

Strengthening government institutions to deliver on the SDGs: How digital transformation can enhance democratic institutions and public governance

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Abstract

Something is rotten in the state of our democratic institutions. For a record 17 years in a row, trust in democracy is declining. We must build stronger institutional governance - the core of the Sustainable Development Goal 16 - to succeed on all the other SDGs. Governments, international institutions, NGOs, donors, and other stakeholders need to reengineer their approach to strengthen institutional capacity.

Several factors can help explain democratic decline, including shifts in the global economy, increasing polarisation, less capable government institutions, and decreasing levels of trust. This is the *first reflection*: Rebuilding trust in democracy is also about rebuilding trust in government institutions and giving governments the tools to implement their SDGs policies and have the desired impact.

The pervasive digital economy transformation is likely to have amplified the democratic decline trend, including through base erosion of national taxation, public dialogues constrained by social media echo chambers, and reduced costs of mis- and disinformation. This points to a *second reflection*: The transformative power of digitalisation is a doubled edged sword that requires continued prudence.

Denmark has been at the front of all global rankings of digital government maturity for more than a decade. The Danish journey points to a *third reflection*: Digital bureaucracy can be a key enabler in creating inclusive and effective government institutions – and standard software can allow good practices to be re-applied in different contexts, across sector areas and jurisdictions. The digital bureaucracy concept highlights how digital transformation can leverage execution on the SDGs across governments working along the Weberian administration principles.

2024 is the year of elections. Ranging from the US to Russia, and from South Africa to India, representatives of more than half of the global population are facing the ballots. While this represents a powerful moment confirming the importance of democracy, several indicators are pointing to a general decline in the quality of democracies. Furthermore, armed conflict continues to be on the rise. Evidence is clear that you must build a strong institutional governance - the core of the Sustainable Development Goal 16 - to succeed on all the other SDGs. In this paper we demonstrate how SDG 16 is linked to the foundations of democracy through fairness, equal access, participation, accountability, transparency, and integrity. If we don't have strong institutions, we will have no governance and progress in meeting the SDGs. We need accountable, open, and effective institutions and thereby give governments the ability to deliver services to its constituencies and implement, monitor, and evaluate their SDG ambitions.

The case study of digital government in Denmark is the story of a small open economy, increasing its competitiveness and social unity by emphasising a digital administration to strengthen its institutions and its ambitious SDG objectives.

The case highlights how public governance focus on value creation through clear use cases, whole-of-

government deployable solutions, user centric approaches, political leadership and mandatory digital usage of services and an emphasis on standard software. These factors have been key in ensuring the Danish global leadership in digital government as well as the high ability to convert high policy ambitions into tangible targets. We call this digital bureaucracy – a bureaucracy characterised by seamless, structured service delivery, covering government workflows end-to-end.

The end of strong institutions, SDG Progress and Democracy?

Democracy has for the past 70 years been the predominant governance system, globally associated with political freedoms and economic growth. The increasing global citizen dissatisfaction with democracy is thus alarming (Freedom house, 2024; Pew, 2020).

The deteriorating quality of democracies reflect on the one side setbacks such as war, coups, and governments clinging on to power - however, governance factors include erosion of democratic institutions, government accountability, and capacity to deliver. The lack of progress on SDGs is at large a consequence of this. Freedom House reckons, more and more countries have remained Partly Free, not moving toward full

democratization (ibid). With almost half the world's population holding elections (Economist, 2024), as we are embarking the Year of Democratic Elections, are we witnessing the beginning of the End of the Liberal Democracy as we know it? and with that, the end to our ability of making ambitious policy agreements like the SDGs, and build institutional capacity to implement them?

In this paper we argue, that that there is a beacon of hope for our national democracies and government institutions. Effective institutions and good public governance are a precondition for delivering on the SDGs – we demonstrate how digital government transformation can strengthen and enhance government institutions and effectiveness.

In this paper we target specifically SDG16 (government institutions) and how digital transformation can make our democratic institutions stronger, more resilient, and able to deliver better services to citizens, and ultimately, spur economic growth, create welfare, and reduce poverty (OECD, 2014). While private sector markets and innovation are decisive to deliver on SDGs such as climate change, clean water, and food security, instruments to drive and leverage implementation are designed through legislation, subsidies, and other types of incentives (UN, 2023). This is among the reasons why government institutions are crucial.

