Bjarne Corydon,
Vidhya Ganesan,
and Martin Lundqvist

Transforming government through digitization

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By digitizing processes and making organizational changes, governments can enhance services, save money, and improve citizens' quality of life.

As companies have transformed themselves with digital technologies, people are calling on governments to follow suit. By digitizing, governments can provide services that meet the evolving expectations of citizens and businesses, even in a period of tight budgets and increasingly complex challenges. Our estimates suggest that government digitization, using current technology, could generate over $1 trillion annually worldwide.[1]

Digitizing a government requires attention to two major considerations: the core capabilities for engaging citizens and businesses, and the organizational enablers that support those capabilities (exhibit). These make up a framework for setting digital priorities. In this article, we look at the capabilities and enablers in this framework, along with guidelines and real-world examples to help governments seize the opportunities that digitization offers.

The core capabilities of a digital government
Governments typically center their digitization efforts on four capabilities: services, processes, decisions, and data sharing. For each, we believe there is a natural progression from quick wins to transformative efforts.

Services
Governments are using digital tools to improve their interactions with citizens and businesses.[2] Most begin by digitizing a few high-volume activities. The United Kingdom kicked off its digital-transformation program by digitizing 25 basic services, such as voter registration.

The key to good digital services is understanding the user's perspective.[3] Governments must be willing to remake products, processes, and policies around what citizens want. Norway's tax administration gives citizens tax returns that it has filled out for them, and more than 70 percent of citizens submit those returns.

Providing services on mobile platforms is another way that governments are aligning with citizens' digital preferences and behaviors. In China, some provincial governments accept passport and visa applications through WeChat, a widely used mobile app.

[1] For more, see "Disruptive technologies: Advances that will transform life, business, and the global economy," McKinsey Global Institute, May 2013.

[2] "Making government for the people," June 2016, McKinsey.com.

[3] Emma Dudley, Diaan-Yi Lin, Matteo Mancini, and Jonathan Ng, "Implementing a citizen-centric approach to delivering government services," July 2015, McKinsey.com.

Exhibit

A digital government has core capabilities supported by organizational enablers.

Capabilities: citizen- and business-facing innovations

Services

- Digitization of touch-points
- Consolidated online-access platforms
- Citizen and business portals
- Messaging platforms
- Payment platforms

Processes

- Automation of transactional processes (eg, grant applications)
- Digital enablement (eg, e-health)

Decisions

- Deployment of sensors (eg, mass transit)
- Advanced predictive analytics
- Large-scale, cloud-based data storage

Data sharing

- Unified, open public registers
- Peer-to-peer sharing of data
- Cocreation of solutions with private sector and citizens

Enablers: innovations across government systems

Strategy

- Close connection to broader government priorities
- Bold aspirations translated into concrete targets
- Focus on citizen and business experience
- Attention to needs of marginal populations (eg, elderly)

Governance and organization

- Organizational design mapped directly to goals
- Governance and accountability for pace, scale, and collaboration
- Funding mechanisms for collaboration, innovation, and efficiency
- Regulations that allow open, joined-up citizen experiences

Leadership, talent, and culture

- Leadership commitment and awareness of trends and opportunities
- Technical and implementation talent
- Programs to attract and retain digital workers

Technology

- Two-speed model for rapidly deploying new services
- Agile development at scale
- Analytics platforms to support efforts in big data and open data
- Robust cybersecurity measures and controls

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Processes

Digitizing behind-the-scenes processes offers the most potential productivity gains, as well as tough challenges. Just as governments should digitize high-volume services first, they should digitize labor-intensive, costly processes before others. Sweden's social-insurance agency began its digitization program with five products that accounted for 60 percent of manual-processing work and more than 80 percent of call-center volume.

Digitizing processes should involve streamlining them at the outset. After amending its tax laws, Denmark was able to create an algorithm for classifying newly registered businesses. Now, more than 98 percent of the tasks involved in registering companies take place with no human effort.

Decisions

The public sector can benefit from big data and analytics in defense, public safety, healthcare, and other areas. Australia's tax office analyzed returns from more than one million small and midsize enterprises to develop industry-specific financial benchmarks. It now uses those benchmarks to identify firms that may have underreported their income and notify them of possible discrepancies.

