

EVALUATION IDEA TO INNOVATION (I2I) SUMMARY

Relevance of I2I

- Canada is recognized for the strength of its academic research, it has yet to reach its full potential when it comes to transferring research discoveries into innovation and commercialization projects.
- I2I focusses on the transition between researcher-led and company-led commercialization activities.
- Canada's Fundamental Science Review panel suggested that academic-driven models of innovation support a number of benefits.

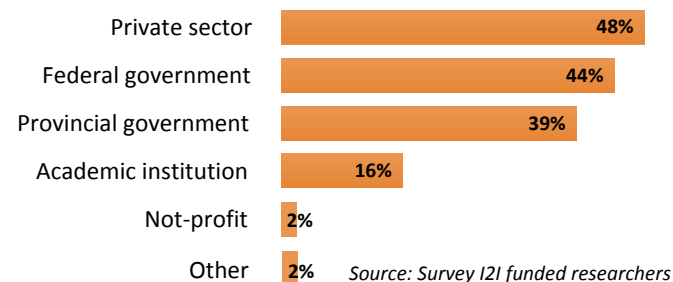
Market Assessment

- Remains a fundamental cornerstone of the commercialization process: understanding market needs and positioning of the innovative technology within this potential market.
- Potential delays:
 - finding the third party to conduct the assessment (may be challenging in highly specialized sectors),
 - securing the funding for the market assessment, and
 - conducting the actual study can take several months.

Other sources of support

- 58% of funded researchers surveyed indicated that they did receive complementary funding.
- Private sector (projects' actual or potential partners) has typically contributed both cash and in-kind support.
- In-kind support from confirmed or potential partners (market knowledge, access to pre-existing relationships, required facilities, tools, instruments, samples, or data that would otherwise not be available to researchers).

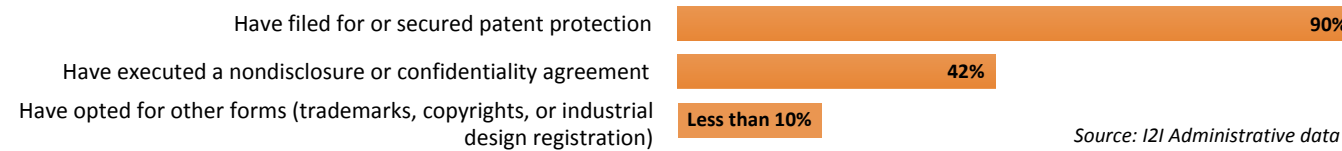
Other sources of support among funded applicants



Reduction-to-Practice

- To advance promising technologies in order to attract early-stage investment or to build valuable Intellectual Property (IP)
- Adequate protection of IP is essential to the commercialization process, particularly in attracting potential partners.

