Public Sector Innovation Scan of Denmark

This edition of the Public Sector Innovation Scan of Denmark was prepared for a workshop with senior officials of the Danish Government on 24 March 2021. This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area

NATIONAL CENTRE FOR PUBLIC SECTOR INNOVATION

OPSI Observatory of Public Sector Innovation

PREFACE

About 50 people with management responsibilities in the Danish public sector or with close collaborative relationships with the public have been respondents in this public sector innovation scan.

In many ways, we have a strong starting point with a very well developed and well-functioning public sector. We also know that innovation is created on a daily basis everywhere in public workplaces. Right from top political and top administrative leadership and all the way out to the individual employee who meets the citizens on a daily basis. Many new solutions are created in collaboration with citizens, voluntary organisations, knowledge institutions and companies.

It is often in the sometimes-cumbersome collaboration, which crosses the borders between municipalities, regions and the state that we stumble upon that one surprising thought that moves us into a different groove from our customary routines. This is one of the spaces where innovation is created. We must look for new opportunities, and we must dare to question ourselves as well as our inherent and wise ways. Are they still the best we can come up with? Thus we have many experiences on innovation in Denmark.

We also know that the welfare challenges of the future will require innovation on a completely different level. We face challenges within e.g. climate and demographic changes as well as changed demands for welfare, for which we currently do not know the answers. The one thing we know is that the answers and solutions are different from those we know today. We therefore need an ambitious investment in the field of innovation that spans all elements of an innovation effort. Finding innovative answers on top of the current operational tasks is not enough. We need an approach that brings us forward faster. The challenges do not stand still.

With the view upon us from the outside that the OECD provides here, we have a new foundation for a discussion of which instruments will bring Denmark into the driver's seat when finding answers to the challenges of the future.

Kristian Wendelboe, CEO, Local Government Denmark (KL)
Adam Wolf, CEO, Danish Regions (Danske Regioner)

Copenhagen, March 2021

FOREWORD

The Danish public sector has long served as one of the international role models for innovation. OECD's research shows that innovation is a core capability of the public sector, sustained by innovative individuals, networks and momentum from decades of success. This capability is essential as the government seeks to remain effective, competent and relevant in a constantly evolving world. A systemic approach to innovation is needed to ensure that the Danish public sector keeps pace with change and the evolving needs of citizens; and is able to tackle the complex policy problems on the horizon such as climate change, demographic shifts, and increasing inequality.

The OECD's Observatory of Public Sector Innovation (OPSI) has collaborated with the Danish National Centre for Public Sector Innovation (COI) to examine the public sector innovation system of Denmark. This innovation scan gathers input and insights from perspectives across sectors and levels of government to explore how innovation is driven, supported and leveraged in the Danish public sector.

OECD research indicates that across all levels of government, public servants are working diligently to innovate to meets the evolving needs of society. The existing innovation capabilities of the Danish public sector have been particularly evident in the face of the COVID-19 pandemic, as the government worked with actors from across civil society and the private sector to adapt to changing circumstances and maintain the functioning of the public service through adversity. Fast-paced adaption has occurred in the medical sector, field of education and beyond. Innovation in the Danish public context arises from the front lines: from individuals or teams that develop and implement creative new solutions to improve the delivery of services. Moreover, crosscutting innovation efforts like the digitalisation agenda have proven that innovation has the potential to be incredibly successful when many parties, from all levels of government, are involved in the process. This is the essence of systemic change.

While innovation has been a central part of the Danish public sector, the global context of increasing ambiguity, uncertainty and complexity demands a deliberate and sustained approach to innovation. This is not a time to be complacent, but rather, to strive for continuous improvement and radical innovation in a context of growing complexity. The problems we are facing demand it. This innovation scan provides a reflection on where the public sector is today to lay a foundation upon which we can reflect, consider, and ensure that the public service is continuously equipped to face the many complex challenges ahead.

ACKNOWLEDGEMENTS

This innovation scan was prepared by the Observatory of Public Sector Innovation in OECD Directorate for Public Governance (GOV) under the leadership of the Director, Elsa Pilichowski.

The Observatory of Public Sector Innovation (OPSI) collects and analyses examples and shared experiences of public sector innovation to provide practical advice to countries on how to make innovation work. This scan was led by Piret Tõnurist and prepared by Heather Buisman and Kent Aitken. The work was co-ordinated in the Observatory by Marco Daglio (Acting Head of Open and Innovative Government Division). Angela Hanson, Alex Roberts and Jamie Berryhill provided input to the draft. National peer reviewers from Canada - Chad Hartnell (Director of Operations, Impact and Innovation Unit) and Sweden - Oskar Thorslund (Senior Advisor, Ministry of Finance) provided invaluable contributions and helped to orientate the analysis in an international context.

This innovation scan was made possible with the dedicated support of the Danish National Centre for Public Sector Innovation, notably Lene Krogh Jeppesen (Chief Consultant) and Pia Gjellerup (Director). The team would like to thank Ole Bech Lykkebo and Marie Munch-Andersen for assisting with Innovation Barometer data.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Observatory of Public Sector Innovation (OPSI) of the Organisation for Economic Cooperation and Development (OECD) conducted a scan of the public sector innovation system of Denmark in partnership with the Danish National Centre for Public Sector Innovation (COI). The aim of the scan is to provide COI with an independent overview of the drivers, supports, organisational and systemic factors that influence the development and diffusion of innovation in the Danish public sector. The scan includes insights on how innovation works across levels of government. This work represents an opportunity for officials to take stock of and reflect on the current developments and achievements, and make intentional, informed decisions about innovation's role in achieving public sector goals.

This findings of this work highlight that while the Danish government is quite advanced in its approach to public sector innovation, there remains an opportunity to develop a more consistent and deliberate approach to innovation. Going beyond responding to immediate priorities and marginally improving what already exists, the government can help solve complex societal challenges and prepare for tomorrow's challenges in innovative ways.

