



# **CAF Digital Literacy Initiative**

## **4th Digital Transformation in Government Conference**

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- What is the problem definition and solution?
- What is the CAF's plan for modernization?
- How does the CAF define Digital Literacy?
- What is the CAF's Roadmap for Digital Literacy?
- How will the CAF improve digital literacy?
- What are the challenges and next steps?

# Problem statement



- How does the CAF undertake digital transformation to conceive of future concepts, develop new processes, incorporate digital technologies, prepare the workforce and implement culture change to provide operational advantage in the Battle Space, improved stewardship in the Corporate Space, and re-imagine our workforce?



- CAF Digital Campaign Plan (DCP) released June 2022
- Strengthening the Digital Backbone initiative
  - Funding to CAF & DND L1s to develop and enhance CAF digital capability and to provide a catalyst for the implementation of the DCP

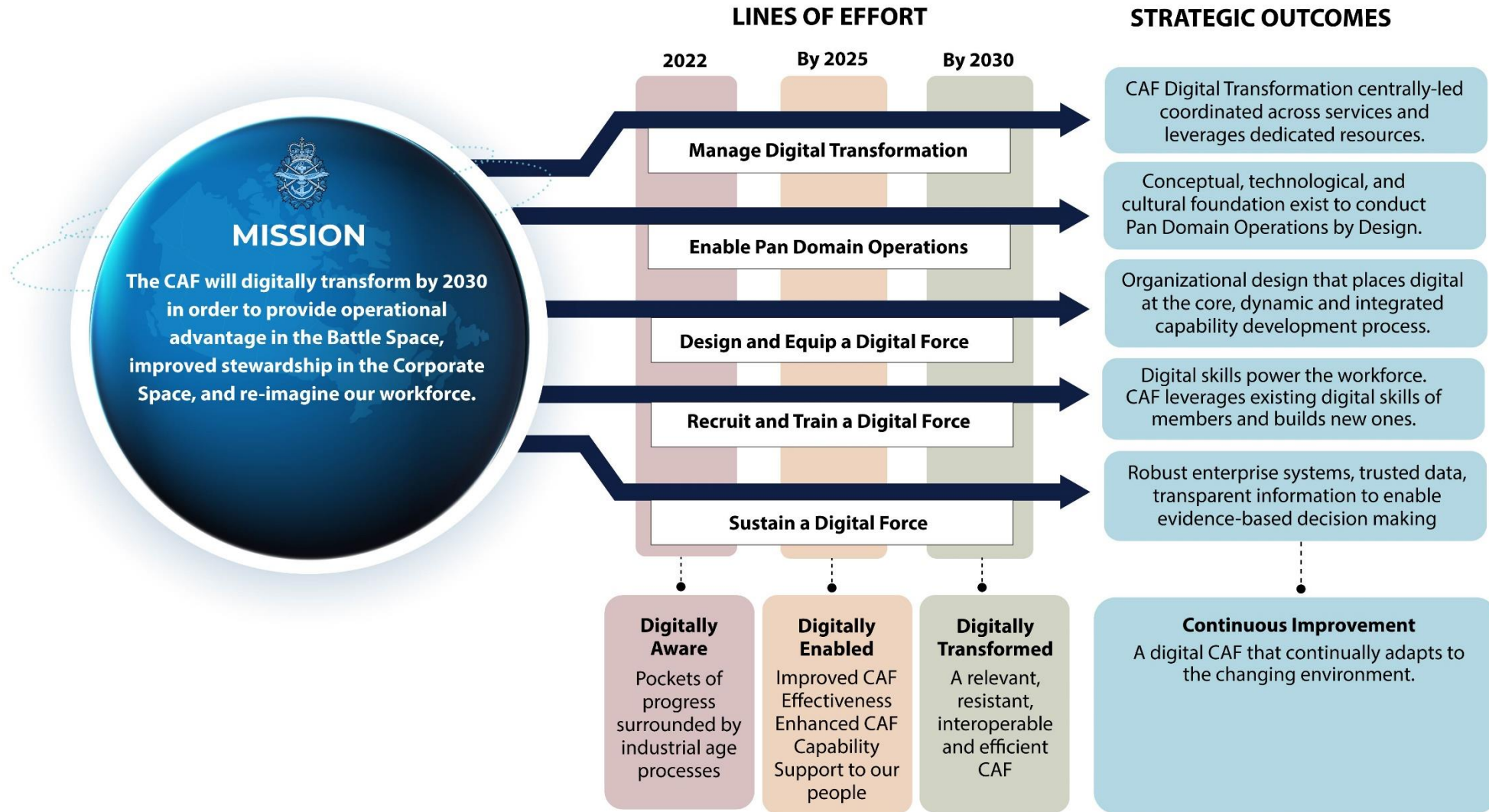


