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DYNAMICS CON

LIVE

MAY 2024

Tricks of the Trade for supporting Citizen Developers

Douglas Hubbard, Transport Canada



Introduction

Are you interested in enabling and optimizing Citizen Development for your organization but unsure of how to navigate this uncharted territory? Transport Canada's Power Apps Centre of Excellence (PACE) has been working at this conundrum for years, and this session discusses what we've done.

Topics covered include: how to structure your tenant, leveraging the CoE toolkit to both support and effectively monitor Citizen Developers; how training and support needs differ from Professional Developers; defining where Citizen Development is (and isn't) appropriate; how to establish effective Fusion Teams; managing expectations and defining obligations for each "flavour" of development; finding the right governance balance between innovation and risk management; ways and means to be inclusive with your Citizen Developers; the often thorny question of maintenance; and establishing a development community that can support one another.



About Transport Canada

Transport Canada

We are a federal institution, leading the Transport Canada portfolio and working with our partners.

Transport Canada is responsible for transportation policies and programs. We promote safe, secure, efficient and environmentally responsible transportation.



<https://tc.canada.ca/en>



Power Apps
Centre of
Excellence

PACE





A close-up, low-angle shot of a bronze statue of a muscular man in a thinking pose. The man is seated on a rock, leaning forward with his chin resting on his hand. The statue is highly detailed, showing the texture of the bronze and the intricate musculature of the man's body. The background is a clear, bright blue sky.

Part One – Understanding your target audience

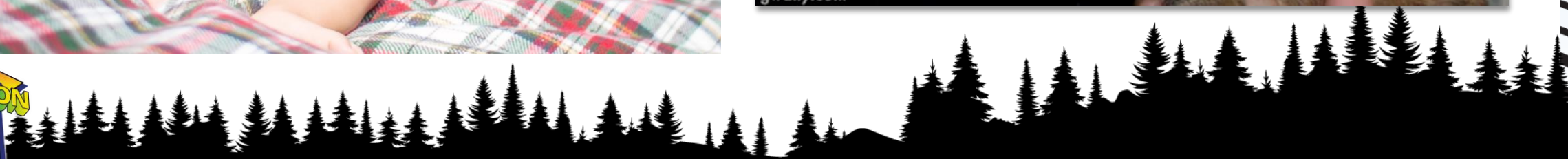
What is a Citizen Developer?

“A Citizen Developer is a user who creates new business applications for consumption by others using development and runtime environments sanctioned by corporate IT. In the past, end-user application development has typically been limited to single-user or workgroup solutions built with tools like Microsoft Excel and Access. However, today, end users can build departmental, enterprise and even public applications using shared services, fourth-generation language (4GL)-style development platforms and cloud computing services.”

Source: Gartner, Information Technology Glossary



Dealing with Organizational Reticence



Money
makes
the world
go round



Citizen versus Professional Developers

(Or: Comparing Apples to Suspension Bridges)



What Citizen Developers want (or need, which is not the same thing)

- Training
- Ongoing support
- Streamlined processes
- Clear policies
- An intermediate/champion for them in IT



What size envelope?

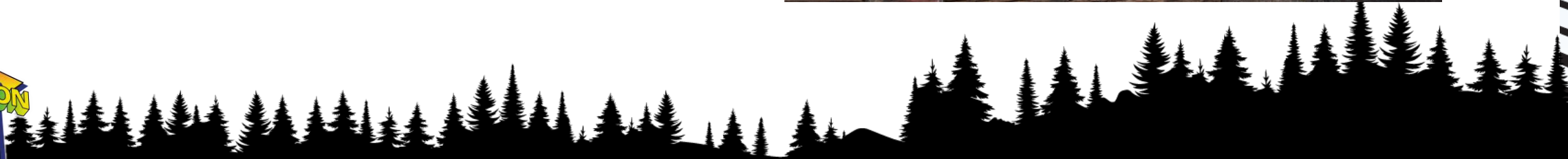




Part Two –
Setting the stage

Where to set up shop

- Default tenant?
- New environment?
- Hybrid?





