# **Digital capabilities for a Digital Society**



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**Global Forum** 



## A citizen-centric digital capability framework to operationalize the digital capability strategy







The framework is based on the following key assumptions:

CITIZEN



Digital transformation should be citizen centered. Digital services and delivered outcomes have aimed to improve the quality of life for the citizen and respect his/her basic right to privacy. For citizen-centric digital transformation, the starting point is understanding citizens' and business operators' needs and life events, and engaging citizens in developing solutions that address these needs through co-creation.

**KEY ASSUMPTIONS** 

Leadership must drive the digital transformation. Digital transformation will not happen without conscious and dedicated leadership, anchored at the top, yet attentive to the citizen's voice. It requires leadership that formulates a vision, sets objectives, ensures engagement, and shapes effective operating models and execution processes that evolve with the life of the country, region, or city.

A fit-for-purpose operating model must align and leverage structures, enablers, and capabilities, and respond to the emerging feedback of citizens to ensure a digital transformation that evolves with the needs of the country, region, and city. The digital transformation will not succeed if adaptive institutions, regulations, and governance are not in place, if there is a lack of skills, or if there is inadequate infrastructure. The capability framework provides an overview of the capabilities needed for a successful digital transformation both for the population and firms, and for the leadership.

#### Digital transformation must be led with the ability to pivot as circumstances

change. Though vision and leadership are needed to drive digital transformation it cannot be locked to a predetermined path. Technology, society, and global conditions change, sometimes quickly - the latter most recently exemplified by the Covid-19 pandemic. Through feedback from citizens the capability framework makes it possible to adapt as circumstances dictate – altering the vision and tuning the strategic operating model to deal with changing conditions and new priorities.



# Why Citizen-centric digital transformation ?

This research posits that by focusing the digital transformation of a country, region, or city around the needs of citizens, government leaders, and practitioners can make a triple value impact

- improving citizens' lives,
- improving the business environment, and
- increasing efficiency and enhancing the effectiveness of government.

Thus, using citizen-centric digital transformation should promote development and simultaneously enable businesses and citizens to evolve from passive information consumers to active participants in designing and co-producing solutions and services.





### METHODS FOR ENGAGING WITH CITIZENS

# **Co-creation**

- Accepting that complex problems, such as furthering a country or region's development, involve multiple stakeholders, co-creation provides an approach in which stakeholders share responsibility for the problem and together develop a process for solving it.
- They use design thinking, where empathy with the user is achieved partly by involving the users as one of the stakeholders in framing and then solving the problem.





### METHODS FOR ENGAGING WITH CITIZENS

# User-driven / user-centered design

- User-driven design is characterized by putting the user/citizen at the center of the development process through an explorative and agile process with numerous pivots and iterations.
- New ways of engaging citizens can be mediated through new social platforms enabled by disruptive technologies, such as sensing technologies (e.g. sensors, biometrics) and analytics technologies (AI, machine learning, deep learning)



## Buying a House: As Is



## METHODS FOR ENGAGING WITH CITIZENS

## User journeys

- User journeys systematically map the steps that users must complete to achieve a task or mission. Looking at the end-to-end service allows the provider to identify the most important steps, gaps, duplicated steps, and overlaps.
- In many countries, regions, and cities the citizen acts as service integrator – bridging the gaps between services provided by disparate units of government. Designing the journey based on the needs of the user over time rather than the internal logic of the organization can lift user satisfaction and improve efficiency.
- Understanding individual user journeys at scale is, however, very difficult due to the variety of life and the multiple technologies involved. Doing away with organizational silos, process orientation in the organization, integrating data so that they are accessible across the organization, and standardizing technologies are steps toward understanding the citizen's journey.

Illustration from GOV.UK: A user journey map from the Land Registry, showing the process of buying a house.





## METHODS FOR ENGAGING WITH CITIZENS

# User feedback

- As part of the citizen-driven design framework, users/citizens must be engaged in evaluating the initiatives that are part of the citizen-driven digital transformation.
- User feedback can be gathered both directly and indirectly. Direct user feedback will include three different types: general user feedback, contributory user feedback, and co-creational user feedback.
- Direct user feedback can be combined with more indirect user feedback collected from, for example, usage data and mobile network analysis to strengthen the insights gained and the validity of the user feedback when adjusting the digital transformation journey.





# Organizational structure and roles: Organizing for digital

### ORGANIZATIONS CAN SELECT DIFFERENT ARCHETYPES TO EMBED DIGITAL ACTIVITIES

#### FULLY INTEGRATED

Business units / public sector agencies lead the charge, and are individually responsible for digital topics



#### SEMI-INTEGRATED MATRIX

#### OVERLAYING CROSS-BUSINESS UNIT DIGITAL TEAMS

Dedicated digital roles embedded in each business unit / public sector agency, in addition to a dedicated team coordinating activites across business units / whole-of -government



#### CREATING CENTERS OF EXCELLENCE

Digital center of excellence concentrates digital capabilities of the organziation, coordinating across and providing services and common infrastructure to business units / public sector agencies

#### FUNCTIONALLY SEPARATE

Standalone digital unit with direct reporting to CEO / minister, dedicated digital competencies and products and with separate P&L / service delivery responsibility





# Organizational structure and roles: Ecosystems

An alternative to the organizational models is the ecosystem driver model

Ecosystem drivers provide a platform for the participants to conduct business and use their brand strength to attract participants, ensure a great customer experience and offer one-stop shopping. This ecosystem perspective could provide a new way for leaders and practitioners to view their role and how they choose to organize in order to orchestrate the digital ecosystem. If leaders view themselves as ecosystem drivers, then the role changes and the organization needs to be able to know their citizens and manage the ecosystem

Obtain information about citizen's goals and life events and amplify the citizen's voice inside the public sector.