Over the course of decades, the public sector of Denmark has showcased how innovation can be used to improve efficiency and effectiveness of public services. Some of the features that appear to characterise the existing system include the prevalence of bottom-up innovation, the professionalism of the Danish public service, cultural tendencies that favour innovation and the continued drive of public servants to develop and deliver quality policies and services for the population. However, key societal challenges, notably, climate change and an ageing population, represent a need for improvement in how innovation is supported and leveraged in the public sector. In addition, governments around the world continue to look for anticipatory practices that support proactive approaches to uncertainty and change, which are largely absent in the public sector of Denmark.

In the face of these complex challenges, innovation needs to be viewed as a system and deliberately steered and supported. The decentralized and devolved governance structure of Denmark has led to an affinity for bottom-up, citizen-focused innovation efforts, but this must be paired with strategic direction and supports from the centre to ensure that innovation focuses on both immediate needs and complex, long-term challenges. In this context, there is a need for a strategic approach to innovation and its supports that connects a diversity of innovation efforts.

Denmark also has an opportunity to lead in areas where efforts are lagging globally. In order to lead in these areas, the public sector culture in Denmark needs to be, first, open to experimentation, as well as the risks of failure associated with innovation projects. Such a culture needs to be openly supported by leaders and politicians both in words and in action: this may require further capacity building and

knowledge at both the leadership and working levels. Second, in a context of decentralised and devolved governance, mechanisms for collaboration, idea sharing, scaling and spreading of innovation across sectors, horizontally across levels of government, and vertically between levels of government, need to be established and accelerated. Third, innovation needs a strong sense of direction, paired with support for a diversity of innovation approaches, to create alignment between many actors working on societal challenges. Finally, innovation needs to be evaluated and critically examined in order to ensure that regardless of the outcomes, innovation projects are a source of learning and knowledge.

Based on the exploratory research conducted by the OECD, this scan highlights steps for Denmark to consider in order to build on the existing innovation capabilities of the Danish public sector to strengthen the innovation system even further. These considerations are largely centred around the need to support innovation that is focused beyond improving efficiency, fostering bottom-up ideas and insights and dealing with immediate concerns:

- **Leverage mission-oriented innovation approaches**
- **Establish consistent funding for innovation**
- **Build anticipatory innovation governance capacity**
- **Improve capacity for evaluation and learning**
- **Outline an overarching innovation strategy**

In the context of growing complexity and uncertainty, made even more clear by the COVID-19 crisis, innovation is both a fundamental necessity and an opportunity to ensure that the Government of Denmark continues to steer towards the best possible outcomes for society. The above recommendations are based on the premise that the public sector innovation system is dynamic and evolving. As such, these considerations are designed to support Denmark in choosing a path through the uncertain future, but also to structure learning and feedback loops to systematically and reliably adjust course in alignment with Denmark's goals.

INTRODUCTION

Innovation is increasingly crucial for governments as they face a context of growing uncertainty and complexity. The COVID-19 pandemic provides a stark example of the need to be prepared to respond and adapt to unexpected circumstances while prioritising learning and experimentation. While the Danish Government has a long tradition of innovation, increasing pressures on the Danish welfare state due to the ageing population, paired with ambitious goals to reach declared climate targets, continue to challenge the public service to drive innovation even further.[1] Public sector innovation is needed now more than ever. This innovation scan seeks to examine the key drivers, structures, organisational factors and governance mechanisms related to public sector innovation

1 OECD (2019), OECD Economic Surveys: Denmark 2019, OECD Publishing: Paris. https://doi.org/10.1787/eco_surveys-dnk-2019-en.

in the Danish context. Furthermore, it will explore the strengths and weaknesses in the current innovation system to reflect on opportunities for capacity building, investment and change to be better equipped in the face of complex challenges.

The Organisation for Economic Cooperation and Development (OECD)'s Observatory of Public Sector Innovation (OPSI) defines Public Sector Innovation as the process of implementing novel approaches aimed to achieve impact.[2] In the broadest terms, public sector innovation has to fulfil three different components: **novelty**, **implementation** and **impact**.[3] The innovation needs to introduce a new approach or apply an existing approach in a new context, it must be implemented and should result in an outcome or impact (for example a shift in public value e.g., efficiency, effectiveness, trust or satisfaction). The Danish Government uses a contextualised definition of public sector innovation, set forth in the Copenhagen Manual, which outlines changes in the workplace as they relate to different types of value (Figure 1).[4] Throughout interviews, responses from Danish public servants matched this definition closely, with interviewees pointing to quality, efficiency, citizen involvement, employee satisfaction, and achieving a goal as potential outcomes or impacts. For decades, Denmark has been seen as one of the world leaders in public sector innovation, recognised in particular for its highly professional public service and sophisticated welfare system[5]; ranking at the top of the EU's Digital Economy and Society Index, and top five of the 2019 OECD Digital Government Index, and first in 2018 and 2020 in the UN's E-Government survey.[6] This understanding of Denmark as an innovative country is shared by the majority of public servants from across levels of government that were interviewed as part of this project. Moreover, there is a strong consensus around the strength and prominence of bottom-up innovation in Denmark, driven by ideas and hard work of employees, civil society organisations, private sector organisations and front line public servants.[7]