Advanced analytics systems feed data from many sources into algorithms that adjust operations in real time. While no government has such a system yet, Singapore is setting up a nationwide network of sensors that will stream data into a repository for all agencies.

Data sharing

Transparency can strengthen the public's trust in government and its civic engagement. A useful step toward sharing data is unifying registries of public information. By using a digital tool to link more than one billion data items from 30 sources, the UK tax authority has claimed an additional £3 billion in tax revenue since 2008.

Information exchanges can also help with data sharing. Estonia's government has a platform, called X-Road, for securely exchanging data among agencies. Even some companies can connect to X-Road.

Enabling success in digital government

Four enablers can accelerate digital transformation in government: strategy; governance and organization; leadership, talent, and culture; and technology. Here is how a government can ensure that each enabler contributes to its digital initiatives.

Strategy

We have seen two approaches that can help governments incorporate digital concepts into their strategies. The first is to align the goals for digital transformation with the government's overall priorities. The government of Denmark designed its digitization strategy for 2011 to 2015 to advance a broader cost-cutting agenda. This helped to speed the execution of the strategy and led to cost reductions that the government had sought.

The second is to evaluate regularly whether digital programs are performing well and to adjust them as conditions change. Governments should also be aware that digitizing services can make those services less accessible or usable to certain groups.

Governance and organization

Many government agencies prefer to operate independently. In our experience, this can hamper digital initiatives. To overcome this problem at the uppermost level of government, one department can be put in charge of setting strategies and assigning responsibilities. In the

Getting started: Five questions for leaders

To begin a digital transformation, government leaders should consider the following five questions and map the answers onto the framework of capabilities and enablers proposed in this article:

1. If we were redesigning the government, with no legacy structures or systems, what would it look like, and what would its top priorities be?

2. What are the biggest differences between that vision and the government today?

3. What capabilities must the government acquire to make up those differences, and what existing structures and systems should it abandon?

4. How do our government's current digital-transformation efforts compare with the changes we identified in the third question?

5. What new priorities must we set for our digital transformation to bring it into line with our overall vision for improving the government?

Australian state of New South Wales, central units help multiple departments work together on some digital-transformation programs.

Within agencies, too, cross-functional collaboration can be the key to successful digital projects. The Danish Business Authority keeps its projects on course by assembling teams of both business and IT professionals, along with vendor staff.[4]

Leadership, talent, and culture

Government leaders should play meaningful roles in digital initiatives. When the Danish Business Authority initiated a major digital program, the chief information officer rearranged his priorities to devote more time to it, and the CEO chaired the governance team's weekly meetings.[5]

Leaders can also push governments to mobilize technical workers and implementation specialists, both by investing in their own human resources and by drawing on external support. We see governments running short-term fellowship programs and staging hackathons to attract digital talent.

Technology

Digital transformation need not involve major IT-architecture changes. Sometimes incremental adjustments to a government's enterprise architecture suffice. We also see promising

[4] Sverre Fjeldstad, Martin Lundqvist, and Peter Braad Olesen, "From waterfall to agile: How a public agency launched new digital services," March 2016, McKinsey.com.

[5] Ibid.

opportunities for governments to share knowledge and technology. Finland is experimenting with Estonia's X-Road system, and Estonia and the United Kingdom have a partnership called TechLink to exchange knowledge on topics such as cybersecurity and smart cities.

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The digital transformation of a government can be challenging, but many public institutions have discovered it is ultimately rewarding. Committing to a comprehensive vision of a digital government is the first step (see sidebar, "Getting started: Five questions for leaders"). Leaders then need to develop and carry out plans for digitizing the government's capabilities and establishing the right organizational enablers. Governments that transform in these areas can ease budgetary strain and improve their citizens' quality of life. ◻

This article is adapted from the McKinsey Center for Government report *Digital by default: A guide to transforming government*.

Bjarne Corydon is the director of the McKinsey Center for Government, based in McKinsey's Copenhagen office; **Vidhya Ganesan** is an associate partner in the Singapore office; and **Martin Lundqvist** is a partner in the Stockholm office.

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