OECD Digital Government Studies

The Digital Transformation of Norway's Public Sector

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Foreword

The Government of Norway is designing a new digitalisation strategy for the public sector to be launched in June 2024. The strategy will build on the work of the previous Digital Strategy for the Public Sector, which aimed to make everyday life simpler for citizens and business through better government services, more efficient use of public resources, and increased value creation (Ministry of Local Government and Modernisation, 2019[1]). This Strategy was introduced in 2019 following OECD policy recommendations from the Digital Government Review and expires in 2025.

The new digitalisation strategy will continue this work but also take important steps to ensure that Norway has a digital government that is fit for the future. It is intended to be comprehensive, covering business, public sector, and society, as well as cross-cutting in terms of co-operation, financing, organisation, regulation and governance. The strategy addresses key developments around artificial intelligence, privacy and security, trust and openness, and the role of 'Big Tech', taking into account the broader European context. It will therefore also include goals and priorities for digital government.

Norway's Ministry of Local Government and Regional Development (now the Ministry of Digitalisation and Public Governance as of 1 January 2023) asked the OECD to provide a 'pulse check' review of Norway's progress since the OECD Digital Government Review carried out in 2017 (OECD, 2017[2]).

The intent of this review is to support the Ministry in formulating concrete and actionable recommendations on digital government to guide and inform the development of the new Digital Strategy. It took a consultative approach by:

evaluating efforts taken by Norway since the 2017 Digital Government Review to assess performance and identify gaps in relation to the implementation of the policy recommendations formulated by the OECD.

evaluating efforts taken under the existing Digital Strategy for the Public Sector (2019-2025) to assess performance and identify gaps in relation its goals.

assessing Norway's current digital government maturity against initial results of the OECD's 2023 Digital Government Index.

identifying priority areas and future opportunities for Norway to enhance its digital government maturity through to 2030, in line with major trends across other OECD countries.

By addressing its maturity in each of the dimensions of the OECD Digital Government Index, the government could maximise the successful delivery of its new digitalisation strategy and of a digital government that aligns with its vision in the Digital Agenda.

The report was approved by the Public Governance Committee on 25 June 2024 and prepared by the Secretariat for publication.

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The paper was co-ordinated and written by Julian Olsen (Chapters 2, 3, 4, 5 and 10), Marco Beltrán Navarro, Consultant (Chapter 2), Alex Seemann (Chapters 4 and 9), Cecilia Emilsson (Chapters 6 and 7), and Ricardo Zapata (Chapter 8). Felipe González-Zapata provided substantial comments.

The paper also benefitted from comments from the OECD's Directorate for Science, Technology, and Innovation (STI), including Molly Lesher, Lorena Giuberti Coutinho, and Louis Holt.

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Executive summary

Since its OECD Digital Government Review in 2017, the Norwegian government has pursued the strategic digitalisation of the public sector in line with its Digital Agenda, aiming to modernise, simplify, and improve the public sector. With this current strategy set to expire in 2025, Norway's Ministry of Digitalisation and Public Governance is developing a new strategy for the digitalisation of the public sector to enable it to deliver more efficient, effective, and innovative public services.

This paper provides a 'Pulse Check' review of Norway's digitalisation efforts to help the Government formulate concrete and actionable recommendations on digital government. It aims to guide and inform the development of the new digitalisation strategy to enhance the digital maturity of Norway's public sector.

While Norway is a leader in digital government amongst OECD Member countries, there are some key areas that the government can include in the new digitalisation strategy to further enhance the efficiency, efficacy, and innovation of Norway's public sector. These include:

- **Digital Governance:** Norway has a strong digital governance model to drive the digitalisation of the public sector at multiple levels. However, there is opportunity to renew this governance model to bolster the role of its key actors, foster a more coherent governance of digital investments, better address environmental impacts of digitalisation, and promote digital-ready legislation.
- **Digital Government Investments:** Norway has many of the elements needed to deliver the outcomes of its digital government investments, but it could benefit from integrating these into a more strategic whole-of-government model.
- **GovTech:** Norway's StartOff programme was a strong example of the potential of GovTech, which could be reintroduced to support priority areas such as artificial intelligence and the 'twin transition' of digital transformation and the green transition.
- **Digital Public Infrastructure:** Norway's 'national joint solutions' form part of the country's digital public infrastructure and support many solutions used by agencies, businesses, and citizens. However, satisfaction with these solutions is declining. By ensuring that they are secure, resilient, used widely across the public sector, and are maximising value to users, Norway could improve user satisfaction levels.
- **Data access, sharing and re-use:** Norway performs comparatively well in data access, sharing, and reuse in the public sector. However, there is opportunity to promote systematic re-use of data, improve data quality, and better understand the impact of data-sharing initiatives.
- **Artificial Intelligence (AI):** Norway has already -widely adopted AI across the public sector but greater co-ordination of these initiatives across the public sector could ensure that its use is effective, responsive, efficient, and accountable.
- **Digital Talent:** Norway has taken measures to address skills gaps but could benefit from a more strategic approach to better co-ordinate efforts to attract, retain, allocate and develop digital talent across the public sector.

- **Service Design and Delivery:** while Norway has made strong progress in developing user-centred digital services, there are opportunities for greater standardisation across its decentralised delivery model to keep pace with the evolving needs and expectations of users.

By working to address these areas, the Government could enhance its approach to digital government and maximise the potential for the successful development and delivery of the new strategy for the digitalisation of the public sector. This will ensure a mature digital government and a public sector that is agile and responsive to the evolving needs and expectations of its users for years to come.

1 Assessment and recommendations

To inform Norway's new digitalisation strategy, the OECD has identified several strategic objectives and recommendations that could support Norway in building on its progress to ensure that the country has a digital government that is fit for the future.

Based on these findings, the Government could consider incorporating the strategic objectives below into its new digitalisation strategy, which could be achieved by addressing the associated recommendations:

Table 1.1. Overview of the OECD's assessment and recommendations

Strategic objectives	Recommendations
Digital Governance: Leveraging the opportunity of a new minister and dedicated ministry, Norway could enhance its digital governance model to increase coherency and coordination and make the best use of public resources.	**Recommendation 1:** The Government could bolster its governance of digital initiatives in the public sector across the investment lifecycle, including standardised decision-making and approval processes, stronger coordination mechanisms, prioritisation, and oversight of digital government investments, and measures to promote greater collaboration, communication, and dedicated funding for shared initiatives. **Recommendation 2:** The Government could evaluate the environmental impact of its digitalisation strategy and consider how the digitalisation of the public sector can support a 'twin transition' alongside a move to a more sustainable and 'green' public sector, including the resources, funding, and collaboration required to support it. **Recommendation 3:** The Government could promote digital-ready legislation to support its digitalisation efforts by addressing 'green digital' and access to private sector data or information to enable greater value creation. It could also adopt legislations covering explicit rights to outline the expectations and protections for citizens when interacting digitally with the public sector.
Digital Government Investments: Norway could aim to have a strategic and integrated whole-of-government governance model for digital government investments to ensure that it realises the intended benefits of its investments.	**Recommendation 4:** The Government could advance towards an end-to-end approach by integrating the different phases of the investments cycle under one consolidated process. Additional efforts are also required to enhanced cohesiveness on lower capital-intensive investments. **Recommendation 5:** The Government could adopt a portfolio management approach to foster agility and experimentation in the implementation of digital government investments. **Recommendation 6:** The Government could leverage data to better monitor the implementation of digital government investments and integrate the existing monitoring tools to strengthen transparency and accountability. This strategic use of data could support a whole-of-government monitoring of digital government investments and maximise coherence and value for money.
GovTech: Norway could aim to reintegrate GovTech into its public sector to support the development of innovative solutions to public sector challenges, particularly in line with key focus areas like AI and the 'twin transition' of green and digital transformations.	**Recommendation 7:** The Government could consider how elements of the StartOff programme could be continued or developed further to support key focus areas for digital government to maximise its impact and return-on-investment. **Recommendation 8:** The Government could address the GovTech Building Blocks and Enablers to facilitate GovTech collaborations across Norway's public sector, particularly around the capacities for collaboration and experimentation and the resources and support needed for implementation.
Digital Public Infrastructure: Norway could aim to evolve its national joint solutions to ensure that they are secure and resilient, support interactions across sectors, and maximise value to users.	**Recommendation 9:** The Government could strengthen the overall governance and funding model for the 'joint national solutions', focusing on the need for continuous investment throughout their lifecycle. **Recommendation 10:** The Government could prioritise the development of 'joint national solutions' that support interaction, collaboration, and interoperability across sectors and domains to incentivise uptake, increase user satisfaction, and improve service delivery, based on stakeholder input. **Recommendation 11:** The Government could prioritise the development of 'joint national solutions' that have already been identified by Norway as critical, such as common solutions for secure messaging.

Strategic objectives	Recommendations
Data access, sharing and re-use: Norway could take concrete steps in enhancing data access, sharing and re-use in the public sector by ensuring the right data governance foundations, the systematic use of guidelines and standards, and by monitoring the impact of data sharing initiatives.	**Recommendation 12:** The Government could consider creating the role of a National Chief Data Officer and agency-level data stewards to advance data sharing and reuse coherently at the central and local level in line with new national targets. Inspiration could be drawn from the Chief Data Officer role in the U.S federal government, adapted to the Norwegian context and public governance model. **Recommendation 13:** The Government could prioritise the systematic adoption and use of the common standards for information management under the Framework for Information Management to support data quality & re-use and implementation of the 'once only' principle. **Recommendation 14:** As part the collaboration between Digdir and Statistics Norway, and the new digitalisation strategy, it would be good to consider collecting statistics to help measure the impact of data sharing initiatives, including open data, on the Norwegian economy and society.
Artificial Intelligence: As it seeks to expand its integration into the public sector, Norway could aim for a more strategic and coordinated approach to AI that ensures that its use is effective, responsive, efficient, and accountable.	**Recommendation 15:** The Government could formalise its guidance on the use of AI in the public sector and implement the provisions of the EU AI Act to drive the transparency and explainability of AI algorithms that are being used across the public sector. **Recommendation 16:** The Government could consider strengthening the monitoring and oversight of the portfolio of AI projects in the public sector and formalise its approach for pursuing new initiatives to maximise the impact of its investment. In line with Recommendations 5-6, this can be done through stronger oversight and evaluation of AI projects to maximise their collective impact and support their successful implementation. **Recommendation 17:** In coordination with the National Competent Authority under the EU AI Act and in alignment with its provisions, the Government could develop guidance and mechanisms for the monitoring and evaluation of the use of AI in the public sector. This may include regular internal audits, performance monitoring, and impact assessments.
Digital Talent: Norway could aim to have a more strategic approach to digital talent across its public sector, better coordinating efforts to attract, retain, allocate and develop talent.	**Recommendation 18:** The Government could strengthen the coordination between Digdir and DFØ to enhance Norway's approach to attracting and retaining digital talent in the public sector. **Recommendation 19:** The Government could develop a strategy for digital talent and skills in the public sector. Building on the competence model, the government can benefit from a strategic approach to the institutional efforts to attract, retain and develop talent in the public sector. This strategy could connect individual initiatives with specific goals and targets to secure accountability and maximise impact. **Recommendation 20:** The Government could establish structured and coordinated efforts to attract, maintain, develop and allocate digital talent across the public sector. By fostering cross-institutional learning and facilitating mobility, the country can enhance the attractiveness of the public function and improve the allocation of digital talent across the public sector.
Service Design and Delivery: Overcoming the challenges of a decentralised model, Norway could aim to evolve its design and delivery of government services to ensure that it is responsive to the changing needs and expectations of users.	**Recommendation 21:** The Government could implement mandatory service standards to build a more coherent approach across a decentralised delivery model for government services. **Recommendation 22:** The Government could integrate the 'Once Only' principle to promote the reuse of data to minimise administrative burden on users and enable more proactive government services. **Recommendation 23:** The Government could develop an omnichannel strategy to enable a more consistent user experience across all channels, as an extension of the digital experience, as well as to ensure services remain accessible and inclusive of different users' needs. **Recommendation 24:** The Government could incorporate more comprehensive performance monitoring to reinforce a data-driven approach to future service enhancements.

2 Norway's progress to date

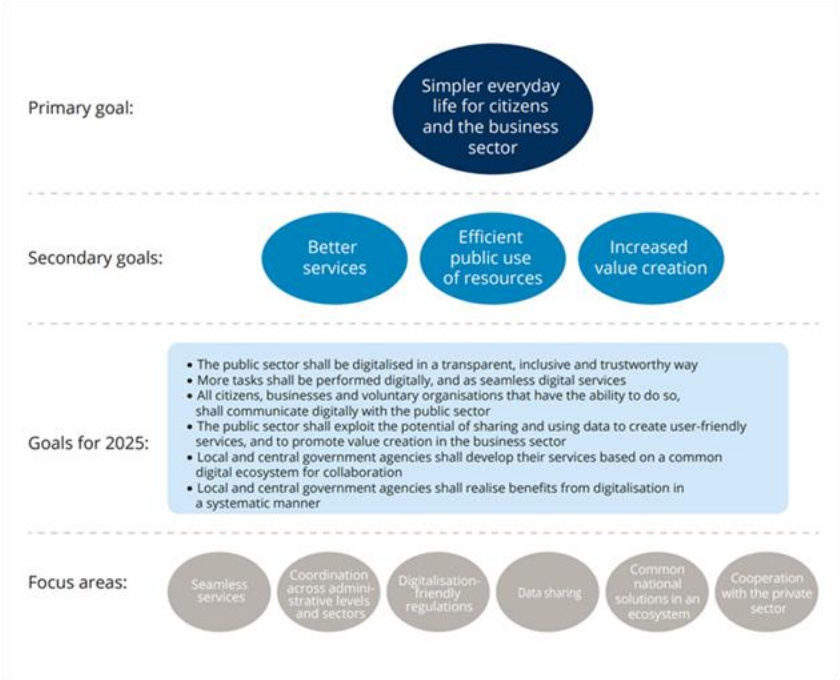
Norway is one of the leading digital governments in the OECD, which has been thanks to ambitions for modernising, simplifying and improving the public sector through digitalisation. However, there is opportunity to build a more effective public sector that is fit for the future and responsive to the evolving needs and expectations of its users.

Norway has one of the most digitally-advanced governments – not just within Europe, but also amongst the wider community of OECD member countries. It has made considerable progress since the OECD's Digital Government Review in 2017, largely thanks to the strategic and coherent approach that its Digital Agenda brought to help achieve the Government's "ambitions for modernising, simplifying and improving the public sector." (Ministry of Local Government and Modernisation, 2016[1]) To better understand Norway's digital development to date, this chapter will consider Digdir's self-assessment of Norway's progress against the current Digital Strategy for the Public Sector, as well as Norway's high-level results in the 2023 DGI where Norway emerged as a top performer in digital government amongst OECD member countries. Despite Norway's strong progress as a digital government, there is still opportunity to improve and build a more effective public sector that is fit for the future.

Progress against Norway's digital strategy for the public sector

Aligned to the vision and strategic objectives of Norway's Digital Agenda, the Government developed its Digital Strategy for the Public Sector (2019-2025) to guide the development of an effective digital government that could meet the expectations from citizens and businesses for simpler interactions with government. Its goals and focus areas are detailed in Figure 2.1 below:

Figure 2.1. Goals and focus of the Digital Strategy for the Public Sector (2019-2025)



Source: : (Ministry of Local Government and Modernisation, 2019[2])

By approaching this strategy in this way, the Government has been able to deliver key improvements in the capacity and capability of the public sector to deliver on the Digital Agenda.

However, there is still room for improvement. Reflecting on its own progress to date, Digdir prepared a self-assessment of Norway's progress against these goals (see Figure 2.1**)**. The assessment is taken from data collected in 2022 and includes insights on how Norway's citizens and businesses are experiencing the goals of this strategy in reality (Digdir, 2023[3]). While these goals are well-targeted and there has been

clear progress since it was implemented in 2019, the success of strategy appears to be varied – indicating that the goals are not delivering the intended outcomes for their beneficiaries.