Welcome to the Playground

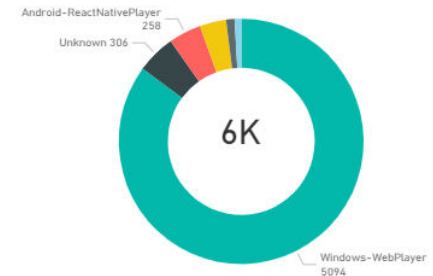


Leveraging the CoE Toolkit

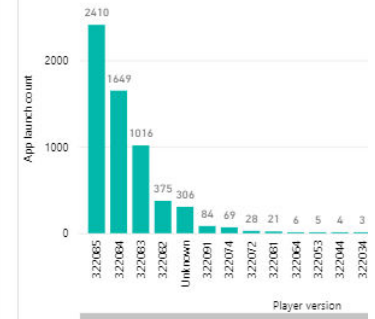


Showing data for FlexiDesk-prod-tcd365 for the Last 28 Days. [Change filters](#)

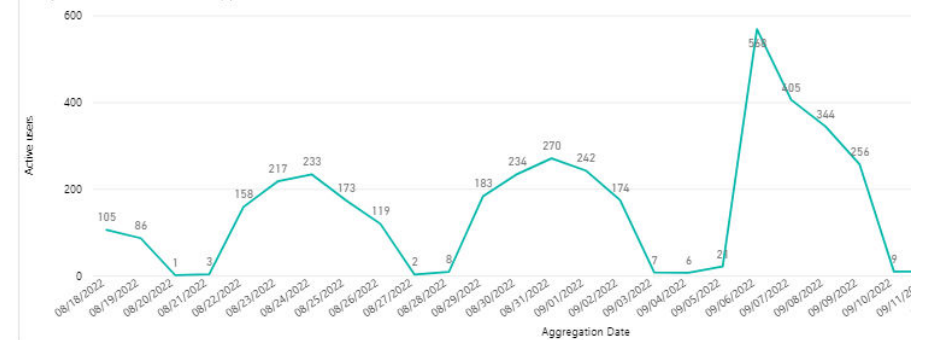
App launches across device platforms for all apps



App launches across player versions for all apps



Daily active users across all apps



Proactive versus Reactive



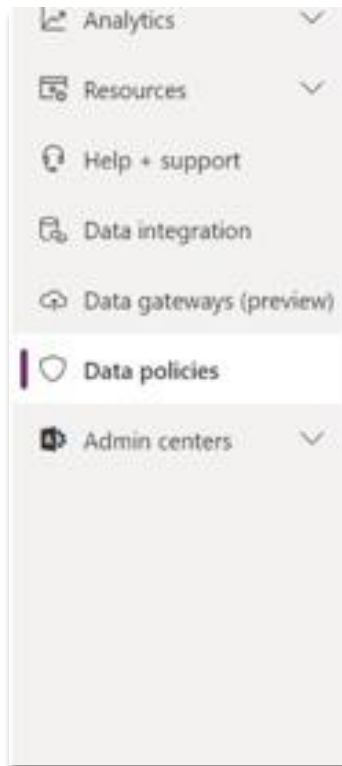


**Who
doesn't
love
pipelines?**



Data Loss Prevention (DLP)

<https://docs.microsoft.com/en-us/power-platform/admin/wp-data-loss-prevention>



No policies created

Protect your org's (tenant) data by creating business, non-business, and blocked connector policies.



The point of it all – hearing from a Citizen Developer

Andre Couture discusses his journey as a Transport Canada Citizen Developer





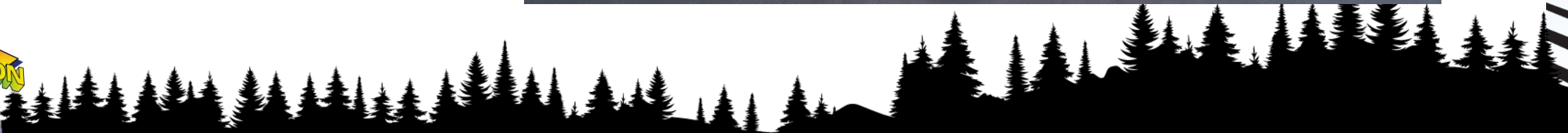
Couture, Andre (TC/TC)



A bronze statue of a muscular man in a thinking pose, similar to Rodin's 'The Thinker', set against a clear blue sky. The statue is highly detailed, showing the man's intense concentration and physical strength. He is seated on a large, textured rock. The text 'Part Three – Rules of the game' is overlaid in white on the left side of the image.

