The governance of innovation and economic development in the Québec City region

By

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Outline

- The short story
- The longer but incomplete story:
 - Aim
 - Context
 - Data collection
 - Preliminary results



The short story

- 1. Types of organizations: 33% local; 33% private; 33% research related
- 2. Service offerings: highly diversified; Strong presence on identification of knowledge opportunities; good presence in exploitation of knowledge; and weaker presence in knowledge validation
- 3. Market segments: offerings to small firms wthin the region
- 4. Revenue generation mechanisms: government grants: 62%; sale of services 21%; pricing of services: all free or free in part: 81%
- 5. Competition between organizations vis-a-vis service offerings: weak
- 6. Governance: boards made up of 50% of members from private firms and extensive collaboration with other organizations

Business model weakenesses: vulnerability to government support; weak on knowledge validation

Business model strengths: large variety of services; good balance of types of org; governance making room for public and private sectors, thus fostering collaboration between organizations



Aim

- To describe governance issues of intermediary organizations involved in the promotion of innovation and economic development in the Québec City region
- To analyze governance issues under the lense of the ISRN problématique, knowledge value chain and business models

Context of the Québec City region

- In 2001, a report prepared by a large consulting firm recommended to the different levels of government to reduce significantly the number of intermediary organizations supporting innovation and economic development
- The rationale: claim of too many overlapping organizations (valid for missions but not for services provided to firms)
- Consequence: the number of organizations was reduced by half; many were agglomerated



Data collection

- 27 intermediary organizations were formally interviewed between November 2008 and February 2009.
- Interview guide and questionnaire development process:
 - ISRN questionnaire as initial template
 - ISRN+ management concepts related to value chain and business models + advisory committee
 - Advisory committee included: representatives from the Québec Science and technology Council, and 9 CEO or VP of various types of intermediaty organizations
 - A focus group was organized: the participants had answered the questionnaire before the focus group meeting
 - A revised questionnaire emerged and was used for data collection



Types of intermediary organizations

Type of organization	Number	Percentage
CLD and SADC(local econ dev agencies	8	29
PO (private organizations)	10	37
PRO (Public research org)	2	7
CTTO (College TTO)	4	14
UTTO (University TTO)	3	11



Mission vs services provided to firms

Conceptual approach:

- 1.Focus on services provided to firms— not the missions of organizations
- 2. Services were classified in a knowledge value chain and related to other elements of business models (Chesbrough, 2006;2007; Landry and Amara, 2009)

PHASE 1: IDENTIFICATION OF KNOWLEDGE VALUE CREATION OPPORTUNITIES

- Help firms to specify their needs related to technologies, production equipment and patents often or very often: 59%
- Help firms to specify their needs related to researchoften, very often:
 63%
- Help firms to access ideas and information on relevant technologies, equipment and patents, very often: 70%
- Help firms to access pertinent research often, very often: 70



PHASE 2: VALIDATION OR PROOF OF CONCEPTS AT DIFFERENT LEVELS

- Technical proof
 - Help firms with prototype design and tests of technical feasibility (product testing) often, very often: 37%
- Control Proof
 - Help firms to prepare patent applications often, very often:3.7%
- Safety proof
 - Help firms with product and process safety certification often, very often:15%
- Value proof (demonstrating that there are enough customers to generate a profit)
 - Provide assistance related to product positioning (first on the market, creating a niche, etc.) often, very often:
 22%
- Economic proof (costs/benefits for consumers)
 - Help firms to develop a business case often, very often: 29%



- PHASE 3: EXPLOITATION: IMPLEMENTATION AND COMMERCIALIZATION OF THE VALIDATED CONCEPTS
- Supporting the scaling up of innovation production (products/services, etc.)
 - Help businesses to scale up their manufacturing practices, processes and technology often, very often: 40%
 - Help businesses to access specialized equipment or facilities to scale up production (e.g., testing specialized equipments, etc.) often, very often: 26%
 - Help businesses to access expertise to scale up production (e.g., student interns, engineers, faculty, experts of the industry, etc.) often, very often: 48%
- Help to access capital
 - Help firms to access commercial bank loans linked to the development of new or improved products and processesoften, very often: 41%
 - Help firms to access angel investors or angel networks linked to the development of new or improved products and processes often, very often: 33%
 - Help firms to access venture capital linked to the development of new or improved products and processesoften, very often: 33%
 - Help firms to access government subsidies and R&D credits linked to the development of new or improved products and processes often, very often: 66%



