# CHAIR INNOVATION

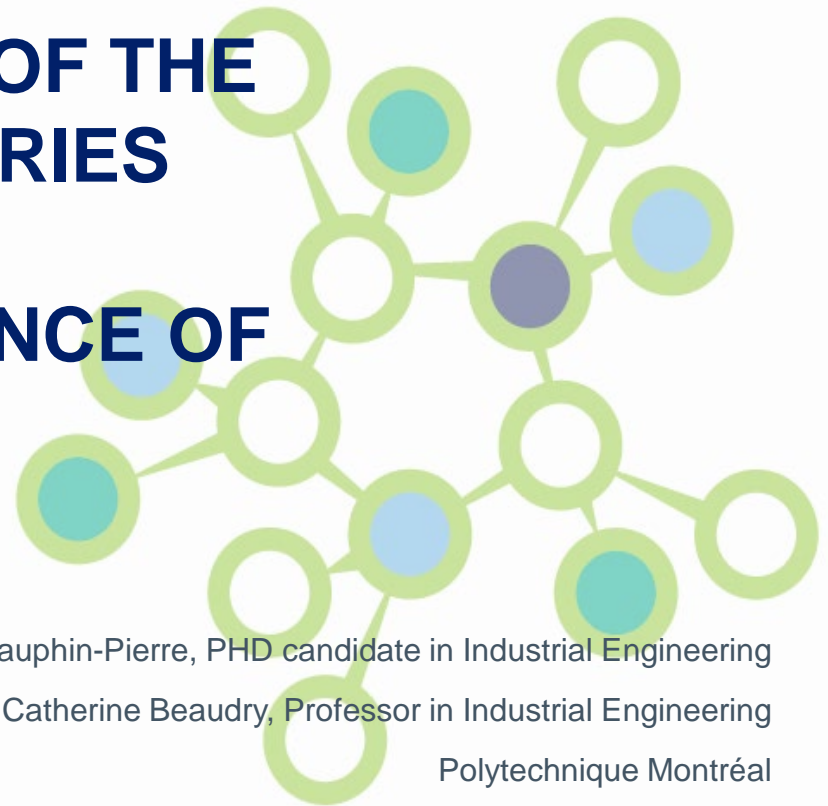CREATION, DEVELOPMENT AND COMMERCIALISATION OF INNOVATION

# A LOOK AT THE IMPACT OF THE RESEARCH INTERMEDIARIES OPERATING IN THE ICT INDUSTRY IN THE PROVINCE OF QUEBEC

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# Key Concepts And Context

⬤ Research intermediary (RI):

◉ "***An organization or body that acts as an agent or broker in any aspect of the innovation process between two or more parties.*** *Such intermediary activities include: helping to provide information about potential collaborators; brokering a transaction between two or more parties; acting as a mediator, or go-between, bodies or organizations that are already collaborating; and helping find advice, funding and support for the innovation outcomes of such collaborations."* (Howells, 2006)

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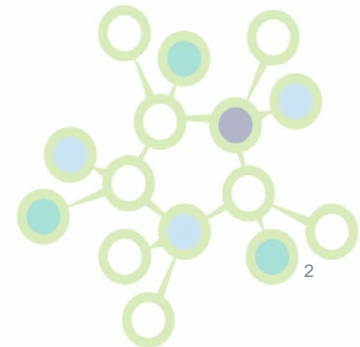
# ICT Industry In Quebec

- Revenue of over 31,8 billions
- Over 7,800 companies and 255,900 workers
- Almost half of these workers work in:
  - Software development
  - Microelectronics
  - Multimedia
  - Optics-photonics
  - Consulting services
  - Telecommunications
  - Cloud computing services
  - Artificial intelligence
- More than 70% of the ICT generated GDP in Quebec comes from the Montreal Greater Region

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# Methodology

- Research question:
  - What are the impacts of RIs in ICT in Quebec's innovation ecosystem?
- Exploratory case study
- Semi-structured interview and data from the Web
- Eight (8) themes discussed
- Four (4) RIs
- Based in Quebec
- Active in the ICT industry

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# Results

- Three major roles in the innovation ecosystem:
  1. Strengthen the innovation ecosystem
  2. Facilitate communication amongst the actors in the ecosystem
  3. Fostering a culture of collaboration throughout the research environment

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# Results: Strengthen The Innovation Ecosystem

| | | RI1 | RI2 | RI3 | RI4 |
|---|---|:---:|:---:|:---:|:---:|
| **Improve the structure of the innovation ecosystem** | Structure the innovation ecosystem | **x** | **x** | | **x** |
| | Offer a physical space that is adapted to R&D | x | | | |
| | Create a space to centralize ICT services | x | | | |
| | Offer additional production | x | | | |
| | Fund research projects | **x** | **x** | **x** | **x** |
| | Conduct a situational analysis | | | x | |
| | Support R&D activities | x | | | x |