Part Three – Rules of the game

Risk and reward



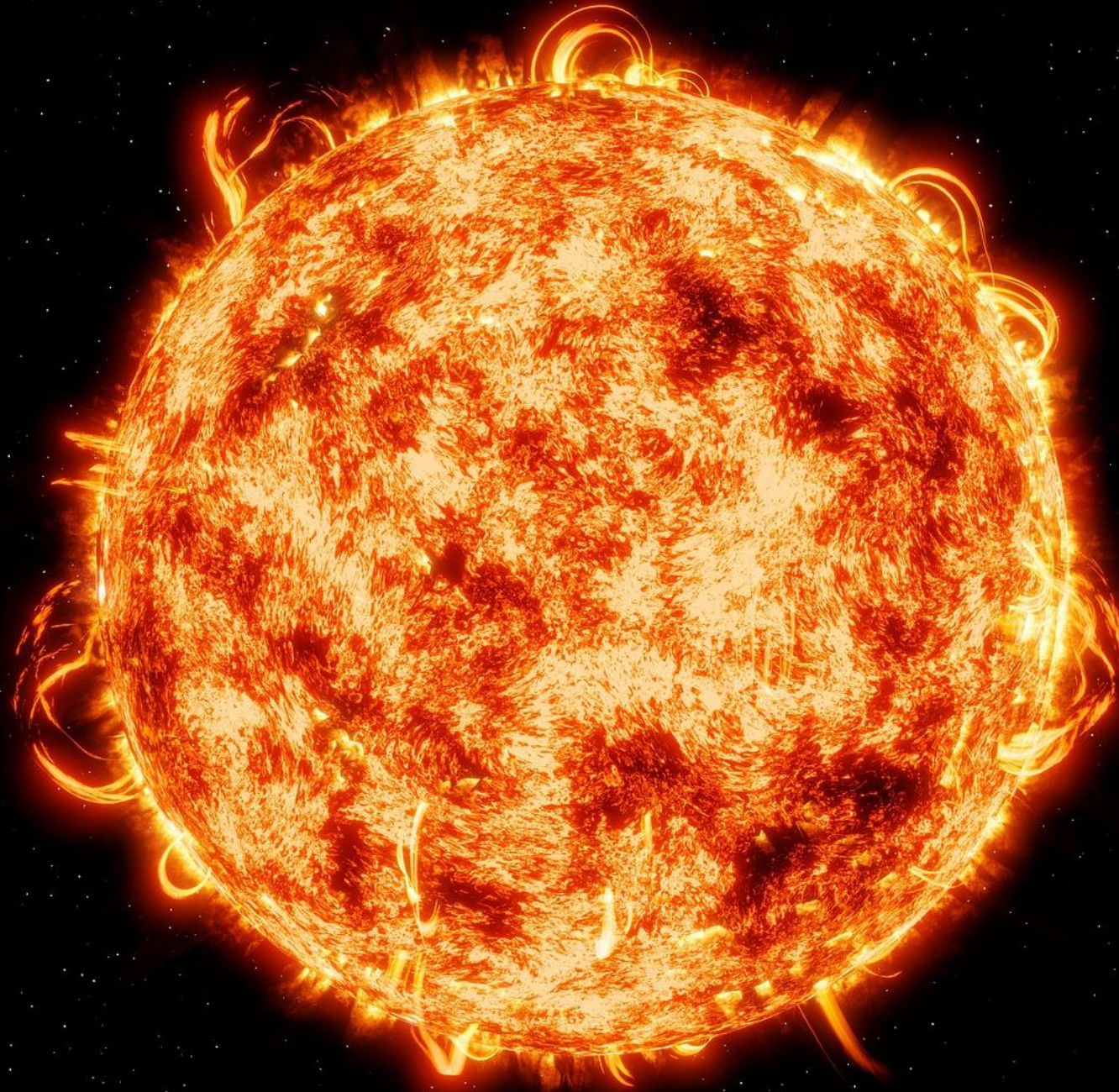


It's a waterfall world



Types of Citizen Development

- “Pure” Citizen Development
- Fusion Teams





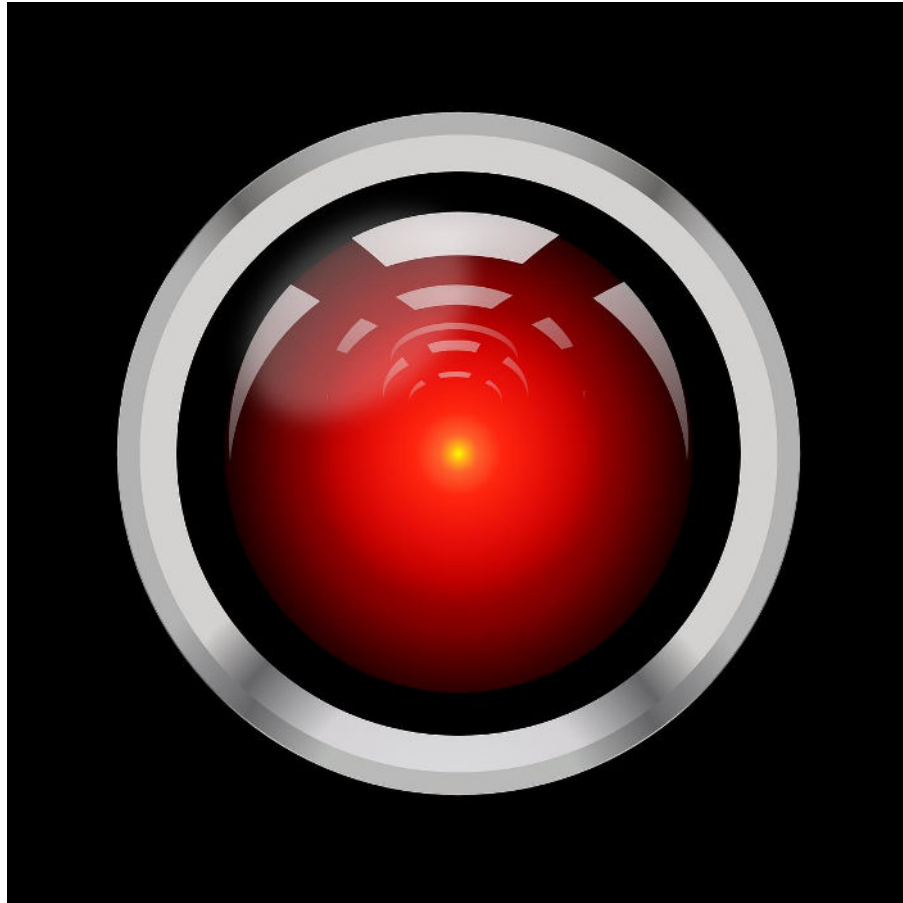
**What's the
right tool for
the job?**



Building bridges and the rules of engagement



ChatGPT, AI in general, and you



"Open the pod bay doors, HAL"





I am the law?





The Good, The Bad, and The Ugly

- Good fits for Citizen Development
- Bad fits for Citizen Development
- When things get ugly



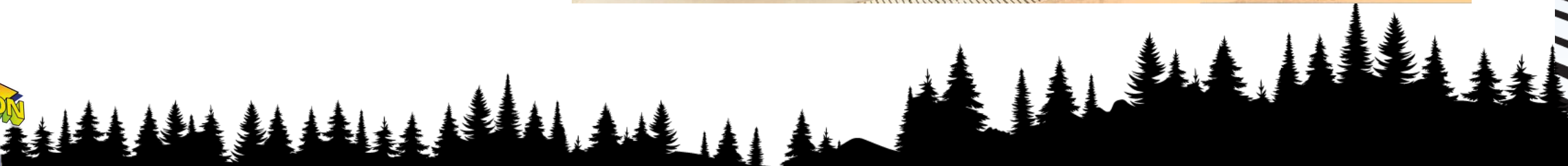
Waiting for the ink to dry: Contracts



A bronze statue of a muscular man in a thinking pose, similar to Rodin's 'The Thinker', set against a clear blue sky. The statue is highly detailed, showing the man's intense concentration and physical strength. He is seated on a rock, with his right hand resting on his chin and his left hand on his knee. The background is a solid, clear blue sky.

