Learning and Performance Support Systems

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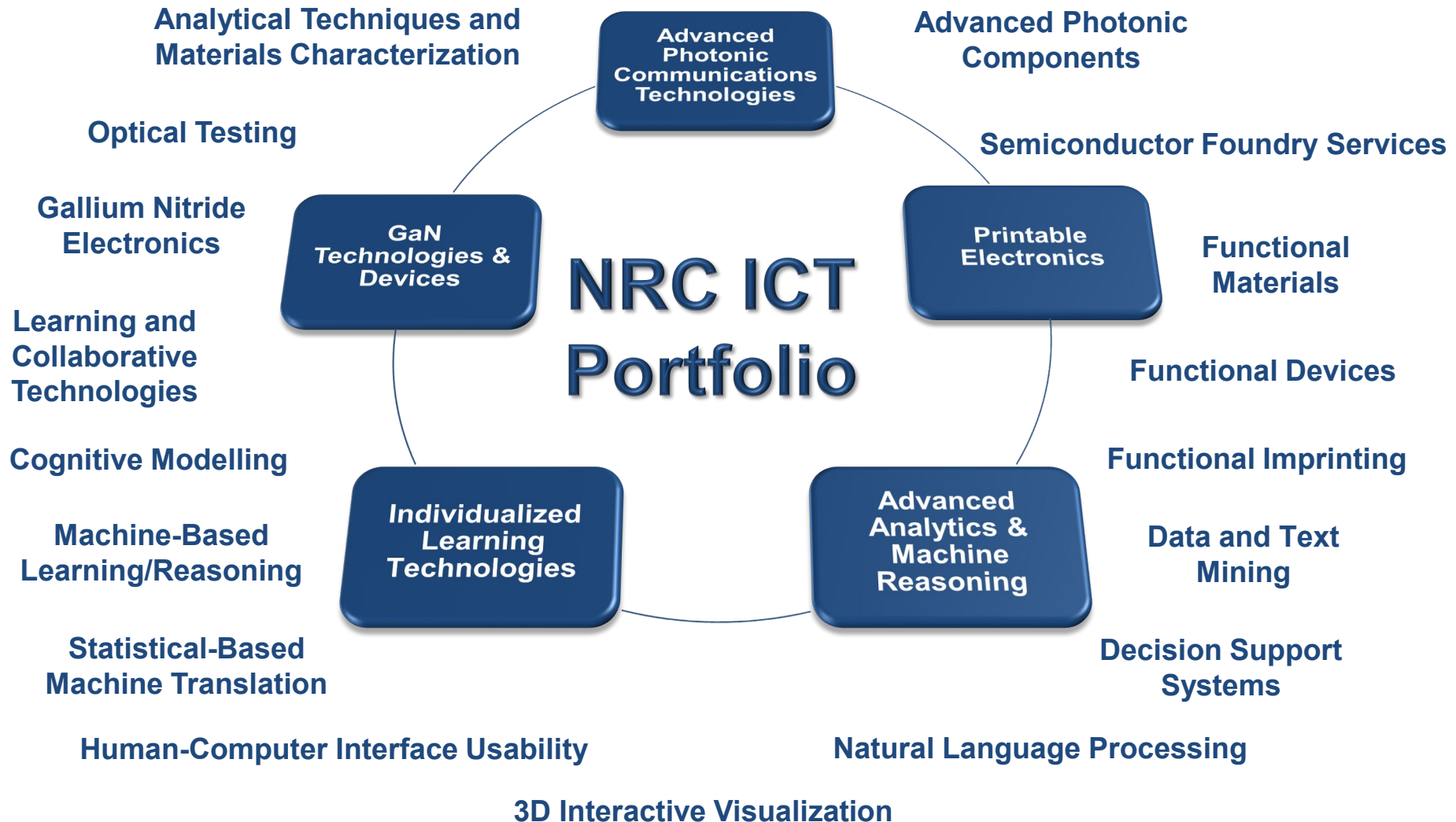
World-Renowned Competencies

Analytical Techniques and Materials Characterization

Advanced Photonic Communications Technologies

Advanced Photonic Components

Optical Testing

Semiconductor Foundry Services

Gallium Nitride Electronics

GaN Technologies & Devices

NRC ICT Portfolio

Printable Electronics

Functional Materials

Learning and Collaborative Technologies

Functional Devices

Cognitive Modelling

Functional Imprinting

Machine-Based Learning/Reasoning

Individualized Learning Technologies

Advanced Analytics & Machine Reasoning

Data and Text Mining

Statistical-Based Machine Translation

Decision Support Systems

Human-Computer Interface Usability

Natural Language Processing

3D Interactive Visualization

NRC·CNRC

The Skills Shortage in Canada

- The Canadian Oil and Gas (O&G) sector alone loses an estimated $4 billion per year due to skills shortages.