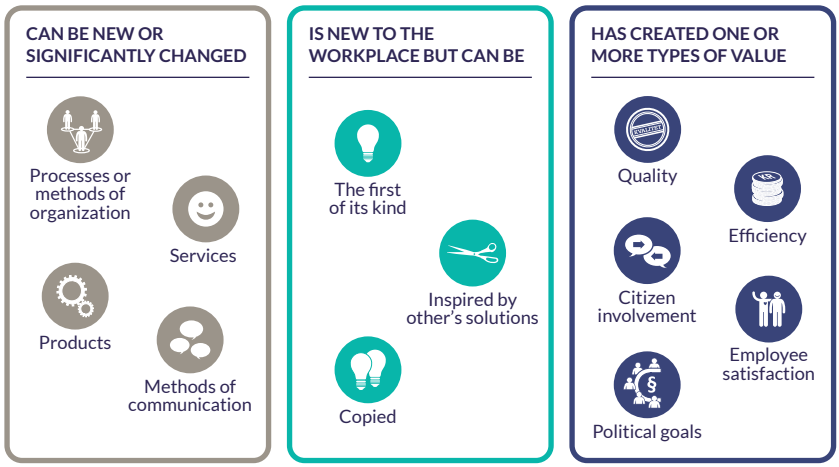

Figure 1 : Defining public sector innovation

The common understanding of public sector innovation in Denmark is closely aligned with the definition provided in the Innovation Barometer (COI (ed.), 2021).

Source: COI (2021), "New and translated Innovation Barometer figures." Working paper. National Centre for Public Sector Innovation, Copenhagen.

2 OECD (2017), Fostering Innovation in the Public Sector, OECD Publishing, Paris, https://doi.org/10.1787/9789264270879-en.

3 OECD (2017), "Fostering Innovation in the Public Sector."; Public sector innovation is "implementing something novel to context in order to achieve impact"

4 COI (2021), "New and translated Innovation Barometer figures." Working paper. National Centre for Public Sector Innovation, Copenhagen.

5 OECD (2019), Society at a Glance 2019: OECD Social Indicators, OECD Publishing, Paris, https://doi.org/10.1787/soc_glance-2019-en.
COI (ed.)(2019), Measuring New Nordic Solutions: Innovation Barometer for the Public Sector," National Centre for Public Sector Innovation, Copenhagen. https://www.coi.dk/viden-og-vaerktoejer/materialer/measuring-new-nordic-solutions/ .

6 OECD (2020), "Digital Government Index: 2019 results", OECD Public Governance Policy Papers, No. 03, OECD Publishing, Paris, https://doi.org/10.1787/4de9f5bb-en.;
European Commission (2020), "Digital Economy and Society Index (DESI)", European Commission, Belgium. https://ec.europa.eu/digital-single-market/en/news/digital-economy-and-society-index-desi-2020 .

7 COI (2021), "New and translated Innovation Barometer figures."

While the majority of public sector workplaces in Denmark have introduced innovations in their organisations according to Innovation Barometer data (Figure 3)[8], the Danish Government should not become complacent. A cross-section of officials and observers reflected that existing approaches to innovation need to evolve and mature to address complex, horizontal, societal challenges. Denmark has significant opportunity areas in which to create additional impact, close gaps, or improve reliability and effectiveness. This includes the ambitious climate targets of 70% CO2 emission reductions by 2030, in addition to the target of carbon neutrality by 2050 which demand for radical innovation. Finally, the demographic pressures of a rapidly ageing population, diminishing birth rates, decreasing taxpayer base and a shrinking labour force will continue to place pressures on the Danish welfare state.[9] These key challenges will increase pressures on the Danish public service to identify innovative solutions and implement them effectively. The question is what model of public sector innovation governance would be the most appropriate to produce the responses needed to respond to these challenges.

Denmark has also chosen to adhere to the OECD Declaration on Public Sector Innovation;[10] formally recognising the importance of innovation as a strategic capability of government not only to modernise state administration but to achieve broader policy goals. This step indicates Denmark's commitment and alignment with internationally-recognised principles and action to embrace and enhance innovation, encourage and equip public servants to innovate, cultivate new partnerships and involve different voices, support exploration, iteration and testing, diffuse lessons learned and share practices related to public sector innovation.

Public sector innovation in Denmark occurs in a highly decentralised[11] governance structure, where regions and municipalities have critical responsibilities in the welfare

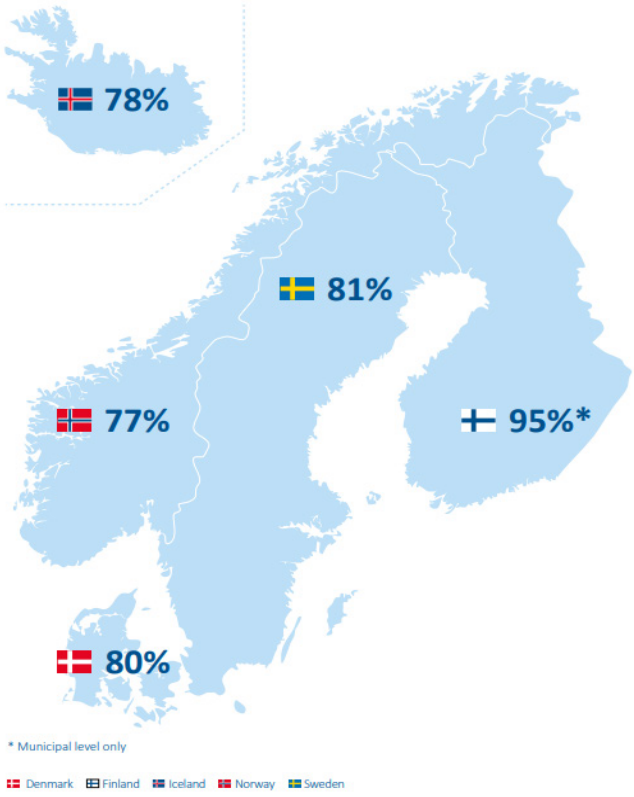

Figure 2: Innovation across Nordic countries

The above map reflects the share of public sector workplaces that have introduced one or more innovations during a two-year period.