Part Four – Care and Feeding of Citizen Developers

**Think of it as
a waterpark**



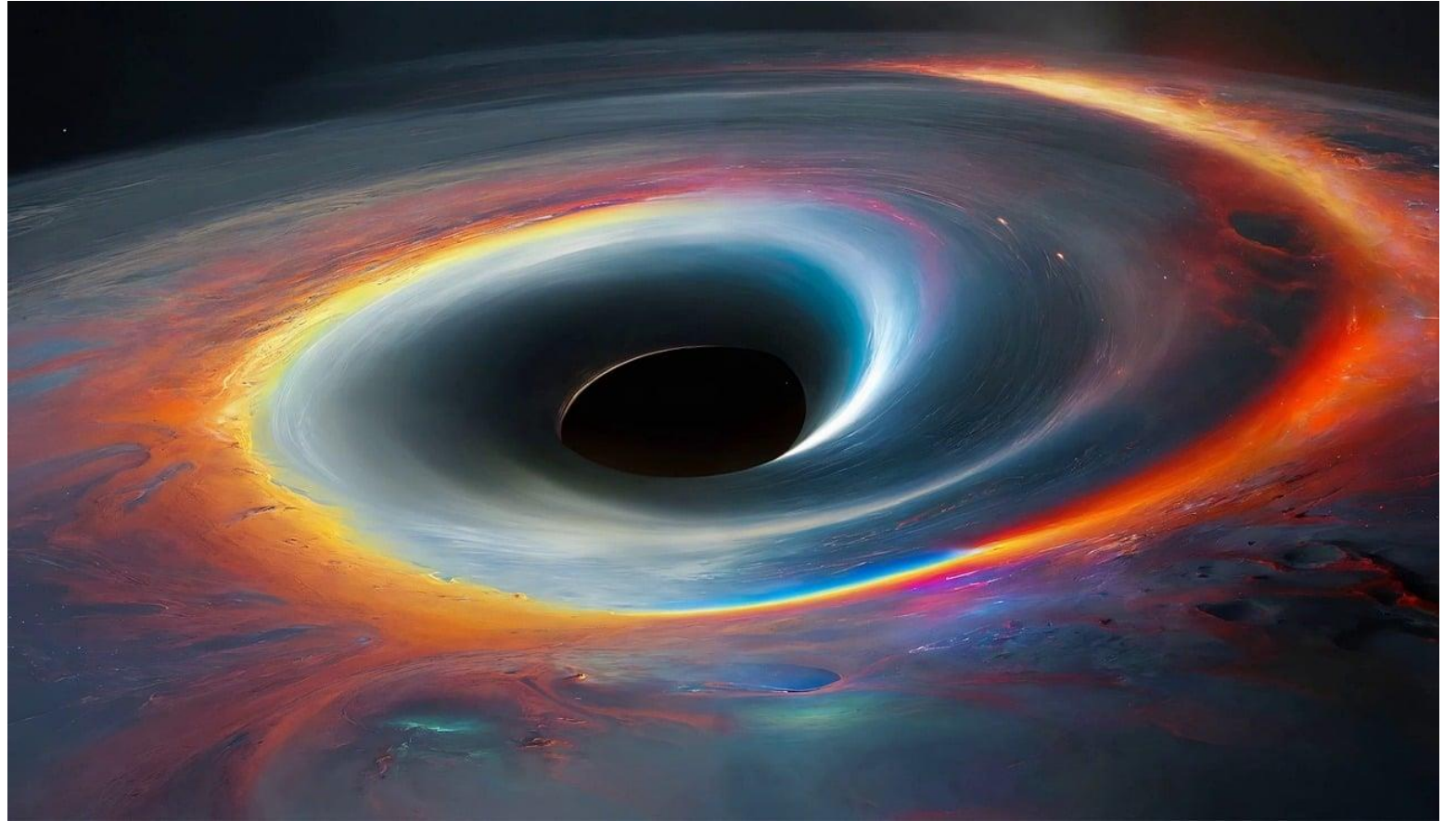
Being inclusive



There are no dumb questions – and they all need answers



Generic e-mail versus black hole



Teams channels and Community of Practice (CoP)



What makes a strong fusion team?



