SR&ED for the Software Sector
Northwestern Ontario Innovation Centre

Quantifying and qualifying R&D for a tax credit submission

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AGENDA

Today's Objectives

1. Overview of the SR&ED tax credit program as it relates to software development.
2. What is NOT R&D and what IS R&D – by the act, and by our experience.
3. How do you define the scope of applicable activities in a project?
4. What kind of documentation will I need to supply?

WHY IS SR&ED IMPORTANT?
Incentive for Innovation

Supporting SR&ED keeps Canada competitive in a global marketplace:

- Offsets the cost of Scientific Research and Experimental Development
- Incentive for product improvement
- Incentive for process improvement
- Increases competitiveness

INCOME TAX ACT - DEFINITION

"A systematic investigation for the purpose of resolving a technological uncertainty, resulting in knowledge"

INVESTMENT TAX CREDIT (ITC)

Who Qualifies?

The program is for:

- Canadian-controlled private corporations (CCPC)…
- …performing qualifying activities…
- …in Canada

SR&ED SECTORS AND INDUSTRIES

Fields of Science & Technology

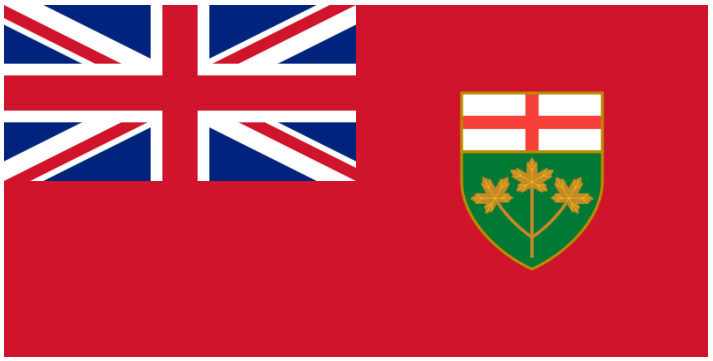
- Natural & Formal Sciences
- Engineering & Technology
- Medical & Health Sciences
- Agricultural Sciences

Excluded by Law

- Social Science
- Humanities

WHAT IS THE RETURN? (Changes start in 2013)

SMEs = 10%



SMEs = 35% REFUNDABLE

Large = 15% NON-REFUNDABLE

QUALIFYING R&D ACTIVITIES

Qualifying activities must be:

1. Systematic, investigative or experimental activities;
2. In a field of Science or Technology
3. One or more of the following categories:
    a) Basic Research;
    b) Applied Research;
    c) Experimental Development;
4. Seek to achieve scientific or technological advancement, and;
5. Involve the resolution of scientific or technological uncertainty.

R&D CAN BE BOTH...

...a runaway success...

AND

...a complete failure.

It can be **PROCESS focused**...

AND/OR

...**PRODUCT focused.**

But in software, we need to talk about **the "how", not the "what".**

CRITICAL CONSIDERATIONS

1. Technological Advancements

What technological advancements were you trying to achieve?

- An advancement in science & technology means an advance in **overall knowledge or capability in the field**
- Advancing the company's state of knowledge or capability does not specifically qualify, UNLESS knowledge of an advance is not reasonably available (ie: not public domain or trade secret)
    - Reverse engineering is allowable!

CRITICAL CONSIDERATIONS

1. Technological Advancements

ADVANCEMENT:	Example:
•Communication protocols with improved performance that could be used in other projects	•Developing mechanisms and data structures to support delivery of large videos
•Capacities for software applications that challenge the original architecture and the techniques or tools used for the original application.	•Development of an enhanced search engine platform
•Tools for a single application when existing tools are unable to meet needs	•Developing language elements and extensions to existing object toolkits

CRITICAL CONSIDERATIONS

1. Technological Advancements

ADVANCEMENT:

•Better information encryption in light of what is already on the market

•Efficient system that incorporates independent, modular platforms

Example:

•Development of an encryption system that not only encrypts but also compresses information within certain constraints where the technology isn't readily available

CRITICAL CONSIDERATIONS

2. Technological Uncertainties

Technological uncertainties arise in two main scenarios:

1. Uncertainty as to whether a particular goal can be achieved; or
2. Uncertainty (from a scientific or technological perspective) in relation to alternative methods that will me desired cost or other specifications such as reliability or reproducibility.