Bridging the divides through digital

Throughout history, new technologies have acted as catalysts for societal progress, driving economic growth and improving overall well-being. From the invention of the printing press, which democratized access to knowledge and fuelled the Renaissance, to the development of the steam engine, which revolutionized transportation and industry. Each wave of general purpose technology has brought a new age of positive change. However, as we have now entered the digital era, it is important to acknowledge that a range of new technologies come with societal challenges of their own. The emerging digital economies led to growth, but also base erosion of national taxation. The internet led to great leaps forward in access to information, but today public dialogues are constrained by social media echo chambers, and ample mis- and disinformation (OECD, 2024). Automation and increases in efficiency also led to needs for rethinking skills and inclusion (UNESCO, 2023). Digital divides continue to exclude certain population segments from the emerging benefits of technologies (UN, 2021). While technology may be neutral at its core, its development, deployment, and

implementation require careful consideration and responsible development.

This is especially important when we look at technology in the context of our democratic and institutional evolution. The technological challenges facing government institutions and public governance are not simply about 'digital' in isolation: It is about leading a fundamental transformation and involves optimizing social, political, and economic conditions for inclusive growth and renewing the social contract, governing the legislative, executive, judicial functions of government and the people.

The historical trajectory demonstrates that significant technological advancements have played a key role shaping our societies for the better. Getting this right is a precondition for closing the execution gap on the SDGs.

The Case of Digital Government and Good Public Governance in Denmark

In Denmark, cBrain have since 2006 developed and deployed a standard software technology platform in close relationship with the Danish government. This platform fundamentally helps government enhance its capacity to ensure full documentation, transparency, accountability, managing policy inclusion and access to case information, ranging from policy making to case management and specific workflows. Today, this platform has become a de facto standard, now being used by 19 out of 21 ministries and the majority of government agencies. By reusing joint development of best practices across government and public governance processes, the deployment of standard software is allowing each government entity to advance faster, configuring and reusing already tested solutions across sectors and different contexts. In essence, this is the advantage of a unique platform built for government. The platform is an integral part of the Danish digital transformation journey, which goes back more than 25 years in time (Danish Agency for Digitization, 2024).

Since the first steps were taken to digitalise the Danish government, key digital infrastructure enablers such as national ID and authentication, digital post, citizens and business portals (today including practically all services, i.e. more than 2000+ online citizens services) have been established through legislation, standards, communication infrastructure and joint procurement frameworks (ibid; Borger.dk, 2024 – see also annex 1). Today, Denmark is consistently leading across international digital government rankings (UNDESA,

2022; OECD, 2024) and is similarly in front in the international good governance indexes, covering transparency, integrity, and democracy (Transparency International, 2023; Open Government Partnership, 2023).

Our findings and UN data support a correlation between well-functioning institutions and a high degree of digitisation. Denmark performs very well on ensuring fundamental rights and has a tradition of extensive consultations with key stakeholders as well as within government (Goal 16). These correlations call for further research, and the area could benefit from more in-depth country comparisons. Still, according to the OECD, public trust leads to greater compliance with a wide range of public policies, and countries with strong democratic institutions and high trust in government are better equipped to leverage technology for democratic purposes (OECD, 2021). So, digitalization has and is playing a key role in the Danish government's ability to deliver services in a fair and accountable way, reinforcing public trust in institutions and delivering on the SDGs. A key denominator, according to the OECD, for the trust in government and service delivery institutions is how the government acted during the pandemic. Table 3 in the annex, shows how Denmark, because of a strong and deep digital government infrastructure, was able to consistently deliver services at a high level during the Covid pandemic and lock down in 2020.

The Digital Bureaucracy

Our experience – based on hundreds of projects over two decades, starting with public sector customers in Denmark but increasingly internationally – confirms that government organizations work in very similar ways, based on the same principles: The Weberian theory of bureaucracy production (cBrain, 2024). This ideal model outlines principles for division of labour, accountability, regulation by rules, and efficient, unbiased administration. Unfortunately, when governments have attempted to digitalise bureaucracy, projects often fail, exceed budget, and governments lose sight of how they focus on sustaining good practises (McKinsey, 2020; Flyvbjerg, 2023).

Our experience show that governments have been – and still are - struggling to convert ambitious digitalisation plans into value adding deliverables and business impact. The Danish experience is that we need go away from a technology-first approach and instead approach digital transformation by a process-first understanding. The Danish government has taken up such an approach, based on best practises, formalized methods, and

standards. The result has been an ability to digitalise all types of work processes and services, from internal ministerial work to citizen-facing processes, end-to-end. Because governments work the same way, standard software is ideally suited to the needs of governments undertaking a digital transformation. It has also allowed for ease of training local resources and admin staff to operate and maintain the software as they can configure less complex solutions themselves.