Holding a Hackathon



Perspective of a participant



Transport Canada
employee and Hackathon
participant Hugo Pellerin
shares his experience





Pellerin, Hugo (TC/TC) ...

A close-up, low-angle shot of a bronze statue of a muscular man, likely Rodin's 'The Thinker'. The man is shown from the waist up, leaning forward with his right hand resting on his chin in a classic pensive pose. His left hand is also visible, resting on his lap. The statue is highly detailed, showing the texture of his skin and the definition of his muscles. The background is a clear, bright blue sky. The text 'Part Five – Managing for the long haul' is overlaid in white, sans-serif font on the left side of the image.

Part Five –
Managing for the long
haul

Prepare for growth





Dealing with maintenance



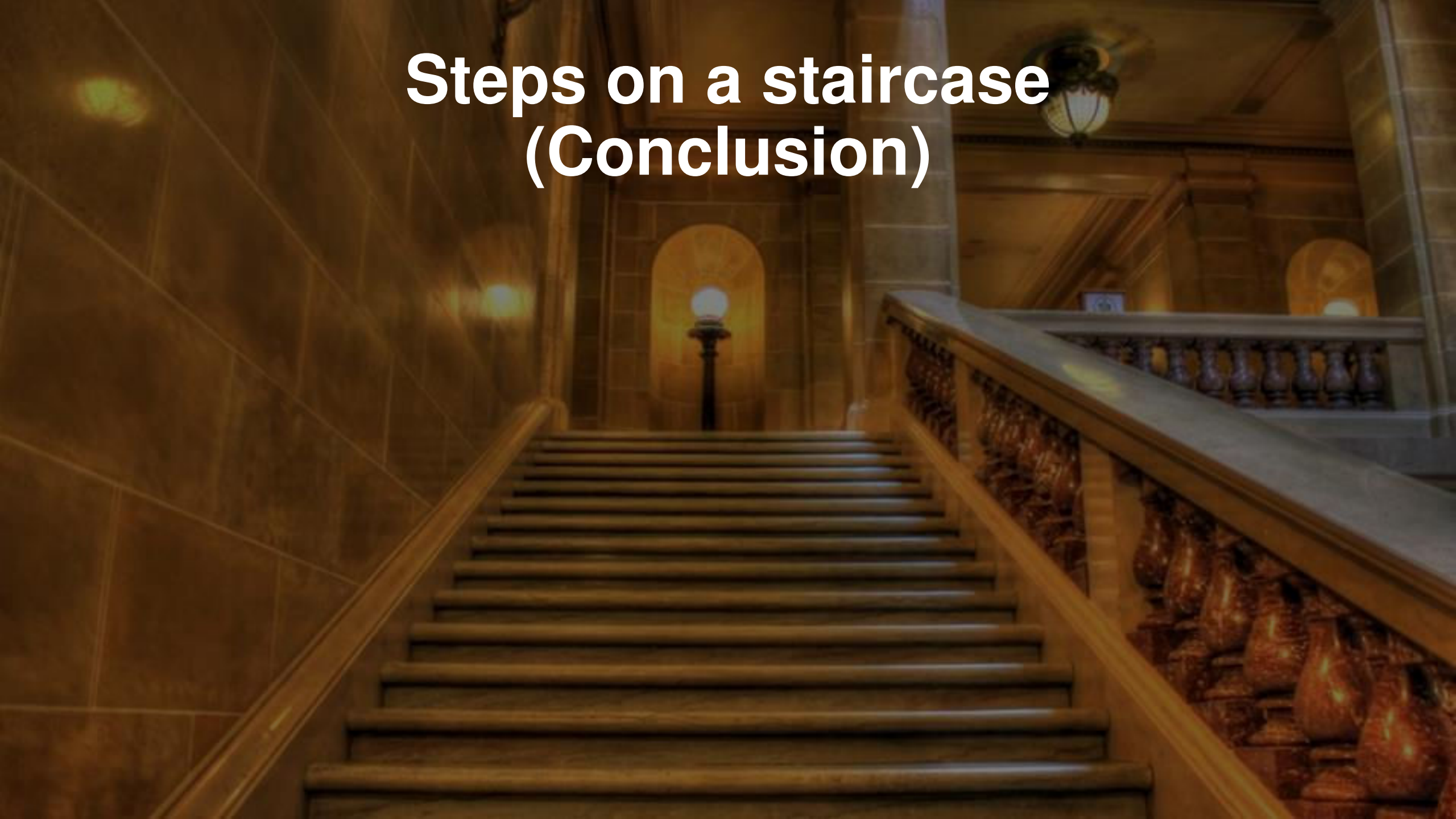
Keeping governance balanced



The perils of Shadow IT



Steps on a staircase (Conclusion)



Questions and feedback

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Annex A – Citizen Development Contract



TC TRANSFORMATION

DIGITAL BY DESIGN



Power Apps Centre of Excellence Agreement

Ongoing support & maintenance

AGILE

SMART

TRUSTED



Objectives



This document has been created to identify and appoint responsibility to all teams involved in the creation of this Power App.

It will cover all aspects of the project, including who is responsible for each facet of the project, as well as time commitments.

Project Details



This agreement is in place for the following project:

Project	
Service owner	
Project type	
Product owner	
Citizen developer	
Organization	
Director	
Brief description of application	

Guiding Principles



There are multiple policies and guidelines when developing any Information Technology in the Government of Canada frameworks. We recommend that you become familiar with the following relevant policies and governances in the interest of compliance.

[Policy on Service and Digital](#), which took effect April 1, 2020, and has replaced many past policies governing the digital landscape.

[Directive on Service and Digital](#), works in conjunction with the Policy on Service and Digital to provide information on how to manage service delivery, information and data, information technology and cyber security.

[Guideline on Service and Digital](#), which supports the two previously listed policies/directives with advice, considerations and best practices.

RACI Matrix Role Definitions