Source: COI (ed.) (2019), "Measuring New Nordic Solutions: Innovation Barometer for the Public Sector." National Centre for Public Sector Innovation, Copenhagen.
https://www.coi.dk/viden-og-vaerktoejer/materialer/measuring-new-nordic-solutions/

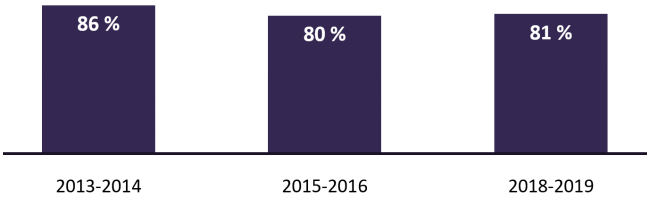

Figure 3: Innovation through the years in the Public Service of Denmark

The above figure shows the volume of public workplaces which identified as having introduced at least one innovation in the period listed.

Source: COI (ed.) (2021), "New and translated Innovation Barometer figures."; The figure is based on the question "In "[years]", did your workplace introduce new or significantly changed "Products?", "Services?", "Processes or methods of organisation?" and/or "External communication methods." The percentage listed shows those who have introduced an innovation and those who have answered "Yes" to at least one of the four sub-questions. Data are weighted to represent the public sector as a whole. n = 5,888. The drop from 2013-2014 to 2015-2016 may be linked to a higher response rate in 2015-2016.

8 Ibid.

9 Danmarks Statistik (2019), "Markant flere ældre I fremtiden." NYT N0. 180. https://www.dst.dk/da/Statistik/nyt/NytHtml?cid=26827.

10 OECD Legal Instruments (2019), "Declaration on Public Sector Innovation." https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0450.

11 The Danish Governance structure would be considered devolved rather than decentralized, however in the Danish language, the word decentraliseret is used to represent both concepts.

state. In this context, municipalities and regions are under pressure to demonstrate strong innovation capacities as they meet the day-to-day needs of citizens, notably in the areas of education, social services and healthcare. Given this distributed nature of the system, networks and collaborative spaces amongst actors at the municipal, regional and state levels, as well as across levels of government, are crucial for the sharing of best practices, innovative solutions (both successes and failures) and new ideas and practices. Central government also needs to ensure regulation and incentives that allow for the full potential of experimentation in the decentralised/local/regional governments, to avoid fragmentation and duplication in the system, and to do so in flexible and collaborative ways.

> ***"If we talk about having 70% less carbon dioxide emissions by 2030 in Denmark, it is not going to happen unless we rethink some things."***
>
> – Stakeholder from outside the public sector in Denmark

This scan explores the strengths and challenges of supporting innovation in a highly decentralised context such as the one described above. It examines how elements related to the leadership, organisations and culture of the Danish public service – and broadly of the Danish society - can be conducive to, or hinder, innovation. Furthermore, it explores key features of the innovation system in Denmark, notably reflecting on the drivers of innovation, the business case for innovation, relationship between levels of government, actors and the system, and the preparedness of the Danish government the complex and uncertain futures ahead. Finally, it showcases opportunities for the Danish government to strengthen the public sector innovation system of Denmark.

SCAN METHODOLOGY AND PURPOSE

The OECD OPSI public sector innovation scans are based on a systems approach. A public sector innovation system refers the set of elements that collectively influence to what extent innovation occurs and the forms that it takes. This can include organisations, structures, capabilities, laws, policies, processes, protocols, traditions, cultures, beliefs, and other factors.

The goal of this scan is to understand which elements are playing a role in Denmark's innovation system, why, and how, different elements relate to each other and if they are supporting or hindering desired public sector innovation outcomes. These elements represent both supports and barriers, and may be seen differently by different actors in the system. For instance, the role of executive support for innovation may benefit a team that has it, and be seen as a barrier to another team without. Recognising this, OPSI public sector innovation system scans focus on common experiences, trends, and tendencies in the system.

Public sector innovation scans rely on triangulating data: the analysis is based on semi-structured interviews, workshops, and desk research used to understand how the public sector innovation

system functions. The work is supplemented by comparative analysis from OECD's relevant body of research and country work. The experiences and insights of practitioners remain central in this analysis, as their knowledge and experiences are central to understanding how the system functions. This knowledge in many cases can be fragmented and needs to be collated to understand the system, validate or challenge existing understandings, and ensure a common view of the landscape to enable informed decision-making about opportunities, challenges, and future actions.

In Denmark, the OECD triangulated data from the following resources:

- **Desk research**, including previous OECD reports on public governance in Denmark, grey literature (policy brief, reports etc.) on innovation and innovation systems, and Danish government reports.
- **Innovation Barometer data** based on an official national statistical survey that describes the level of innovation in Danish public workplaces based on data from 2,271 respondents. This data is collected by the COI with Statistics Denmark and stratified, in accordance with the OECD Oslo Manual which provides guidelines for innovation statistics, and the Copenhagen Manual for public sector innovation (see Box 11).[12]
- **Semi-structured interviews with 27 practitioners, experts, observers, and stakeholders** across jurisdictions and sectors to understand the system elements, timeline, key players, and experiences of actors within the system. The interviews were recorded, transcribed and coded in NVivo. The coding covered the most frequently used concepts connected to public sector innovation, innovation drivers, innovation at different levels of governments, key actors and organisations, organisational factors and system level leavers.
- **Validation workshop** with a cross-section of public sector innovation leaders, experts and practitioners to corroborate and substantiate the preliminary findings (see Annex B).
- **A peer review process** including senior officials in the innovation space from the governments of Canada and Sweden, to participate in interviews, contribute to analysis and findings, provide additional comparison points, and review project documentation and recommendations.
- **Analysis against OECD frameworks and tools**, including the OPSI determinants of innovation, the OPSI innovation facets model and international case studies to situate Denmark's system against patterns and experiences that appear across international contexts.

