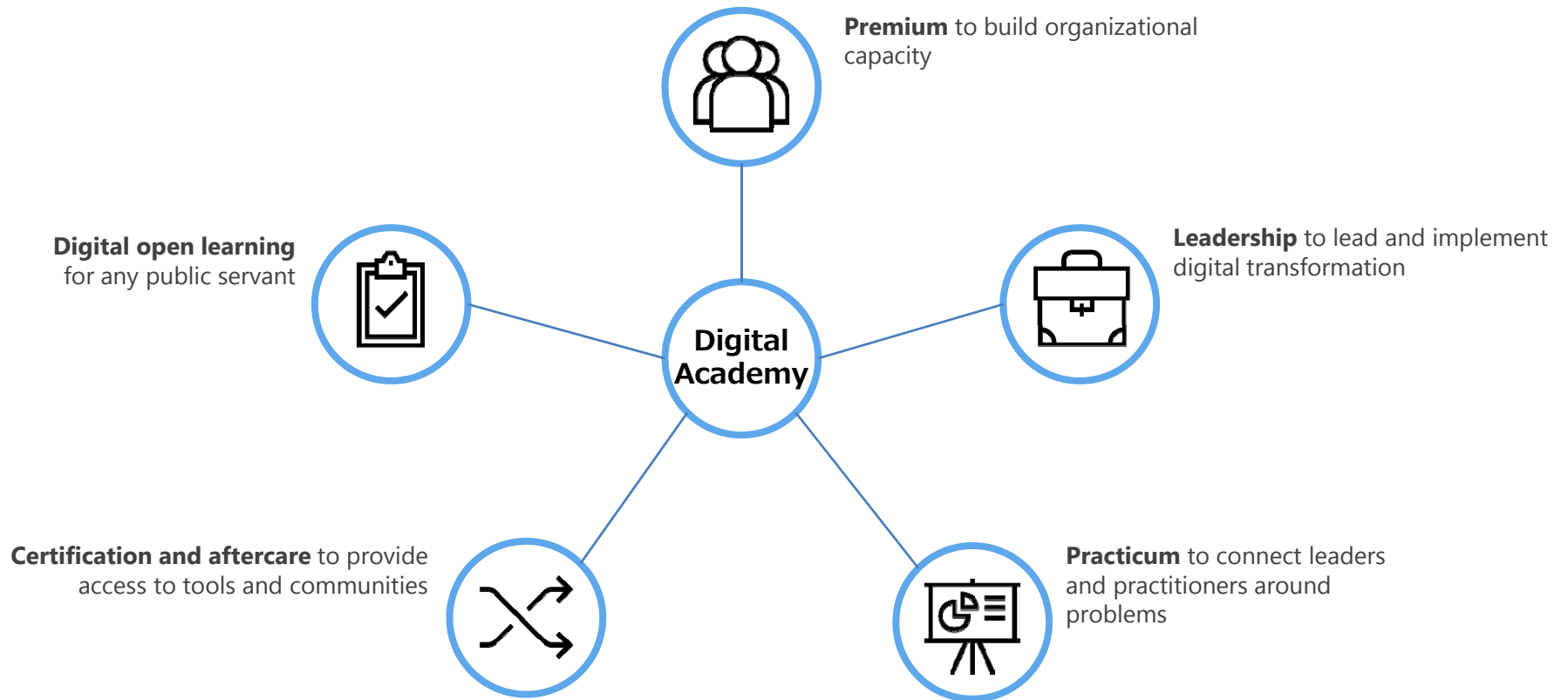# Digital Academy: what and why

● Concept

A teaching organization held at the Canada School of Public Service (CSPS) in partnership with the Office of the Chief Information Officer (OCIO) and the Canadian Digital Service (CDS)
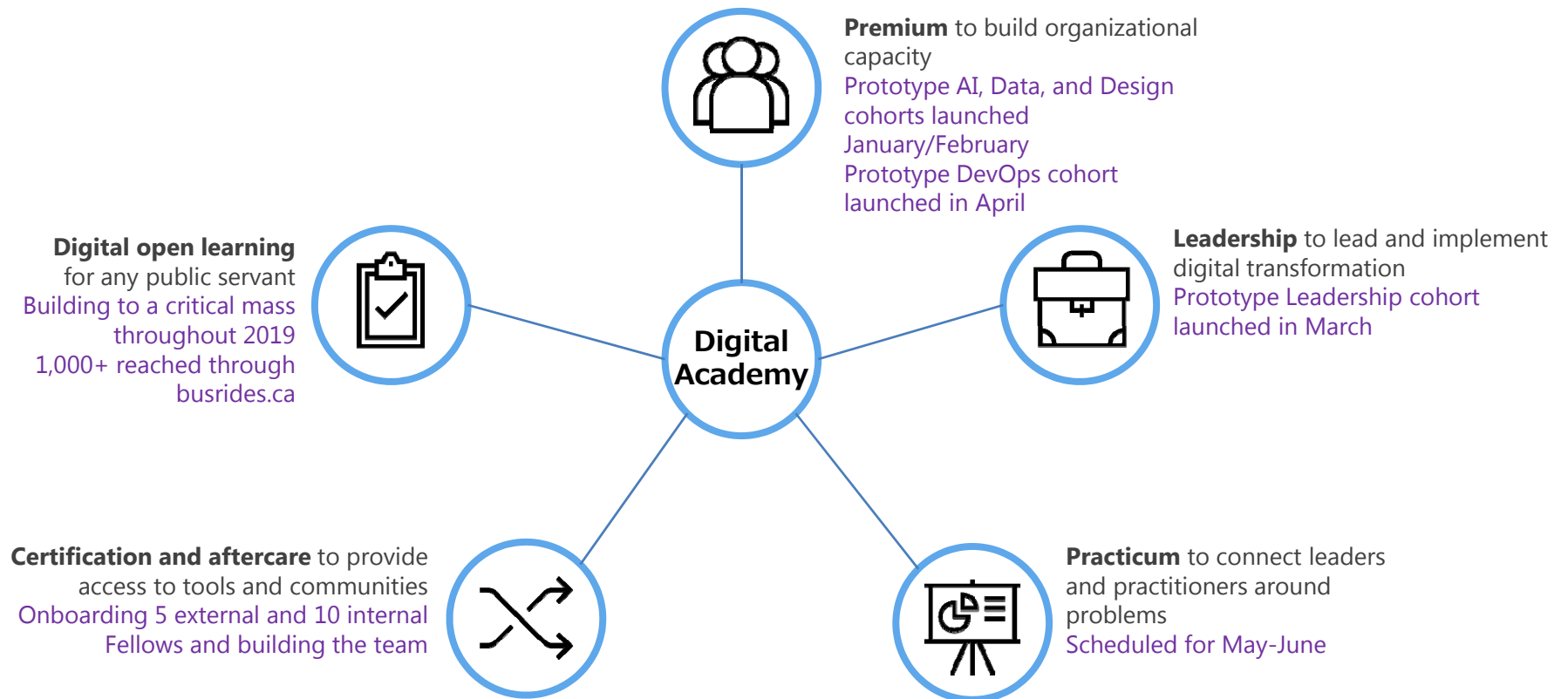
● Objectives

1. Work with partners and experts to develop in our people the foundational, specialist and leadership digital skills needed to meet expectations of Canadians

2. Build diverse and inclusive communities and networks to support continuous and social learning

3. Re-focus learning on the practical application of tomorrow's technology and tools

Digital academy: overview

Premium to build organizational capacity

Digital open learning for any public servant

Digital Academy

Leadership to lead and implement digital transformation

Certification and aftercare to provide access to tools and communities

Practicum to connect leaders and practitioners around problems

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Digital academy: update

Premium to build organizational capacity
Prototype AI, Data, and Design cohorts launched January/February
Prototype DevOps cohort launched in April

Digital open learning for any public servant
Building to a critical mass throughout 2019
1,000+ reached through busrides.ca

Digital Academy

Leadership to lead and implement digital transformation
Prototype Leadership cohort launched in March

Certification and aftercare to provide access to tools and communities
Onboarding 5 external and 10 internal Fellows and building the team

Practicum to connect leaders and practitioners around problems
Scheduled for May-June

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1. Digital Foundations

A variety of learning opportunities to raise digital awareness and literacy for public servants

Combination of original content, third party solutions and community interactions

Learners will have access to material of a variety of difficulty levels

2. Premium: Specialized Learning

Data: skills and tools required to conduct analytics, develop and test hypotheses, visualize and share reproducible results

Design: skills related to techniques and tools used in user experience research and service design in a digital age