- *The CAF will become digitally transformed by 2030. The **Digitally Transformed** CAF will be relevant, resilient, interoperable, integrated, and efficient. Through a stable, resilient and adaptive technology and security backbone and with a mature, common and accessible **data mesh**, we will establish a digital foundation for the **application layer** that will revolutionize the way we process, analyse, present and deliver the insights garnered from data to better **inform decision-makers**. These digital capabilities will be secure, integrated, accessible, intuitive, and delivered at the **speed of operations**. Our enhanced decision-making will provide an operational advantage in the **Battle Space**, and improved stewardship in the **Corporate Space**.*

# Mission Statement



- The **CAF will digitally transform** by 2030 in order to provide operational advantage in the Battle Space, improved stewardship in the Corporate Space, and re-imagine our workforce.



**Stages of Digital Maturity**

# Line of Effort 4: Recruit and Train a Digital Force

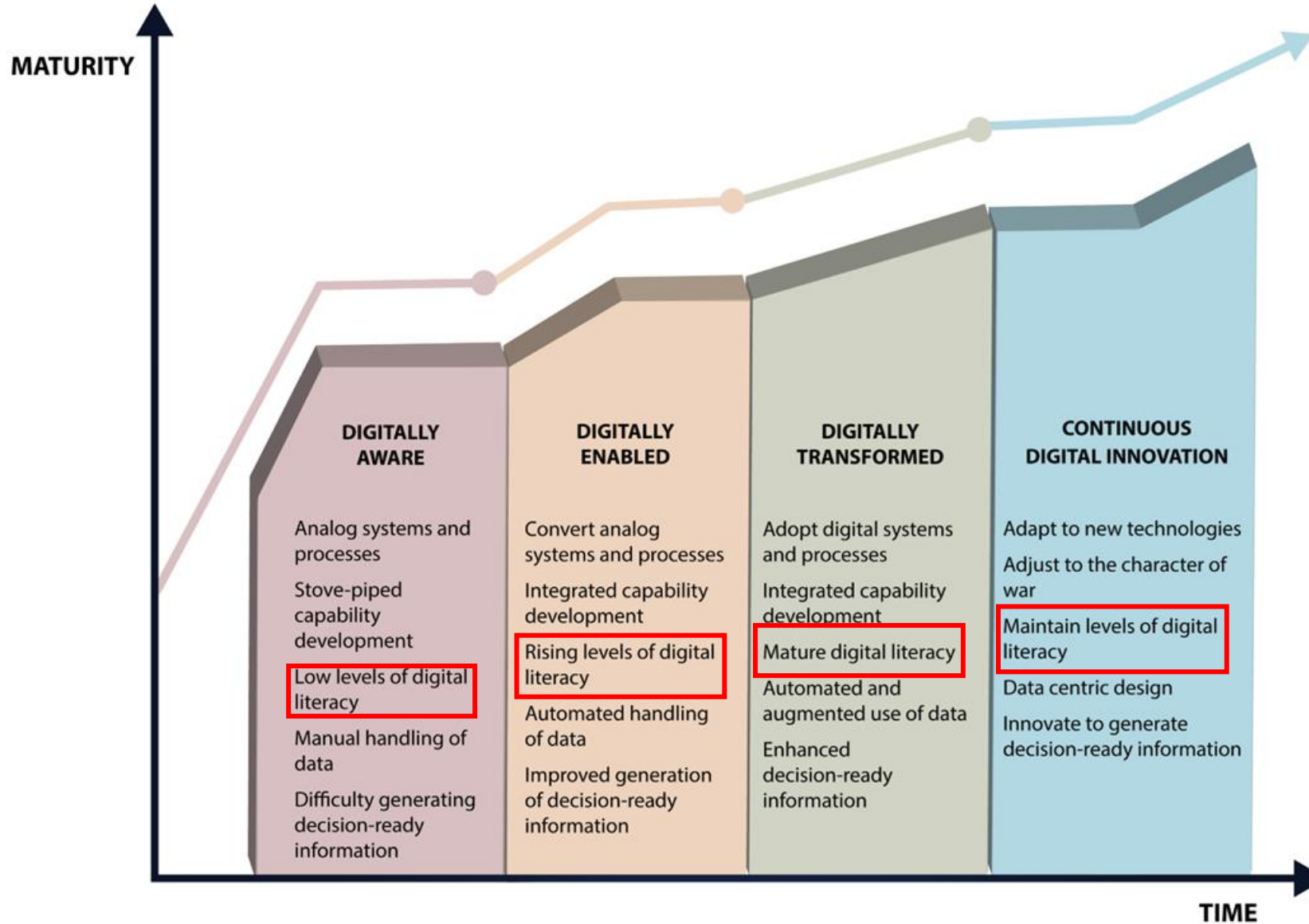


**Objective 4.2:** Develop the digital literacy knowledge, skills, and attitudes necessary for CAF members to successfully interact in the current digital world and to shape the CAF of the future.