This work contributes to a growing understanding of countries' public sector innovation systems and how to influence and improve them. The Observatory's primary efforts include analysing emerging practices across, and beyond, OECD member countries to identify common elements and principles to support the collective progress of countries. A growing critical mass of practices and approaches are captured in the OPSI Case Study Library[13], the COVID-19 Innovative Response Tracker, and the Toolkit Navigator.[14] These collections, along with previous country-based research, have led to a suite of tools and frameworks for initial analysis.

12 COI (ed.) (2021), Copenhagen Manual, National Centre for Public Sector Innovation (ed.), Copenhagen. https://www.innovationbarometer.org/copenhagen-manual/.
Thøgersen, D., Waldorff, S.B. and Steffensen, T. (2020), "Public Value through Innovation: Danish Public Managers' Views on Barriers and Boosters". International Journal of Public Administration, pp.1-10. https://doi.org/10.1080/01900692.2020.1750030.

13 See more: https://oecd-opsi.org/case_type/opsi/.

14 See more: https://oecd-opsi.org/toolkit-navigator/.

COUNTRY CONTEXT

Denmark is a parliamentary representative democracy, with a constitutional monarchy and a decentralised unitary state. The country has a history of minority governments and reaching agreements with changing coalitions in the Danish Parliament.[15] Approximately, 80% of new laws are implemented with broad majorities, which means that despite minority governments there is usually a stability in the foundation for the rules, laws and reforms that enable public sector innovation.[16]

The Danish public sector is highly devolved (decentralised)[17] in nature, with 98 Municipalities and five regions that play a crucial role in the functioning of the welfare state, notably in the realms of education, healthcare and social services. In total, the public service employs over 722, 000 people,[18] accounting for approximately 24% of the labour force.[19] In this distributed system, front line workers from across the public, private and civil society sectors play an important role in the innovation process.[20] Local level, frontline experimentation has been a component of the Danish system since the 19th century with the rise of the cooperative movement and local associations.[21] Compared to other countries,[22] innovation is a central part of the culture and norms of the Danish public sector, sustained in part by a long history of innovation reforms spanning across levels of government.

In the 1990s, innovation was associated with the rise of New Public Management (NPM) approaches which pushed for professionalisation, customer orientation and efficiency in the public service. Throughout the 1990s and beyond, the public service was pushed to modernise under tight fiscal constraints; balancing the pressures of budget cuts with the increased demands on the welfare state from citizens and society to deliver positive outcomes.[23] Much of the agenda was also connected to de-bureaucratisation and red tape reduction (e.g., the smart regulation initiative 'Burden Hunters' in 2007-2008). This has led to a series of incremental improvements widely known as 'bricolage' or incremental improvement.[24] Additionally, several initiatives were undertaken to drive user-centric innovation (e.g., Danish Business Promotion and Building Agency user-centric innovation program in 2006; practice of MindLab (see Box 2 below)).

15 Christiansen, P.M., Elklit, J. and Nedergaard, P. eds., (2020), The Oxford handbook of Danish politics. Oxford: Oxford University Press.

16 Kurrild-Klitgaard, P., Hansen, M.E. and Robert, K., (2005), Blokpolitik og det" samarbejdende folkestyres" fire gamle partier, 1953-2005. Department of Political Science and Public Managements, Faculty of Social Sciences, University of Southern Denmark.

17 Devolved means having had power transferred or delegated to a lower level, especially from central government to local or regional administration. While this is the general term to describe the governance structure "decentralised" is used in Denmark synonymously and is better known. From, here forth both terms are used interchangeably.

18 Statistics Denmark (2020), "Public sector employment", Statistics Denmark, Copenhagen. https://www.dst.dk/en/Statistik/emner/arbejde-indkomst-og-formue/beskaeftigelse/offentlig-beskaeftigelse.

19 European Commission (2020), "Labour market information – Denmark, National Level", EURES, Luxembourg, https://ec.europa.eu/eures/main.jsp?lang=en&acro=lmi&catId=2599&countryId=DK&regionId=DK0&langChanged=true#:~:text=Denmark%20has%20a%20population%20of,force%20is%20employed%20in%20agriculture.

20 OECD (2017), Fostering Innovation in the Public Sector, OECD Publishing, Paris, https://doi.org/10.1787/9789264270879-en.

21 Hjelmar, U., (2019), "The institutionalization of public sector innovation". Public Management Review, 23(1), pp.53-69. https://doi.org/10.1080/14719037.2019.1665702.

22 OECD (2018), The Innovation System of the Public Service of Canada, OECD Publishing, Paris, https://doi.org/10.1787/9789264307735-en. OECD (2019), The Innovation System of the Public Service of Brazil: An Exploration of its Past, Present and Future Journey, OECD Public Governance Reviews, OECD Publishing, Paris, https://doi.org/10.1787/a1b203de-en.

23 Hjelmar, U., (2019), "The institutionalization of public sector innovation."

24 Bugge, M.M. and Bloch, C.W., (2016), "Between bricolage and breakthroughs—framing the many faces of public sector innovation". Public Money & Management, 36(4), pp.281-288.

BOX 1: TIMELINE OF KEY EVENTS

1990s: The Danish Ministry of Finance adopted a number of reforms associated with New Public Management, which drove an agenda of efficiency and effectiveness. This accelerated innovation in the face of budgetary pressures and a desire to professionalise the public service.8

1990 – 2018: A rate adjustment pool (Satspuljen) established. This funding amounted to approximate two billion euros, with approx. 150 million each year provided to local governments in the form of grants intended to improve welfare. 9 The pool was closed in 2018 due to a case of alleged fraud, which brought into question the risks of flexible funding and oversight for innovation.10

1995: First Digitalisation Strategy in Denmark, situating Denmark as a global leader in digital government.