A RACI matrix was developed to ensure that all members of the integrated team have a shared understanding of their roles and responsibilities. The four roles and responsibilities that members of the integrated team will play in the Power Apps project can be broadly categorized as below:

- **Responsible:** people or stakeholders who will lead the functional and development work. They must complete their task or objectives or make decisions.
- **Accountable:** person or stakeholder who is the "owner" of the work. He or she must sign off or approve when the task, objective or decision is complete. This person must make sure that responsibilities are assigned in the matrix for all related activities.
- **Consulted:** person or stakeholders who need to give input before the work can be done and signed-off on. These people are "in the loop" and active participants.
- **Informed:** people or stakeholders who need to be kept in the discussion about the project. They need updates on progress or decisions, but they do not need to be formally consulted.

Project Levels

Citizen Development

A citizen development project is *fully developed* by the Citizen Developer (CD), someone from the service side. The PACE team will be there to provide support if questions arise and guide the user when necessary. The PACE team **does not** do any development.

Citizen development is strictly **no-code** and must only conduct activities that come 'out of the box' for Power Apps. If coding, or activities that do not come 'out of the box' are required, the project automatically becomes a Fusion development project. A fusion development project is a project that includes both a Citizen Dev(s) and a Pro Dev(s).

A citizen development project has a mandatory production certification process, which includes helping the CD with the proper security paperwork, as well as certifying that the application is ready to move to production.

The CD is responsible for the ongoing break-fix and enhanced maintenance, as well as support of the solution once it has been released to production.

- If break-fix or enhanced maintenance goes beyond the abilities of the Citizen Developer, the first step would be to contact the service side IT team to determine if they have a Power Apps developer. If they do, it falls under their responsibility.
- If there is no Power Apps developer, a request can be made with PACE, which will be filed as a new project request. At this point, an estimate of time and cost will be provided.