Table 2.1. Norway's self-assessment for progress in the digital strategy for the public sector (2022)

Goal	Norway's self-assessment
The public sector is digitalised in an open, inclusive and trustworthy manner.	**Status: medium, trending negative.** This is due to concerns around an estimated 20% of the population vulnerable to digital exclusion; only 52% of citizens who have trust in digital government services; and opportunity to improve the involvement of users in the development and decision-making of services. Source: (Digdir, 2023[4])
Several tasks are solved digitally, and as seamless services.	**Status: medium.** While Norway is increasing the number of digital services, only 30% of users and 25% of businesses report a coherent and seamless user experience. Source: (Digdir, 2023[5])
All citizens, businesses and voluntary organisations that have the ability to do so communicate digitally with the public sector.	**Status: good.** There is an increasing rate of digital communication with the public sector year-on-year, but the use of digital challenges does drop slightly when there is an important issue to be discussed or an unfamiliar situation. Users also report issues or dissatisfaction with their digital service experience. Source: (Digdir, 2023[6])
The public sector exploits the potential of sharing and using data to create user-friendly services, and to contribute to value creation for the business sector.?	**Status: not good, trending positive.** There are overall positive trends in the reuse of data by the public sector, with 22% saying they reuse to a large extent and a decrease in the number that say they do it rarely or never. 17% of businesses also reports having improved services through the use of open data to a large extent. However, obstacles remain for the sharing of data and municipalities are not improving at the same rate. Source: (Digdir, 2023[7])
Municipal and central government agencies build their services on the basis of a common digital ecosystem for collaboration.	**Status: good.** The good target achievement is mainly driven by increased use of the national joint solutions. There are nevertheless indications that the joint solutions are under pressure, both due to funding challenges and indications of declining perceived usefulness. Source: (Digdir, 2023[8])
Municipal and central government agencies derive benefits from digitalisation in a systematic manner.	**Status: medium.** 30% of public sector agencies are now realising the expected benefits of digitialisation, up from 19% in 2021. However, 44% say that they struggle to realise benefits in projects in collaboration with other entities, and 51% say they are doing the minimum to realise profits. This shows opportunity for more systematic work on realising benefits. Source: (Digdir, 2023[9])

1. To better understand why the real-life impact for citizens and businesses may not be aligning to its digital ambitions, the Government could consider its underlying foundations for digital government, which can be assessed through Norway's performance in the 2023 DGI.

Norway's performance in the 2023 OECD Digital Government Index

Many of the findings of this review are based on insights garnered through Norway's performance in the 2023 iteration of the OECD's Digital Government Index (DGI). This DGI "assesses the efforts made by governments to establish the foundations necessary for a digital transformation of the public sector that is coherent and human-centred." (OECD, 2024[10]) The DGI measures the extent to which countries have developed the foundations necessary for mature digital government, but it should be noted that it does not measure the digitalisation of government services or the take-up of these services by users (ibid).

Instead, the DGI measures countries' level of maturity across the six dimensions of the OECD Digital Government Policy Framework (DGPF), shown in Figure 2.2, is a policy instrument designed to help governments identify key determinants for effective design and implementation of strategic approaches for the transition towards digital maturity of their public sectors. The DGPF enables the OECD to assess countries' digital government maturity based on qualitative and quantitative measures across six dimensions (OECD, 2020[11]):

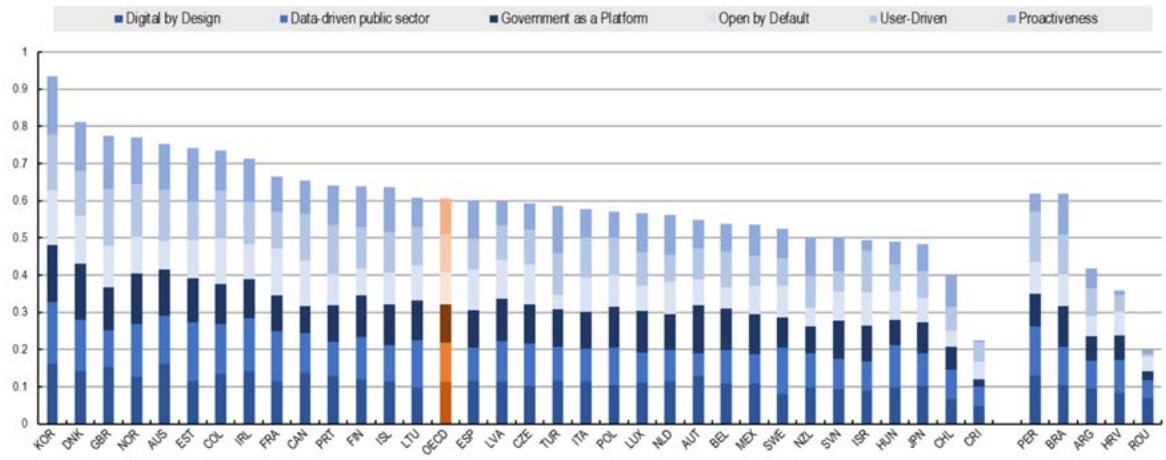
- **digital by design –** governing and leveraging digital technologies to rethink and re-engineer public processes, simplify procedures, and create new channels of communication and engagement with stakeholders.
- **data-driven –** valuing data as a strategic asset and establishes the governance, access, sharing and re-use mechanisms for improved decision-making and service delivery.
- **acting as platform –** deploying platforms, standards and services to help teams focus on user needs in public service design and delivery.
- **open by default –** making government data and policy-making processes available to the public, within the limits of existing legislation and in balance with national and public interest.
- **user-driven –** centring people's needs and convenience in the shaping of processes, services and policies; and by adopting inclusive mechanisms that enable this to happen.
- **proactive –** anticipating people's needs and respond to them rapidly, avoiding the need for cumbersome data and service delivery processes.

Figure 2.2. OECD Digital Government Policy Framework

Source: (OECD, 2020[11])

In the 2023 DGI, Norway performed strongly overall, ranking 4th of 33 participating OECD member countries (see Figure 2.3), with a score of 77% compared to the OECD average of 60.5%.

Figure 2.3. Norway's results in the 2023 DGI



Note: The 2023 DGI is based on data collected between January 2020 to October 2022
Source: (OECD, 2024[10]) For an interactive version of the 2023 DGI, see: : https://goingdigital.oecd.org/indicator/58

To better understand Norway's maturity against the DGPF, the results for each of the six dimensions is broken down into different stages of the policy lifecycle in Figure 2.4 below:

Figure 2.4. Norway's results against the dimensions of the DGPF (compared to OECD average)

Norway

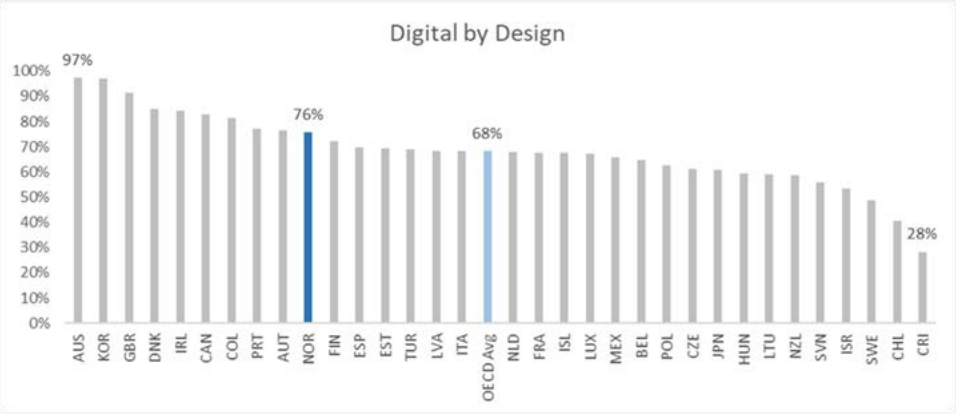
Dimension	Strategic Approach	Policy levers	Implementation	Monitoring	Dim Average
Digital by Design	50%	82%	74%	100%	76%
Government as a Platform	85%	77%	81%	100%	82%
Data-driven public sector	87%	71%	92%	100%	85%
Open by Default	50%	50%	65%	50%	59%
User-Driven	93%	90%	100%	66%	85%
Proactiveness	100%	85%	56%	78%	75%
Grand Total	**78%**	**77%**	**76%**	**80%**	

OECD Average

Dimension	Strategic Approach	Policy levers	Implementation	Monitoring	Dim Average
Digital by Design	74%	71%	70%	51%	68%
Government as a Platform	71%	58%	60%	56%	61%
Data-driven public sector	71%	62%	65%	44%	63%
Open by Default	71%	53%	53%	39%	53%
User-Driven	78%	53%	60%	55%	61%
Proactiveness	70%	63%	53%	45%	57%
Grand Total	**73%**	**62%**	**60%**	**50%**	

Source: Findings from the 2023 DGI (OECD, 2024[10])

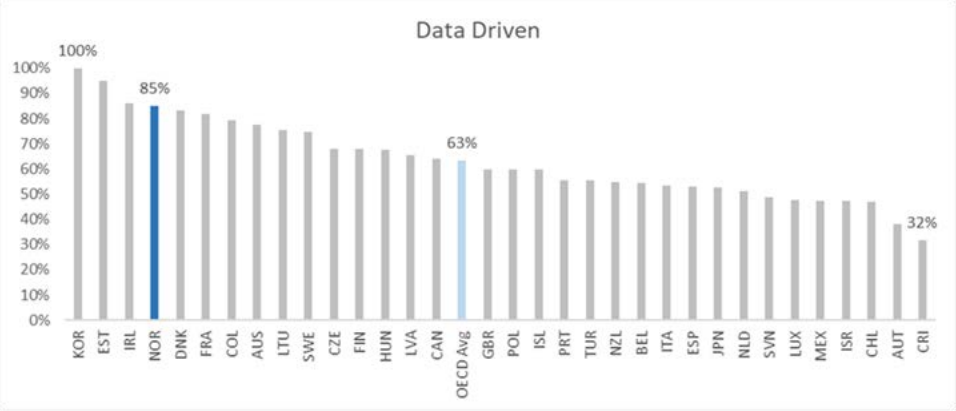
Figure 2.5. Results by Dimension: Digital by Design



Source: Findings from the 2023 DGI (OECD, 2024[10])

Norway ranked 10th in the 'Digital by Design' dimension, with a score of 76% compared to the average score of 68% amongst OECD member countries. At a high level, this score was based on the country's maturity in three key areas: robust digital infrastructure; effective digital investments with a focus on assessing socio-economic impacts; and strong governance marked by a leading digital government institution, coordination body, and external advisory mechanisms. However, there is still opportunity to develop a more strategic approach to digital talent. Additionally, enhancing service design and delivery could strengthen the country's digital capabilities. Greater maturity in this dimension could have supported the delivery of Goal 6 of the Digital Strategy to help the public sector derive the benefits of greater digitalisation, but also would have delivered value to citizens and business in line with Goals 2 and 3.

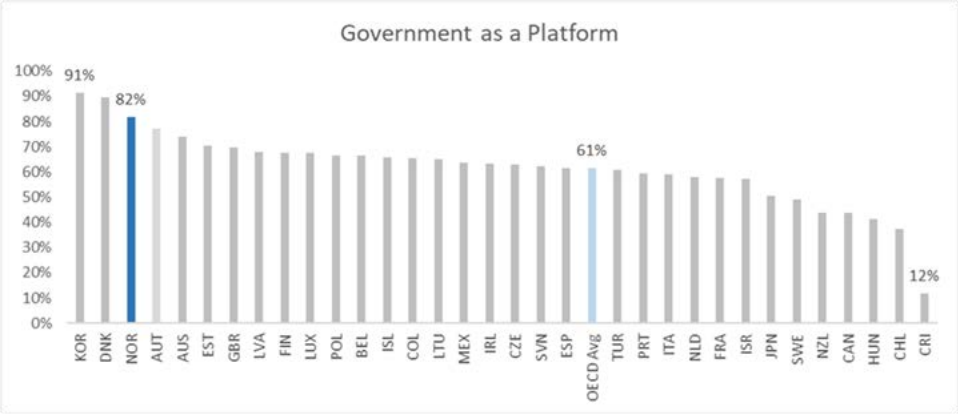
Figure 2.6. Results by Dimension: Data-Driven



Source: Findings from the 2023 DGI (OECD, 2024[10])

Norway ranked 4th in the 'Data-Driven' dimension, with a score of 85% compared to the average score of 63% amongst OECD member countries. At a high level, this score was based on Norway's performance in key factors such as having a well-established interoperability system, a comprehensive data inventory, and robust data protection. However, there is still opportunity to in data governance including by clarifying roles and responsibilities for more effective data management. By further improving its maturity in this dimension, Norway could have better supported the delivery of Goal 4 of the Digital Strategy and address its reported underutilisation of data across the public sector.

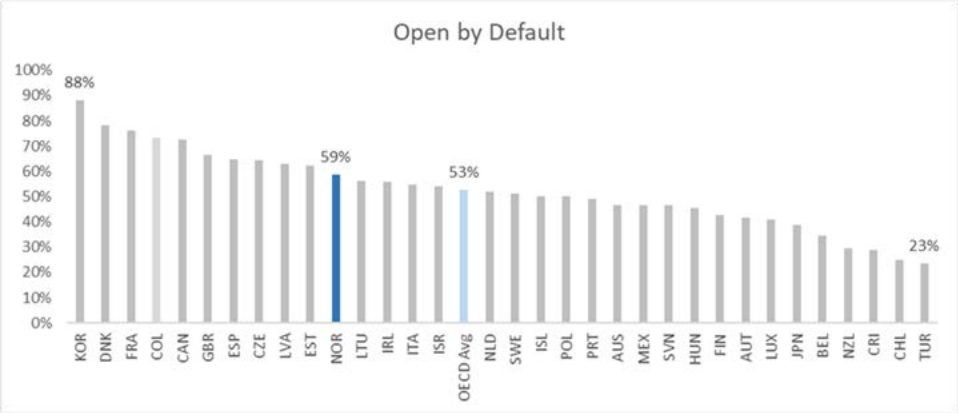
Figure 2.7. Results by Dimension: Government as a Platform



Source: Findings from the 2023 DGI (OECD, 2024[10])

Norway ranked 3rd in the 'Government as a Platform' dimension, with a score of 82% compared to the average score of 61% amongst OECD member countries. At a high level, this score was based on maturity in key areas such as cloud infrastructure, including strategy, storage, and computing capabilities; a comprehensive digital identity framework with a strong regulatory background; and advanced GovTech initiatives. However, there is still opportunity to improve its maturity in service design and delivery. Addressing maturity in this dimension could have supported all the goals of the Digital Strategy, but especially Goal 1 and Norway's efforts for greater digitalisation in keeping with the trust of citizens.

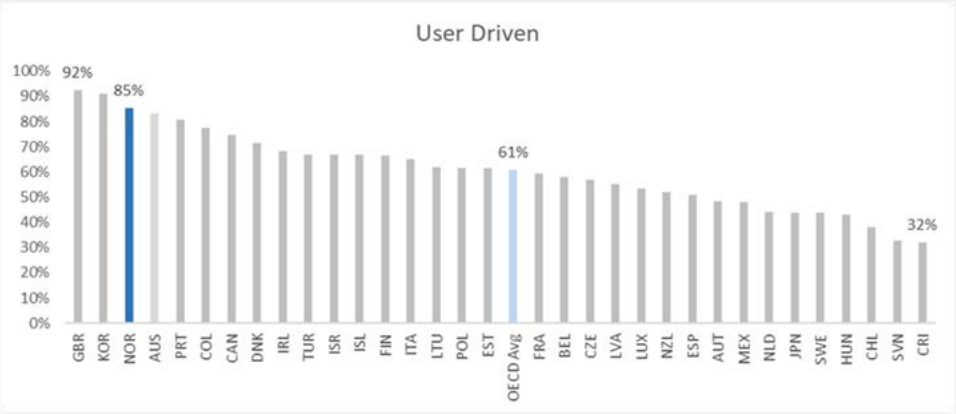
Figure 2.8. Results by Dimension: Open by Default



Source: Findings from the 2023 DGI (OECD, 2024[10])

Norway ranked 11th in the 'Open by Default' dimension, with a score of 59% compared to the average score of 53% amongst OECD member countries. At a high level, this score was based on maturity in areas such as open data legislation, a well-defined open data strategy, and a comprehensive catalogue of services. These strengths reflect the country's commitment to transparency and accessibility in government data. However, there is still opportunity to improve maturity in implementing incentive mechanisms to promote the publication of open government data and conducting assessments to evaluate the impact of open government data on the economy and public sector. Greater maturity in this dimension, could have supported the delivery of Goals 4 and 5 of Norway's Digital Strategy, enabling greater value creation in and out of the public sector by unlocking the potential of open data.

