

Innovation Map Associations Leading

Innovation in Canada

C A N A D A' S I N N O VATION S T R A T E G Y





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Innovation Map Associations Leading INNOVATION IN CANADA

Private sector associations are playing an active role in addressing the challenges of *Canada's Innovation Strategy*. That is the underlying conclusion of the Innovation Map, a study to determine the role of private sector associations in supporting innovation in Canada.

About the Innovation Map

The objectives of the Innovation Map were to create an inventory of existing programs and to determine the role of private sector associations in support of the goals and challenges identified in *Canada's Innovation Strategy*. The Innovation Map presents the results of discussions with 162 associations of varying sizes and from a broad cross section of industries and regions. The associations participated in the study by identifying the types of programs they run that address the innovation challenges identified in *Achieving Excellence: Investing in People, Knowledge and Opportunity* and the innovation goals identified in *Knowledge Matters: Skills and Learning for Canadians.*

The Innovation Map was authored and implemented by The CCR Group, a technology incubator and partnership of strategic advisors. In addition to the financial and strategic support of Industry Canada, the operational support and endorsement of three organizations made the study possible. The three supporting organizations were

- the Canadian Advanced Technology Alliance (CATAAlliance),
- the Innovation Management Association of Canada (IMAC) and
- Magna International.

To find out more about *Canada's Innovation Strategy*, visit **www.innovationstrategy.gc.ca** The complete text of the *Innovation Map: Associations Leading Innovation in Canada* may be found at **www.theccrgroup.com/innovationmap**

Summary of Results

The study found that:

- more than 90 percent of the associations are running programs that address the four innovation challenges of the Strategy, as identified by Industry Canada, and
- between 17 percent and 35 percent of the associations are running programs that address the four innovation goals of the Strategy, as identified by Human Resources Development Canada (HRDC). (For more information, see Tables 1 and 2 on the following page.)

Further findings of the study uncovered differences in the programs offered by associations in different regions and industries, and identified the challenges and goals that are being addressed most by private sector associations. Notable highlights include the following.

- Most associations offer self-serve programs to encourage their members to find solutions to innovation challenges among themselves.
- **Branding initiatives are widespread**, but appear to be focussed on specific regions and industries, and not on Canada as a whole.
- Cluster development a central theme to the innovation challenge related to communities — on the whole is a relatively underdeveloped and disparate concept among private sector associations.

• University partnerships connecting university research with industry needs — are common among the programs of a majority of private sector associations.



- Although access to capital is frequently discussed as a primary challenge to Canadian innovators, a minority of private sector associations play an active role in addressing this need through financing or access to capital programs.
- Private sector associations clearly see themselves as playing an important role in education, but at a very high level (for example, by making curriculum recommendations) and not by engaging students or individuals directly.
- Technology associations invest a surprisingly **small amount of resources on youth**. As an example, they spend more resources on addressing the innovation goals related to adult labour goals than they do on the goals related to children, youth and post-secondary education.
- Like financing and access to capital programs, **recruiting programs** are offered by a **minority of associations**; in most cases these programs involve an on-line job board or related offering.



Table 1: Programs Run by Private Sector Associations to Address Innovation Challenges in Achieving Excellence

Innovation Challenge	Most Common	Least Common
Knowledge Performance	69.1% Networking events 59.9% Access to experts 57.2% Strategic advice	13.8% Laboratory facilities 22.4% Financing 28.3% Incubation
Skills	78.2% Educational seminars 74.8% Practice sharing	13.6% Accreditation 34.5% Job training
Innovation Environment	63.3% Lobbying/representation 62.6% Marketing and promotion	38.1% Sectoral alliances 41.5% International alliances
Communities	85.8% Networking events 75.9% Other networking	31.2% Cluster branding 33.3% Cluster facilities

Table 2: Programs Run by Private Sector Associations to Address Innovation Goals in Knowledge Matters

Innovation Goal	Most Common	Least Common
Children and Youth	21.4% Education 21.4% Employment	2.4% Mentorship 11.9% Awards
Post-Secondary Education	18.8% Education 16.7% Awards	2.1% Promotion 4.2% Mentorship
Adult Labour	46.4% Education	3.6% Financial aid 3.6% Marketplace
Immigration	21.4% Employment 21.4% Promotion	7.1% Education 10.7% Research

Note: The figures above are expressed as a percentage of respondents, where respondents selected all programs that applied. As such, total responses for a given challenge or goal may add up to more than 100 percent.