Artificial intelligence and machine learning: practical experience in developing and using algorithms to learn from and make predictions or decisions based on data

Development: application & Web development and coding; includes bootcamp in developing web and mobile applications and introduction to DevOps

Disruption: hands-on experimentation on technologies in an innovative laboratory environment

3. Leadership

① Digital Solutions

- Lead agile teams in designing, delivering and operating services

- Leverage data as a business asset

- Use innovative and modern skill-sets and tools to deliver value

- Collaborate and partner effectively with others

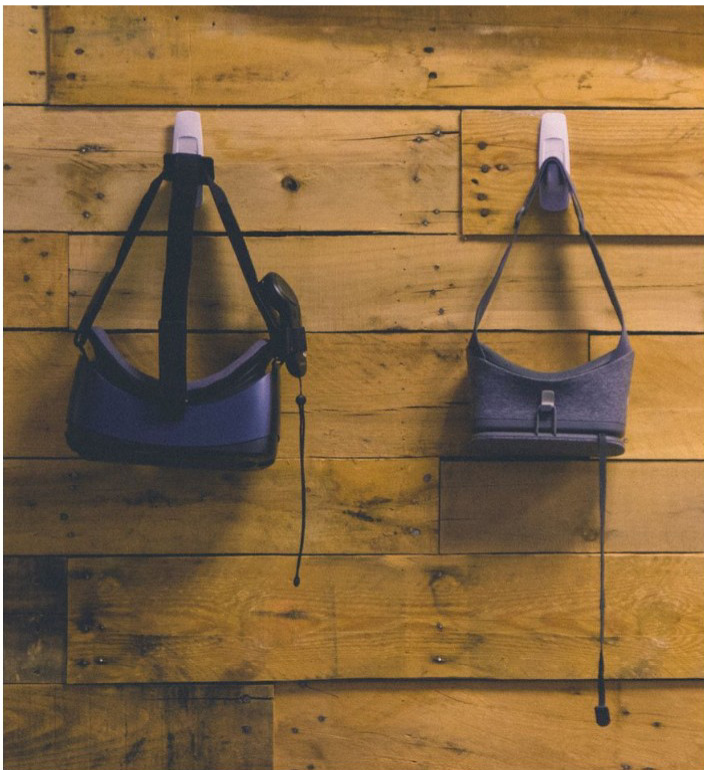- Change leadership within organizations

② Digital for Senior Leaders

- Understand the drivers of success of a digital government

- Be attuned to digital's potential disruptive impact on culture and processes

- Rethink how they organize, measure, recruit, share ideas and partner

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4. Practicum

- Practitioners are matched with leaders to learn through the completion of a project or challenge

- Real projects or challenges are brought from the host organization of participants in the Leadership stream

- Coaches and mentors support the project team in achieving results

- Learners are evaluated in their abilities and their competencies throughout the practicum
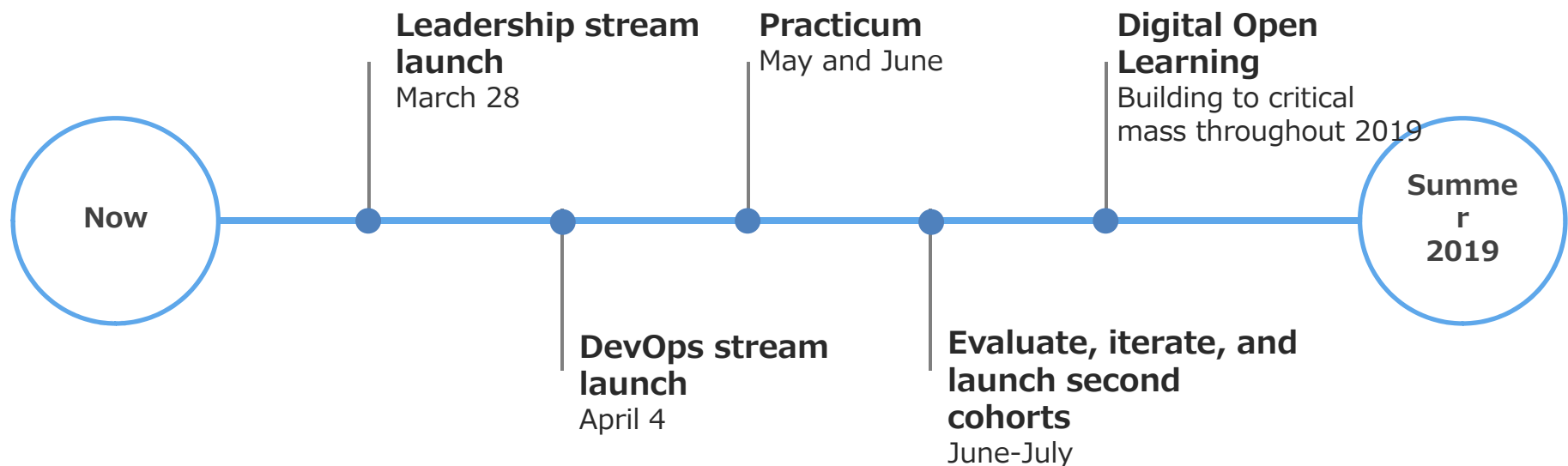

