INNOVATION150: LESSONS LEARNED ON NATIONAL PAN-ORGANIZATIONAL OUTREACH COLLABORATIONS

INNOVATION150: LESSONS LEARNED ON NATIONAL PAN-ORGANIZATIONAL OUTREACH COLLABORATIONS

Summary

Innovation150 was a national partnership that offered awe-inspiring educational experiences for youth, families, and communities across Canada in celebration of the nation's sesquicentennial in 2017. Made possible through support from the Department of Canadian Heritage's Canada 150 Fund and generous partners and sponsors, Innovation150 included two travelling science exhibitions, a mobile makerspace, innovation festivals, and a digital hub with crowdsourced innovation stories, contests, and classroom resources.

This highly successful outreach initiative was led by Perimeter Institute for Theoretical Physics, in collaboration with Actua, the Institute for Quantum Computing at the University of Waterloo, the Canadian Association of Science Centres and its members, and Ingenium – Canada's Museums of Science and Technology. Together with regional partners across Canada, these organizations created meaningful and enriching activities that fostered a culture of innovation and inspired the next generation of social and technological innovators.

This whitepaper shares the lessons that these partners learned in coming together and executing on this multifaceted outreach project. The observations and insights within are drawn from stakeholder interviews, as well as information shared during a symposium hosted at the 2017 Canadian Science Policy Conference with senior representatives from each partner organization.

Key Takeaways

- Pan-organizational partnerships can provide significantly greater reach and impact, but combining like-minded projects does not simply mean financial savings. To fully seize opportunities, partners require sufficient financial and administrative support and infrastructure.

- For partnerships to succeed over an extended duration, partners need to come together under a single shared vision, while also understanding and respecting each other's unique institutional priorities. This is only achieved through continually reinforced transparency, trust, and open communication.

- Engaging like-minded organizations, particularly at a local level, allows outreach initiatives to dramatically scale reach and impact, but requires the development of infrastructure and processes that enable effective vetting of potential collaborators based on alignment, a clear sense of the value proposition for all involved, and a simple means to engage.

- To ensure lasting impact for collaborative outreach initiatives, partners should strategically embed legacy components into every event, activity, or exhibition possible. This means building in activities that will have lasting impact for decades to come.

- For projects to succeed in delivering programming over vast geographical areas (in the case of Innovation150, in every province and territory in Canada), partners need to collaborate with regional organizations, ambassadors, and consultants who will bring vital local expertise, connections, and networks.

About Partners

Perimeter Institute is the world's largest research hub devoted to theoretical physics. The independent Institute was founded in 1999 to foster breakthroughs in the fundamental understanding of our universe, from the smallest particles to the entire cosmos. Research at Perimeter is motivated by the understanding that fundamental science advances human knowledge and catalyzes innovation, and that today's theoretical physics is tomorrow's technology. Located in the Region of Waterloo, the not-for-profit Institute is a unique public-private endeavour, including the Governments of Ontario and Canada, that enables cutting-edge research, trains the next generation of scientific pioneers, and shares the power of physics through award-winning educational outreach and public engagement.

Actua is Canada's leading science, technology, engineering, and mathematics (STEM) youth outreach network representing 35 university- and college-based members. Over 5 million young Canadians have been inspired through their participation in Actua's hands-on educational workshops, camps, and community outreach initiatives. Each year, Actua's growing network of member organizations reach over 250,000 young Canadians in over 500 communities nationwide. At the national level, Actua focuses on the engagement of underrepresented audiences through specialized programs for Indigenous youth, girls, and young women; at-risk youth; and youth living in Northern and remote communities. Actua's major funders include: the Government of Canada, Google Canada, Suncor Energy Foundation, GE Canada, and the Natural Sciences and Engineering Research Council of Canada.