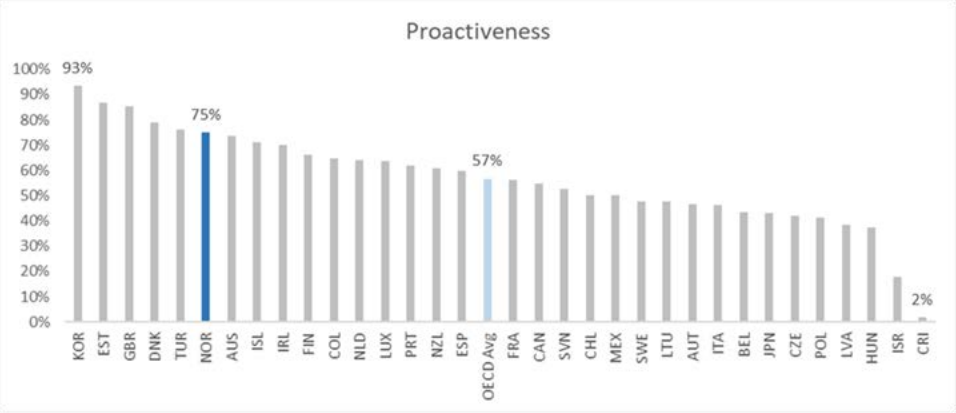
Figure 2.9. Results by Dimension: User-Driven



Source: Findings from the 2023 DGI (OECD, 2024[10])

Norway ranked 3rd in the 'User-Driven' dimension, with a score of 85% compared to the average score of 61% amongst OECD member countries. At a high level, this score was based on maturity in service design and delivery, characterised by formal requirements to use digital government tools for involving citizens and businesses in policy design, government-wide initiatives for engaging diverse population groups, and employing testing methods like design thinking and focus groups. However, there is still opportunity to better understand the main barriers in co-designing digital government services with citizens, as well as to implement additional metrics to measure the performance of digital services to inform future enhancements. While this was another strong area for Norway, even greater maturity in this dimension could have supported the delivery of Goals 2 and 3 of the Digital Strategy – providing a more seamless and better user experience for citizens and business, in turn building the trust in digital government services that Norway was working towards under Goal 1.

Figure 2.10. Results by Dimension: Proactiveness



Source: Findings from the 2023 DGI (OECD, 2024[10])

Norway ranked 6th in the 'Proactiveness' dimension, with a score of 75% compared to the average score of 57% amongst OECD member countries. At a high level, this score was based on maturity in the country's data-driven and consultative approach to service design and delivery. However, there is still opportunity to improve its maturity in the adoption and integration of AI within the public sector, as well as in enhancing risk assessment processes for digital projects. Strengthening these areas could significantly boost the

country's digital capabilities and efficiency. Greater maturity in this dimension could also enable the evolution of Norway's digital service delivery in line with the expectations of citizens and businesses, which could have supported the delivery of Goals 2, 4, 5, and 6 of the Digital Strategy.

Figure 2.11. Results against key areas of digital government

Norway

Dimension	AI	Data	Digital Divide	Digital Infrastructure	Digital Talent	Governance	Investments	Open Data	Service D&D	Dim. Average
Digital by Design				100%	37%	88%	100%		40%	76%
Government as a Platform				80%		100%	92%		50%	82%
Data-driven public sector		85%								85%
Open by Default	0%	100%		50%		50%	50%	62%	86%	59%
User-Driven		100%	94%			85%			78%	85%
Proactiveness	66%	89%				88%	65%		89%	75%
Grand Total	**55%**	**87%**	**94%**	**81%**	**37%**	**86%**	**88%**	**62%**	**70%**	

OECD Average

Dimension	AI	Data	Digital Divide	Digital Infrastructure	Digital Talent	Governance	Investments	Open Data	Service D&D	Dim. Average
Digital by Design				94%	56%	72%	34%		52%	68%
Government as a Platform				68%		67%	57%		48%	61%
Data-driven public sector		63%								63%
Open by Default	12%	63%		57%		29%	39%	58%	66%	53%
User-Driven		80%	75%			64%			47%	61%
Proactiveness	62%	46%				60%	42%		57%	57%
Grand Total	**54%**	**62%**	**75%**	**72%**	**56%**	**68%**	**52%**	**58%**	**52%**	

Source: Findings from the 2023 DGI (OECD, 2024[10])

Finally, Figure 2.11 shows Norway's results across some of the key areas of digital government. Laid across each of the six dimensions of the DGPF, these results create a heat map that demonstrates some of the focus areas for the country's digital maturity, especially for elements of AI, digital talent, and service design and delivery, where Norway has scored below the OECD average.

Where to from here?

The results from the 2023 DGI highlight the key areas on which Norway could focus on its digitalisation strategy to build a more effective and efficient digital government, which will be discussed in detail in the chapters that follow. These key areas include digital governance, digital government investments, GovTech, digital public infrastructure, data sharing, access and re-use, artificial intelligence, digital talent, and service design and delivery.

By addressing these key areas, Norway could build its maturity across the six dimensions of the DGPF and strengthen its foundations for effective and efficient digital government. In doing so, the Government may minimise some of the incidental barriers that might have prevented more positive outcomes against the goals of the previous Digital Strategy for the Public Sector, as well as equip its public sector with what it needs to maximise the potential success and impact of its new digitalisation strategy.

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3 Digital governance

Norway has a strong and collaborative approach to its digital governance, which has been key to driving the progress since under the country's existing digital government strategy.
Leveraging the opportunity of a new minister and dedicated ministry, Norway could enhance its digital governance model to increase coherency, coordination, and make the best use of public resources.

Robust digital governance is key to supporting governments in overcoming challenges, reaping the full benefits of digital government, and enabling holistic digital transformation. Norway has made great progress in its digital governance thanks to the strength of Norway's digitalisation strategy, as well as the collaborative governance model that is in place to drive its successful implementation. However, there is opportunity for Norway to enhance its model for digital governance to drive the successful implementation of the new digitalisation strategy, as well as ensure that the Government continues to meet the needs and expectations of its citizens. It could achieve this by considering how Norway's governance model could be enhanced to bolster the coordination of digital initiatives, integrate greater management of digital investments, evaluate environmental impact, and enhance Norway's legal framework for effective digital government.

Progress to date

Norway has strong maturity in its digital governance according to its results in the 2023 DGI, where it scored 86%, compared to the OECD average of 68%. This is thanks to the strength of Norway's digitalisation strategy, as well as the collaborative governance model that is in place to drive its successful implementation. With the creation of the new Ministry of Digitalisation and Public Governance, there is an opportunity for Norway to build on this progress and renew its digital governance.

Aligned to its broader Digital Agenda, Norway's *Digital strategy for the public sector 2019–2025* (Ministry of Local Government and Modernisation, 2019[1]) demonstrates strong commitment to digital government and a clear vision, objectives, targets, and action plan with defined timeframes, goals, and concrete measures. Developed in consultation with a broad range of stakeholders, it has been a key measure in building consensus and driving progress towards the digitalisation of Norway's public service. (OECD, 2024[2]) The OECD welcomes indications that the same approach will be taken for the new strategy.

Norway also shows maturity in the way it oversees, coordinates, and consults on the implementation of this strategy. Its collaborative governance model consists of a number of bodies and institutions that play different but important roles in engaging with all sectors and levels of government. They include the:

- **Ministry of Digitalisation and Public Governance (formerly Local Government and Regional Development):** responsible for the policymaking, strategy development, and administration required to set the right vision and environment to enable digitalisation. (Bjørgo, 2023[3])
- **Digitalisation Agency (Digdir):** is the underlying digitalisation agency, which provides dedicated focus to the planning, coordination, and development of digital initiatives. (Digdir, 2023[4])
- **Skate:** an advisory body of senior digital government officials at the director-level, which provides input to both the minister and agency responsible for digitalisation. (Digdir, 2023[5])
- **Digitalisation Council:** with representatives from academia, civil society, and the private sector, provide an easily accessible forum where management of government agencies can seek advice in their efforts to provide digital services and for the digital transformation of their agency (Digdir, 2023[6])

These bodies are comparatively effective in working together to drive the digitalisation of Norway's public sector in the right ways. However, there are still opportunities to enhance its approach. The results in the 2023 DGI indicate that the Government could bolster the role of both the Ministry and Digdir to enable more effective coordination of digital initiatives. This is in line with the findings of Norway's 2017 Digital Government Review, which called for a more structured governance model, with clearly-defined roles, centralised decision-making, a clear mandate, and strong oversight capability. However, this still does need to be balanced with maintaining agility and space for innovation and collaboration within the public sector. (OECD, 2017[7])

In October 2023, Norway's Prime Minister announced a new Ministry of Digitalisation and Public Governance, recognising the increasingly vital role that technology and digitalisation plays in society, declaring that the new ministry would be "responsible for driving the development of new technological solutions with a clear focus on the users of these solutions." (Office of the Prime Minister, 2023[8]) This change also ensures that there is dedicated focus and coordination at the political level to drive a more effective and efficient public sector through digitalisation. (Office of the Prime Minister, 2023[8]) With a more centralised focus at both the political and institutional levels, Norway could use this opportunity to renew its approach to digital governance.

Remaining challenges

A renewed model for digital governance could drive the successful implementation of Norway's new digitalisation strategy, as well as ensure that the Government continues to meet the needs and expectations of its citizens. It could achieve this by considering how Norway's new governance model could bolster the coordination of digital initiatives, integrate greater management of digital investments, evaluate environmental impact, and enhance Norway's legal framework for effective digital government.

Bolster coordination of digital initiatives

Working in a decentralised model of service delivery and digital development, the coherent and effective coordination of digital initiatives is key to ensuring that Norway maximises the successful delivery and impact of its digitalisation strategy. The results of the 2023 DGI highlighted opportunities to bolster this coordination at all levels of Norway's digital governance model, including with a:

- **stronger decision-making for digital government investments:** where Norway scored 20% (compared to the OECD average of 28%). The results recognise Digdir's current role in prioritising digital and ICT projects investment across the central/federal government. However, there is an opportunity to bolster Norway's approach to digital government investments (in line with Chapter 4 to enhance decision-making in the value proposition and approval stages for these projects, as well as for securing financial support for them and mandating external reviews. Given the national context in Norway an appropriate model could be envisaged in the through a central body, or at the agency-level with stronger coordination by Digdir. However, under either model, the process and considerations should be standardised (while still leaving space to consider specific agency requirements).
- **more active role for Skate in supporting the coordination of digital initiatives:** digital initiatives: where Norway scored 37% for the responsibilities that Skate plays in coordinating digital initiatives (compared to the OECD average of 57%). This score was based on the work Skate does in horizontal coordination and monitoring of the implementation of the Digitalisation Strategy at the national level, as well as its coordination with municipal governments in digital initiatives. However, there could also be opportunity for Skate to use its current mandate to take a more active role in the coordination, prioritisation, and oversight of digital government investments across Norway's public sector (see Chapter 4), including for alignment with digitalisations strategies and the adoption of technical standards. This is also in line with calls from Skate for the Government to adopt more cross-cutting approach to governance to increase opportunities to foster greater interaction and collaboration across the public sector (Digdir, 2023[9]).
- **close engagement with the Digitalisation Council as the advisory body:** where Norway scored 33% (compared to the OECD average of 43%). The score recognises the Council's role in sharing the latest advancements of the industry in the areas of digital, ICT and data. The results indicated that the Council could have greater input into the digital strategy, but this was because the DGI data was collected before the Council had been invited to provide input into the development of

the new digitalisation strategy. Finally, as part of its role in providing advice to agencies to support their digitalisation efforts, the Council could continue efforts to support successful digital initiatives by sharing insights on digital policies and projects.

Each of these bodies contributes to Norway's effective digital governance, providing layers of coordination and oversight to enable Norway's digital transformation.

Integrating greater management of digital investments

In providing input on the new digitalisation strategy, Skate recommended that the new digitalisation strategy was an opportunity to introduce governance and funding that supports collaboration. To achieve this, the Government could adopt more cross-cutting approach to governance to increase opportunities to foster greater interaction and collaboration across the public sector. It believes this would improve efficiency and maximise the potential for a successful delivery of the strategy. Skate also recommended that any renewed approach to digital governance should be considered alongside the funding mechanisms necessary to facilitate agile product development and collaboration or joint solutions across sectors and across borders. (Digdir, 2023[9])

These calls are echoed by Digdir, who called for the digitalisation strategy to provide greater budget certainty by incorporating mechanisms in the annual budget process for more long-term funding, mechanisms to fund the development of cross-sector initiatives, and a better way to evaluate the value and impact of digital initiatives in a broader socio-economic context. This would require a more coherent and integrated approach to the governance of digital government investments, which is discussed in greater detail in Chapter 4.

Evaluating environmental impact

There could be opportunity to better evaluate the environmental impact of Norway's new digitalisation strategy. In the 2023 DGI, Norway scored 75% for the way it evaluates the impacts of its digital strategy on citizens and businesses (compared to the OECD average of 62%), but environment was one area that was missing. The Government could enhance its digital governance by extending its impact evaluations of digitalisation to include its environmental impact, especially as Norway increases its focus on the 'twin transition' of green and digital transformations. This 'twin transition' could be an area where the strategic coordination of digital government initiatives could integrate greater support and oversight advance this agenda. This could be an area that complements calls from Digdir for the Government to pursue greater opportunities for the public sector to share resources, initiatives, and funding to collaborate on key challenges and deliver shared outcomes (Digdir, 2023[10]).

Enhancing Norway's legal framework

Norway has a strong legal framework, which has reflected many of the key areas of digital required to enable its digitalisation efforts whilst also ensuring the right protections are in place. However, the 2023 DGI shows that there are still some areas where the Government could consider going further, including:

- **digital reflected in laws, regulations, and policies:** where Norway scored 89% (compared to the OECD average of 66%). While this is a strong result, there are opportunities to review these legal instruments and identify opportunities to also include 'green digital' and access to private sector data or information to enable greater value creation.
- **digital rights acknowledged in policy:** where Norway scored 75% (compared to the OECD average of 53%). This is because Norway acknowledges key rights around communication, access, privacy, and autonomy, but there could be more explicit on outlining the right for citizens to choose to interact digitally with the public sector. This is in line with the need for an omnichannel

approach outlines in Chapter 4, which enables citizens to access and interact with services in the most efficient and effective way for them, based on their needs and preferences.

Should the Government choose to review Norway's digital legal framework, it could also consider calls from Skate for the Government to develop frameworks and processes to help the public sector navigate laws and regulations when pursuing digitalisation. This could help the Government adapt this legal framework to ensure it is relevant and workable in a digitalised age. (Digdir, 2023[11])

Recommendations

Based on these findings, the Government could consider incorporating the strategic objective below into its new digitalisation strategy, which could be achieved by addressing the associated recommendations:

Strategic objective: Digital Governance

Leveraging the opportunity of a new minister and dedicated ministry, Norway could enhance its digital governance model to increase coherency, coordination, and make the best use of public resources.