Regional Analysis

The figures below summarize the degree to which associations in various regions across Canada are addressing the challenges of *Canada's Innovation Strategy*. Shown

Region

All Associations

All associations tend to be very active in addressing the *Achieving Excellence* challenges.

for each region are the percentages of respondents — relative to all participants — who are running programs that address each challenge.

Programs Addressing Challenges in Achieving Excellence



Western Canada

Western associations are active in addressing the challenge related to communities, and running programs to connect innovators with sources of capital.

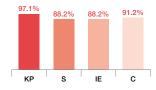
Central Canada

Central associations are less active in skills- and education-related programs, but strong at promoting the attributes and accomplishments of their members.



Eastern associations are very active in programs to address the communities challenge, and in forging international alliances.







Notes:

• All figures above are expressed as a percentage of respondents.

• Achieving Excellence categories are as follows: knowledge performance (KP), skills (S), innovation environment (IE) and communities (C).

Results by Industry Focus

The following figures show the relative participation rates in programs addressing the challenges of *Canada's Innovation Strategy* for associations representing three particular industries: technology, health care and biotechnology, and research and education.

Industry

Technology Associations

Technology associations are active in cluster development and job training programs.

Programs Addressing Challenges in Achieving Excellence



Health Care and Biotechnology Associations

Health care and biotechnology associations are active in cluster development and programs addressing the innovation challenges related to both communities and knowledge performance.



92.5%

97.5% 95.0% 93.8%

s

IF

ĸР

Research and Education Associations

Research and education associations are among the only ones active in promoting education, and tend to offer hands-on programs like incubation and collaborative research and development (R&D) assistance.

Notes:

• All figures above are expressed as a percentage of respondents.

· Achieving Excellence categories are as follows: knowledge performance (KP), skills (S), innovation environment (IE) and communities (C).

Further findings, related to the size of associations, included the following:

- Associations of increased size tend to be less nationally focussed and less focussed on one specific industry.
- Larger associations along with a majority of associations tend to offer self-serve programs, whereas smaller associations play a somewhat more active or hands-on role in supporting the innovation needs of their members.

Conclusions and Next Steps

The conclusions and recommendations of the Innovation Map study are best presented in terms of *opportunities* for both private- and publicsector stakeholders in *Canada's Innovation Strategy*.

Partnership Opportunities in Supporting and Coordinating Existing Initiatives

Private sector associations are actively involved in supporting innovation in Canada, and innovation stakeholders should leverage their efforts wherever possible. Examples include the following:

- **Branding Initiatives** Leveraging the widespread base of existing initiatives to create a unified brand that is representative of Canadian innovation, both locally and internationally.
- University Partnerships Supporting the strong ties between academia and industry associations that are already in place in a majority of cases.
- Networking Events Supporting and promoting the wide range of networking events offered by associations from coast to coast.

Leadership Opportunities in Implementing New Initiatives

In other areas, there are opportunities for Canada's innovation stakeholders to augment what existing organizations are doing by implementing new programs. Notable examples include the following:

- **Financing Portal** Creating a Canada-wide financing portal for innovators seeking sources of funding from public- and private-sector sources.
- Skills Portal Creating a Canada-wide skills portal that combines the on-line job boards and recruiting marketplaces of qualified industry associations into one central database.
- Alliance Building Playing an active, hands-on role in advancing the efforts of existing associations in international and cross-sector alliance building.

- Active Coordination Actively facilitating increased communication and coordination between existing associations and clusters, using innovation as the common thread.
- **Guiding Long-Term Issues** Ensuring that longerterm opportunities and issues are understood and that associations are engaged in them, including:
 - *skills* highlighting the importance of HRDC's leadership to innovation; and
 - *sustainability* promoting the role of sustainable development in innovation.

Associations Leading Innovation in Canada

Academy of Chief Executives of Technology Companies Society ACM SIGGRAPH Advanced Card Technology Association of Canada Aerospace Industry Association of BC Agricultural Institute of Canada AIFSEC Canada Inc. Alberta Chambers of Commerce Alberta Heritage Foundation for Medical Research Association of Internet Marketing and Sales Inc. Association of Professional **Computer Consultants** Atlantic Provinces Chamber of Commerce B.C. Advanced Systems Institute B.C. Internet Association B.C. Regional Science and Technology Network B.C. Ventures Society / New Ventures B.C. **BCNET Networking Society** BioAlberta BIOTFCanada C.D. Howe Institute

