Design Slicing, Shell Programming, Responsive Development
- GIS Mapping System
- Site Search
- Events Calendar
- News / Blog, Media
- Service / Resource lists
- Online Customizable Forms
- Social Media Integration
- User / Role Setup

Testing, SEO, Go Live

- Compatibility & Accessibility
- SEO & Analytics Setup, Custom 404 Page
- Website "Go Live" Process (includes updating of DNS records, file & database transfer to preferred host, domain management, etc)
- SSL Security Certificate

Content Insertion, Training & Management

- Up to 2 Hours of CMS Training
- Content Insertion Support
- Project Management - Meetings, Ongoing Communication & Project Facilitation

Ongoing Fees:

Hosting	\$35.00 / month
Maintenance Plan	\$220.00 / month
Plugin Renewal Fees	TBD
Content Writing	\$110.00 / hour



Suggested Budget - Phase Two

TOTAL INVESTMENT SUGGESTED: \$10,500 - 14,500

Design & Copy Support

Website Programming

- Talent Directory with registration & user profiles
- Job Board with registration & company profiles

Keyword Analysis

We have attached a keyword analysis report to this document. The Keyword Analysis highlights key phrases being used in Google to search for information about the current tech scene in our region. This list provides great insight into what people are searching for, and the language they are using to try to find it. This information helps guide strategic choices for the website in terms of structure and terminology usage.

Capital & Funding Resources - Initial Findings

(A personal visit was held with most to establish relationships)

Source	StartUps	Early Stage	Scaling	Export Ready	Talent/ Training	Research & Dev.	Online Resources
Frontfundr – bridging between investors and early stage		✓					
Angel Forum – Venture Capital			✓	✓			
Western Diversification Canada		✓	✓	✓		✓	✓
Business Development Bank			✓	✓			✓
7 Gate Ventures			✓	✓			
Bank of Nova Scotia		✓	✓	✓			✓
Roynat Capital							
Royal Bank of Canada		✓	✓				✓
CIBC		✓	✓				
Bank of Montreal		✓	✓				✓
Canadian Small Business Financing Program- partner with charter banks		✓	✓				
Community Futures	✓						✓
KickStarter	✓					✓	
Indiegogo	✓					✓	
Futurepreneur	✓	✓					✓
League of Innovators	✓						✓
Work BC					✓		✓



Tech Stack Survey Results

Date: October 2019

Tech Sector	Backend Programming Language		Backend Programming Framework		Frontend Programming Language		Frontend Programming Framework		Build Tools		Package Management Tools		Database		Design Tools, Services, and Platforms		Source Control		
	Options	Responses	Options	Responses	Options	Responses	Options	Responses	Options	Responses	Options	Responses	Options	Responses	Options	Responses	Options	Responses	
Web Development	8	Php	11	Laravel (PH	8	Javascript	15	React	5	Jenkins	4	None	6	MySQL	13	Adobe Illus	7	Git	21
Other	4	Javascript	6	Rails	3	HTML/CSS	8	Vue	2	Git	3	NPM	4	Sqllite	4	Adobe Pho	7	Bitbucket	2
IT Management and Service	3	Node JS	5	Hapi	2	Java	3	Bootstrap	2	GULP	3	Yarn	2	MS SQL Ser	4	Sketch	2	Subversion	2
App Development	3	Java	4	.Net Core	2	Swift	2	Angular	1	Webpack	2	nuget	2	Postgress	3	Wordpress	4		
Education	2	Python	3	Spring	1	PHP	2	Laravel	1	Jira	2	Android SD	1	Oracle	3	Kopages	1		
Web Hosting	2	Typescript	3	Django	1	C#	2			Android SD	1	iOS SDK	1	Dynamo	2	XML	1		
Gaming	1	C#	3	Express	1	C++	2			iOS SDK	1	Invision	1	Redis	2	HTML/CSS	1		
Software as a Service	1	Ruby	2			Objective C	1			Rollup	1	Jira	1	MSP	1	Javascript	1		
Sales and Marketing	1	C++	1			Typescript	1			NPM	1	Git	1	Google Clo	1	Xcode	1		
Telecommunications	1					C	1			Typescript	1	PIP	1	neo4j	1	Microsoft	1		
										Haxe	1	Haxe	1	Casandra	1	Solidworks	1		
										VS	1	Docker	1	Tigergraph	1	Material	1		
														Quickbook	1	Blender	1		

Task Management		Project Management		Collaboration Tools		Communication Tools		Documentation Tools		Test software, tools and platforms		Hardware Platforms for Embedded Software		Tool chain for Embedded Software		Co-op skillset		Level of developers seeking		Number of developers to hire over next 2 years	
Options	Responses	Options	Responses	Options	Responses	Options	Responses	Options	Responses	Options	Responses	Options	Responses	Options	Responses	Options	Responses	Options	Responses	Options	Responses
Jira	5	Jira	6	Slack	7	Slack	15	Google Doc	5	None	2	None	10	None	11	Javascript	8	1-3 Years	7	1 to 3	8
Trello	4	Trello	4	Google Har	5	Skype	5	Office 365	4	Browsersta	2	Android	2			PHP	4	5-10 Years	11	3 to 10	5
Custom	3	Google She	2	Google Doc	5	MS Teams	3	Confluence	3	Manual	1	Printer	1			HTML/CSS	4	3-5 Years	9	10+	3
Clickup	1	Clickup	2	Trello	3	Hangouts	2	Wiki	3	Postman	1	Microsoft	1			React	3	10+ Years	4	Zero	2
MSP	1	Redmine	2	Confluence	3	Outlook	2	None	2	TestCafe	1	Apple	1			Networking	2				
Redmine	1	Gitlab	2	Zoom	1	Google Cha	1	Swagger	2	Garie	1	Other	1			Wordpress	3				
		Hangouts	1	Sharepoint	1	Whatsapp	1	Postman	1	Jmeter	1					Java	1				
		Confluence	1	MS Teams	1	Zoom	1	Gitlab	1	Funkify	1					C	1				
		Wunderlus	1	MS Outloo	1	Gitlab	1			Elastic sera	1					C++	1				
		Custom	1	MS Sharep	1					Jenkins	1					Photoshop	1				
				Gitlab	1					Travis	1					Typescript	1				
										Circle	1					NodeJS	1				
										HAPI	1					Swift	1				
										Zephyr	1										
										Nunit	1										
										Rspec	2										