KNOW YOUR CITIZENS

Develop an integrated, multichannel citizen experience

Leverage available data and emphasize evidence-based decision making MANAGE YOUR ECOSYSTEM

Create services-enabled interfaces that other stakeholders can use (such as private sector service providers)

Become great at building partnerships with stakeholders across state, market and civil society

Identify efficiencies and risks across the ecosystem





# Legal and regulatory framework

The legal framework necessary for digital transformation can be divided into an external area of concern and an internal area of concern.

- **External:** The legal framework that facilitates the increased use of digital technologies in the market and civil society
- Internal: The legal and regulatory framework that facilitates the increased use of digital technologies in the state

The focus of the digital transformation can be either or both

Regardless of whether the focus is the external or internal legal framework, or both, the legal framework's agility and adaptation to digital is tied to:

- Human resources with the right competences and skills, professional civil servants such as lawyers serving under the Ministry of Justice, parliamentarians, advisors, and administrators.
- Digitalization of records, which is the result of e.g. "paperless government acts" or "digital government acts", and implies a complete overhaul of data collection and processing, from paper-based registries to electronic records describing an entity (business, family, person, or asset) while ensuring the uniqueness of the entity, and its identification, validation, and recognition in its electronic representation, by the legal system.
- The time it takes to develop, approve/ratify, and implement digital-friendly legislation.



# Data & algorithms

To make the most of the value of data – collected by the state, market, and civil society – it is necessary to build and run the tools that can make sense of the flood of data.

A newly emerged paradigm is that public data can be released to the public for a concrete citizen-driven approach.



THE WORLD BANK

Infographic inspired and expanded from "Open Data Now" Joel Gurin (2013) and "Open Government Data", Montana on Open Gov Guide (2019)

# New digital roles that support the business leader and facilitate good digital transformation governance

At each layer of government, the following roles may be relevant in order to coordinate and drive digital transformation. They will need to work and collaborate both vertically and horizontally across the public sector as well at the 'edges' of private and community sectors.

## Chief Information Officer

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A government CIO is responsible for imagining, developing, and running the IT-infrastructure and applications that will support the use of government data and provide services to citizens and businesses.

### Chief Data Officer

date and relevant.

A government CDO (Data) is responsible for the asset represented by public sector data. As with all assets data must be both maintained and leveraged in order to gain full value. The CDO (Data) is responsible for extracting data from public data and for ensuring that data is up to

## Chief Digtial Officer

A government CDO (Digital) is responsible for transforming public sector services, business models and citizen facing ways of working using digital technologies.

## Chief Information Security Officer

A government CISO is responsible for safeguarding the public sector from harmful digital risks, including risks to data. Some CSIO's are also charged with protecting the privacy of citizens though this could also be provided by an independent watchdog.



## Chief Technology Officer

A government CTO is responsible for introducing relevant, value-adding technologies to the public sector. The technologies may benefit both the public sector and society as a whole.



# The leadership profile: Developing a digital mindset

## What is a digital mindset?

Whether a leader is in a specialist technology function or a more specialist business function they need to adopt a digital mindset – a mindset that is often at odds with the traditional public sector way of working. An Accenture study found that a successful digital mindset included three forward-looking mindsets:

- Find what works and replicate it
- View the adoption of new technology as strategic, not merely operational
- Be proactive, rather than wait-and-see

These forward-looking mindsets may seem easy to adopt. However, the framing of a (digital) mindset is crafted by a person's beliefs, attitudes and experiences, positive or negative, gained from responding to situations. As such, it may take time and a lot of effort and experiences to change a leaders' or an practitioners' mindset.





# Considerations for leaders of digital transformations

- What data should be open/public and what should be private or have limited access?
- Who do we allow to leverage public data?
- How do we upskill our people to be able to design or even just run and maintain AI-based solutions?
- Who will own the algorithms that form the basis of Albased solutions?
- How do we ensure the transparency of our AI solutions and that we are able to explain the decisions that AI solutions arrive at?





# Considerations for leaders of digital transformations

- How can we prepare the workforce for new manmachine interfaces? How can we work with a digital colleague or with digital twin user interfaces of the organization?
- How can we create job security and trust through lifelong learning and re-skilling of the workforce?
- How can we attract and keep digital talents?
- How can we adapt the organization including HR and leadership to the new requirements and values of the digitally-savvy generations?
- How can we re-skill the leadership to become digital people leaders?