2002-2014: MindLab was established; providing practical support in implementing innovative approaches and methods, pushing a culture of innovation and further normalising innovative practice in the public sector.

2007: A municipal reform was adopted to combine 271 municipalities into 98, at the same time, considerable responsibilities were placed upon the municipalities to support aspects of the welfare state, including social services, elderly care, childcare, primary education and more.

2011: Creation of the Agency of Digitalisation in the Ministry of Finance.

2012: Launch of the Frikommuneforsøg (Free Municipality Experiments): These experiments exempt participating municipalities from state regulations, allowing them freedom to experiment, test and pilot new solutions and approaches the best fit their municipal contexts. Thematic areas of these experiments include flexible employment, affordable housing, social expenditure, investment in children, collaboration across sectors and coherence, collaboration and transparency with citizens. This experiment has run numerous cycles, including the latest group of seven municipalities, which launched their participation in the experiments in 2021.

2013: Partnership for public sector modernization: An agreement between the Government, Local Government Denmark (KL), the Danish Regions and the three main labour unions of public sector employees. This agreement was aimed at modernizing the public sector with a focus on trust.

2013: Establishment of the National Centre for Public Sector Innovation (COI) to support innovation practice, knowledge sharing and resource development. The COI was formed following the above mentioned partnership.

2015: Publication of the first Innovation Barometer results by the National Centre for Public Sector Innovation and Statistics Denmark.

2016-2019: Establishment of position of Minister of Public Sector Innovation in the Ministry of Finance (see Box 5).

2016: Launch of new Digital Strategy in coordination with municipal, regional and state level governments to drive and support the country in seizing technological opportunities, creating added growth and efficiency and maintaining trust of Danes in digital society.

2017: Sammenhængsreform (cohesion reform) aimed at renewing and developing the public sector through the use of tech, time management, and efficiency and management improvements.

2019: First public sector innovation award.

2021: Launch of the Copenhagen Manual for Public Sector Innovation Measurement.

Currently there are signs that a predominantly efficiency-driven agenda of NPM is retreating and more significance is put on quality of public services and value-driven change in new innovation projects, this is paired with a political commitment that "public institutions should be the most innovative and dynamic in the world".[25] This has further come to the forth with increased attention on mission-driven innovation and discussions around societal challenges including climate change, aging, inequality, welfare state reforms.[26]

In 2007, 271 municipalities in Denmark were amalgamated into 98 municipalities and 14 counties into five regions.[27] This spurred on process and organisational innovations. The five regions have responsibility over the organisation of transport services, hospital services, health insurance and private health care institutions, and institutions for groups with certain social needs. The reform also saw a large part of the welfare state functions moving to the local level including primary education, social welfare, care for the elderly etc. This increased co-creation, collaboration and social innovation on the local level out of necessity.[28]

In parallel, Denmark supported leading investments in innovation, such as the establishment of MindLab to support innovation in practice. MindLab was one of the first dedicated public sector innovation labs in the world, an example which many countries used as a template to design their own labs and units.[29] Throughout its tenure, it played an action-oriented process catalyst role across ministries in the space of public sector innovation, which currently is missing in the public sector at the state level.[30] Around the time of the creation of MindLab, other labs and units were established at the municipal and regional level, some of which are still running.

Denmark is recognised globally for its excellence in digitalisation and digital innovations.[31] In part, this is due to the early adoption of a digitalisation strategy (1995). In 2011, the Agency for Digitalisation was created in the Ministry of Finance. This trajectory has continued for decades, with 15 years of successful pan-governmental digitalisation strategies. The third iteration of the strategy is now guiding digitalisation in the public sector.[32] This is one of the examples where direction setting has been largely successful across government levels. While the digitalisation and innovation agendas are seen as largely separate, innovation barometer data shows that technology plays an important part in 35% of innovations (Figure 4).[33]

25 Regeringen. (2007), "På Vej Mod En Kvalitetsreform [Towards a Quality Reform]". Copenhagen: Government of Denmark.; Hjelmar, U., (2019), "The institutionalization of public sector innovation".

26 Hjelmar, U., (2019), "The institutionalization of public sector innovation".

27 Blom-Hansen, J., (2010), "Municipal amalgamations and common pool problems: The Danish local government reform in 2007." Scandinavian Political Studies, 33(1), pp.51-73.

28 Copus, A., Berlina, A., Perjo, L., Jungsberg, L., Minoz, Å. and Sigurjonsdottir, H.R., (2016). "Territorial Social Innovation in the Nordic Countries and Scotland". Nodregio, Stockholm. https://archive.nordregio.se/Publications/Publications-2016/Territorial-Social-Innovation/Social-Innovation-in-the-Nordic-and-Scottish-co/Scotland/index.html

29 Tõnurist, P., Kattel, R. and Lember, V., (2017). "Innovation labs in the public sector: what they are and what they do?". Public Management Review, 19(10), pp.1455-1479. 10.1080/14719037.2017.1287939

30 Carstensen, H.V. and Bason, C., (2012), "Powering collaborative policy innovation: Can innovation labs help". The Innovation Journal: The Public Sector Innovation Journal, 17(1), pp.1-26.

31 OECD (2020), "Digital Government Index: 2019 results", OECD Public Governance Policy Papers, No. 03, OECD Publishing, Paris, https://doi.org/10.1787/4de9f5bb-en.
European Commission (2020), "Digital Economy and Society Index (DESI)", https://ec.europa.eu/digital-single-market/en/news/digital-economy-and-society-index-desi-2020 .

32 https://digst.dk/strategier/digitaliseringsstrategien/15-aars-faelles-digitaliseringsstrategier/

33 COI (ed.) (2021), "New and translated Innovation Barometer figures."

In 2013, the state government, associations of the municipalities and regions, together with labour unions of public employees, established a partnership to develop the public sector. At the core of this all-inclusive partnership was an agreement to establish National Centre for Public Sector Innovation (COI) which opened its doors in 2014.