Potential associated costs *(if required)*

- Certification process
- Maintenance



Project Levels

Citizen Development



Product Owner

- Individual from business guiding the production of the application.
- Works closely with Citizen Developer to identify issues for resolution

Citizen Developer

- Application developer
- Meets with the Product Owner regularly to ensure application is producing as expected.
- Responsible for implementing changes post-production
- **Responsible for knowledge transfer**

Technical Advisor

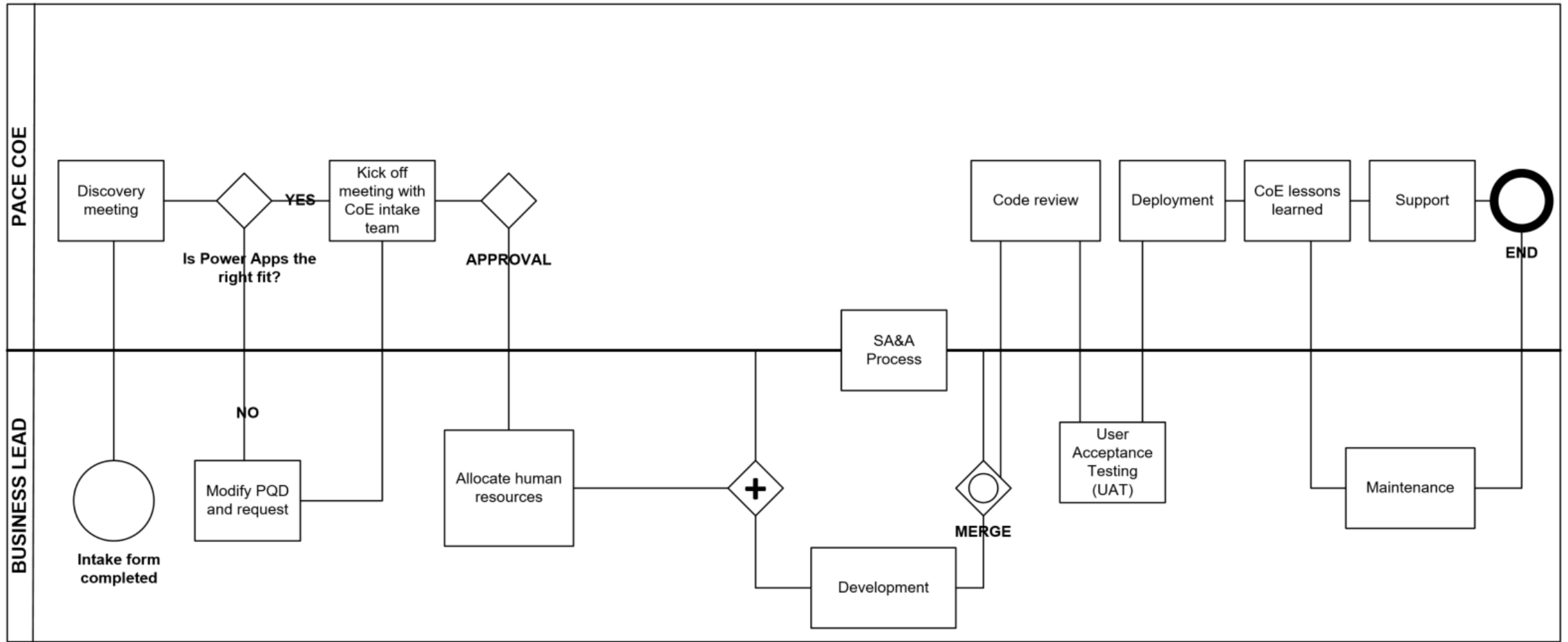
- Supports onboarding of Citizen Developer including providing training resources and getting started.
- Provides COE support (creating environments and assigning licenses when necessary)
- Provides support for certification (*cost **may** be associated with this service*)
- *Can provide in-depth support on complex issues should they arise (cost **may** be associated with this service)*

Product Owner

- Any complaints, feedback, etc. are sent directly to the Product Owner from the affected department.
- Reviews complaints to see if it can be solved by the Citizen Developer.

Project Levels

Citizen Development



High level RACI Matrix

Citizen Development

Task	PACE	SERVICE	
Project management	I	A	R
IT Security and Governance Documentation and Approval	C	A	R
Licensing	R	C	
Solution Testing	C	A	R
Technical Issue	I	A	R
IT Change Management Process	I	A	R

LEGEND

A

Accountable

R

Responsible

C

Consulted

I

Informed

Agreement

Citizen Development



We agree to respect and comply with the responsibilities, policies, principles and governance as outlined in this document.

Signature of Service Developer

Signature of PACE Manager

Signature of Service Manager

Date of agreement