- **Recommendation 1:**

  The Government could bolster its governance of digital initiatives across the investment lifecycle, including standardised decision-making and approval processes, stronger coordination mechanisms, prioritisation, and oversight of digital government investments, and measures to promote greater collaboration, communication, and dedicated funding for shared initiatives.
- **Recommendation 2:**

  The Government could evaluate the environmental impact of its digitalisation strategy and consider how the digitalisation of the public sector can support a 'twin transition' alongside a move to a more sustainable and 'green' public sector, including the resources, funding, and collaboration required to support it.
- **Recommendation 3:**

  The Government could promote digital-ready legislation to support its digitalisation efforts by addressing 'green digital' and access to private sector data or information to enable greater value creation. It could also adopt legislations covering explicit rights to outline the expectations and protections for citizens when interacting digitally with the public sector.

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4 Digital government investments

While Norway has developed advanced practices for planning, funding, and managing digital government investments, there is a need for a more coherent approach across its public sector.
Norway could aim to have a strategic and integrated whole-of-government governance model for digital government investments to ensure that it realises the intended benefits of its investments.

Effective management of digital government investments helps to ensure that governments make the best use of public resources and realise the intended benefits of these investments. The evidence collected through the 2023 DGI shows that Norway has made good progress to date, having developed advanced practices for planning, funding, and managing digital government investments reflect the progress towards a strategic and whole-of-government approach to invest in the digital transformation of the public sector. Nevertheless, the country could benefit of integrating the existing procedures of investments lifecycle into a streamlined end-to-end process that delivers better value and impacts for Norway's digital government investments in line with the forthcoming OECD Digital Government Investment Framework.

Progress to date

Norway has many strong elements in place to help develop, manage, and deliver its digital government investments. This is clear from Norway's performance in the 2023 DGI, thanks to its:

- **project financing:** where Norway scored 100% (compared to the OECD average of 73%) for having a co-financing scheme in place to ensure that "socio-economically profitable digitalisation measures can cover part of the project cost," according to Norway's submission to the 2023 DGI.
- **value proposition:** where Norway scored 100% (compared to the OECD average of 88%) for having a standardised methodology for developing a value proposition for all digital projects. It also scored 100% (compared to the OECD average of 63%) for ensuring that this covers social and financial value, that it assesses risks and environmental impacts, prioritises digital projects, and aligns with standards and the objectives of the digitalisation strategy.
- **procurement:** where Norway scored 100% (compared to the OECD average of 67%) for having procurement guidelines for all projects, including specific considerations for digital projects.
- **project management:** where Norway scored 100% (compared to the OECD average of 58%) for having guidance in the Digitalisation Memorandum in all projects and Digdir's Project Wizard as a standard procurement management tool. Norway also scored 100% (compared to the OECD average of 39%) for this model including agile project management methodologies.
- **ex-post cost benefit analysis:** where Norway scored 100% (compared to the OECD average of 27%) for including this in the documents and reporting as part of Norway's annual budget process.
- **project evaluation:** where Norway scored 100% (compared to the OECD average of 39%) for having a common methodology provided by DFØ to support effective decision making, as well as scoring 100% (compared to the OECD average of 28%) for ensuring this evaluation considers the societal, economic, and environment considerations for government, citizens, and businesses.

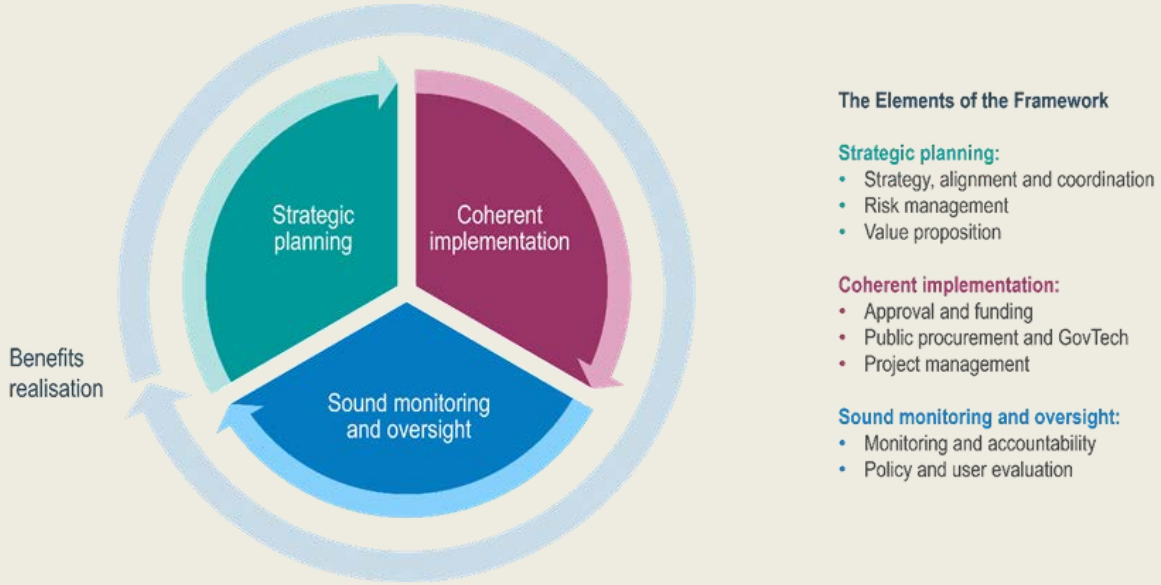
With strong maturity in each of these elements, Norway is ensuring that it is already making effective use of public resources and realising the intended benefits of its digital investments.

Remaining challenges

While Norway demonstrates maturity in its governance of digital government investments, it could benefit from integrating the existing elements listed above into a more streamlined and coordinated process – supporting the Government to derive the best value from its digital government investments throughout the investment lifecycle. In line with the forthcoming OECD Digital Government Investment Framework (see Box 4.1), Norway could implement measures in each of the key phases of Norway's strategic planning, coherent implementation, and sound monitoring and oversight of digital government investments.

Box 4.1. OECD Digital Government Investment Framework

The OECD Digital Government Investment Framework is a tool to analyse the challenges governments face in investing in the digital transformation of the public sector. It includes three pillars: strategic planning, coherent implementation, and sound monitoring and oversight. The Framework identifies the critical elements to be addressed within each pillar to strengthen the governance for digital government – enabling government to mitigate risks and exploit the potential benefits of digital transformation.



- **Strategic planning:** essential to strengthen the governance of digital government by establishing a clear leadership, effective policy levers and coordination mechanisms to steer the public sector digital transformation. Through strategic alignment and coordination between key stakeholder, governments can improve the planning of digital government investments.
- **Coherent implementation:** the development of digital investments allows governments to build coherence and agility in the use of digital technologies in the public sector. Governments can leverage the use of shared tools and methodologies to secure benefits realisation.
- **Sound monitoring and oversight:** key elements of governance to foster accountability and drive performance, enabling countries to track the investments portfolio, encourage projects to be managed properly, and ensure these investments yield the intended benefits.

Source: (OECD, forthcoming[1])

Strategic planning for digital government investments

In the case of Norway, Digdir has an explicit mandate for advising and monitoring public sector institutions at federal level in the implementation of digital government investments.

Skate play a role in the strategic planning and oversight of digital government investments as the top strategic body for digital transformation. This role provides a unique overview of the digital governments investments situation, facilitating the identification of potential needs and steering public investments in digital transformation towards strategic policy goals. Nevertheless, the evidence collected shows the

coordination between Skate and Digdir focuses on large investments and there is an opportunity to extend its oversight to cover all digital government investments.

Together with close coordination and alignment, digital government investments require whole-of-government risk management and value proposition for investments on digital government to secure coherence and sustainability in the use of digital technologies in the public sector.

The strategic relevance of digital technologies stresses the importance of developing a thorough identification, understanding and mitigation when investing in digital. The evidence collected through the 2023 DGI shows Norway has set a comprehensive framework to define, identify and mitigate potential risks. Digdir has developed dedicated guidelines and procedures to assess and manage risks, including a preliminary assessment, methodologies for assessing risks, risk management, monitoring and measurement and evaluation. (Digdir, 2023[2]) In addition, DFØ, the body responsible for public procurement, has a specific guidance for information security and privacy for ICT procurement.

The value proposition is another critical element when it comes to planning digital government investments. It includes the policy instruments for assessing and estimating value to inform investments decision-making. One critical consideration of the value proposition is the alignment with the strategic objectives of the public sector, including how digital investment are in line with the digitalisation strategy. Many OECD countries use business cases to assess the merits of digital government investments, providing a structured and standardised method to estimate costs, benefits and potential risks associated with a specific initiative.

Norway's value proposition for digital government investments provides a holistic assessment to inform decision-making, enabling the approval and prioritisation of these investments. The mechanism allows the public sector to estimate the social and financial value of digital projects, enabling a comprehensive analysis of their societal benefits and economic feasibility. It also estimates potential risks and environmental impact. This instrument is also used to assess alignment of digital government investments with national standards and the objectives of the current Digital Strategy.

Coherent and sustainable implementation

The approval process for digital projects is a critical milestone to build consistency in the funding and implementation of digital government investments. As indicated in the previous section, the comprehensive value proposition mechanism in place in Norway is a critical building block for the approval of digital investments and constitute the cornerstone of the approval process.

In the 2023 DGI, Norway scored 50% for its system of project approvals (compared to the OECD average of 55%) as this system was in place only for certain digital projects. Currently the approval process differs according to the investment’s complexity reflected in the total budget. Digital government investments over 300 million NOK must undergo different procedures according to complexity and strategic relevance of investments. The Project Model for large investments include two different approval stages, including external quality assurance of the conceptual choice, securing alignment with strategic goals and a second validation focusing on emphasis on budget and implementation considerations.

Norway has also developed funding mechanisms to support digital government investments. The Co-Financing Scheme for new, small-to-medium-sized digitalisation initiatives was established in 2016 under Digdir with an estimate budget of 140 million NOK. (Digdir, 2024[3]) This mechanism was designed to fund investments between 10 and 100 million NOK with a maximum contribution period of three years. Public sector institutions benefiting from this instrument are required to contribute a minimum of 50% of the investment funding. Project are selected according to a separate procedure based on considering both quantifiable and non-quantifiable impacts. Additionally, beneficiaries must commit to accepting a budget reduction equal to 50% of the estimated internal net benefit.

Another critical element in the implementation phase is the development and promotion of shared tools as part of the common building blocks required to standardise and secure a coherent deployment of digital investments. OECD countries have taken different actions to foster project management ecosystem that can foster collaboration and peer learning across the public sector. Norway has developed different management tools that can support the delivery of investments. For example, the Prosjektveiviseren is a project management guideline designed to support public sector teams in developing investment projects. (Projektveiviseren, 2023[4]) Similarly, the aforementioned Project Model for large investments also provides a set of standards and assurance mechanisms that support the implementation.

Sound monitoring and oversight

In the case of Norway, the evidence collected through the 2023 DGI shows the existence of different instruments to monitor digital government investments. These include a monitoring system for the implementation of the Action Plan for digital transformation of the public sector (Digdir, 2023[5]) and monitoring mechanisms of the *Project Model for large investments.* The evidence showed the monitoring mechanisms could further strengthen accountability by making the information more granular, for example by leveraging open government data. Norway could consider expanding the monitoring coverage to secure a full oversight of how the country is investing in the digital transformation of the public sector. The country could strengthen the overall governance framework by building a joint whole-of-government overview of digital government investments.

Building on the existing governance, including with Digdir and Skate, Norway could benefit from a strategic oversight of the digital investments cycle. By creating a strategic overview of the digital government investments being planned and implemented, the country could foster coherence and efficiency in the use of digital technologies in the public sector. Advancing this whole-of-government approach can strengthen the governance for digital government allowing Norway to plan and implement investments in line with long-term policy goals. This is in line with the findings outlined in Chapter **3**.

Finally, regarding the evaluation of digital government investments, the country has developed solid framework to collect evidence on the impact of digital government. The Directorate for Administration and Financial Management (DFØ) has developed in collaboration with Digdir a thorough guideline to measure benefit realisation (*Gevinstrealisering*). This document provides specific guideline to plan, identify and measure benefits for digital government investments. These guidelines are fully connected with the Agency *prosjektveiviseren,* which provides a clear example of the benefits of integrating the investments phases to deliver value.

Recommendations

Based on these findings, the Government could consider incorporating the strategic objective below into its new digitalisation strategy, which could be achieved by addressing the associated recommendations:

Strategic objective: Digital Government Investments

Norway could aim to have a strategic and integrated whole-of-government governance model for digital government investments to ensure that it realises the intended benefits of its investments.

- **Recommendation 4:**

  The Government could advance towards an end-to-end approach by integrating the different phases of the investments cycle under one consolidated process. Additional efforts are also required to enhanced cohesiveness on lower capital-intensive investments.
- **Recommendation 5:**

  The Government could adopt a portfolio management approach to foster agility and experimentation in the implementation of digital government investments.
- **Recommendation 6:**

  The Government could leverage data for monitoring and integrate the existing monitoring tools to strengthen transparency and accountability in the delivery of digital government investments. Norway could benefit from a strategic use of the data to support a whole-of-government monitoring of digital government investments and maximise coherence and value for money.

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5 GovTech

While Norway's StartOff program offered a strong approach to GovTech by balancing risk mitigation with innovative procurement, the program has since been discontinued.
Norway could aim to reintegrate GovTech into its public sector to support the development of innovative solutions to public sector challenges, particularly in line with key focus areas like AI and the 'twin transition' of green and digital transformations.

GovTech can be a valuable tool for the public sector – leveraging collaborative and strategic partnerships to help develop solutions to the key challenges that it faces. Looking at Norway's progress to date, its StartOff programme demonstrated strong GovTech maturity – successfully finding a balance between traditional risk management and innovative procurement practices. However, as StartOff's funding has been reallocated to other priority areas, a challenge remains for Norway in how to address some of the key GovTech Buildings Blocks and Enablers to facilitate the reintroduction of a GovTech function, potentially tied to emerging priority areas of AI and the 'twin transition' of green and digital transformations.

Progress to date

In the 2023 DGI, Norway performed strongly on the topic of GovTech, achieving a score of 92% compared to the OECD average of 50%. Norway achieved this by demonstrating a dedicated GovTech practice in the country that was considered as part of Norway's digital strategy and resourced to maximise the potential success of this practice across its public sector.

Norway's results in the 2023 DGI were based on its StartOff programme, which was introduced in 2020 to leverage innovative procurement to work in collaboration with start-up companies to develop solutions for the public sector – particularly across its municipalities. Administered by the Norwegian Agency for Public Management and Financial Management (DFØ), StartOff would guide participants through the programme and provide resources to provide support with project management, defining the need, and providing legal and commercial advice. (DFØ, 2024[1])

The programme was based on a repeatable methodology that would deliver a solution within a defined 6-month process, from defining the challenge through to the delivery of a minimum viable product (MVP) of a solution. A key feature of the programme was its defined procurement processes, which companies are invited to submit idea sketches in response to the client's 'need', with the best 6 sketches progressing to interview and then top 3 of those suppliers progressing to 3-week phase in which to develop a paid solution proposal. Finally, once a preferred supplier was chosen, they were engaged for a further 15 weeks to develop the MVP for a set fee of NOK 450,000. After that, the client could then conduct a standard procurement process to further develop the MVP or to explore other options. (DFØ, 2024[1]) The StartOff model represents an effective approach to GovTech, which many countries could replicate to addresses some of the key challenges that they face in finding a balance between:

- making procurement processes more agile and digital.
- creating space for start-up companies in government procurement by improving access to opportunities and minimising the resource-intensive process of responding to opportunities.
- maintaining the certainty around process, timelines, costs, and ethical procurement processes that is still important for the effective and responsible use of public resources.