In 2015, a new minister for Public Sector Innovation within the Ministry of Finance was appointed to promote public sector innovation as a tool to achieve key strategic goals connected to modernisation and public sector productivity.[34] While internationally well-known, the appointment did not mark a significant change in the role of public sector innovation with the attention remaining primarily on digitalisation.[35]

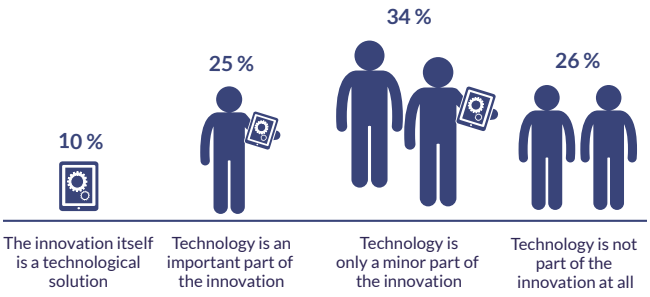

Figure 4: Technology in Innovation

The figure above showcases the role of technology in innovations from period 2018-2019.

Source: COI (ed.) (2021), "New and translated Innovation Barometer figures."; The figure is based on the question: "To what extent is technology part of the most recent innovation? Technology concerns both physical and digital solutions. The question was only asked to workplaces that have introduced at least one innovation in the period 2018-2019. The percentages in the figure do not add up to 100%, as the figure does not show the 5% who answered "Do not know". Data are weighted to represent the public sector as a whole. n = 1,877.

ACTORS IN THE DANISH PUBLIC SECTOR INNOVATION SYSTEM

The OECD's research has shown that there is no single model internationally for governing public sector innovation, and approaches for innovation governance vary depending on national context and innovation portfolios.[36] Public sector innovation in Denmark is supported by a diversity of drivers and actors that creates a context for innovation to flourish.

From an operation standpoint, mirroring the devolved nature of the Danish public system, there is no one organisation steering, driving and supporting public sector innovation in Denmark. Rather, innovation drivers are diffused and activated by a range of actors from private companies to regions, municipalities and state ministries (see Table 1: Key Actors in the Danish Public Sector Innovation System). This means that there has not been uniform attention on the strategic goals within the public sector innovation system to align innovation efforts with policy goals. This was also showcased during the interviews, as few policy innovations were mentioned and municipalities noted efforts to stay 'ahead of reform' rather than policy reforms leading or steering innovative action.

> *"We have this reform, the reform perspective, you have had a lot of sort of new product management ideas, where governments are just continually pushing for more effectiveness, and efficiency in government. So a lot of this comes from people just striving to do things better all the time, mainly because of economic drivers. But now, when we see the COVID-19, I think that there's a lot of innovations that are simply coming up, because people are trying to solve new problems, and they are just, you know, working together. And it's not so much the economy, it's arts, it's more the, you know, saving lives. That is a driving force."*
>
> – Stakeholder from academia

34 https://www.regeringen.dk/media/2704/kgl-resolution-af-281116.pdf

35 Ibid.

36 OECD based on public sector innovation reviews in Canada (2018) and Brazil (2019) and innovation scans in Norway (2019), Israel (2019) and Latvia (2021).

TABLE 1: KEY ACTORS IN THE DANISH PUBLIC SECTOR INNOVATION SYSTEM

Type of organisation	Role in supporting innovation
Civil society organisations and private sector	Driving innovation from the bottom up, experimenting with new methods and technologies. Some private sector corporations also function as funding sources for the public sector through grant schemes. e.g., Danish Design Centre, Red Cross, private healthcare companies, tech companies etc.
Collaborative networks and associations	Forums to share innovative ideas, projects, tests etc. in order to spread innovations and learn from failures. These networks and association help to decrease duplication of research and experimentation activities. e.g., Danish Regions, The Unit for Technology and Innovation in Danish Municipal Association, Unit for Technology and Innovation. Both organisations also run topic specific networks
Informal networks of leaders and practice-sharing	Forums to share ideas and spread innovations. e.g., Informal network established between municipalities involved in Free Municipality experiments, informal networks between leaders at municipal and regional levels
Innovation hubs and labs	Knowledge supporters for innovation projects, providing specialised expertise, providing a forum for innovation outside of existing hierarchical structures. Innovation hubs and labs are largely found at the regional and municipal levels of government. e.g., Health Innovation Centre of Southern Denmark, CFIA in Aarhus Municipality
The Innovation Fund	This innovation fund invests in a range of innovative projects, ranging to projects designed by emerging entrepreneurs or PhD students, to innovations that target large societal challenges. The focus, thus, far is on private sector innovation. Public sector bodies are eligible to apply for funding depending on the alignment of project goals.
Universities, university colleges, research institutions	Conducting research and development, exploring emerging technologies and trends and providing training on innovation to all graduates since 2016/2017.
Foundations	Funding innovation projects e.g., Realdania, Novo Nordisk Fonden, A.P. Møllerfonden
Danish Business Authority	Building relationships between the public sector and industry, experimenting with regulations, sharing knowledge between sectors. Driver of the Danish GovTech initiative together with the Agency for Digitisation as well as the challenge platform challenge.dk

Ministry of Finance	Pushing for reform mindsets and efficiency agenda. Incentivises innovation through budget and budgetary cycles (business cases for new developments).
National Centre for Public Sector Innovation (COI)	A knowledge exchange centre showcasing examples of innovation to normalise, justify and share innovative methods. Source of best practices to help point out barriers to innovation, and tools for innovation in addition to public sector innovation measurement. COI runs various network activities as well as an innovation internship connecting innovators across the public sector.
Digitalisation Agency	Aimed at supporting the renewal of Danish welfare, notably in implementing the government's digital ambitions and use of digital technology to enhance the functioning of the welfare state.