The Institute for Quantum Computing (IQC) is a world-leading research centre in quantum information science and technology at the University of Waterloo. IQC's mission is to develop and advance quantum information science and technology through interdisciplinary collaboration at the highest international level. Enabled by IQC's unique infrastructure, the world's top experimentalists and theorists are making powerful new advances in fields spanning quantum computing, communications, sensors, and materials. IQC's award-winning outreach opportunities foster scientific curiosity and discovery among students, teachers, and the community. The University of Waterloo is Canada's top innovation university. With more than 36,000 students, Waterloo is home to the world's largest co-operative education system and its unmatched entrepreneurial culture, combined with an intensive focus on research, powers one of the top innovation hubs in the world.

The Canadian Association of Science Centres (CASC) is a national platform for Canada's Science Centres and informal science engagement. Founded in 1985, the association was created with a goal to create synergy among Canada's science centres and science-related museums, to assist in finding solutions to the challenges faced by these important public institutions, and to provide a single voice before government. The association provides professional development and networking opportunities for more than 2,000 science communications and support professionals and 10,000 volunteers across Canada. CASC represents 50 members across Canada that collectively attract an estimated 8 million visitors each year through direct visits, outreach, curriculum-linked school programs, lectures, and adult-only events.

Ingenium – Canada's Museums of Science and Innovation, is Canada's only comprehensive science and technology collecting institution. Headquartered in Ottawa, Ingenium operates three Museums: the Canada Agriculture and Food Museum, the Canada Aviation and Space Museum, and the Canada Science and Technology Museum. Ingenium's mandate is to preserve Canada's scientific and technological heritage, while promoting, celebrating, and sharing knowledge of that heritage and how it affects Canadians' daily lives.
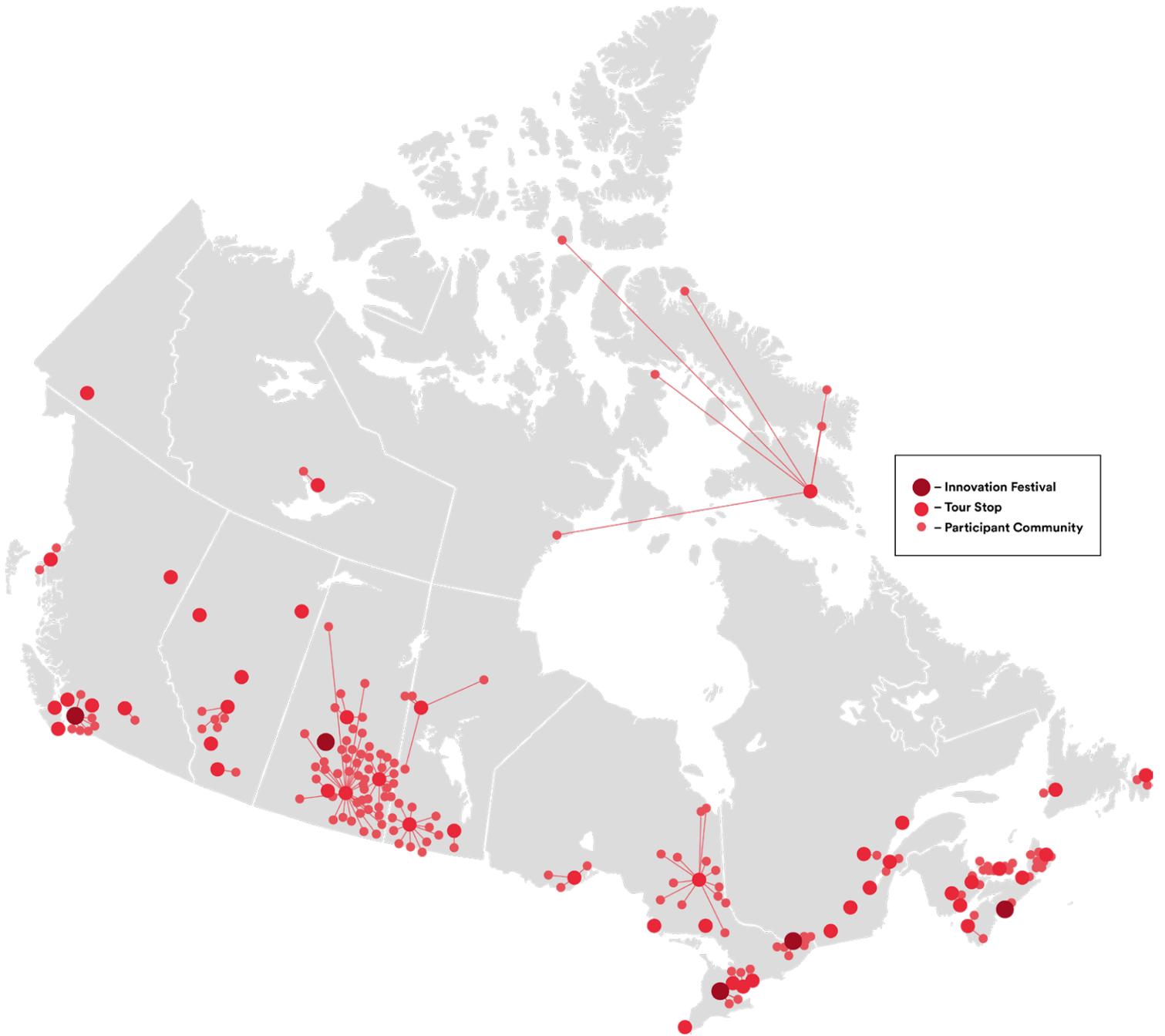
About Innovation150