For example, the Danish Environmental Agency, had singled out 244 processes and services for automation (Environmental Protection Agency, 2023). With a traditional approach, looking at each process individually, building customised software, this would have taken years. But by looking at the processes through a thematic lens, we were able to identify generic processes that could be digitally copied and adapted between different departments and divisions, while improving good practices in areas such as workflows for permits, inspections, or approval processes. One such good practice was published as a blueprint for the inspection of wastewater companies, treatment plants, rainwater overflow and discharge, adopted at the latest UN water seminar in 2023 and published on the UN website.

The standard software approach allowed to scale up a digital transformation based on a catalogue of predefined steps, thus leading to a better service faster, fewer case handling errors, and a more resilient service delivery through compliance and standardisation.

Conclusions and policy recommendations

The quality of our democracies is declining. As we face a year of elections, governments are under increasing pressure to restore trust. Strengthening democratic institutions is a key lever for doing so.

The Case of Digital Bureaucracy in Denmark demonstrates how digitalization may be a way to bolster accountability, enhance public governance, and increase governments capacity to deliver on their promises. This eventually deepens the support of democratic rule and the delivery of progress on the SDGs, including SDG 16. A key feature behind the Danish Digital Bureaucracy model is the extensive use of public sector specific standard software across the government that builds on accountability, inclusiveness, transparency, equal access and most importantly, fair, and secure service delivery of services “by design”.

The Danish case emphasizes two policy recommendations:

Firstly, the concept of Digital Bureaucracy highlights the value of reusing best practice processes across sectors and levels of government. The perception in each public organisation of being unique can co-exist with the extensive use of configurable standard software. Using standards and standard software reduce risks and increase government performance and service delivery.

Secondly, governance is key to digital transformation of government. Mechanisms to ensure value added, user-centricity, and impact through service delivery are essential. The use of digital platforms built for government, facilitating good public governance (SDG 16) including accountability, inclusion, and fairness, can help restore trust.

Thirdly, government needs to reclaim control of both their data and their process design to ensure trust in policy and service delivery. Instead of failing big and costly, we should allow ourselves to fail early and often, but always fail forward. By starting small, creating momentum for change through incremental success, and then scale, government can foster trust in their ability to deliver on the SDGs.

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Annex 1

Table 1. Denmark Scores high on Digital Government



Table 2. Danish Digital Transformation the past 25 years

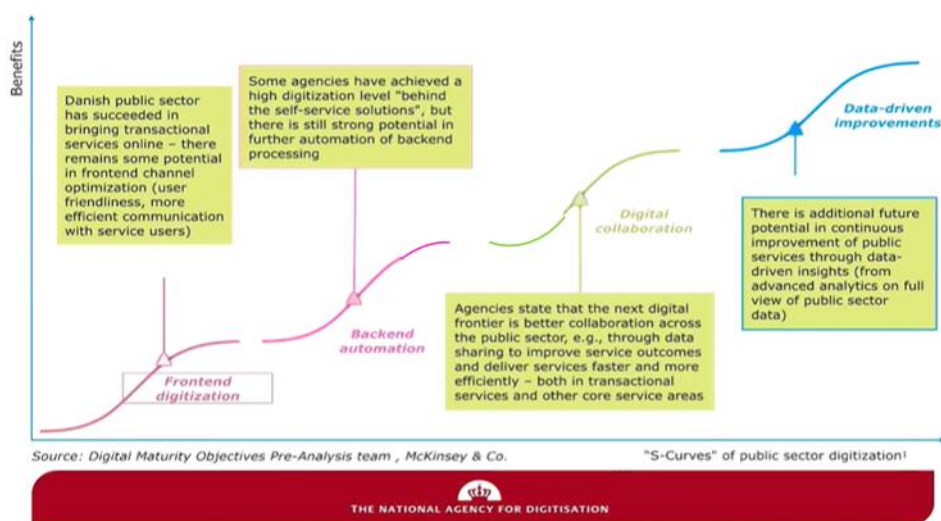


Table 3. From paper to paperless in the Danish State Administration

1+ Million citizens	Production Before F2 Software	Measurable effects and savings After F2
<ul style="list-style-type: none"> Family law EU Guardianship Contributions Inspection 	<ul style="list-style-type: none"> 200,000 decisions per year 500,000 letters in 600,000 letters out 350,000 phone calls 100,000 visitors/meetings 	<ul style="list-style-type: none"> 30% total cost reduction over 3-year period Paperless Administration 10.000 Phone calls 50.000 Meetings Workplace satisfaction up from 62%-91% Citizen Service Award Use of Machine Learning and AI to streamline case management 250.000 Decisions per year

Table 4. Production data during lockdown in 2020 in the Danish Environmental Protection Agency