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5. Certification & After Care

- **Learners in leadership and specialist streams will be certified on demonstration of skills and competencies, and will gain:**

- Access to the Digital Academy's innovative and collaborative workspace

- Access to modern tools and equipment to conduct experiments and proofs of concepts

- Access to a cloud data learning sandbox

- Invitation to community events and networking platform

Digital academy: timeline

Leadership stream launch
March 28

Practicum
May and June

Digital Open Learning
Building to critical mass throughout 2019

Now

Summer 2019

DevOps stream launch
April 4

Evaluate, iterate, and launch second cohorts
June-July

Specialist and leadership capacity for 200-300 learners in 2019 (~15 per stream per cohort)
Scale through partnerships to reach up to 1,000+ in-depth learners per year
Reach through Digital Open Learning to reach 10k-100k+ public servants

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How to get involved

(1) **Share**
- [Bus Rides](#): short, consumable digital learning
- [About the Digital Academy](#)

(2) **Partner**
- Develop case studies [with us](#) based on your digital change projects
- [Tell us](#) about your skills gaps, training needs, and research

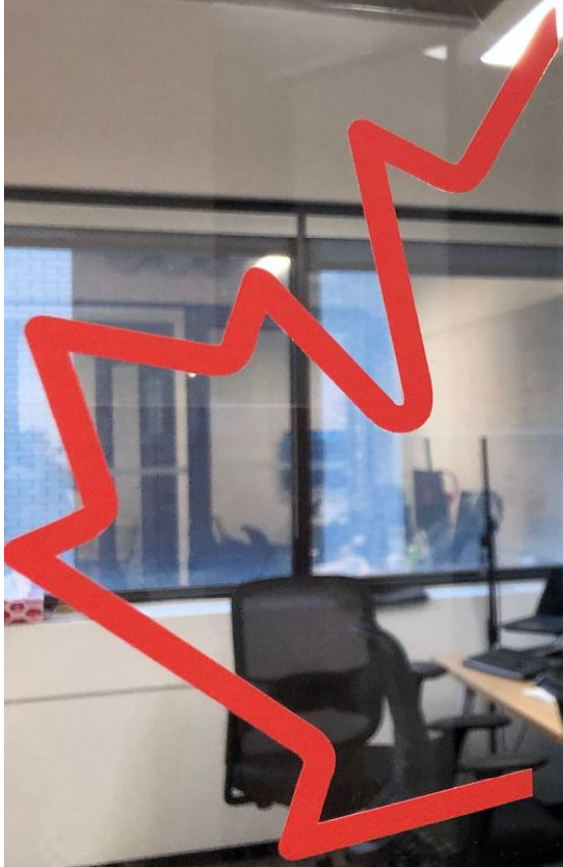**(3)** **Build**
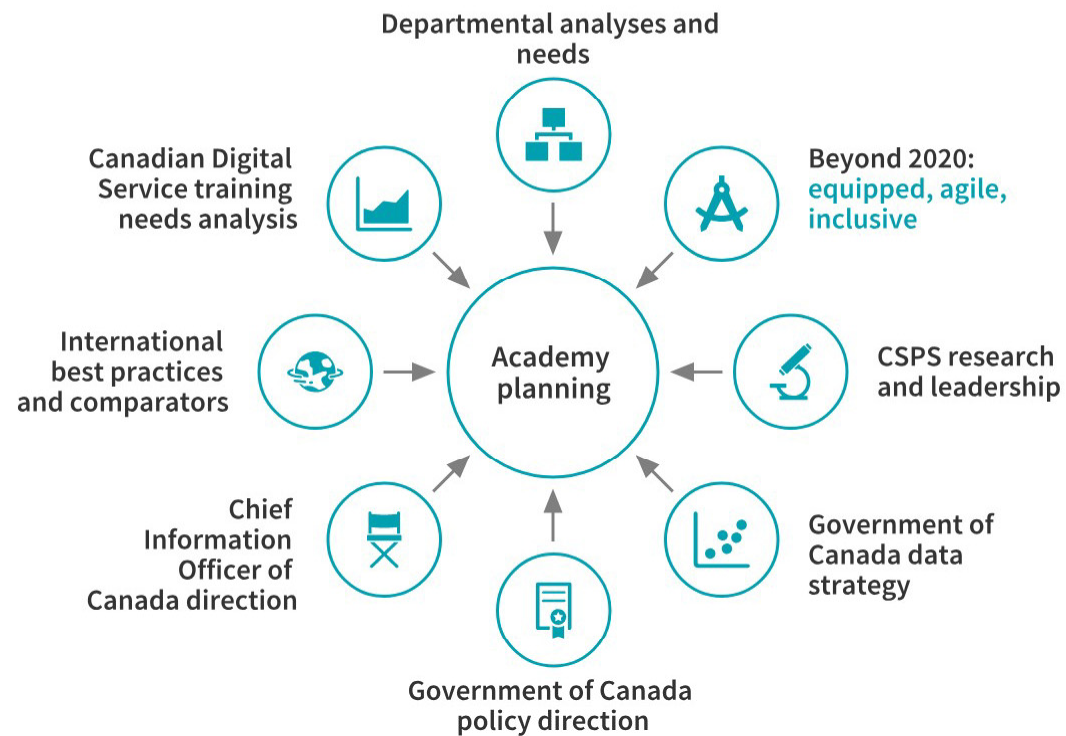- Re-use Digital Academy [learning resources](#) for training