Innovation150 was a nationwide program from five leading science organizations that celebrated Canada's innovative past and sparked the ideas and ingenuity to propel our future. The interactive, year-long program offered awe-inspiring experiences in science, technology, and innovation across the country for Canada's 150th anniversary in 2017.

- **Power of Ideas Exhibition** — In this inspiring exhibition and presentation from Perimeter Institute, youth and families took a fun, hands-on approach to engaging in the process of science. From delving into two of the world's largest science experiments to exploring changing ideas about our universe, this immersive experience fostered curiosity and a better understanding of how we investigate our world. Travelling to schools and science centres across the country, the Power of Ideas Exhibition, a bilingual and fully accessible, universally designed exhibit, also included an interactive presentation for youth that drew on stories of Canada's past to inspire the innovator in all of us.

- **Actua Maker Mobile** — Actua's Maker Mobile was a moving maker space packed with exciting, cutting-edge technology that encourages youth to experiment and build with hands-on learning. Actua's Maker Mobile team delivered interactive workshops, where youth had the unique opportunity to learn how to create and prototype using design software, and watch their inventions come to life with 3D printers and laser cutters. Throughout their Maker Mobile experience, youth learned skills and gained the confidence they need to be the problem solvers, innovators, and entrepreneurs of the future.

- **QUANTUM: The Exhibition** — QUANTUM: The Exhibition is the first-ever travelling exhibition on quantum information science and technology. At 4,000 square feet, it is an interactive exploration of the core concepts of quantum mechanics — from superposition to entanglement — and how scientists are harnessing its power to develop revolutionary technologies. Designed to engage science enthusiasts of all ages, the exhibition explores how quantum technologies will impact computing, communication, information security, sensing, and more. Developed by the Institute for Quantum Computing, with innovative inclusive design, the exhibition pulls expert knowledge from Canadian researchers. It travelled to six Canadian cities throughout 2017.

- **Innovation Festivals** — Hosted in part by science centres across Canada, these large-scale festivals amplified the excitement of the Canada 150 celebrations and inspired curiosity and innovation through a wide range of exciting activities. These major interactive showcases of Canadian innovation took place in five regions across the country: Vancouver, Ottawa, Halifax, Waterloo Region, and province-wide in Saskatchewan.

- **Cross-Canada Speaking Series** — Special presentations in cities and towns across the country inspired ingenuity and celebrated Canadian science and innovation, including lectures from leading thinkers like Perimeter Director Neil Turok with the "We Are Innovators" lecture and Nobel Laureate Art McDonald, as well as interactive innovation talks for youth in schools and science centres.