Calgary Council for Advanced Technology Calgary Enterprise Forum Society Calgary Technologies Inc. Canada25 CanadalT.com Canadian Advanced Technology Alliance Canadian Association for **Renewable Energies** Canadian Association of Financial Planners Canadian Association of Internet Providers Canadian Association of Management Consultants Canadian Association of Petroleum Producers Canadian Bankers Association Canadian Bar Association Canadian Centre for Philanthropy Canadian Council for **Aboriginal Business** Canadian e-Business Initiative Canadian Environmental Technology Advancement Corporation — West Canadian Federation of Independent Business



Canadian Information Processing Society Canadian Innovation Centre Canadian Institute for Health Information Canadian Institute of Forestry Canadian IT Financing Forum Canadian Microelectronics Corporation Canadian Petroleum Products Institute Canadian Plastics Industry Association Canadian Professional Sales Association Canadian Society of TeleHealth Canadian Venture Capital Association Canadian Wireless Telecommunications Association Canadian Women in Communications

CANARIE Inc.

- Centre for Experimentation and Development of Multimedia Technologies
- Centre for Innovation Law and Policy
- Centre francophone de recherche en informatisation des organisations
- Chambre de commerce et d'industrie de Laval
- Communications and Information Technology Ontario
- Communitech Technology Association Inc.
- **Community Futures**
- Community Futures Development Association of B.C.
- Construction Technology Centre Atlantic Inc
- CSA International
- Digital Media Professionals Association
- Earth Energy Society of Canada
- Ecoforestry Institute
- e-Content Institute
- Electro-Federation Canada
- Electronic Commerce Council of Canada
- Financial Executives International
- Financial Planners Standards Council First Tuesdav FlashinTO Inc Forest Engineering Research Institute of Canada Forest Products Association of Canada FoundLocally.com Media Inc. Genesis Group GoNorth Greater Kitchener Waterloo Chamber of Commerce Greater Ottawa Chamber of Commerce Greater Toronto Marketing Alliance Halifax TFCH-table High Tech ReConnect **Hi-Tech Entrepreneurs Association** Hyperchip Inc. I.T. Contact Inc. Independent Power Producers' Society of Ontario Information Technology Association of Canada Information Technology Industry Alliance of Nova Scotia (ITANS) Innovation Management Association of Canada Innovation Resource Centre



Institut du commerce électronique Interior Science & Innovation Council International Institute for Sustainable Development Investment Dealers Association of Canada ITAP Kootenay Association for Science & Technology Learning for a Sustainable Future I ondon Chamber of Commerce London Economic Development Corporation Malaspina University College Technology Transfer Office Manitoba Crop **Diversification Centre** Manitoba Quality Network MaRS Discovery District Micronet R & D Mid-Island Science, Technology and Innovation Council MultiMediator Strategy Group Inc. (MMSG Inc.) Native Investment & Trade Association

New Media Business Alliance New Media Innovation Centre Newfoundland & Labrador Association of Technology Industries North Bay & District Chamber of Commerce Northwest Territories Chamber of Commerce Nova Knowledge Okanagan Science and **Technology Council** Ontario Chamber of Commerce Ontario Competitive City **Regions Partnership** Ontario Innovation Trust Ottawa Photonics Cluster Partnership Group for Science and Engineering Perimeter Institute for **Theoretical Physics** Petroleum Technology Research Centre Inc. PRFCARN **PRECARN** Incorporated PTAC Petroleum Technology Alliance Canada Pulp and Paper Research Institute of Canada Quebec Venture Capital Association

Reseau InterlogiQ **Robarts Research Institute** Saint John Board of Trade Saskatchewan Advanced **Technology Association** Saskatchewan Research Council SMART Toronto **Technology Alliance** Software Human Resource Council Solar Energy Society of Canada Inc. Spadina Bus Association Inc. Sustainable Tourism Association of Canada Inc. Tech Alliance TechAlliance Technically Hip Techvibes **Telecom Applications Research Alliance** The BIT Combo The Canadian Institute for Advanced Research The Fields Institute for Research in Mathematical Sciences The Leaf Initiative The Node Learning **Technologies Network** The TBL Napkin The Winnipeg Chamber of Commerce



Toronto Internet **Developers Association** Toronto Talks Toronto Venture Group TRI abs Vancouver Enterprise Forum Vancouver Island Advanced Technology Centre Voluntary Challenge & Registry Inc. Wired Woman Society Women in Film and Television — Toronto Woodside Network Association Yellowknife Chamber of Commerce York Technology Association Young Entrepreneurs Association Youth Science Foundation Canada