The success of this is clear, with 21 projects delivering solutions across the public sectors of both the state and municipalities, with another 4 projects to be delivered in 2024 (DFØ, 2024[1]) According to interviews with Norway's civil servants, this encouraged a culture of innovation, as well as the sharing of knowledge, experiences, and solutions between municipalities, between levels of government, and between administrators and the start-up companies. Norway therefore achieved the programme's objectives to:

- foster public sector innovation.
- increase cost-effectiveness.
- promote a culture of experimentation and collaborative governance.
- facilitate testing and adoption of emerging technologies.

Through the StartOff programme, Norway demonstrated how GovTech can be a valuable tool for the public sector – leveraging collaborative and strategic partnerships to help develop solutions to the key challenges

that it faces. It is used in the early stages of a digital investment as part of the discovery, experimentation, and piloting of potential initiatives. Further, StartOff serves as a case study for other countries on how to innovate their procurement processes to create opportunities to diversify their supplier ecosystem and generate economic opportunities for start-ups and small-to-medium-sized businesses.

Remaining challenges

Despite StartOff's success in recent years, the programme was discontinued in the 2024 national budget, with the Government deprioritising the programme to reallocate resource to other priority areas. Despite this, Norway maintains its focus on innovative procurement, and there are indications that elements of StartOff could be continued or developed further to support priority areas, like sustainability or circular economy (Project interviews (DFØ, 2024[1]) With increased funding being allocated in Norway for research and development of AI, perhaps this too could be an area where the StartOff programme could encourage agile and innovative solution development in collaboration with the private sector.

As the Government considers how best to facilitate the reintroduction of a GovTech function, it could use the OECD GovTech Policy Framework described in Box 5.1 (OECD, forthcoming) to focus its efforts on building maturity in the key GovTech Building Blocks and Enablers to maximise its potential success. At the micro-level, Norway could invest time and resources to ensure that the right GovtTech Building Blocks are in place to get the most out of their GovTech practice going forward, including:

- **Mature digital government infrastructure:** GovTech should aim to build on digital government maturity technology, infrastructure, tools, and data governance. In line with the recommendations in Chapters 6 and 7, maturity in these areas helps to enhance public sector capability, but also enables Norway's suppliers to better address the key challenges that it faces.
- **Capacities for collaboration and experimentation:** successful GovTech engagement requires a capable public sector, which depends on having the right skills; process, tools, and methods; and culture in place. In terms of the process, the Government could leverage the existing StartOff methodology as an example of repeatable process that balances innovation with risk management. However, for the reintroduction of a sustainable GovTech function to be successful, it could be valuable to develop initiatives to build a culture that supports and celebrates the practice, including by appointing key executive leaders and GovTech champions to promote the practice.
- **Resources and implementation support:** GovTech should be considered as both a method to help deliver digital investments and as a digital investment itself to be realised. StartOff was already proven to be a sound procurement process that had the capacity to scale solutions across levels of government. The main gap then under this Building Block would be to address the funding issue, which could be addressed by aligning the GovTech function with a key area of future investment, as with AI and the 'twin transition' of green and digital transformations.
- **Availability and Maturity of suppliers:** governments could take measures to ensure that there is a mature and capable ecosystem of GovTech suppliers ready to support co-creation. While the StartOff model improves access to improvements, the Government could consider whether to take additional measures, like acceleration programs or venture capital funding, to further invest in building the capability of the start-up ecosystem in Norway.

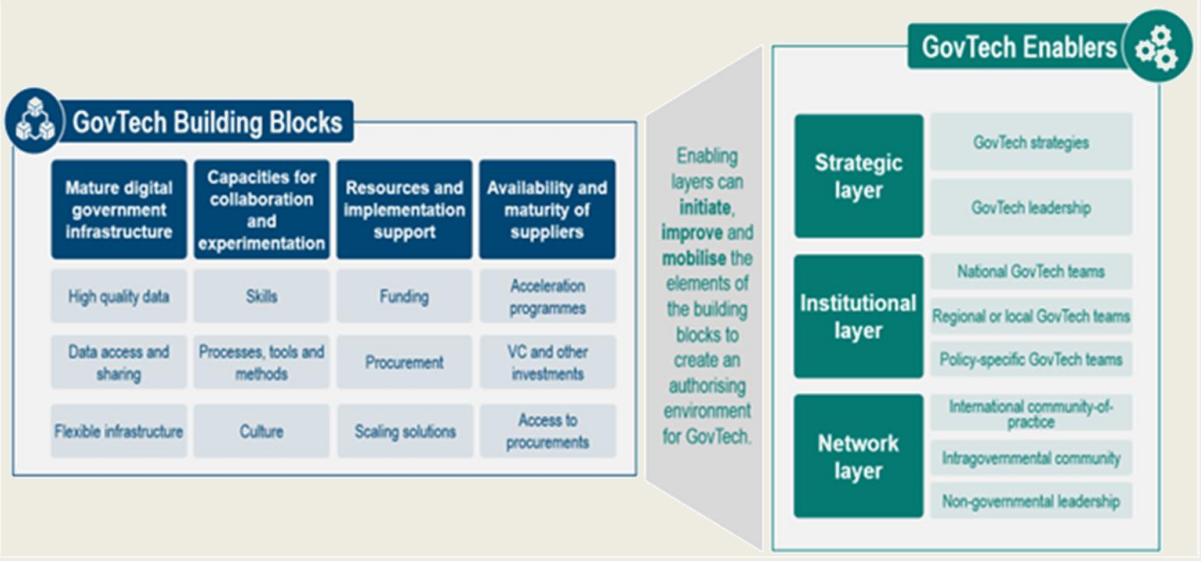
At the macro-level, Norway could also address the GovTech Enablers to ensure the GovTech ecosystem operates in a coordinated manner and progresses in a unified direction, including at the:

- **strategic layer:** governments could use GovTech strategies and champions in senior leadership positions to mobile support around and set a clear direction for the use of GovTech. Norway could develop a dedicated GovTech strategy, potentially aligning with other strategy objectives or priority areas, like for AI and the 'twin transition' of green and digital transformations.

- **institutional layer:** governments could seek collaboration and knowledge-sharing across institutions at the national, regional, or policy levels. While a dedicated GovTech team could be valuable at the national level to drive the practice and coordinate opportunities, it could still be valuable to have counterparts in different levels of government or policy areas to enable the use of GovTech more comprehensively across Norway's public sector.
- **network layer:** both governments and GovTech actors could seek to mobilise the network collectively to strengthen the practice and garner broader support. By creating communities-of-practice for GovTech in Norway's public sector, the Government could demonstrate the value of the practice, encourage best practice, and generate potential opportunities for additional funding as different agencies or levels of government explore their own projects.

Box 5.1. OECD GovTech Policy Framework

The OECD's forthcoming GovTech Policy Framework outlines the key GovTech Building Blocks and Enablers on which governments could focus their efforts in order to build their capacity for GovTech – ensuring that they continue to engage GovTech actors in the right way and maximise the impact of their collaborations. This GovTech Policy Framework is detailed below:



Source: (OECD, forthcoming[2])

Recommendations

Based on these findings, the Government could consider incorporating the strategic objective below into its new digitalisation strategy, which could be achieved by addressing the associated recommendations:

Strategic objective: GovTech

Norway could aim to reintegrate GovTech into its public sector to support the development of innovative solutions to public sector challenges, particularly in line with key focus areas like AI and the 'twin transition' of green and digital transformations.

- **Recommendation 7:**

  The Government could consider how elements of the StartOff programme could be continued or developed further to support key focus areas for digital government to maximise its impact and return-on-investment.
- **Recommendation 8:**

  The Government could address the GovTech Building Blocks and Enablers to facilitate GovTech collaborations across Norway's public sector, particularly around the capacities for collaboration and experimentation and the resources and support needed for implementation.

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6 Digital public infrastructure

While Norway's 'national joint solutions' are a strong basis for the country's digital public infrastructure, there is declining user satisfaction with these services. Norway could aim to evolve its 'national joint solutions' to ensure that they are secure and resilient, support interactions across sectors, and maximise value to users.

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Digital public infrastructure (DPI) – including digital identity and other common, foundational systems – facilitates the vision of a mature, digital government that operates like a Government as a Platform. It ensures seamless and secure access to digital services and promotes efficiency through standardised and reusable tools. Norway's 'national joint solutions' initiative forms part of the country's DPI and offers several solutions used by a majority of public agencies as well as businesses and citizens. However, challenges persist with declining satisfaction with these solutions due to difficulties in meeting evolving user needs.

Progress to date

Norway has made significant progress in DPI through its 'national joint solutions' initiative, aligning closely with Digitalisation Strategy Goal 5: "Municipal and central government agencies build their services on the basis of a common digital ecosystem for collaboration." (Digdir, 2023[1]) Launched several years ago, this initiative has produced 26 accessible national joint solutions, with 19 managed and directly provided by Digdir. Eleven solutions are open for use by private entities, and eight are free of charge, including the national cadaster register. Notable examples of joint solutions include ID-porten (a single-sign-on solution), Varsling (common notification), eBevis & eSignature, Altinn (common service platform), Basic data registers (including population register & company register), Styrning av tilgang (access control), and Digital postkasse (digital post) (Digdir, 2023[2]). Currently, 69% of public agencies in Norway use these joint solutions, with 66% expressing positive views on how they contribute to better solutions within their own organisations (Digdir, 2023[1]). In the 2023 DGI, Norway excels in digital infrastructure, scoring 81%, surpassing the OECD average score of 72%). Norway also ranks 3rd out of 33 OECD countries in the Government as a Platform dimension of the DGI, with a score of 82% compared to the OECD average score of 61%. This success is primarily attributed to Norway's strong performance in the digital identity assessment. In the 2023 eGovernment Benchmark, Norway scored 91/100 in the indicator "key enablers" which includes eID and digital post, thus well above the EU27+ average of 71/100. "Key enablers" was the area in which Norway progressed the most compared to 2022 (European Commission, 2023[3]).

Remaining Challenges

However, challenges remain despite Norway's lead over other OECD countries in DPI. There is a reported decline in satisfaction with the 'national joint solutions'. According to a recent survey, 42% of public agencies identify a lack of joint solutions in a shared ecosystem, across public sector domains, as an obstacle to developing seamless digital services. In additional, few public agencies report extensive use of other components supporting a common digital ecosystem, with only 30% using reference architecture and standards (Digdir, 2023[1]), which may be attributed to a lack of awareness of these resources. In interviews, some Norwegian civil servants have also highlighted the need to prioritise specific types of 'national joint solutions' as part of the new digital government strategy, such as secure messaging.

Skate (Digdir, 2023[4]) suggests that the decline is user satisfaction is due to the joint solutions not keeping up with the evolving needs of users, both from private and public institutions. Skate highlights the importance of financing for maintaining and developing these solutions and leaving room for continued improvement. Skate also advocates for better incentives for additional public bodies to contribute to and use existing joint solutions, and the need for 'national joint solutions' to better support interaction between actors across sectors and domains.

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Recommendations

Based on these findings, the Government could consider incorporating the strategic objective below into its new digitalisation strategy, which could be achieved by addressing the associated recommendations:

Strategic objective: Digital Public Infrastructure

Norway could aim to evolve its ‘national joint solutions’ to ensure that they are secure and resilient, support interactions across sectors, and maximise value to users.

- **Recommendation 9:**

  The Government could strengthen the overall governance and funding model for the ‘joint national solutions’, focusing on the need for continuous investment throughout their lifecycle.
- **Recommendation 10:**

  The Government could prioritise the development of 'joint national solutions’ that support interaction, collaboration, and interoperability across sectors and domains to incentivise uptake, increase user satisfaction, and improve service delivery, based on stakeholder input.
- **Recommendation 11:**

  The Government could prioritise the development of 'joint national solutions’ that have already been identified by Norway as critical, such as common solutions for secure messaging.

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7 Data access, sharing and re-use

While Norway has recognised data as a key priority of its existing digital government strategy, there are challenges that mean that the country is falling short of its own expectations in this space. As such, Norway could take concrete steps in enhancing data access, sharing and re-use in the public sector by ensuring the right data governance foundations, the systematic use of guidelines and standards, and monitoring the impact of data sharing initiatives.

Data has become the lifeblood of effective governance, driving transformative change in how governments operate and engage with their citizens. As technology evolves at an unprecedented pace, the sheer volume and complexity of data generated present both a challenge and an opportunity for governments worldwide. From enhancing public services to informing policy decisions, leveraging data enables governments to unlock valuable insights, optimise resource allocation, and foster trust and innovation. While Norway performs well in international comparisons in data access, sharing, and reuse in the public sector, challenges remain in promoting systematic re-use of data, improve data quality, and understanding the impact of data sharing initiatives.

Progress to date

As part of the 2017 Digital Government Review of Norway, the OECD made recommendations to the Norwegian Government to prioritise breaking down data siloes in the public sector by streamlining data management and sharing practices (OECD, 2017[1]). Since then, Norway has recognised data as a key priority of its existing digital government strategy, with target 4 focused on ensuring that "the public sector utilises the potential in the sharing and use of data to create user-friendly services, and to contribute to value creation for business."

According to the most recent OECD benchmarks, Norway has made considerable progress in data access, sharing and re-use in the public sector. Norway ranks 4th out of 33 OECD countries in data-driven public sector of the 2023 OECD Digital Government Index (see Figure 2.6, with a score of 85% compared to the average score of 63% amongst OECD member countries. At a high level, this score was based on Norway's performance in key factors such as having a well-established interoperability system, a comprehensive government data inventory, and robust data protection. In the 2023 eGovernment Benchmark, Norway also performed above the EU+27 average in the transparency of personal data use by governments (European Commission, 2023[2]).

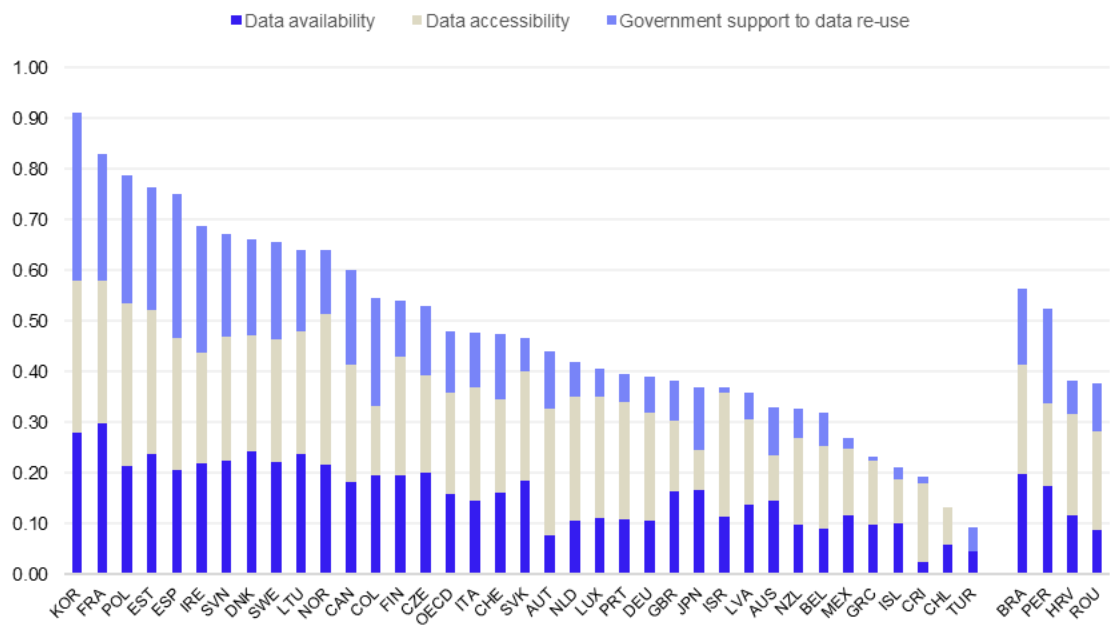
For open data, Norway ranks 11th out of 36 OECD countries in the 2023 OURdata Index (see Figure 7.1). Norway is placed in the 2nd best performing group of countries ("High performance") for open data, together with Canada, Colombia, Finland, Czechia, Italy, Switzerland, the Slovak Republic, Brazil, and Peru. Amongst its Scandinavian neighbours, however, both Denmark and Sweden perform slightly above Norway (OECD, 2023[3]).