- 25 job groups show signs of skills shortages. 21% of employment in Canada, these groups have an unemployment rate of less than 1%,

- Training current and prospective employees is time-consuming and expensive.

Why NRC?

- NRC is a globally recognized leader in emerging learning technologies
  - Not core competencies for target clients
  - LPSS benefits from NRC's research in other fields
- NRC is deeply connected to the e-learning industry
  - University researchers not driven to spend the time with industry
  - NRC by contrast has collaboration and commercialization experience
  - Neutral broker reduces risk to technology development partners

LPSS program
Personal Learning and Performance Support

Single point of access to all skills development and training needs

- Individual learning path
- Context-aware support
- Searchable and verifiable
- Tailored to industry needs
- Always available

LPSS Program Overview

- LPSS is a $19 million program over 5 years, average 30 FTEs per year

- Based on hosted services used to develop and monetize core technologies, which are then transferred to commercial receptors

- Will work with Canadian learning technology providers and target verticals to address critical skills shortages in that industry

- Revenues during program execution, with potential for ongoing licensing revenues

Learning and Performance Support System: Core Technology Development Projects

- Learning services network and marketplace

- Automated skills development and recognition

- Lifetime management of learning and training records and credentials

- Personal learning assistant to view, update and access training

Resource Network
Learning Assistant
Personal Learning Records
Automate Skills Dev.
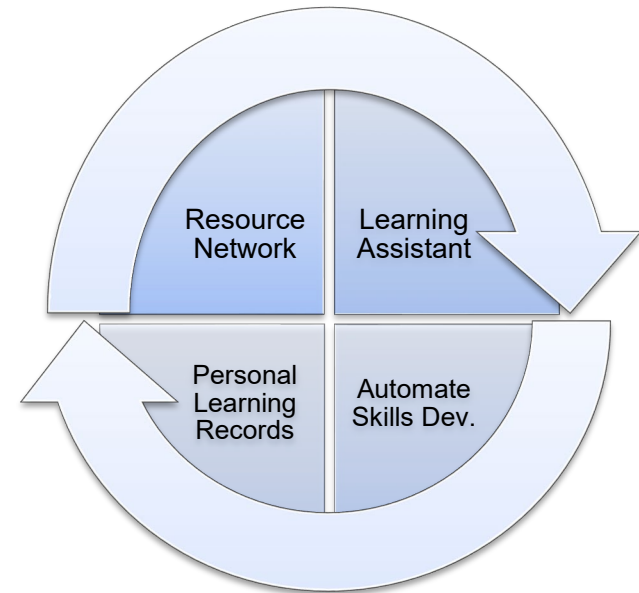
- Learning as a cloud service and deep integration with external systems

The Program Business Model

- Two-phase business model, based first on the development of hosted services, and second on the transfer of technology and client base to strategic partners.
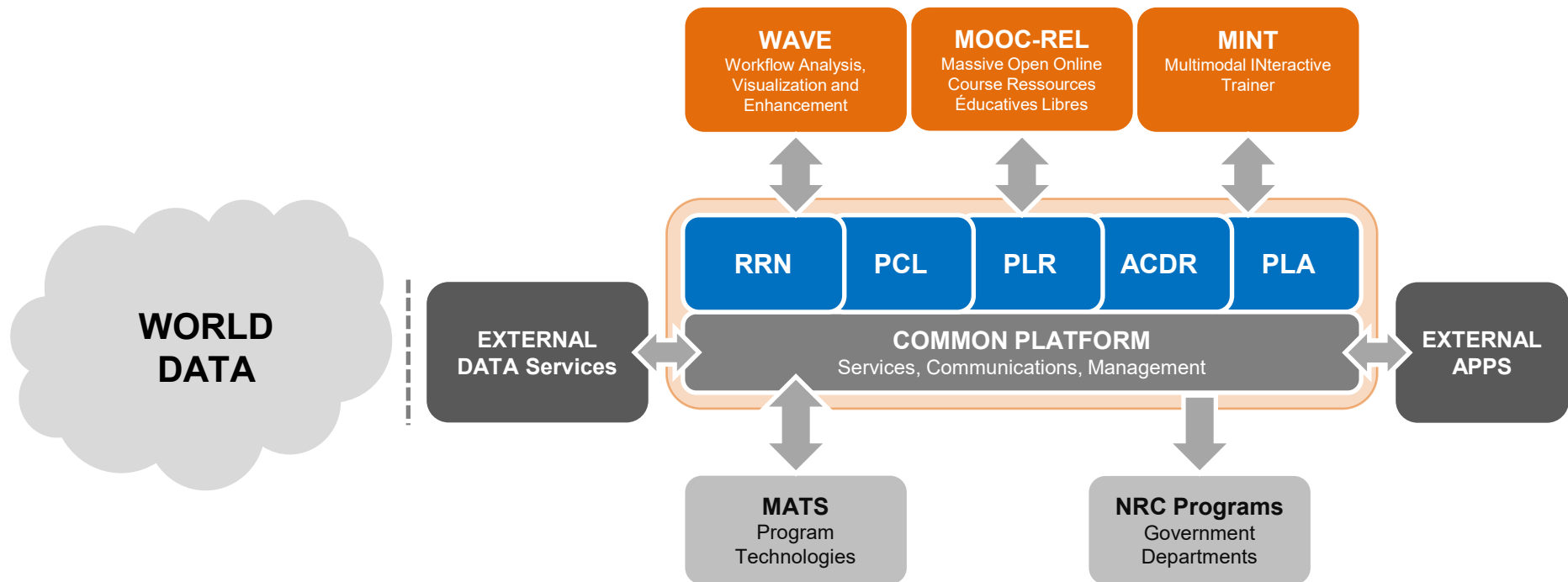
1
- Capacity development through hosted projects