- **Digital Hub** — The Innovation150 Digital Hub was the highly engaging, online nexus for every part of Innovation150. The go-to showcase offered opportunities for youth, teachers, and the public to explore and contribute to user-generated stories of innovation, find nearby events, follow the cross-country tour, download skills-building classroom resources, and participate in exciting contests that celebrated every corner of Canada.

- **Public Awareness Campaign** — Canadians have a remarkable history of innovation, and they can be the innovators of the future too. This national awareness campaign engaged youth, families, and communities in innovation through promotions, media engagement, online content, and national public service announcements that were seen more than 45 million times in 2017.

COMMUNITIES REACHED

- **Innovation Festival**
- **Tour Stop**
- **Participant Community**

Genesis of Innovation150

Leading up to 2017, the Government of Canada, through the Department of Canadian Heritage — the Federal lead for the Canada 150 initiative — supported hundreds of programs across the country to celebrate Canada's sesquicentennial. Canadians fostered a sense of pride in what makes the country great, from history and heritage to arts and research institutions. The Innovation150 partnership — and its focus on science, technology, and innovation content — was a core pillar of the Government's Canada 150 celebrations.

Innovation150 was one of the Signature Projects selected as part of Canada 150 core programming and launched by the Government of Canada in 2013. Perimeter, Actua, IQC, and CASC were four among hundreds of organizations that submitted proposals following the Government's initial call for Signature Project ideas.

After reviewing proposals, Canadian Heritage recognized similarities among the projects proposed by Perimeter, Actua, IQC, and CASC regarding science, technology, and innovation, and saw a rare opportunity to explore greater reach and amplify impact by partnering them with one another. Canadian Heritage, through the Canada 150 Fund, offered funding to deliver their proposed programming as a collective, along with Ingenium, and tasked Perimeter Institute with leading the nascent partnership.

Forming a New Partnership

Following the news that their projects would be delivered jointly across Canada, Innovation150 partners met in-person several times to discuss how the collaboration would work, including their audiences, logistics plans, and overall concerns. PI and the team brought on Title Entertainment, a media and event management company, to assist in drafting and negotiating a comprehensive Memorandum of Understanding (MOU), and to later set up an Innovation150 Secretariat. This MOU was not a legally binding document, but offered mutually agreed-upon frameworks for decision-making, revenue and cost sharing, co-branding, collaborative visioning, reporting, and data sharing.

Meanwhile, executives at each partner institution were tasked with persuading their boards, senior leadership teams, and staff to support this large-scope undertaking. This proved to be a distinctive challenge for each of the members, as illustrated by the following examples:

- For Ingenium, it was a matter of getting colleagues to appreciate what the partnership could mean for their project, and embracing the paradigm shift. Ingenium had been working on their crowdsourced storybook since 2013, and it had been live online since June 2015. Everything would need to be refreshed, and the site would need to be worked into the Innovation150 Digital Hub to accommodate Perimeter's project. Fortunately, the Ingenium team had adopted a "release quickly and iterate often" approach for the development of their site, giving them the agility to adapt to the new scope of work.

- The challenge for CASC was proving to its board and membership that these new partners were truly collaborative, willing to hear their advice on exhibition design and development. They had fears of hosting exhibitions that struggled to meet interactivity requirements for science centre audiences and wanted their expertise to be utilized. Fortunately, IQC was eager to collaborate as they learned more about the intricacies of exhibition design, realizing there was much they did not yet know. And for them, stepping into the unknown was challenging, albeit exciting.

- Actua is also a membership-based network and wanted to make sure that their opportunity for national exposure through this project was not diluted by adding multiple other brands. Their members' needs had to be considered in all decisions. Weighing the possible benefits against the risks was paramount. However, the opportunity with which they were presented was undeniable and inevitably outweighed the risks.

Communication and Trust

The keys to the success of this partnership were transparency, trust, and open communication. Being able to candidly discuss questions and concerns was imperative to laying the foundations of trust. Each representative was elected by their organization for their ability to fairly represent their needs and objectives, and each was known to be driven to succeed.