- The CAF generates digital skills primarily to serve technical functions, but is absent from general specifications. Pursuing these digital skills of often viewed as career-breaking.
- **Becomes:** The CAF generates technical digital skills, and integrates digital literacy into the professional development framework in priority areas. Digital skills are valued and recognized.
- **End-state:** The CAF generates technical digital skills, and delivers digital literacy across the workforce with all elements of the professional development framework. The CAF utilizes digital skills of member effectively and by design. Digital skills are sought after, by practitioners and leaders alike.



# Digital Maturity Model



# Define Digital Literacy



- Digital literacy encompasses an **individual's skills** for successfully using data, information and communications technologies, and interacting with digital information ecosystems.
- It is about **understanding ethics, responsibilities, and rights** surrounding technology, acknowledging digital trends and their relevance, discerning data and information in a digital environment, and communicating effectively within it.
- Digital literacy cannot be assumed and because it is concerned with interactions, it is perishable. It demands **skills, knowledge and attitudes** to interact in the present, while relying on a more general set of intellectual skills to evolve in the future.



- Step one – Define Digital Literacy End-State
  - Develop Personas and Competencies
  - Refinement based Defence Advisory Board Study Team Report
  - Coordination/engagement with CAF Digital Community
- Step two – Targeted, short-term upskilling
  - Address literacy gap in priority areas
  - Procure licenses from various online learning platforms for CAF use
  - Establish curated learning paths based on Digital Personas and Competencies
  - Internally develop learning path(s) for Digital Commander, Enabler
- Step three – Integrate Digital Literacy into CAF Professional Development System
  - Provide final version of Digital Competencies to Chief Military Personnel
  - Collaborate as required/requested



- Early collaboration beginning in ~2021
- Current version of Digital Personas and Competencies a synthesis of various sources and engagement
  - ADM(DIA) Data Governance Framework
  - DoD AI Training and Education Strategy (2020)
  - JCSP Service paper, Developing Digital Literacy Across CAF Officers Through Training and Education (Maj M Charette)
  - Defence Advisory Board Report - *Digital Literacy as an Enabler for Transformation*



- Each Persona is an archetype of a different possible digital citizen within the CAF
- 6 Personas
  - 4 Common (Development Period-based) Personas
    - Potentially more
  - 4 Role-based Personas
    - New role-based personas expected

# Common Personas



Persona	Rank Lvl	Definition	Overall Literacy Level	Notes
<b>Digital Operator</b>	ALL	<ul style="list-style-type: none"> <li>-user of digital products, majority of CAF</li> <li>-application of existing digital solutions</li> <li>-capable of providing feedback on current digital solutions</li> </ul>	<b>Basic</b>	DP1
<b>Digital Supporter</b>	Jnr-Mid Lvl O, NCO	<ul style="list-style-type: none"> <li>-Identifies issues to be solved by digital solutions, capable of seeing potential digital solutions</li> <li>-not a digital expert (i.e., digital at a user level), but capable of representing users to ensure digital solutions relevant to support operational requirements</li> <li>-bridges the gap between Digital Operator and Digital Producer</li> <li>-potential "Product Manager"</li> </ul>	<b>Moderate</b>	DP2
<b>Digital Leader</b>	Mid-Snr Lvl Officer	<ul style="list-style-type: none"> <li>-ensures appropriate digital capabilities are developed and delivered across the CAF</li> <li>-capable of being a "Product Sponsor"</li> </ul>	<b>Mod/High</b>	-DP3 -depening on role, outside learning may be required
<b>Digital Senior Leader</b>	Snr Officer	<ul style="list-style-type: none"> <li>-leads the CAF's adoption, use and future digital plans</li> <li>-not a technical "expert," guidance and policy "expert"</li> <li>-creates digitally-aligned policy, doctrine and guidance</li> <li>-ensures digital policy carried out by personnel they lead</li> </ul>	<b>High</b>	-DP4 -level of competency can vary depending on role