Norway performs above the OECD average in the two pillars on data availability and data accessibility. In government support to data reuse, Norway performs only slightly above the OECD average, showing room for improvement. As seen in Figure 7.2, Norway performs above the OECD average in all sub-pillars of the OURdata Index except one, with outstanding performance in the indicators *Content of the open by default policy*, *Content of the free and open access to data policy*, *Stakeholder* engagement for data quality and completeness, and Implementation of data accessibility. At a high level, this can be attributed to the Norwegian Government's Guidelines for making government data available (Ministry of Local Government and Modernisation, 2017[4]), which are required for use by state agencies and recommended to municipal agencies; the functions and design of the national open data portal data.norge.no, and the level of quality and accessibility of high value datasets1 (HVD) made available as open data (Table 7.2).

[1] HVD assessed in the OECD OURdata Index are based on the G8 Open Data Charter and inspired from the EU Open Data Directive. They are not equivalent to those HVD listed in the implementing act of the EU Open Data Directive. The full list of data categories assessed by the OECD can be found in Annex A.

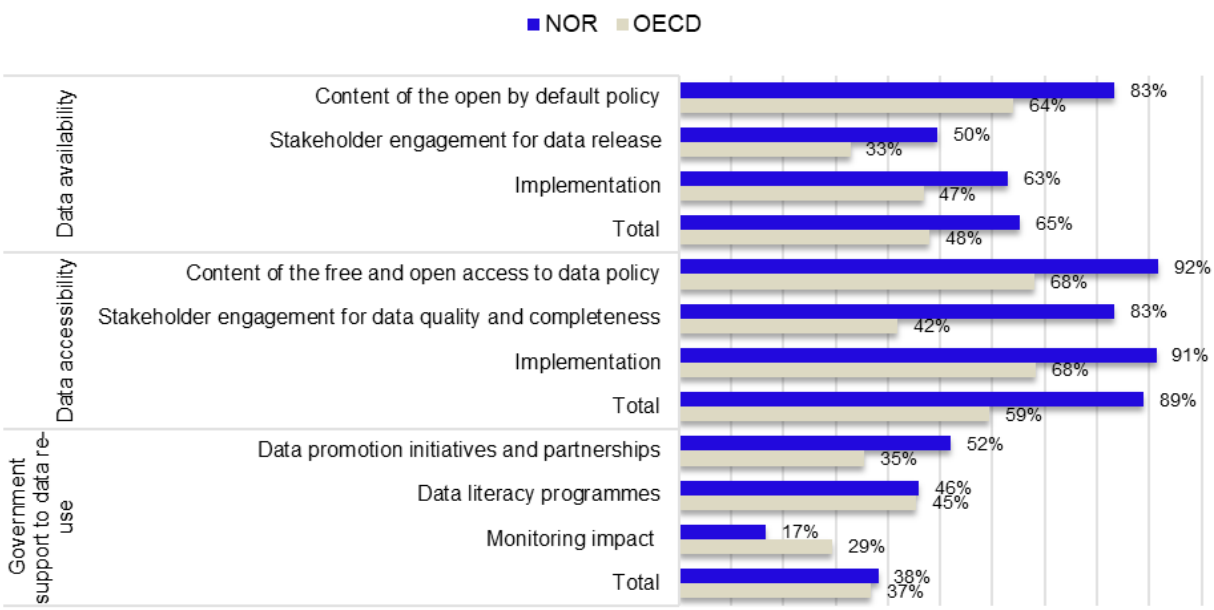
Figure 7.1. 2023 OECD Open, Useful and Re-usable data (OURdata) Index

Score range from 0.00 (lowest) to 1.00 (highest)



Note: Data is not available for Hungary and the United States.
Source: OECD (2023) https://www.oecd.org/publications/2023-oecd-open-useful-and-re-usable-data-ourdata-index-a37f51c3-en.htm

Figure 7.2. 2023 OURdata Index results - Norway



Note: The OECD average is based on data from 36 OECD countries, not including Hungary and the United States. For methodology see Annex B https://www.oecd.org/publications/2023-oecd-open-useful-and-re-usable-data-ourdata-index-a37f51c3-en.htm
Source: OECD (2022), Survey on Open Government Data 5.0.

The OURdata Index assesses the availability of HVD (Table 7.1). In total, Norway have made 63% of HVD assessed by the OECD, compared to the OECD average 47%, and 100% of HVD in the categories geospatial, meteorological, mobility, and statistics. Compared to other Nordic countries, Norway performs 2nd after Denmark in this indicator, before Finland, Sweden, and Iceland.

Table 7.1. Norway ranks 2nd among Nordic countries in the availability of high value datasets as open data, and above OECD average

	Company and company ownership	Earth observation and environment	Geospatial	Meteorological	Mobility	Statistics	Government finances and accountability	Crime and justice	Education	Health and social welfare	Total
Norway	50%	91%	100%	100%	100%	100%	19%	33%	0%	38%	63%
Denmark	100%	100%	100%	100%	83%	80%	25%	67%	20%	63%	74%
Sweden	0%	73%	0%	100%	50%	100%	25%	83%	80%	63%	57%
Finland	50%	91%	100%	83%	100%	80%	31%	67%	100%	63%	76%
Iceland	0%	50%	67%	17%	50%	80%	19%	83%	60%	50%	48%
OECD	31%	56%	67%	46%	56%	67%	27%	39%	37%	42%	47%

Note: The OECD average is based on data from 36 OECD countries, not including Hungary and the United States. For methodology please see Annex B https://www.oecd.org/publications/2023-oecd-open-useful-and-re-usable-data-ourdata-index-a37f51c3-en.htm
Source: OECD (2022), Survey on Open Government Data 5.0.

When looking at the quality and accessibility of HVD, Norway scores a total of 91%, compared to the OECD average of 66% (Table 7.2). What stands out positively is that, in Norway, 98% of the HVD are up to date, 96% can be accessed through data.norge.no, and 94% are in open, non-proprietary format. In this assessment, Norway performs above all other Nordic countries, which is primarily a result of ensuring all open data, including HVD, are available on data.norge.no.

Table 7.2. Norway tops Nordic & OECD countries in the quality and accessibility of high-value datasets available as open data

	Up to date	Metadata quality	Open format	API access	Central portal access	Total
Norway	98%	86%	94%	81%	96%	91%
Denmark	100%	91%	100%	85%	66%	88%
Sweden	65%	59%	67%	52%	50%	59%
Finland	92%	43%	87%	74%	44%	68%
Iceland	74%	21%	76%	5%	0%	35%
OECD	79%	47%	88%	47%	66%	66%

Note: The OECD average is based on data from 36 OECD countries, not including Hungary and the United States. For methodology please see Annex B https://www.oecd.org/publications/2023-oecd-open-useful-and-re-usable-data-ourdata-index-a37f51c3-en.htm
Source: OECD (2022), Survey on Open Government Data 5.0.

Remaining challenges

According to Norway's self-assessment, the public sector still falls short of expectations in its efforts on data. This is due to the low proportion of reported public sector entities engaging in systematic sharing and reuse of data. In 2022, only 22% reused data from other public agencies across sectoral areas, and 35% reused data when creating services. Issues related to data quality and relevance was highlighted as challenges by public agencies, with 17% considering the lack of quality in available data a challenge for

data reuse, and 32% of public agencies experiencing data quality as an obstacle to digital service development (Digdir, 2023[5]). Regarding open data, the survey undertaken by Norway shows progress among central government agencies, as 29% shared open data compared to 18% the previous year. Similarly, municipalities show improvement, with 19% sharing open data in 2022 compared to 10% in 2021. 17% of enterprises state that they have developed or improved digital services based on open data in 2022, compared to 12% in 2021 (Digdir, 2023[5]).

According to the results of the OURdata Index and the OECD Survey on Open Government Data, Norway can improve in making high-value datasets available as open data in categories such as education, government finances and accountability, crime and justice, and health and social welfare, where it performs below the OECD average.

While Norway does comparatively well in conditioned data access and sharing areas such as health (OECD, 2020[6]), providing open data in these areas will require further efforts. Norway could also focus on improving performance in the OURdata Index indicator on 'Government support for data re-use', especially by systematically monitoring the impact of open data re-use. From 2023 onwards, Digdir is collaborating with Statistics Norway to measure the benefits of reusing data from public enterprises in the business sector through the survey 'Use of ICT in the business sector.' According to Digdir, this collaborative effort aims to provide a better foundation for assessing Goal 4, focusing on the potential of sharing and using data for value creation in the business sector (Digdir, 2023[5]).

Recommendations

Based on these findings, the Government could consider incorporating the strategic objective below into its new digitalisation strategy, which could be achieved by addressing the associated recommendations:

Strategic objective: Data access, sharing and re-use

Norway could take concrete steps in enhancing data access, sharing and re-use in the public sector by ensuring the right data governance foundations, the systematic use of guidelines and standards, and monitoring the impact of data sharing initiatives.

- **Recommendation 12:**

  The Government could consider creating the role of a National Chief Data Officer and agency-level data stewards to advance data sharing and reuse coherently at the central and local level in line with new national targets. Inspiration could be drawn from the Chief Data Officer role in the U.S federal government, adapted to the Norwegian context and public governance model.
- **Recommendation 13:**

  The Government could prioritise the systematic adoption and use of the common standards for information management under the Framework for Information Management to support data quality & re-use and implementation of the 'once only' principle.
- **Recommendation 14:**

  As part the collaboration between Digdir and Statistics Norway, and the new digitalisation strategy, it would be good to consider collecting statistics to help measure the impact of data sharing initiatives, including open data, on the Norwegian economy and society.

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8 Artificial intelligence in the public sector

Norway has deployed artificial intelligence across its public sector to explore how it could help the sector become more efficient, effective, and innovative. As Norway seeks to expand its integration into the sector, it could aim for a more strategic and coordinated approach to AI that ensures that its use is effective, responsive, efficient, and accountable.

Like many countries, Norway is increasingly focussed on how to leverage artificial intelligence (AI) to make its public sector more efficient, effective, and innovative. Its application spans the full scope of public sector delivery, from the automation of tasks to improve operations, to delivering more personalised and human-centred government services, and to deriving key insights from large datasets to inform policymaking and improving accountability. However, countries need to take the right approach to adopting AI technologies to ensure its use is effective, responsive, efficient, and accountable.

Norway has made progress in its adoption of AI, having taken steps to develop the right governance and strategy, to set appropriate guardrails for its use, to implement solutions to support a broad range of agencies, and to provide oversight of the use of AI across the public sector. However, there are still some remaining challenges that Norway could overcome in its implementation of AI, including policy levers for algorithmic transparency, a more whole-of-government approach to delivery, and broader performance monitoring, audits, and impact assessments to maintain accountability.

Progress to date

In the 2023 DGI, Norway scored 55% overall for AI, compared to the average score of 54% amongst the OECD countries. Although this result appears relatively low, Norway in fact performed strongly in many of the elements of effective AI adoption across the policy lifecycle including strategic approach, policy levers, and monitoring. By having maturity in these key areas, the Government demonstrates that it is heading in the right direction for the effective, responsive, efficient, and accountable use of AI, which is reflected by the existing use cases of AI across Norway's public sector.

Use cases of AI in the public sector

A recent non-exhaustive overview of AI projects in the public sector developed by Digdir and NORA.ai in March 2023 lists 178 projects across different policy areas, stages of development, and timeframes for implementation (Felles datakatalog, 2023[1]). Norway's registered AI projects are being developed in many policy areas and by different organisations. Table 8.1 below shows the owners with most registered projects and the departments to which they have been registered, which also serves as a proxy indicator of their sector or policy area. Even though 58 different organisations have registered AI projects, 60% of projects are concentrated in the 12 organisations shown below. For instance, the National Library has been developing language models trained on Norwegian texts from the last 200 years and making them publicly available, in order to foster further AI developments in the country. Thematically, around 31% of projects belong to health and care, 19% to industry and trade, and 12.4% to culture and equality, while 13% have no information.

Table 8.1. Owners and departments of AI use cases in Norway (2023)

Owner	Number of projects		Department	Number of projects
National Library AI Lab	13		Ministry of Health and Care Services	55
Posten Norge (Postal Service)	13		Ministry of Trade, Industry and Fisheries	34
Ruter (Oslo's public transport system)	13		*No information*	23
The Norwegian Public Service Pension Fund	10		Ministry of Culture and Equality	22
Northern Norway Regional Health Authority	9		Ministry of Labour and Social Inclusion	13
Western Norway Regional Health Authority	9		Ministry of Education and Research	13
National Archives	9		Finance	6
Oslo Universe Hospital	9		Ministry of Transport	3
Health Middle	7		Ministry of Justice and Public Security	3
Trondheim Municipality	6		Ministry of Local Government and Rural Affairs	2

University of Oslo	5		Ministry of Petroleum and Energy	1
University of Bergen	4		Parliament	1
Others	71		Ministry of Climate and Environment	1
Grand Total	**178**		Foreign ministry	1
			Grand Total	**178**

Source: Author's own development, based on data from (Felles datakatalog, 2023[1]).

One of example of these projects was during the COVID-19 pandemic in Norway, where the Labour and Welfare Administration used a conversational AI called Frida to help citizens access social benefits 24/7, resolving 80% of enquiries without requiring the intervention of a civil servant. (boost.ai, 2023[2]) This helped improving the timeliness and precision of the assistance provided, a particularly important objective under the pandemic.

Norway's AI projects can also be classified according to operational characteristics. First, for a minority of projects specifying their operational status, most have already been implemented or ended, while less than half are in operation or planned to start by 2023. Second, most projects are being implemented at the central government level (61%) and just a few at state-owned companies (13%) or at the sub-national level (8%). Finally, most projects (56%) are developing their own AI models, showing that public sector organisations are acting more as developers rather than sole users of AI.

Table 8.2. Overview of the status, ownership, and development of AI use cases in Norway (2023)

Status	Number of projects		Type of ownership	Number of projects		Model development	Number of projects
No information	139		Central government activities	109		*No information*	58
Implemented	14		Other	31		No	20
In development	9		State-owned company	23		Yes	100
Ended	8		Local government sector	8		**Grand Total**	**178**
Pilot	3		Municipal activities	6			
Ongoing	2		State activity	1			
Planned	2		**Grand Total**	**178**			
In use	1						
Grand Total	**178**						

Source: Author's own development, based on data from (Felles datakatalog, 2023[1]).

Going forward, Norway has dedicated 1 billion NOK (or around USD 90 million) in funding over the next 5 years to research on AI and digital technologies shows how implementation has gained traction as a priority for the higher levels of government. (Ministry of Education and Research, 2023[3]) The initiative is financed within the framework of the Ministry of Education and Research, encompassing diverse priorities, including research on how digital technologies can be used for innovation in the public sector and the consequences of AI for society, democracy, trust, or ethics. Such concrete investment plans are a positive sign and commitment to the implementation of AI in the public sector and the implementation of concrete use cases.

Strategic approach to AI in the public sector

Norway is taking a strategic approach to governing the implementation of AI in the public sector, with a dedicated strategy and an institutional structure to support its implementation. The National Strategy for AI sets the ground for the coordinated development of this technology in the country. (Ministry of Digitalisation and Public Governance, 2020[4]) Originally, the former Ministry of Local Government and Modernisation oversaw the development of the AI Strategy, but more recently this function was moved to the newly-created Ministry of Digitalisation. At a more operational level, the digitalisation agency, Digdir, is

responsible for high-level oversight of AI projects in government and is developing technical guidance for public organisations.

In its AI strategy, the Government demonstrates an understanding of its role in setting the right basis for AI development by having in place good data availability[2], good language resources, fast and robust communication networks, and sufficient computing power. Public administration stands among the key areas where the country sees opportunity for investment. As part of its wider vision to rationalise and create better services using digital technologies, the Government sees AI as an opportunity to enhance public innovation. Among the relevant commitments on this topic, the Government is actively fostering collaboration and the exchange of best practices in central and subnational administrations and plans to potentially reintroduce a GovTech function for collaboration between start-ups and the public sector on AI.