AGAIN:

- If the best solution is readily apparent to a competent professional in the field, and there is no doubt as to how to proceed, there is likely no R&D.

CRITICAL CONSIDERATIONS

2. Technological Uncertainties

- Is the desired solution and advancement apparent?
- Is it known which alternative is the best solution?
- Technological uncertainty exists if there is at least one issue that makes us doubt that the specifications can be met with existing techniques
- Is it known if software and hardware constraints will affect desired performance, interface or interoperability?
- Can the design issue be resolved through discussion?
- The peer test. Bring it to one of your peers if the solution isn't apparent to them either then you have an uncertainty

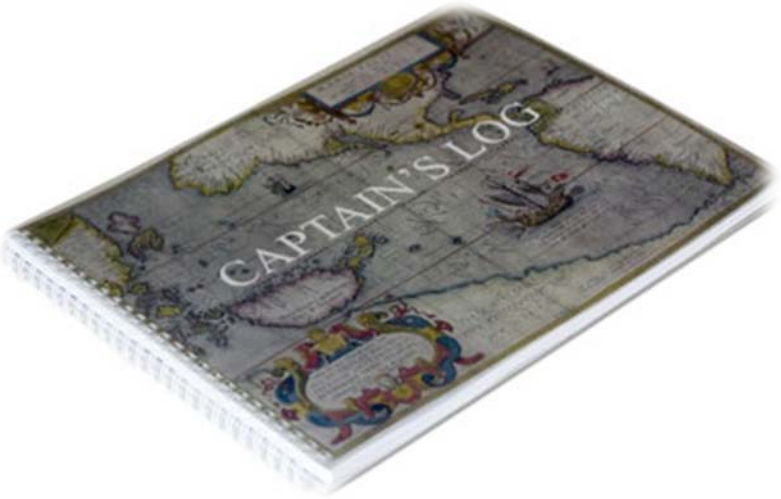
- To demonstrate the technological uncertainties and the systematic investigation, various alternative designs as well as analyses and testing to select from among the various alternatives are helpful (i.e. Supporting documentation)

CRITICAL CONSIDERATIONS

3. Systematic, Investigative & Experimental

How do you demonstrate this?

1. Planned logical sequence of work;
2. Detailed records maintained;
3. Show how major elements fit into the R&D activity as a whole;
4. Show specific indicators or measures to help define when the end-point of the R&D will arrive;
5. Qualified personnel performing the R&D work.



ACTIVITIES THAT DO NOT QUALIFY

Does NOT Qualify:

"Standard Engineering and/or Practice"

With exceptions:

If the "standard engineering and/or practice" is required or drawn in as a critical, dependent component of a larger initiative that seeks an advancement or resolves an uncertainty, it should be included.

Rule of Thumb:

If an activity in and of itself does not constitute qualifying work, examine it in the greater context of the project.

ACTIVITIES THAT DO NOT QUALIFY (cont')

Where there is no advancement/obstacles:

- Adapting a known engineering or technological practice to a new situation where there is a high degree of certainty that the known technology or practice will achieve the desired objective
  - you did it once elsewhere as part of an R&D initiative, and now you're reusing technique
- Solution available in public domain
- When the outcome is predictable
- Minor modifications, trouble shooting, debugging, tweaking, optimizing
  - work performed after you have clear indicators that the R&D project is complete

ACTIVITIES THAT DO NOT QUALIFY (cont')

Where there is no advancement:

- No new knowledge
- No experimentation or analysis
- Methodical but not challenging
- Routine (data collection, quality control, condition monitoring)
- Performed by non-qualified staff
- Non-technological (social sciences or humanities, marketing, style changes or aesthetics, user interface)

ACTIVITIES THAT MAY QUALIFY

Ask yourself:

1. Did you design a new product/process or improve an existing product/process?
2. Did your design change as you went along?
3. Did you investigate/test several alternative solutions?
4. Did you adapt or use a known technology for a different application than its original intent or usage?
5. Did you learn something unexpected about your technology?

