

# Agile Delivery and DevOps in BC

Presentation to Public Sector Chief Information Officer  
Council

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Ministry of  
Citizens' Services

# Context: This Isn't Lord Maude's Digital Government

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## What does it take to turn a digital strategy into government policy?



“The elements you need are the **political cover**, ...backing it and supporting the team. You need a **technical leader**, someone who has a high degree of technical credibility. You need a **team at the centre of government** that has a critical mass of technical knowledge and understanding in a multi-disciplinary way. ...

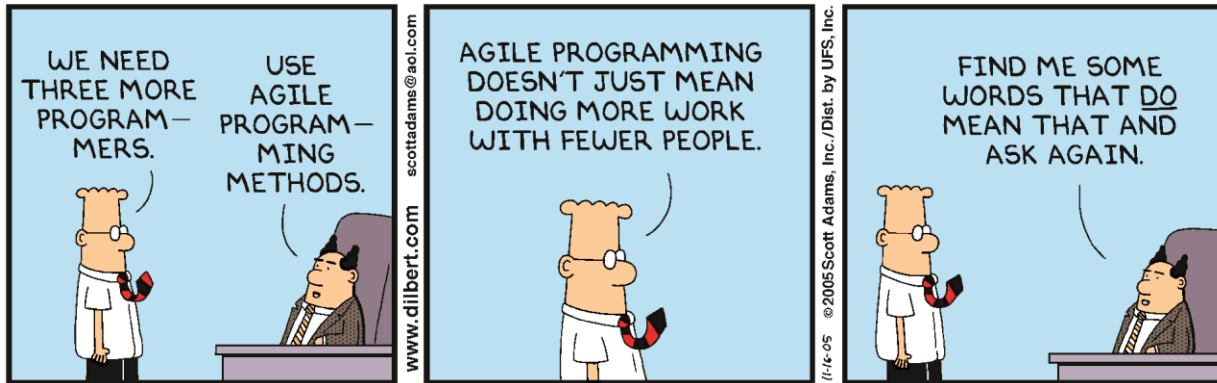
Then you need a **mandate**, one that informs standards across government. It needs the ability to spot money being spent on the wrong thing, which then is backed by the capability to support the rest of the government in doing the right thing.”

**Those are the essentials.**

# Introduction: Establishing a Shared Vocabulary

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## What do we mean when we say



In public sector circles the term “Agile” has established itself as the “new” buzzword of the day – despite the methodology the term describes having been in-development for many decades, and the commercial software community having standardized on these practices many years ago.

**We do not mean “do stand-ups & sprints.”**

**Listen to users. Keep listening.**

**Establish highly-autonomous, cross-functional teams.**

**Equip those teams with the right tools for the job.**

**Optimize those teams for velocity (governance) and learning (experimentation).**

# Start Up: What Was Required to Begin

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## This kind of change is hard ...

What we can now defensibly describe as an “Agile Transformation” in the BC Government had humble beginnings.

In 2015, the Environmental Assessment Office was facing its biggest-ever public engagement, with a digital system completely unfit for purpose.

At the same time, innovators in the OCIO were experimenting with a private cloud platform that would enable iterative development.

Two motivated groups had a reason to collaborate.

**...so give people leadership, enablement and a reason to stick it out.**



# Scale Up: Our Path to Growth

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## The Collaboration Theme Continues

In late 2016, the BC Developers' Exchange – a new organization with a vision for changing the BC Government's approach to digital service delivery while also shifting the model of engagement with the BC technology sector – established the Exchange Lab.

At the Lab, a growing community committed to making public impact works as a network of agile teams to solve hard public problems. Teams spend a 9-12 month residency in the Lab before returning to their home agency, taking their agile methods and mindset with them, spreading these new ways of working.

Supported by the OCIO, the Lab teams' successes stem from sharing.

**Community**

**Capabilities**

**Code**



# Current Status: Successes, Challenges & the Bandwagon

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## Successes:

In the 4+ years since the BC Government started shifting towards this way of working, over 20 teams have come through the Lab and expanded around gov, delivering value for things like patient health empowerment, land-use planning and oversight, and climate action.

## Challenges:

Despite establishing that these agile teams deliver at 10x the speed of traditional development, organizational impediments such as HR and financial policy and practices are slowing broader adoption.

## The Bandwagon:

Nonetheless, everyone building a digital service now seems to want to “do agile.” Legacy projects are “pivoting to 9 teams doing scaled agile.” With change requests. And legacy overhead. And...a lack of appreciation that agile is not something you *do*, but instead must *be*.

## Accomplishments



**Digitizing priority public services** like MSP registration in weeks, not years.



Enabling Government's **climate action and clean growth** mandate.