PHASE 3: EXPLOITATION: IMPLEMENTATION AND COMMERCIALIZATION OF THE VALIDATED CONCEPTS

Help to improve management processes

- Help firms to recruit qualified managers often, very often: 15%
- Help firms to recruit students and qualified employees via internships, fellowships, and other programs and activities where students or employees are involved with industry often, very often: 29%
- Help firms in the design and implementation of business processes (customer needs assessment service, inventory management) often, very often: 29%
- Help to create spin-offs in order to exploit inventions often, very often: 22%

Commercialization

- Help firms regarding advertising and promotion of new products often, very often): 22%
- Help client firms access markets/distribution channels often, very often: 22%
- Help client firms access international markets/distribution channels often, very often:11%
- Help firms regarding negotiation and management of contractual agreements often, very often: 18%



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Market segments

Average percentage of revenue that came from the provision of services to private firms during the last three years: 23%

Percentage of revenue that came from the provision of services in the following geographical markets during the last three years:

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- In your region (within 100km) (60 %)
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- Between 100 and 250km (20 %)
- Elsewhere in your province/territory (12 %)
- Elsewhere in Canada (2%)
- Other countries (6 %)



Market segments

Percentage of your clients that are:

- Private firms with less than 10 employees	(54	%)
- Private firms with 10 to 100 employees	(29	%)
- Private firms with more than 100 employees	(17	0/0)



Market segments

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Revenue generation mechanisms

Percentage of each of the following sources of funding in your organization's total budget over the last three years:

- Government grants
- Membership fees
- Sale of services
- -Licenses
- -Other sources



Revenue generation mechanisms

Pricing policy for the services you offer to private firms

- All services are free: 37 %
- Some services are free: 44 %
- None of the services are free: 19 %



Financial vulnerability to clients

 Percentage of your organization's total revenue, during the last financial year, that came from your three most important business clients: (27 %)



Global strategies

Often or very often using strategies linked to Market and services :

- i) Seeking new geographic markets for your services : 26%
- ii) Extending your current services to new categories of clients; 48%
- iii) Developing new services: 48%
- iv) Developing and exploiting niches or specialized markets: 22%
- v) Providing customer-specific services (customized services, delivery methods, after-sale services, etc.): 77%

Often or very often using strategies linked to Knowledge management

- vi) Using and updating scientific information databases: 33%
- vii) Developing measures favoring knowledge sharing between your employees: 74%
- viii) Capturing and using knowledge obtained from other industry sources (e.g., industry associations, competitors, clients and suppliers): 55%

Often or very often using strategies linked to Marketing strategies

- x) Promoting your services through advertising (advertising campaign, websites, etc.):55%
- xi) Promoting your services through direct marketing (prospectus, email marketing, technical reports, etc.): 40%
- xii) Promoting your services through public relations (seminars, press conferences, etc.): 59
- xiii) Differentiating and positioning your services in relation to those offered by organizations like yours: 55%
- xiv) Segmenting and profiling your clients: 70%



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Competition strategies

- For your organization, how strongly do you agree or strongly with each of the following statements?
- My business client's demands are hard to predict: 26%
- My business clients can easily substitute my services for those offered by other organizations: 4%
- The actions of other organizations offering services like ours are hard to predict: 18%
- The arrival of other organizations offering services like ours is a constant threat:22%
- Our services quickly become obsolete: 11%



Governance

- Percentage of organizations governed by a board: 25/27 (92%)
- Average number of board members: 14
- Average number from private sector: 7
- Collaboration with reg. econ development agencies, gov. agencies, universities, and consulting firms is frequent

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Thank you for your attention Questions? Comments?