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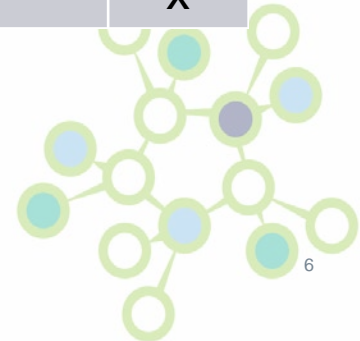
# Results: Strengthen The Innovation Ecosystem

| | | RI1 | RI2 | RI3 | RI4 |
|---|---|---|---|---|---|
| **Improve the quality of the actors in the innovation ecosystem** | Attract researchers in the field | | | | x |
| | Train future staff | | x | | x |
| | Link the innovation ecosystem on an international level | | x | | x |
| | Attract foreign financing | **x** | **x** | | **x** |

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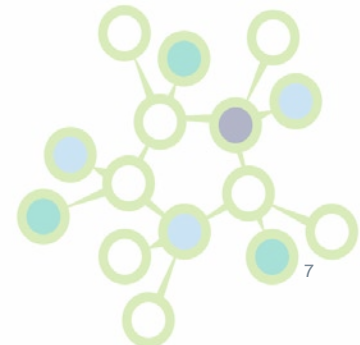
# Results: Strengthen The Innovation Ecosystem

|  |  | RI1 | RI2 | RI3 | RI4 |
|---|---|---|---|---|---|
| **Improve IS results** | Favor the economic development of the country | x | x | | |
| | Stimulate innovation | | **x** | **x** | **x** |
| | Coordinate large projects in the field | | x | | x |
| | Favor market-driven R&D | x | | | |
| | Accelerate technology commercialization | x | | | |
| | Favor the adoption of new technologies or new practices | | | x | |
| | Technology or service transfer | x | | x | |

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# Results
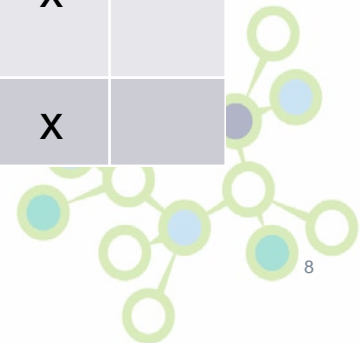
| Facilitate communication | | RI1 | RI2 | RI3 | RI4 |
|---|---|---|---|---|---|
| | Disseminate information | | x | | x |
| | Disseminate information from the field to the publics | x | | x | |
| | Influence the government | | x | x | x |

| Foster a collaboration culture | | RI1 | RI2 | RI3 | RI4 |
|---|---|---|---|---|---|
| | Facilitate partnerships | x | x | | x |
| | Promote cross-sectorial exchanges | x | | x | |

# Results : Cross-Sectorial Transfer Practices

- RI2
  - Multi-sector project opportunities at the request of members
- RI3
  - Projects with a multi-sectorial component to attract people from a variety of industries
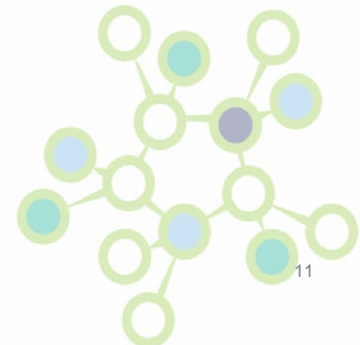  - Research projects may lead to the development of services that will be spined-off or spined-out
- RI4
  - Multisectorial projects  arise spontaneously where skills from different sectors are integrated into a joint research
  - Cross-sectorial partnership promotion with RI from other sectors
  - Cross-sectorial exchanges within SMEs

# Conclusions

- ⦿ Each of these RIs have different impacts and roles on the innovation system.
- ⦿ They all provide some form of funding to the actors in the system.
- ⦿ RI1, RI2 and RI4 have a great impact on industrialists and researchers.
- ⦿ RI3 adds an impact on the public and the government.
- ⦿ There is therefore somewhat of a member selection across the network and the benefits may not apply to everyone.
- ⦿ Three of the four RIs offer some openness to the exterior but they may lack the resources to go further
- ⦿ Opportunities for multisectoral projects could emerge if a more conscious effort was made on this objective and if the RIs shared good practices on the subject.

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⦿ Thank you