Digital Academy direction and curriculum

Inspired by Government of Canada Digital Standards

1. Design with users
2. Iterate and improve frequently
3. Work in the open by default
4. Use open standards and solutions
5. Address security and privacy risks
6. Build in accessibility from the start
7. Empower staff to deliver better services
8. Be good data stewards
9. Design ethical services
10. Collaborate widely

Leadership: Curriculum Overview

Digital Solutions (EX-01 - 03)

- Hiring and leading multi-disciplinary teams and specialized skills
- Communicating 360 for results
- Leading agile projects
- Leading user-centered solutions
- Coaching others
- Change management and resilience
- Servant leadership
- Building digital acumen

Digital for Senior Leaders (EX-03 - 05)

- Fostering collaboration and boundary spanning
- Fostering risk-taking and experimentation
- Providing sponsorship and Governance in Agile Environments
- Nudging transformation

Foundations: Curriculum Overview

Digital Government

Showcase domestic and international government best practices, policies, and tools and innovations to educate and inspire across government and beyond.

Design Foundations

Enable public servants to use digital information and communication platforms to find, evaluate, create, and communicate clear information.

Digital Literacy

Encourage public servants to work in a more iterative and creative approach while basing the design of government products and services on end-user's needs, wants, and limitations.

Technology and Tools

Foster the use and exploration of technologies to inspire more efficient and innovative ways of working in the public service.

Premium: Sample Data Curriculum

1. Data science universals
2. Basics of programming
3. Statistical and math foundations
4. Data and information architecture
5. Data collection and processing
6. Data exploration and visualization
7. Basic data analytics techniques
8. Measures and metrics
9. Advanced data visualization and reporting
10. Unstructured data and sentiment analysis
11. Predictive analytics

Premium: Sample AI/ML Curriculum

1. Data science universals
2. Basics of programming
3. Statistical and math foundations
4. Data and information architecture
5. Data collection and processing
6. Data exploration and visualization
7. Data mining
8. Classification and value estimation
9. Clustering
10. Unstructured data and sentiment analysis
11. Introduction to deep learning

Premium: Sample Design Curriculum

1. Design thinking
2. Design research
3. Content design
4. Information architecture
5. Service design

6. User interface
7. Interaction design
8. Data visualization
9. Usability testing
10. Prototyping