IP protection strategies used by researchers receiving Phase I or II funding

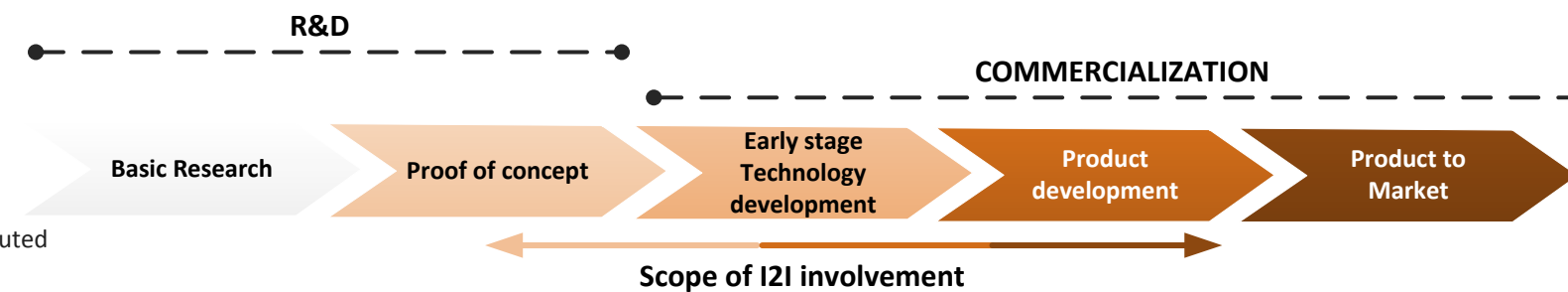


Idea to Innovation – Distinct Funding Options

Four distinct funding options characterized by the maturity of the technology or the involvement of an early-stage investment entity or an industrial partner.

MARKET ASSESSMENT	REDUCTION-TO-PRACTICE		TECHNOLOGY ENHANCEMENT EARLY STAGE INVESTMENT	TECHNOLOGY ENHANCEMENT PARTNERSHIP WITH A CANADIAN COMPANY
106 funded projects	516 funded projects		73 funded projects	
Up to 12 months NSERC contribution: 3/4 of total cost, up to a maximum of \$15,000	Up to 12 months (phase I) NSERC contribution: 100% of total cost, up to a maximum of \$125,000	Up to 6 months (phase Ib) NSERC contribution: 100% of total cost, up to a maximum of \$60,000	6 to 18 months NSERC contribution: 2/3 of total costs up to a maximum of \$125,000	Up to 24 months NSERC contribution: 1/2 of total costs up to a maximum of \$350,000
KEY PLAYERS Researcher Industry Liaison Office	KEY PLAYERS Researcher Industry Liaison Office End-user(s)		KEY PLAYERS Researcher Industry Liaison Office Investor	KEY PLAYERS Researcher Industry Liaison Office Canadian Company

- There is no expectation that all I2I funded projects will end-up on the market.
- Innovation projects explore new concepts involving a significant level of risk management.
- Measuring the extent to which an innovation has successfully entered the market requires the ability to follow and track the transferred technology well beyond the reporting period of I2I funded projects.



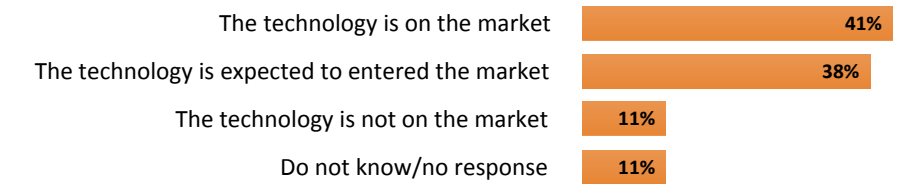
Unfunded Projects

- Unfunded projects tend to be halted.
- 25% of them will be taken further down the path of commercialization either with other government programs (including NSERC programs), funds from private sources or from their research institution.
- The extent to which unfunded projects are likely to be commercialized is somewhat limited.
- If they are, it will most likely be done by an established Canadian company.

Transfer process & receptors of the transferred technology

- Successful commercialization process may require more than 18 months
- Receptors of the transferred technology largely consist of either established Canadian companies or spin-off companies in which researchers may or may not be a primary investor.
- In a small number of cases, technologies are fact transferred to a foreign entity.
- The technology is transferred to a partner (through licensing, selling of IP rights etc.) in 54% of cases.

Market Entry for Technologies Transferred to Partners



Recommendations

- 1. The federal government should continue to support the commercialization of Canadian innovations through the three types of funding currently offered by I2I.** While each type of funding serves its own purpose, and while Phase I funding remains the most relevant form of funding, there is also a strong rationale for supporting market assessments and Phase II funding when applicable.
- 2. Idea to Innovation program management should employ a more systematic approach to document the long-term outcomes of the I2I projects it supports.** Program management already collects, using a semi-structured process, valuable information on project outcomes, particularly as these outcomes unfold during the post-funding period. Having a more systematic approach for these monitoring activities would provide additional evidence on the rationale for the types of funding provided and on the impacts of the program.