# Role-based Personas



Persona	Rank Lvl	Definition	Overall Literacy Level	Notes
<b>Digital Producer</b>	Both, Role based	<ul style="list-style-type: none"> <li>-produces digital products to meet current and future needs of the CAF</li> <li>-a digital technical expert</li> <li>-potential "Product Owner"</li> <li>-in lieu of contracted support, or oversee team of contracted digital specialists</li> </ul>	<b>High, technical</b>	Technical Digital Literacy Requirements met by outside resources
<b>Digital Specialist</b>	Both, Role based	<ul style="list-style-type: none"> <li>-supports digital producer</li> <li>-possesses requisite digital skills to be directly involved in digital creation as a member of a development team</li> <li>-possesses subject matter expertise in CAF process relevant to digital solutions being produced</li> </ul>	<b>High, specialized</b>	Specialized Digital Literacy Requirements met by outside resources
<b>Digital Defender</b>	Both, Role based	<ul style="list-style-type: none"> <li>- cyber security and defensive cyber operations should be integrated "by design."</li> <li>-possesses requisite digital skills to be directly involved in security aspect of digital transformation</li> <li>-possesses subject matter expertise in CAF process relevant to digital solutions being produced</li> </ul>	<b>High, specialized</b>	Specialized Digital Literacy Requirements met by outside resources
<b>Digital Enabler</b>	Snr Officer, Digital Command Team	<ul style="list-style-type: none"> <li>-complete a design process with a Product Owner, Designer and Tech Lead</li> <li>- review, complete and recommend a cloud CONOPs and SCAR created by team</li> <li>- review, complete and recommend a data request, API call or connection request</li> </ul>	<b>Moderate, specialized</b>	Key leaders within organizations undergoing digital transformation, <b>digital decision maker</b>

# Competencies



Foundational Concepts	Understand Digital Terminology
	Understand Digital Technology
	Understand Digital Rights and Responsibilities
Digital Application	Apply Digital Safety and Security
	Access Current Digital Tech
	Integrate Current Digital Technologies
	Locate and Access Digital Info
	Assess and Synthesize Digital Knowledge
	Learn Digitally
	Communicate and Collaborate Digitally
Digital Defence	Apply Cyber Security Best Practices
	Understand the Cyber Threat Environment
	Apply Cyber Defense Measures
	Develop Cyber Incident Response Plans
Digital Innovation	Understand Principles of Cross-Domain Data Stewardship
	Identify Deficiencies in Digital Solutions
	Recognize Opportunity for Digital Innovation
	Apply Cross-Domain Digital Strategies
Digital Management	Manage Lifecycle of Digital Tech
	Manage Product Development
	Manage Digital Competencies
	Report Issues
Digital Development	Define and Express Digital Requirements
	Develop Digital Solutions
	Support Digital Development
	Integrate New Digital Tech
Digital Enablement	Understand Digital Trends and Emerging Tech
	Foster Digital Initiatives
	Define and Communicate a Digital Vision
	Understand Digital Policy and Doctrine

- For each Persona, each of the 20 competencies is assigned a level between 0-3
  - 1 - Basic Level of Competency
  - 2 - Moderate Level Of Competency
  - 3 - Advanced Level of Competency



# Organizational Digital Literacy



- **Aware:** The CAF generates digital skills primarily to serve technical functions, but is absent from general specifications. Pursuing these digital skills is often viewed as career-breaking.
- **Enabled:** The CAF generates technical digital skills, and integrates digital literacy into the professional development framework in priority areas. Digital skills are provided to diverse groups of members with a range of baseline abilities; new digital skills are valued and recognized.
- **Transformed:** The CAF generates technical digital skills, and delivers digital literacy across the workforce with all elements of the professional development framework. The CAF utilizes digital skills of member effectively and by design. Digital skills are sought after, by practitioners and leaders alike.

Organization Digital Literacy				
	Quantity	Quality	PD System	Culture
BASIC	pockets of basic digitally literate members 50% of	small numbers of members have required literacy level based on rank and role	Digital Competencies defined, included in Officer and NCM General Specifications	The organizational focus is to train and educate the users to be effective with existing digital systems and processes
MODERATE	members have at least basic literacy majority of	50% of members have required literacy level based on rank and role (as per matrix above)	Digital Literacy present within all specifications, PD, education and training	The organizational focus is to develop systems and processes with the individual user as the driving force
ADVANCED	members achieved basic literacy	majority of members have required literacy level based on rank and role (as per matrix above)	All CAF Members have received digital training at all DP levels	The organizational focus is to enable users to drive innovative change in the information space and information management processes

# Challenges



- Capacity – people and talent
- Process – traditional and bureaucratic
- Institutional – CAF-specific challenges



- Engage stakeholders to refine Personas/Competencies
- Continue working through procurement (licenses, Administrator)
- Provide Digital Personas to potential vendors for learning path development
- Continue working with CMP for long-term solution
- No “end-point” to literacy, constantly evolving