This drive and appreciation for honesty fostered trust within the executive committee and solidified the partnership. The benefits of trust include increased efficiency; continuous learning and support; access to new partners, sponsors, and stakeholders; and improved delivery and results.

In the early days, meeting in person was extremely helpful in establishing lines of communication and getting to know one another; it was the first time a number of these organizations worked together. The first meeting of the executive committee took place in August 2015 in Ottawa. Over the course of the next 16 months, the team would meet in person approximately 10 times, but hold virtual meetings every two weeks to check in on progress and developments. After establishing relationships of trust, in-person meetings became less important, which reduced travel expenditures.

Throughout the course of the project, Perimeter and the Secretariat it led also increased knowledge transfer, communication, and efficiencies among partners by establishing four sub-committees that addressed key aspects of the initiative, including the Power of Ideas Tour, Innovation Festivals, executive/joint-financial issues, and marketing/communications. Each working group involved representatives from all relevant partner organizations.

"Simply grouping organizations together will not multiply success. Collaboration, openness, and commitment to the project are keys to successful partnership."

— Greg Dick, Perimeter Institute

Scaling Up for Impact

The greatest benefit of the Innovation150 partnership was the significantly higher reach and impact that all partners realized by delivering programing in concert with each other. If each partner had organized its own activities in isolation, they wouldn't have been able to reach as many Canadian youth, families, and communities as they did collectively under the banner of Innovation150. The whole was much greater than the sum of its parts.

For example, Perimeter initially set an objective of reaching 23,000 youth and adults with the Power of Ideas Exhibition. This target was set with the understanding that the mobile science expo would travel mostly to high schools, leveraging the contacts in PI's nationwide network of teachers that span the country.

Due to the success of partnerships with members of CASC and Actua, as well as community uptake, the Exhibition reached more than 107,000 people — 74,000 of which were youth. One reason for this was that setting up the

Exhibition in science centres during the summer months, when schools were closed, allowed for much greater foot traffic than high schools.

Another reason is that Perimeter, Actua, and CASC shared their networks, which allowed the Innovation150 team to attract more people or find the optimal venue in any given city or town. In some instances, partners also combined forces and joined activities together under the banner of Innovation Festivals, which contributed to greater buzz and region-wide impact and reach.

A second example of scaling impact is the shared Innovation150 Digital Hub developed by Perimeter in service of all partner activities. The initial target was 2 million engagements online at Innovation150.ca and through social media channels. But through the partnership with Ingenium and the inclusion of their crowdsourced digital storybook that started in 2015, the Hub was stocked with rich and interesting content from day one.

The Ingenium-fostered content — and how partners leveraged it for contests and social sharing — contributed to the Hub receiving more than 6 million online engagements and 1 million pageviews, which far exceeded expectations.

A third example of how collaboration between partners benefitted the initiative is the Innovation150 public service announcement (PSA) campaign. Consisting of four 30-second videos (two English, two French), this PSA campaign showcased Canadian innovators in action and brought greater attention to all partner activities.

Although the content of the videos would certainly have garnered airplays, it was the overall mandate of youth, education, and collaboration that contributed to two key endorsements that increased airplays: the Canadian Association of Broadcasters (CAB) board of directors, who recommended to its members across the country that they support the campaign, and Shaw Communications, who provided airplay as part of their sponsorship of the Power of Ideas Exhibition.

Legacy Over Logos

Grouping like-minded organizations to deliver broad-scope programs can be a challenge when it comes to branding, and some partners had valid concerns about visibility of their organizations. While impact among youth, families, and communities was the bottom line for all five partners, being properly recognized for their efforts was also a motivator. This led to some challenges as organizations with different resources, expectations, and marketing communications approaches combined forces.

Early in the partnership, the Innovation150 executive committee adopted a mantra: Legacy over logos. Partners agreed that, in order to streamline the mandate of the partnership and get the desired messages across to Canadians, the brand and goals of Innovation150 needed to come before that of any of the individual partners.

This mantra followed thanks to each partner organization's understanding of a shared vision for the initiative, and of each other's unique institutional priorities. This was achieved through continually reinforced transparency, trust, and open communication.