Developing and using trustworthy AI that respects individual rights and freedoms is another relevant pillar of the strategy. On this aspect, the Government sets guiding ethical principles and commits to encourage their adoption across society and the public sector, including the expectation for the supervisory authorities to develop the necessary capabilities to ensure compliance with the principles (discussed further in the following subsection).

The development of the AI strategy was supported by a public consultation with inputs from a wide variety of actors, including other public sector institutions, as well as external stakeholders such as business, academia, civil society, GovTech community, and representatives of under-represented groups. (Ministry of Digitalisation and Public Administration, 2019[5]) Having a public consultation in place with participation from a wide variety of actors increases the collective ownership of the instrument, as well as its legitimacy and representativeness.

Policy levers for the responsible use and development of AI

Norway is using key policy levers to set the guardrails required for the responsible use and development of AI in its public sector. Through its AI strategy, Norway has adopted seven key requirements that AI systems should meet to be deemed trustworthy. These requirements are the same issued by the High-Level Expert Group on AI set up by the European Commission in 2019 and can be comparable to the five AI Principles set by the OECD. (European Commission, 2019[6]) As a complement to these principles and as part of the commitments set out by the Strategy, the digital agency, Digdir, released an 'open beta' Guide to Responsible Use and Development of Artificial Intelligence to provide concrete and actionable advice to public organisations. (Digdir, 2024[7]) Open beta means that the guide is permanently evolving according to users' feedback and normal technological and regulatory development.

Beyond these instruments, Norway shows an open and iterative approach to new regulations. For instance, the regulatory sandbox of the Data Protection Authority was designed to explore privacy challenges of innovative solutions, mainly AI, in the public sector. (Datatilsynet, 2024[8]) In its 5th round in November 2023, 3-4 projects were expected to be added to the 12 projects that were either ongoing or finalised. Most of the new projects are concerned with the legality and ethics of using generative AI or language models in different areas. (Datatilsynet, 2023[9])

Monitoring Norway's AI policies and implementation

Norway has multiple public organisations contributing to monitoring AI policies and use cases. In response to the rise of AI, Norway has adopted as an approach the extension of responsibilities of existing agencies or directorates to encompass AI-related issues, rather than establishing new entities. This approach is

[2] For further information see the Government's policy for value creation using data as a resource, https://www.regjeringen.no/en/dokumenter/meld.-st.-22-20202021/id2841118/?ch=1

considered more cost-effective and aligns with existing professional environments, fostering synergies. For instance, the Data Protection Authority's mandate covers the country's data protection law (based on GDPR), the Equality and Anti-Discrimination Ombud covers the laws on discrimination and inclusion[3], and the Auditor General of Norway (Central government) and the County Governors (local and county level) oversee the rule of law and transparency in public sector decision making. These three legal areas apply to the use of AI in the public sector.

The Office of the Auditor General (OAG) is additionally developing more specific capabilities and plans for AI policy monitoring. Since 2023, it has started auditing the use of AI in the central government as part of its pipeline of new performance audits. (Riksrevisjonen, 2023[10]) Additionally, in its Strategic Plan 2018-2024, the OAG also envisions using AI for service delivery, pointing that "problem solving will become more automated, and the use of [AI] will gradually take over tasks in both the public administration and the OAG". (Office of the Auditor General, 2028[11]) These efforts are aligned with the international work developed by the OAG in increasing oversight capabilities of by non-executive branches of government (e.g., judiciary and parliament) and accountability institutions (e.g., access to information agencies, data protection agencies, ombudspersons, audit offices) over the development and use of AI within the public sector4. Table 8.3 summarises the monitoring functions developed by the OAG and other previously mentioned monitoring organisations in Norway, comparing them to the OECD average.

Table 8.3. Regulatory oversight and ethical advice of AI (based on 2023 DGI)

Types of oversight or advice on AI provided by the responsible body	Norway's score	OECD average score
Procedural guidance (e.g., guidelines, standards, codes of conduct, collective agreements)	100%	55%
Ethical oversight and monitoring (e.g., AI councils, data ethics bodies)	100%	45%
Educational guidance (e.g., capacity awareness building, inclusive design, training)	100%	42%
Regulatory oversight, legal enforcement, or compliance	100%	42%
Auditing conducting by National Supreme Audit Institutions (SAIs)	100%	6%
Technical guidance (e.g. toolkits, documentation, technical standards)	0%	39%
Reporting frameworks (e.g., algorithmic impact assessments)	0%	15%
Internal auditing	0%	9%
Other	0%	6%

Source: (OECD, 2024[12])

Remaining challenges

The AI efforts developed by Norway show a good level of maturity, with a balanced coverage across the different stages of the policy cycle. However, there are some remaining challenges, particularly with policy levers for algorithmic transparency, a more whole-of-government approach to implementation, and with its monitoring and evaluation of AI.

Policy levers for algorithmic transparency

To build more sound policy levers and guardrails for AI in the public sector, Norway could enhance its digital maturity by further developing algorithmic transparency initiatives. This improvement could involve

[3] See for instance, the Equality and Anti-Discrimination Act: https://lovdata.no/dokument/NLE/lov/2017-06-16-51

[4] See for instance, "Auditing machine learning algorithms", a white paper for public auditors released by the Supreme Audit Institutions of Finland, Germany, the Netherlands, Norway and the UK: https://www.auditingalgorithms.net/.

implementing the provisions of the EU AI Act to support public sector institutions in better communicating how and why they use algorithm tools. Additionally, establishing an open algorithm register or an equivalent platform showcasing detailed information of the algorithms used by different public sector institutions could contribute to transparency[5]. There are relevant initiatives building up towards this objective. On the first category, Digdir's AI Guide does address and encourage openness, meaning the ability to explain how an AI model has reached a decision, and it also guides when current regulation requires some degrees of transparency. (Digdir, 2024[13]) However, a specific requirement for algorithmic transparency is expected to come with the European Union's upcoming AI Act[6]. On the second category, there is no public algorithm register, although the overview of AI projects in the public sector developed by Digdir and NORA.ai is a first step towards such degree of explainability. (Digdir, 2024[14]) It is worth noting that that there are limited international benchmarks for this, but the Government could refer to the Algorithm Register of the Netherlands[7] and Canada's required publication of completed Algorithmic Impact Assessments[8], which provides public information for each automated system used to make or support administrative decisions.

Whole-of-government approach to implementation

Under the current approach to implementing of AI projects in the public sector, each public organisation is granted autonomy for the development of a wide variety of use cases across many fields. Looking ahead, Norway could consider establishing a whole-of-government approach that maintains the momentum for innovation seen in many organisations while also strengthening the capacity of central actors, such as in the Ministry and Digdir, to support AI use cases in prioritised policy areas. The implementation of the EU AI Act can be leveraged to streamline this process, especially through measures such as the establishment of common codes of conduct, transparency mechanisms, and the alignment of innovation-supporting measures with existing tools (e.g., AI regulatory sandboxes). This approach would also involve tracking and supporting the investment in AI systems, including through procurement processes and collaboration with other actors, such as GovTech entities.

Monitoring and evaluation of AI

Strengthening the central supervisory capabilities could improve the monitoring process of AI policies and use cases, not only in the executive but also in other branches of power, such as the supreme audit institutions. This improvement could provide better guidance and resources for public organisations to conduct regular internal audits and develop continuous performance monitoring and impact assessments. The purpose of such measures would be to maintain accountability and ensure that AI applications within the public sector align with pre-defined objectives.

[5] As a complement to and in coordination with the EU Database for High-Risk AI Systems foreseen under Article 60 of the AI Act.

[6] See in particular Article 13, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52021PC0206

[7] See: https://algoritmes.overheid.nl/en

[8] See: https://www.canada.ca/en/government/system/digital-government/digital-government-innovations/responsible-use-ai/algorithmic-impact-assessment.html

Recommendations

Based on these findings, the Government could consider incorporating the strategic objective below into its new digitalisation strategy, which could be achieved by addressing the associated recommendations:

Strategic Objective: Artificial Intelligence (AI)

As it seeks to expand its integration into the public sector, Norway could aim for a more strategic and coordinated approach to AI that ensures that its use is effective, responsive, efficient, and accountable.

- **Recommendation 15:**

  The Government could formalise its guidance on the use of AI in the public sector in line with the provisions of the EU AI Act to drive the transparency and explainability of AI algorithms that are being used across the public sector.
- **Recommendation 16:**

  The Government could consider strengthening the monitoring and oversight of the portfolio of AI projects in the public sector and formalise its approach for pursuing new initiatives to maximise the impact of its investment. In line with Recommendations 5-6, this can be done through stronger oversight and evaluation of AI projects to maximise their collective impact and support their successful implementation.
- **Recommendation 17:**

  In coordination with the National Competent Authority under the EU AI Act and in alignment with its provisions, the Government could develop guidance and mechanisms for the monitoring and evaluation of the use of AI in the public sector. This may include regular internal audits, performance monitoring, and impact assessments.

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9 Digital talent

Norway has made strong progress to date in developing talent needed to support the digitalisation of its public sector. However, Norway could aim to have a more strategic approach to digital talent across its public sector, better coordinating efforts to attract, retain, allocate and develop talent.

Digital talent and skills are a critical element to leverage digital technologies and secure sustainable outcomes in the public sector. Norway has made strong progress to date in developing some of the key digital foundations required to develop the capability of its public sector to support its digitalisation strategy. However, the Government could develop a more strategic and coherent approach to developing, retaining, and attracting digital talent to ensure Norway's public sector is equipped to drive impactful and human-centred outcomes for its digital initiatives.

Progress to date

The solid digital foundations of the Norwegian public sector reflect the maturity of the digital talent in the public administration, including needs assessments, training programmes, and actions to retain digital talent. These are complemented by a competence model for digital transformation, and well-established procedures for cross-agency mobility.

Based on Norway's results in the 2023 DGI, we can see commitment from the Government establish and maintain a digital workforce by addressing:

- **needs assessment for skills:** where Norway scored 100% (compared to the OECD average of 64%) thanks to the work undertaken by the Government as part of its One Digital Public Sector assessment of where to focus to increase the digital competence in the public sector, which recognised the need to take a more strategic approach to recruiting and developing digital talent.
- **training programmes that cover core digital skills:** where Norway scored 80% (compared to the OECD average of 55%). This is because the Government provides training through the Learning Management System or guidance via Digdir that covers awareness of the potential risks and benefits of digital for transformation; understanding users and their needs; service design skills; open collaboration; and the trustworthy use of technologies.
- **actions taken by the Government to retain digital talent:** Norway scored 75% (compared to the OECD average of 36%). This is because it provides a clear career path, has a work-life balance plan, and offers opportunities for professional and personal development.

Another critical foundation regarding the development digital skills in the public sector is the Competence Model for digital transformation developed by Digdir (Digdir, 2023[1]). The model provides a conceptual framework to better understand competences needs to succeed in the digital transformation of the public sector. The model develops a three-layer model including policy and general guidelines, management of digital transformation, and professional knowledge and skills:

- **Policy and general guidelines:** providing institutions with an introduction to digital government, and to understand the social significance of working with digital transformation in the public sector.
- **Management of digital transformation:** guiding public sector leadership on how digital transformation transform public management.
- **Professional competence and skills:** outlining an overview of competences for public institutions to succeed with digital transformation.

The existence of the competence model can serve a valuable foundation to advance towards a strategy for digital talent in the public sector. Furthermore, a strategic approach can complement this thorough needs assessment with specific goals and corresponding actions. This would help Norway connect the existing element regarding the talent and skills in the digital governance framework.

Finally, having well-established procedures for cross-agency mobility are also a good example of concrete practices that can enhance efficiency in talent allocation and raise attractiveness of the public sector as an employer (Ministry of Digitalisation and Public Administration, 2019[2]). Norway could coordinate further efforts focusing on attraction and allocation of digital talent across the public sector. These efforts could be

supported by the promotion of communities of practice to encourage a knowledge-sharing culture and strengthen engagement around digital government policies.

These initiatives have contributed to Norway's overall digital government maturity by fostering the digital workforce required for Norway's public sector to be able to support and implement key digital initiatives. However, as Norway looks keep pace with a rapidly-evolving digital environment, it will also need to take a more strategic approach to bolster its efforts to address digital talent and skills.

Remaining challenges

While Norway demonstrates some key progress for its digital talent, the results of the 2023 DGI demonstrated that this is one of the areas for Norway with the most room for improvement. The Government could develop a more strategic and coherent approach to digital talent in line with the OECD Framework for Digital Talent and Skills in the Public Sector (see Box 9.1). This approach includes comprehensive measures to develop and maintain existing talent, as well as attract new talent to the public sector. These efforts could support Norway building an efficient and sustainable digital transformation, where digital government initiatives are supported by a workforce that drives impactful and human-centred outcomes.

Box 9.1. OECD Framework for Digital Talent and Skills in the Public Sector

The OECD Framework for Digital Talent and Skills in the Public Sector offers an analytical tool to help understand what leaders and public servants need to do to effectively manage digital transformation in the public sector, including for:

- creating the right environment to encourage digital transformation, which focuses on the environmental conditions that enable digital transformation.
- developing skills to support digital government maturity, which focuses on the how government identify the skills to drive transformation in the public sector.
- establishing and maintaining a digital workforce, including the institutional efforts to retain and bring in talent and skills to drive digital transformation in the public sector.

Source : (OECD, 2021[3]). https://doi.org/10.1787/4e7c3f58-en.

A more strategic approach to digital talent

The dynamic pace of digital technologies requires governments to rethink the way they are attracting and retaining talent, especially in the context of a mature digital society such as Norway. However, Norway's public sector has not yet adopted a dedicated strategy focused on digital skills and talent. without such a strategy, Norway scored 0% (compared to the OECD average of 50%) for this in the 2023 DGI, which meant that it also scored 0% for the aims of what the strategy is seeking to achieve and for the public officials that are targeted by such a strategy (compared to the OECD average of 68% for both).

In contrast to other digital government policy areas, Digdir also lacks an explicit mandate for guiding the development of digital skills within the public sector. DFØ has a leading role in "offering[ing] professional development to leaders and employees of government agencies and enterprises", but also without an explicit focus on digital talent and skills. (DFØ, 2024[4]) Further coordination between Digdir and DFØ could enhance coherence and efficiency when attracting and retaining digital talent.

Despite the existence of comprehensive practices for digital talent, the effectiveness of these efforts is hindered by this disjointed approach and the lack of a clear policy roadmap with concrete goals and targets. A strategy could better steer institutional efforts to identify, promote and develop digital skill and secure a sustainable and digital transformation of the public sector. Without specific actions to establish and maintain a digital workforce, the public sector could face challenges in securing impact and sustainability of digital government in the long-term.

Developing and retaining existing talent

Norway could benefit by implementing structured approaches to develop and maintain a digital talent in the public sector. In the 2023 DGI, Norway scored 40% for its approach to maintaining the digital skills of its existing workforce (compared to the OECD average of 51%). While employees are able to participate in formal trainings and there are mechanisms in place for mobility and skills transfer, the Government could bolster its approach by also offering on-demand training to help employees develop at their own pace, as well as informal learning through communities-of-practices, 'show-and-tell' sessions, and retrospectives. This would be complemented by establishing more multi-disciplinary teams for service delivery to enable the cross-pollination of key skills and practices.

The lack of a strategic approach to developing digital talent is also reflected in the implementation of training for public officials. For example, both the Digdir and the Norwegian Agency for Public and Financial Management (DFØ) offer separate training programmes related to digital government. Digdir has developed several training programmes addressing essential core skills required by public servants including modules on awareness of the potential risks and benefits of digital for transformation, understanding users and needs, service design skills, open collaboration, and trustworthy use of technologies. The DFØ delivers several trainings including digital development in the public sector, digital transformation of the public sector and information security for managers. These synergies stress the opportunity for Norway to strategise the planning and management of digital talent in the public sector.