ACTIVITIES THAT MAY QUALIFY

Ask yourself:

6. Did you integrate otherwise independent technologies into a new system?
7. Did you pursue an idea upon which you were not confident in the outcome?
8. Did you achieve changes in performance metrics?
9. Did you engage in projects that failed or did not meet the performance guidelines prescribed at project outset?

ACTIVITIES THAT MAY QUALIFY

Ask yourself:

10. Did you suffer higher than normal or expected scrap rates?

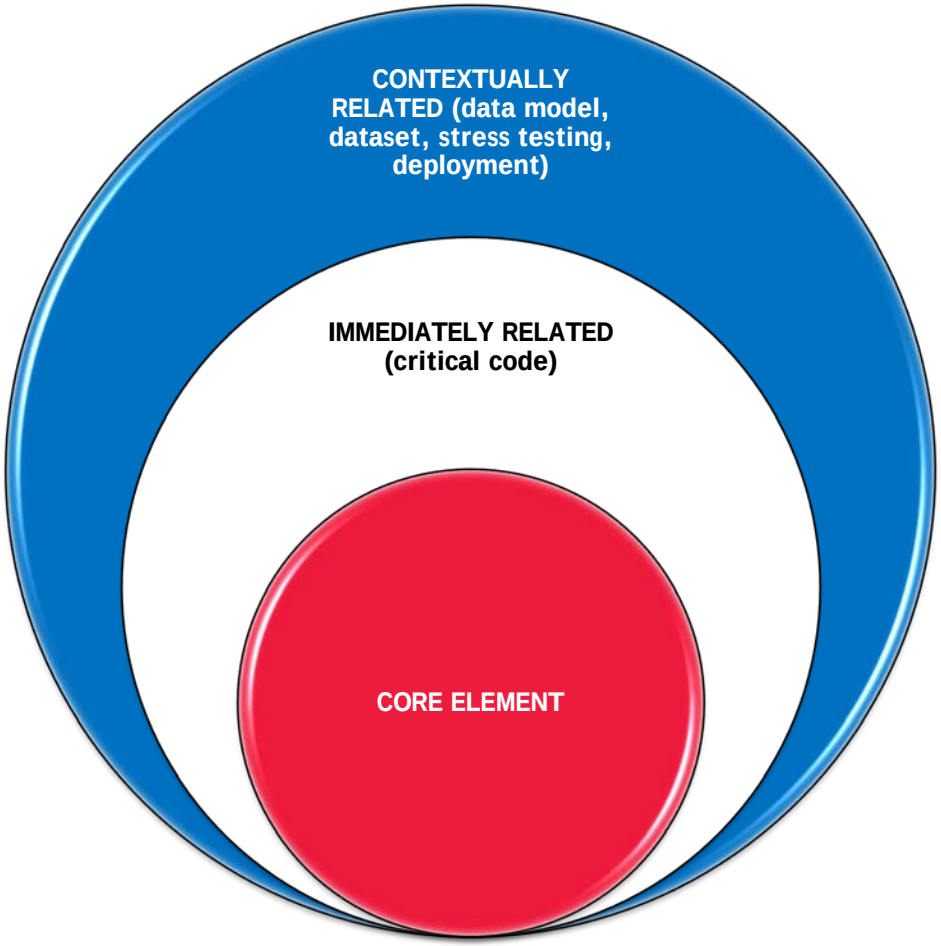
11. Did you suffer cost overruns or longer than expected development time?

12. Did you have issues related to satisfying regulatory bodies?

13. Did you conduct performance tests?

14. Did you have to meet non-technological constraints (cost, size, appeal, etc.?)

THE NUCLEIC METHOD OF PROJECT SCOPE



WHAT CAN I USE FOR DOCUMENTATION?

We will ask if you have:

- ❑ Project planning documents
- ❑ Records of resources allocated to project, time sheets
- ❑ Design of experiments
- ❑ Project records, laboratory notebooks
- ❑ Records of trial runs
- ❑ Progress reports
- ❑ Minutes of project meetings
- ❑ Test protocols, test data, test results
- ❑ Analysis of test results, conclusions
- ❑ Final project report or professional publications
- ❑ Prototypes, samples

QUESTIONS?

"SR&ED happens when the standard research and development processes come to a grinding halt, forcing the development team to consider their options."

Want to know more?

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