"With five organizations, it could have easily become 'logo soup' but we all decided to support the larger brand of Innovation150. It's what was best for the group."

— Tobi Day-Hamilton, Institute for Quantum Computing

Managing Pan-organizational Budgets

Putting the ambitious mandate of Innovation150 ahead of promoting individual initiatives was about more than checking egos at the door; it was also about the financial aspects of the entire project. Each partner organization was responsible for its own budget, but all members had to come together to make joint decisions about how monies were spent or sponsorships were received.

All financial decisions were either laid out in the joint MOU or discussed during regular executive committee meetings. The MOU established two frameworks that were employed throughout the initiative: a shared cost roster and a sponsorship receivable matrix.

The shared cost roster meant that one or two organizations would cover the costs for joint activities, such as consultants or press conferences at major milestones, and they would be reimbursed later by partners. This limited administrative burden and allowed the partnership to move quickly.

In the MOU, partners also established a matrix for the distribution of sponsorship funds. This was a framework for outlining how partners would fairly and proportionately share sponsorship monies. As a group, the executive committee decided which organizations were most in need of funds — often the smaller organizations — and how different tranches of money would be divided.

Collaboration at a Cost

Through the early planning phases of the Innovation150 project, it became evident to partners that administrative costs were going to scale higher than anticipated if they were going to fully realize the potential of this far-reaching, collaborative project.

Building a productive partnership meant increased travel for in-person collaboration with each other, as well as to successfully mobilize regional partners. Furthermore, fostering the open communication so vital to the partnership meant many meetings, much consultation, and crucial personal relationship-building among the partners — all of which would prove to be time-consuming during two very busy years.

This scenario was further complicated by each partner receiving less federal funds from the Department of Canadian Heritage than requested in their original separate proposals, as well as less private funds than expected from corporate sponsors and partners.

Together, pan-organizational partnerships such as Innovation150 can provide significantly greater reach and impact than individual organizations going it alone, but combining like-minded projects does not simply mean fiscal savings. To fully seize opportunities, partners require sufficient financial and administrative underpinning.

Central Hub: Forming a Secretariat

In May 2016, Perimeter formed the Innovation150 Secretariat as a shared resource for all partners, which offered support for strategic guidance and administration, operations/logistics, design and technical production, and marketing/communications to ensure the project progressed according to plan and seized opportunities as it travelled the country.

Initially, partners were going to contribute a proportionate sum of their project funds towards the shared Secretariat. However, the Department of Canadian Heritage ended up providing supplemental monies that funded the Secretariat

staff and activities, along with an extra tranche of funds to assist with the additional administration and, in turn, help partners realize the project's full potential.

Perimeter, in agreement with partners, chose a media and event production company, Title Entertainment, to assemble and manage the Innovation150 Secretariat. Title had been hired to assist with the logistics of the Institute's project before the joint partnership was announced. After the Department of Canadian Heritage approached Perimeter to lead the initiative, senior leaders worked with Title to establish the MOU.

Perimeter and Title ran the Secretariat along with a communications manager and an operations manager. The Secretariat oversaw scheduling, timing, and content development for the Innovation150 executive committee. The bi-weekly meetings were organized to cover key areas such as developing risk factors, upcoming obligations, and regular reporting to the Department of Canadian Heritage.

While each organization was responsible for developing and delivering their own programs in support of Innovation150, the Secretariat was there to make sure logistics were synchronized between initiatives. In the case of joint endeavours, such as the project announcement in Halifax (2016) or the tour launch in Vancouver (2017), Secretariat staff coordinated these milestone events.

Secretariats need to make financial sense, in terms of offering benefits to scale. They are implemented with a clear purpose and a set lifespan. When separate organizations come together, a third and neutral party will help make sure that all boxes are being checked repeatedly and consistently. A good Secretariat will conceptualize and bring together the rules and structure of a project, make sure all the moving parts come together coherently, and then dissolve at the culmination of the joint project.