Finally, while Norway scored well in the 2023 DGI for its approach to retaining digital talent, there could be opportunity to do more to complement professional development with a formal reward system to incentivise digital talent to remain in the public sector. This would complement the work to develop existing talent and support efforts to attract, promote and retain digital talent for the public sector.

Attracting new talent

There is also opportunity for Norway to take a more strategic approach to how it attracts digital talent to the public sector. In the 2023 DGI, Norway scored 0% initiatives to attract digital talent (compared to the OECD average of 58%). To address this, the Government could run proactive recruitment strategies, promote public sector as an employer, and to consider any improvements that might be needed to the recruitment process (including clear job descriptions, job profiles, and measures to minimise any potential biases in the process). A proactive approach would allow the public sector to identify digital talent needs in advance and act proactively on them. This would help ensure that its public sector has the skills and capabilities to complement existing talent in the delivery of the new digitalisation strategy.

Recommendations

Based on these findings, the Government could consider incorporating the strategic objective below into its new digitalisation strategy, which could be achieved by addressing the associated recommendations:

Strategic objective: Digital Talent

Norway could aim to have a more strategic approach to digital talent across its public sector, better coordinating efforts to attract, retain, allocate and develop talent.

- **Recommendation 18:**

  The Government could strengthen the coordination between Digdir and DFØ to enhance Norway's approach to attracting and retaining digital talent in the public sector.
- **Recommendation 19:**

  The Government could develop a strategy for digital talent and skills in the public sector. Building on the competence model, the government can benefit from a strategic approach to the institutional efforts to attract, retain and develop talent in the public sector. This strategy could connect individual initiatives with specific goals and targets to secure accountability and maximise impact.
- **Recommendation 20:**

  The Government could establish structured and coordinated efforts to attract, maintain, develop and allocate digital talent across the public sector. By fostering cross-institutional learning and facilitating mobility, the country can enhance the attractiveness of the public function and improve the allocation of digital talent across the public sector.

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10 Service design and delivery

While Norway has showed progress towards user-centred service design and delivery, there are some remaining challenges that the Government could address to improve its approach within a decentralised system and ensure a better experience for its users.
To overcome the challenges of this decentralised model, Norway could aim to evolve its design and delivery of government services to ensure that it is responsive to the changing needs and expectations of users.

With a score of 70% in the 2023 DGI, Norway showed progress towards user-centred digital service design and delivery and alignment with the OECD's Good Practice Principles for Public Service Design and Delivery in the Digital Age. However, there are some remaining challenges that the Government could address to improve its approach within a decentralised system and ensure a better experience for its users, including implementing mandatory service standards, better integrating of the 'Once Only' principle, developing an omnichannel strategy, and incorporating more comprehensive performance monitoring.

Progress to date

Norway showed progress in its digital service design and delivery in the 2023 DGI, largely thanks to its guidelines, proactive user engagement, use of digital tools, monitoring for meeting user needs, and comprehensive service catalogue. The findings demonstrate Norway's commitment to maturing its digital service delivery in alignment with the OECD's Good Practice Principles for Public Service Design and Delivery in the Digital Age (OECD, 2022[1]) described in Box 10.1 (the Good Practice Principles hereafter).

In the 2023 DGI, Norway scored 70% for its maturity in service design and delivery, compared to the OECD average score of 52%. This score was based on strong maturity demonstrated in some of the key foundations in place for effective digital government services. These include Norway's (DGI, 2023):

- **guidelines:** while Norway does not have mandatory service standards, Digdir guides agencies on best practices via mandatory and recommended ICT standards, the Digitalisation Memorandum, and accessibility requirements.
- **proactive user engagement:** Norway engages proactively with diverse user groups during service development, which aligns to the recommendation in the Digitalisation Memorandum for all agencies to put the user at the centre and consider their needs, involve them in the process, test services with them to ensure an efficient and coherent approach.
- **use of digital tools:** Norway encourages the use of digital tools, amongst other channels, to engage with a diverse range of user groups in the design process, which is outlined in the Digitalisation Memorandum, Digitalisation Strategy, and Principles of Architecture, among others.
- **monitoring for meeting user needs:** while its application varies across Norway's decentralised service delivery model, there is monitoring in place at different stages of the service lifecycle to determine if services are meeting user needs. Although the following section will discuss how this could be enhance further to provide greater insight and data-driven decision-making.
- **comprehensive service catalogue:** Norway has comprehensive and accessible catalogues on Norge.no and Altinn of services that can be completed digital (with some paper applications and options for phone and in-person support if required).

These areas cover a number of areas measured in the 2023 DGI, where Norway scored 100% and far exceeded the corresponding OECD average scores. In building its maturity in these areas, Norway has shown its commitment to effective service design and delivery that aligns with the Good Practice Principles (Box 10.1) to build accessible and user-centred services; to deliver with impact, at scale, and with pace; and to be accountable and transparent in order to continue building public trust in digital services.

Box 10.1. Good Practice Principles for Public Service Design and Delivery in the Digital Age

The OECD's Good Practice Principles for Public Service Design and Delivery in the Digital Age were developed to give clear, practical, and actionable standards that countries could implement to improve the quality of their digital service design and delivery. They advise countries to:

Build accessible, ethical and equitable public services that prioritise user needs, rather than government needs.

1. Understand users and their needs.
2. Make the design and delivery of public services a participatory and inclusive process.
3. Ensure consistent, seamless and high-quality public services.

Deliver with impact, at scale and with pace.

4. Create conditions that help teams to design and deliver high quality public services.
5. Develop a consistent delivery methodology for public services.
6. Curate an ecosystem of enabling tools, practices and resources.

Be accountable and transparent in the design and delivery of public services to reinforce and strengthen public trust.

7. Be open and transparent in the design and delivery of public services.
8. Ensure the trustworthy and ethical use of digital tools and data.
9. Establish an enabling environment for a culture and practice of public service design and delivery.

Source: (OECD, 2022[1])

Remaining challenges

While Norway's digital government services are strong, the 2023 DGI did identify some remaining challenges that the Government could address to improve its service design and delivery and ensure a better experience for its users, including the need to:

- implement mandatory service standards to build a more coherent approach across a decentralised service delivery model.
- integrate the 'Once Only' principle to promote the reuse of data to minimise administrative burden on users and enable more proactive government services.
- develop an omnichannel strategy to enable a more consistent user experience across all channels, as an extension of the digital experience.
- incorporate more comprehensive performance monitoring to enable a data-driven approach to future service enhancements.

By addressing these challenges in its new digitalisation strategy, the Government could ensure that its public service is able to keep pace with the evolving needs and expectations of users for years to come.

Mandatory service standards

Implementing mandatory service standards could support the Government in building a more coherent approach to service design across Norway's decentralised delivery model. Service standards are tools for regulating and organising a wide range of legal and regulatory domains that establish metrics for the implementation of digital government services. They provide a baseline expectation and guidance for how to develop these services in a consistent way. For example, Australia's Digital Transformation Agency does this with the Digital Service Standard 2.0 incorporated into its Whole-of-Government Architecture.[9]

In the 2023 DGI, Norway scored 0% for mandatory service standards, compared to the OECD average score of 37%. This is because Norway has opted for a softer approach, with Digdir working with various delivery agencies and levels of government to encourage best practices by providing information, guidelines, and principles for design approaches that are human-oriented and based on meeting user needs. (Norway's submission to the 2023 DGI) While this approach is understandable given the decentralised context within which the Government is operating, this approach risks greater inconsistencies in the process, quality, and experience of the various services being delivered. This could, in part, help explain Digdir's findings that only 30% of users and 25% of businesses report a coherent and seamless user experience, and many users are still reporting issues or dissatisfaction with their digital service experience. (Digdir, 2023[2]) By building a more coherent approach to service design and delivery, the Government could enable more consistent approaches across all delivery agencies and levels of government. This would create a more seamless experience for users, as well as create opportunities for greater efficiencies and synergies across Norway's public sector.

'Once-Only' principle

By better integrating the 'Once Only' principle into its service design and delivery, the Government could promote the reuse of data to minimise administrative burden on users and enable more proactive government services. This is an area where the Government has been trying to make progress, scoring 66% in the 2023 DGI, compared to the OECD average of 36%. Skate has been working to determine how best to ensure that the public sector collects information only once, and that the quality of data is sufficient for use throughout the public sector. The 'Once-Only' principle has also been included as a required consideration in the assessment of digital investments going forward. However, there is still opportunity to further the integration of the 'Once Only' principle, including by requiring that it be considered as standard in the context of transaction costs and the overall value proposition of any new digital initiatives. Without this, the Government could risk the underutilisation of government data, with only 22% of agencies reporting to reuse data to a large extent in their work. By promoting the reuse of data in service design and delivery via the 'Once Only' principle, the Government could reduce the burden on users to provide the data, minimise the effort and time required to collect it, and create opportunities for innovation and enhancements in the service delivery. This should be considered alongside Chapters 6 and 7.

Omnichannel strategy

Developing an omnichannel strategy could enable a more consistent user experience across agencies and support channels (e.g. in-person, phone, etc.) as an extension of the digital experience. In the 2023 DGI, Norway scored 0% for having an omnichannel strategy and only 20% for its approach to service channels, compared to the OECD average scores of 45% and 71% respectively. This is because Norway reported having service channels focussed on digital channels, without any dedicated strategy to ensure inclusive multichannel access to services. The risk of this challenge is highlighted in Digdir's self-assessment, which found that while there is an increasing rate of digital communication with the public sector year-on-year,

[9] Read more at: https://www.dta.gov.au/DigitalServiceStandard

users still prefer to leverage other channels when there is an important issue to be discussed or an unfamiliar situation. (Digdir, 2023[3]) More concerningly, Digdir also found that 20% of Norway's population is vulnerable to digital exclusion and only 52% of citizens have trust in digital government services.

It is then clear that the Government could develop a more coherent omnichannel strategy to provide the best possible experience for these users regardless of the service channel that they choose, but also to ensure services are inclusive of varying levels of digital literacy and accessibility requirements. A more coherent approach across all services could ensure seamless integration between digital and non-digital channels. This includes users being able to access services through one digital platform, as well as maintaining access for users to be supported through phone and in-person channels that act as an extension of the digital experience. This would help to ensure that both citizens and businesses can enjoy a simple, fast, and consistent experience of interacting with government.

An effective omnichannel approach also ensures that government services are accessible to all user groups and inclusive of their needs, ensuring that any digitalisation efforts do not create a digital divide in Norway or create are barriers to users accessing the services that they need, when they need them. By prioritising this, Norway could ensure digital government services remain accessible and inclusive.

Performance monitoring

Incorporating more comprehensive performance monitoring would enable the Government in taking a data-driven approach to future service enhancements. Across the metrics for performance and monitoring in the 2023 DGI, Norway scored:

- 50% for requiring testing for digital government services (compared the OECD average of 45%) because services are tested with users and providers, but it is not mandatory.
- 25% for the metrics it uses to assess the performance of digital government services (compared to the OECD average of 36%) because of various measures in place to monitor only user satisfaction (and not other key metrics), as well as the completion rate for certain transactions via Norway's joint national solutions.
- 0% for its standardised mechanisms or guidelines for measuring transaction costs (compared to the OECD average of 24%) because there was not a standardised approach in place for this.
- 0% for assessing and monitoring barriers to co-design with users (compared to the OECD average of 24%) because no such assessments had been undertaken yet.

From the evidence provided through the 2023 DGI process, it is clear that there are different approaches and levels of maturity across the Norwegian public sector, depending on which agency is delivering the service that is being monitored. The risk of maintaining the current approach is that Norway could see a continuing negative trend that has seen only 30% of users and 25% of businesses report a coherent and seamless user experience, despite an overall increase in the digital services made available to them. (Digdir, 2023[2]) There needs to be more comprehensive monitoring of the performance of government services to provide the kinds of data needed to understand the reality of how users are experiencing these services in order to better inform future enhancements to address any pain point, barriers, or future needs.

The Government could address this by:

- making it mandatory to test all digital government services with users and providers.
- monitoring additional metrics for service performance, like average time to complete a transaction, the rate of incomplete transactions, and failure demand. This would complement existing monitoring and reporting on the user satisfaction and availability of services.
- developing standardised mechanisms to measure the transaction costs of digital services based on clear metrics and methodologies for evaluating the efficiency and cost-effectiveness.

- assessing and monitoring barriers in co-designing services with different user groups in order to ensure inclusivity and inform future enhancements to Norway's service design and delivery.

By addressing its maturity in these areas of performance monitoring, the Government could derive greater insight into how well services are performing and identify better target areas for future improvement, which would enable a more efficient allocation of resources for maximum impact.

Recommendations

Based on these findings, the Government could consider incorporating the strategic objective below into its new digitalisation strategy, which could be achieved by addressing the associated recommendations:

Strategic objective: Service Design and Delivery

Overcoming the challenges of a decentralised model, Norway could aim to evolve its design and delivery of government services to ensure that it is responsive to the changing needs and expectations of users.

- **Recommendation 21:**

  The Government could implement mandatory service standards to build a more coherent approach across a decentralised delivery model for government services.
- **Recommendation 22:**

  The Government could integrate the 'Once Only' principle to promote the reuse of data to minimise administrative burden on users and enable more proactive government services.
- **Recommendation 23:**

  The Government could develop an omnichannel strategy to enable a more consistent user experience across all channels as an extension of the digital experience, as well as to ensure services remain accessible and inclusive of different users' needs.
- **Recommendation 24:**

  The Government could incorporate more comprehensive performance monitoring to reinforce a data-driven approach to future service enhancements.

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Annex A. HVD assessed in the OECD OURdata Index

Table 0.1. HVD assessed in the OECD OURdata Index

Companies and company ownership
Company register
Company ownership
Earth observation and environment
Orthoimagery
Satellite imagery
Land cover
Land use
Geology
Water bodies
Water treatment plants
Water supply networks
Mineral resources
Renewable energy resources
Fossil fuel resources
Air quality
Water quality
Noise pollution
Protected areas
Natural risk zones
Forestry
Agriculture
Food security
Fishing
Hunting
Energy consumption by end-users
Geospatial
Addresses
Elevation
Buildings
Administrative units
Geographical names
Cadastral parcels
Meteorological

Meteorological observations
Historical meteorological observations
Weather forecasts
Climatological observations
Climate change predictions
Climatological reference data
Mobility
Road transport networks
Rail transport networks
Water transport networks
Public transport timetables
Real-time traffic information
Motor vehicle registrations
Health and social welfare
Medical prescriptions
Levels of access to health care
Health visitor data
Location of healthcare facilities
Health statistics
Health insurance
Social benefits
Housing
Statistics
Census and demographic indicators
Vital statistics
Economic indicators
Connectivity
Wealth
Government finances and accountability
Public procurement: Planning
Public procurement: Call for tender
Public procurement: Awards
Public procurement: Contracts
Public procurement: Implementation
Detailed government budget
Detailed government spending
Election results
Salaries of individual senior civil servants
Government contact points
International aid
Hospitality and gifts
Aggregated data on lobbying on public decision making
Assets declarations of top-two-tiers of public employees
Interest declarations of top-two-tiers of public employees
Emergency and disaster relief
Crime and justice
Draft legislation
Laws and statues

Members of parliament
Judicial decisions
Crime statistics
Gender-based violence
Education
List of schools
Location of educational facilities
School performance
Skills statistics
Digital skills statistics

OECD Digital Government Studies

The Digital Transformation of Norway's Public Sector

While Norway is a leader in digital government amongst OECD countries – ranking 4th overall in the 2023 OECD Digital Government Index – there is scope to improve the efficiency, efficacy, and innovation of Norway's public sector through digitalisation. This report reviews Norway's digitalisation efforts since its 2017 OECD Digital Government Review and provides recommendations to help the government develop a new strategy for digital transformation. It looks at eight areas ranging from digital governance and digital government investments to artificial intelligence, digital talent and service design and delivery.

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