Fulfilling BC OAG's demands for **better mine oversight**



Meeting the BC Ombudsperson's calls for **greater transparency** in Crown Land allocation

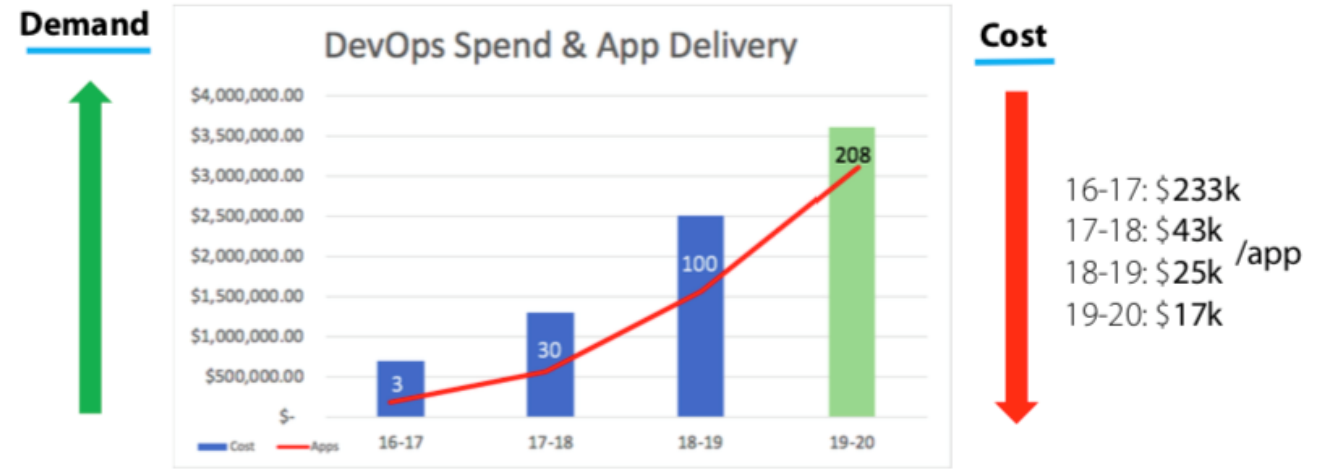
# Current Status: DevOps

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Substantiated by 4-years of prior investment, collaboration, and learning, we envision a near-future state in which all public sector entities are enabled to

- meet their users' needs,
- respond to changing requirements, and
- rapidly deliver value to the public through world-leading approaches to application development and deployment.

## The Growth Curve of Digital Government Enablement



## Four Years' of Learning

- Community driven improvements
- Quota model cost management
- Ability to instantly prototype
- Identical dev, test and prod environments

# Moving at the Speed of Need: COVID-19 Response

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The importance of using modern tools and ways of working to better serve citizens has amplified during the COVID-19 pandemic, catalyzing the Province to step up modernization efforts.

For example:

- In response to demand for modern cloud-based tools to support remote collaboration, the OCIO rapidly made enabling changes to privacy legislation via a Ministerial Order.
- Using cloud-based infrastructure, the Province rolled out a new service in less than a week that helps returning travelers submit self-isolation plans and receive required supports to self-isolate – this open source code was then shared and scaled via the Federal Open Call initiative.
- The Province rapidly rolled out a COVID-10 Chatbot to connect an unprecedented number of visitors to gov.bc.ca with the information and services they required.
- The Province expanded the BC Health Gateway to provide citizens with secure online access to COVID-19 test results.



# Lessons Learned & Next Steps

## What we've learned:

- This isn't about ceremonies, sprints and jargon
- It's a substantial change in mindset, process, and org design
- It takes time – more than you want
- Start small. Fail small. Iterate. Learn
- Build teams, not apps
- Give those teams top cover & get out of the way
- Support experimentation
- Work in the open
- Cultivate community, celebrate success
- Recognize the interconnected requirements

for change – not least policy, procurement,

financial model

## Where to from here:

- Keep working on removing institutional challenges, driven by next iteration of Digital Framework
- Continuing to measure and share successes and openly share learnings
- Enhancing rigor and consistency around "agile" practices – see: "AINO: agile in name only"
- Continuing to train the Public Service, reducing our dependency on contractors
- Networking the success of the Exchange Lab into a hub-and-spoke delivery network across government
- Expanding collaboration beyond core government

– including being intentional about cultivating

Pan-Canadian public and external ecosystems

A group of people are gathered around a large white conference table in a meeting room. A man in a suit is standing and pointing at a presentation screen. The screen displays a slide titled "Readers' Digest Version (jargon-free)" with two bullet points: "start by defining your problem in terms of user needs." and "build solutions quickly and simply at first—just get something workable finished." A whiteboard in the background has the text "What I Want" written on it. The room is filled with people, some sitting and some standing, all appearing to be engaged in a discussion. The table is cluttered with various items including laptops, water bottles, coffee cups, and papers. The overall atmosphere is professional and collaborative.

# Discussion