The Secretariat played a role in fostering trust between partners, as well as hearing concerns and making sure those concerns were addressed in the bi-weekly meetings. When any sort of conflict or challenge came up, the Secretariat was there to offer support and mediation, but this was not often necessary as the executive committee was made up of resourceful and diplomatic professionals. It always came down to the trust established in the early days of the partnership, and everyone relied on one another to be forthcoming with their concerns. Open dialogue and perseverance were the keys to getting issues in hand quickly and resolved appropriately.

It's important to note that the Secretariat did not have autonomy in this particular instance, and would always defer major decisions to PI as the flagship organization of Innovation150, or to the appropriate executive representative of each organization. However, in other partnerships, the Secretariat may be given autonomous oversight of a project, depending on the level of expertise among members of the executive committee.

Leveraging Expertise & Networks

For the national Innovation150 partnership to succeed in delivering programming across Canada's vast geography, leveraging each other's expertise — and the expertise of regional partners, ambassadors, and consultants — was essential. Very early in the project, relying on each other's proficiencies and networks became the standard.

In terms of Innovation150 partners pooling expertise, IQC and CASC provide an instructive example. IQC had been developing an exhibition with the intention of bringing quantum physics to the public. Members of CASC believed this to be nearly impossible, given the complex nature of the subject, but IQC is a leader in the quantum science and knew they could deliver on content. Exhibition design experts from the CASC membership were brought together with content experts from IQC to work together to design the exhibition. This working experience was transformative for both partners, and has opened doors to new possibilities of partnership with other organizations with specialized expertise.

Perimeter's collaboration with Science World British Columbia (a CASC member) for *Innovation Festival: Vancouver* demonstrated the value of leveraging regional networks. With the Institute's home location in central Canada, and most of its west coast network being comprised of high school teachers, staff didn't have a thorough understanding of the best marketing strategies to reach audiences in Vancouver. Leveraging Science World's local knowledge and existing media contacts, and the Institute's festival marketing budget, the partners jointly created an advertising plan customized to the local market — including the high Cantonese population — that attracted more than 46,000 people to the festival. This collaborative approach became the model for festival promotions in three other regions.

A mantra of the group was "You can't know what you don't know." For national projects to succeed in delivering programming across Canada, partners need to collaborate with regional partners, ambassadors, and consultants who bring vital expertise and networks.

Creating a Collaborative Infrastructure

From day one, Innovation150 was designed to allow for as many organizations as possible to contribute and participate in a meaningful way. The collaborative framework was formed through dozens of stakeholder interviews and offered tangible value propositions. It included opportunities such as hosting affiliate events during Innovation Festivals, sharing stories, joining contests, or sharing classroom resources for Canadians to access on the Digital Hub. By the end the year, more than 100 community groups or organizations participated in some way.

For example, each festival was structured such that it was hosted by a regional CASC member partner, and incorporated affiliate events and activities from regional partners that further increased reach and impact.

Innovation Festival: Vancouver involved 20 distinct facets of programming, with lectures, exhibitions, and social events from 11 organizations including the Innovation150 partners, BC Science World, TRIUMF, the University of British Columbia, Simon Fraser University, Vancouver Aquarium, HR MacMillan Space Centres, Terry Fox Secondary School, and the Roundhouse Community Centre.

Innovation Festival: Saskatchewan involved 21 events from 12 organizations including the Saskatchewan Science Centre, Canada-Wide Science Fair, SESQUI, Vancouver Aquarium's C150 Aquavan, Western Development Museum, University of Saskatchewan, and the University of Regina.

The Digital Hub created opportunities to engage organizations online, by accessing the crowdsourced digital storybook, sharing classroom resources, and participating in contests.

For example, Perimeter pulled together 11 leading science organizations for the Innovation150 *#InEveryClass* video contest — a fully bilingual competition that encouraged teachers and students to submit short videos of their favourite school experiments to showcase innovation happening in classrooms across Canada. Together, these partners transformed the winning school from Hamilton, Ontario's inner city into a pop-up innovation expo featuring leading scientists, cutting-edge technologies, and opportunities to celebrate Canadian ideas and ingenuity.