- Monetization through through development agreements and fee-for-service

2
- Transfer of program assets to the commercial sector
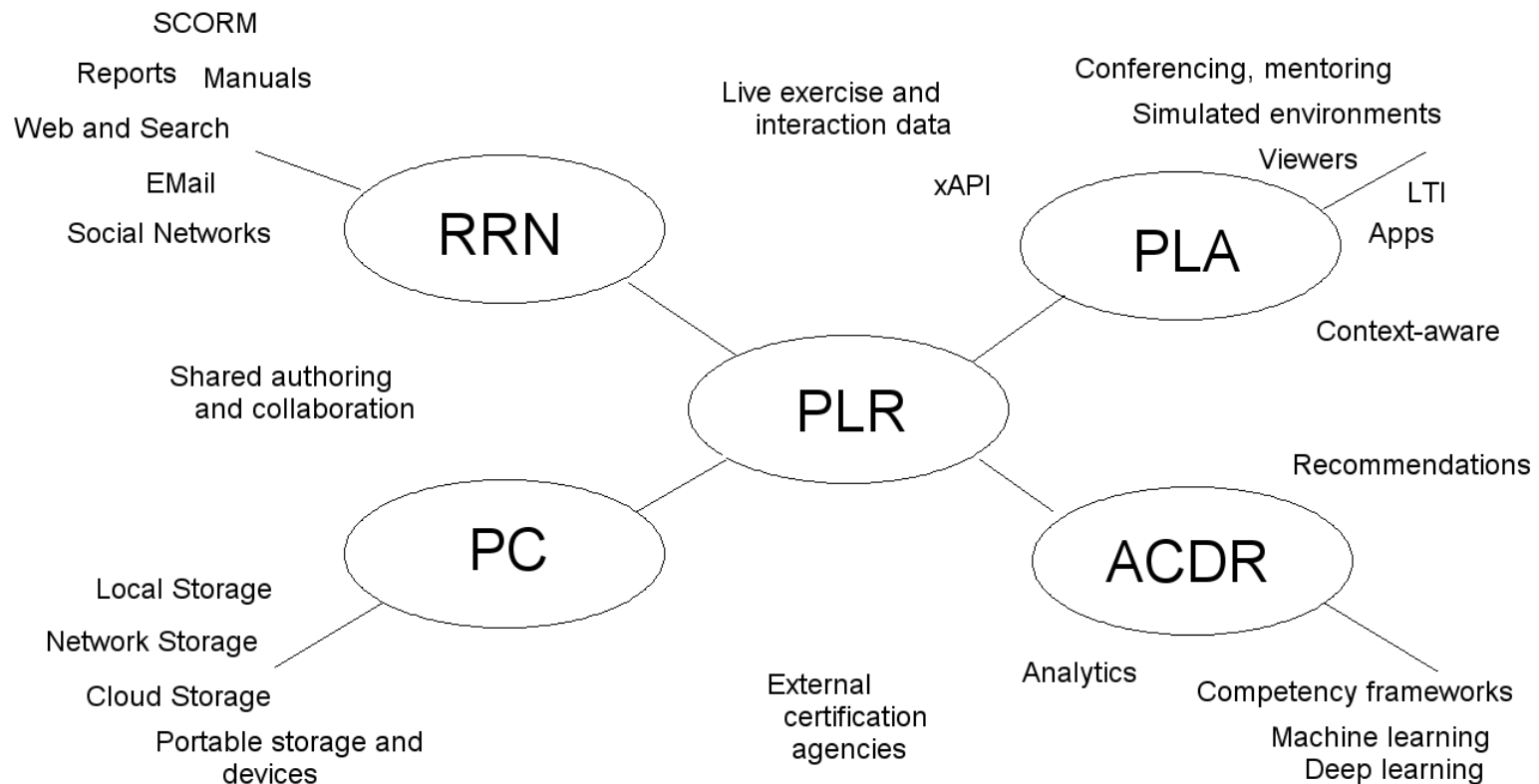
- Consolidation of revenue and exit.