Outreach initiatives can increase reach and impact through implanting opportunities within project components for as many organizations as possible to contribute and participate. These strategies and frameworks should offer tangible value propositions vetted through direct consultation with prospective groups.

Built-in Legacy

Before Innovation150 partners started discussing project components, ensuring legacy was a significant component of the planning discussions. Partners strived to embed lasting impact into the design of most every event, activity, or exhibition.

For example, Perimeter's Power of Ideas Exhibition included a legacy component with innovation-themed classroom resources being distributed to teachers at every tour stop. These will continue to build teacher capacity and provide youth with skills-building opportunities for many years to come.

The tailored, responsive, and strategic design of the Innovation150 Digital Hub was adapted for legacy use by a new education collaboration led by the Rideau Hall Foundation. Additionally, the crowdsourced storybook on the Innovation150 Digital Hub lives on through an engagement-focused website owned by Ingenium.

The other significant legacy is the relationships created by Innovation150's collaborative approach. The collaborative model and frameworks behind Innovation150 have brought together dozens of organizations in a shared spirit of inspiring the next generation of innovators. These new institutional bonds continue to spark new collaborative projects and relationships that could, like Innovation150, achieve maximum efficiencies, reach, and impact in cultivating a strong culture of innovation in Canada in the decades ahead.

The single most important legacy of Innovation150 is the deep and lasting impact on youth. The entire project aimed to fuel their confidence and capacity to innovate toward a brighter future at home, and add to the entrepreneurial fabric of Canada writ large. By leveraging the Innovation150 partners' extensive outreach expertise and far-reaching networks, the program not only inspired these next-generation innovators, but guided them toward the STEM subjects (science, technology, engineering, and math) for the ongoing skills-building they will need for personal and professional success, and to contribute to Canada's future economic prosperity.

Conclusion

Organizations have the potential to reach significantly more people and create greater impact if they join forces for large-scale, multi-faceted projects. However, just as Innovation150 showed, several ingredients are necessary for long-term success: a shared vision; open communication and trust; adequately resourced administrative support; built-in legacy; and an infrastructure for collaboration between partners and beyond.

Quotes

"Perimeter Institute has a strong history of bringing content to schools through teacher networks. Innovation150 came under our leadership because of our proven ability to manage large networks."

— RJ Taylor, Perimeter Institute

"An important lesson in innovation is that failure is okay! This is how we learn and progress and evolve."

— Sandra Corbeil, Ingenium

"Communicating with honesty and expressing points of view, but doing so in the context of understanding that there are many ways of looking at things, helped to foster trust within the executive committee."

— Sandra Corbeil, Ingenium

"Continued patience with stakeholders is essential because there is a fear of the unknown in partnerships."

— Stephanie Deschenes, Canadian Association of Science Centres

"Greg really set the tone for collaboration; there was room for everyone at the table. So, when we partnered with local science centres and schools, it felt very natural."

— Stephanie Deschenes, Canadian Association of Science Centres

"It's never too early to talk about partnership."

— Jennifer Flanagan, Actua

"Government funders can't expect to save on expenses by grouping like-minded organizations. Administration and travel costs are higher, on top of the original estimate of delivering the product."

— Jennifer Flanagan, Actua

"Maintaining dialogue with the Department of Canadian Heritage was also key to success. Two-way communication — both formal and informal — with leadership and staff at Canadian Heritage ensured comfort at each step of forming the team, coordinating the programming, and rolling out across the country as was originally envisioned."

— John Matlock, Perimeter Institute

INNOVATION150

PERIMETER INSTITUTE

actua
Youth · STEM · Innovation

UNIVERSITY OF WATERLOO | IQC Institute for Quantum Computing

CANADIAN ASSOCIATION OF SCIENCE CENTRES
ASSOCIATION CANADIENNE DES CENTRES DE SCIENCES

Ingenium
Canada's Museums of Science and Innovation
Musées des sciences et de l'innovation du Canada

CANADA 150 | Canada