What is LPSS?

- It's a network of personal learning environments…
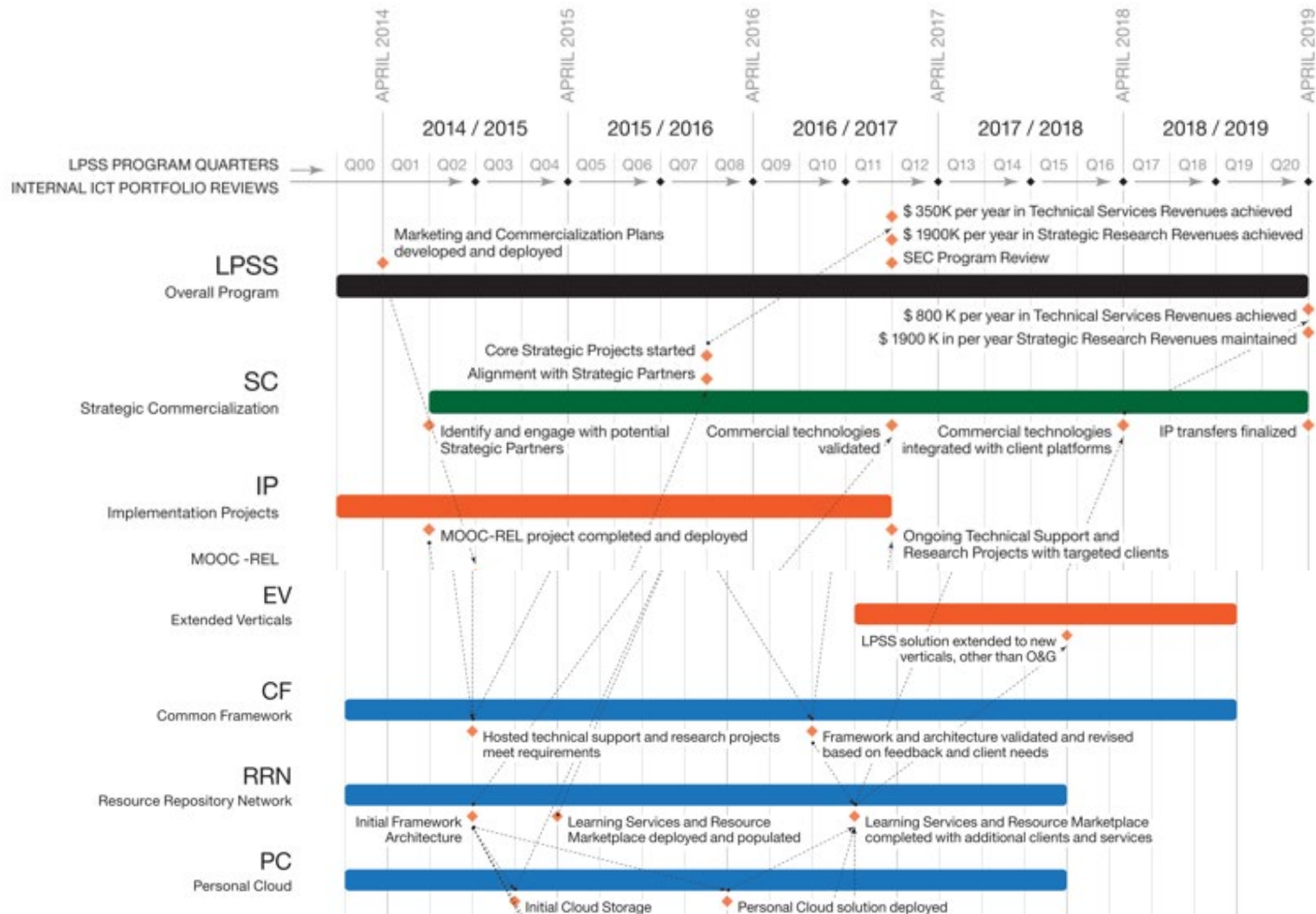- … connected to a large array of learning services

- It's not one big thing…

- … but a set of many small things

- Tasks that are simple in an enterprise system…
  - Like data storage
  - Like content distribution
  - Like authentication
  - Like analytics

  … become that much more difficult

What is the LPSS Program?

Highlights

- **Value Proposition:**
- Problem: skills shortage in Canadian professions and industry
- Solution: personal skills development infrastructure
- **Market Pull:**
- Ongoing negotiations with Ed Tech and Insuctry Clients
- Projects with universities, government departments, international bodies
- **Program Design Based on Engagement:**
- Product and service development with end-user clients
- Transfer and commercialization to Ed Tech partners

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