There are some notable gaps in the roles in the system. Since the closure of MindLab in 2014 (see Box 2), central and cross-silo action-oriented support for public sector innovation in Denmark is largely missing on the ministerial level. Different organisations support their own particular activities, but cross-governmental support and coordination is missing (e.g., the Danish Business Authority has an agile governance initiative, but lacks the mandate to pursue these topics across the specific business development domains). The Danish Design Centre has taken up some of this support from a design thinking perspective working together with both private and public sector organisations, but it lacks the broader mandate to support ministries on a continual basis around these topics.

DRIVERS OF PUBLIC SECTOR INNOVATION

Innovation in the public sector is driven by a range of factors inside organisations and teams, but also on the system level.[37] In the current scan these were clustered into top-down, bottom-up, demand and supply-driven factors that influence public sector innovation in the Danish context. These included drivers such as technology, COVID-19 and societal challenges external to the system, but also internal drive towards innovation, business case logics and particular projects (Figure 5).

From a top-down perspective, innovation is often a response to ambitious political targets or objectives that would not be possible without innovation. This includes ambitious targets in the face of large societal challenges such as climate change or COVID-19. While the desired outcomes may be known, the public sector must search for the most effective interventions and explore how they will be received in practice.

> ***"The best innovation comes from people who also operate and understand the problem and live [with] the problem very close."***
>
> – Stakeholder from outside the public sector in Denmark

From the supply side, innovation often results from part-

37 OECD (2019), The Innovation System of the Public Service of Brazil: An Exploration of its Past, Present and Future Journey.

nerships and relationships between the public sector and other sectors, or is driven directly by civil society or private sector organisations that generate ideas that are later adopted and institutionalised by the public sector. Interviews indicate that there is a large portion of collaborative innovations in the public sector in Denmark especially in the area of welfare policies. From the supply perspective, technology is also a strong driver for innovation. Notably, new technological possibilities in fields such as climate, energy and medicine push the public sector to explore how new tools and technology can be leveraged in innovative ways. One example of this is the Signature Projects on Artificial Intelligence in the municipalities and the regions (Signaturprojekter med kunstig intelligens i kommuner og regioner) which is an innovation fund dedicated to experimentation related to artificial intelligence in practice, particularly focused on how AI can be leveraged by the public sector.[38]

From the demand perspective, innovation can result from the push from citizens to see the benefits of the welfare state context, and through frontline interactions between public servants and citizens that lead to improvements. Lastly, and perhaps most importantly in the Danish con-

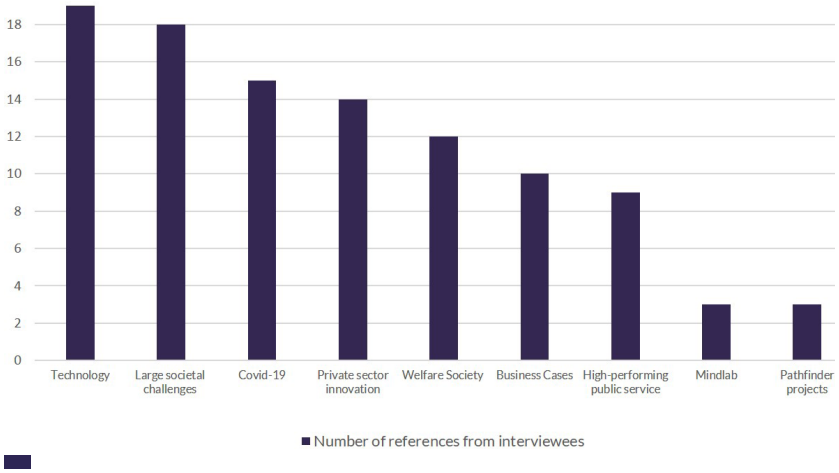

Figure 5: Drivers of innovation named by interviewees

The figure above indicates the number of times interviewees referenced specific drivers of innovation as part of OECD's research (N=27).

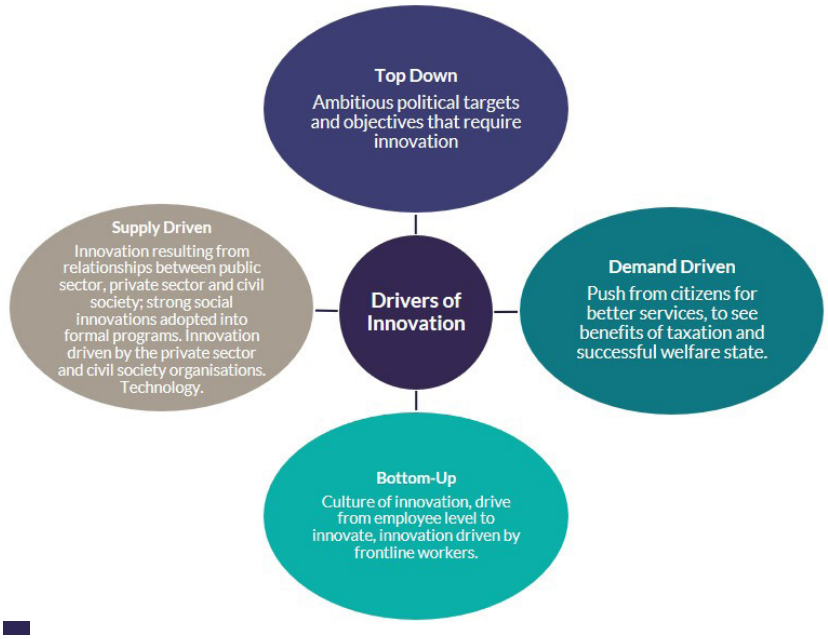

Figure 6: Drivers of Innovation

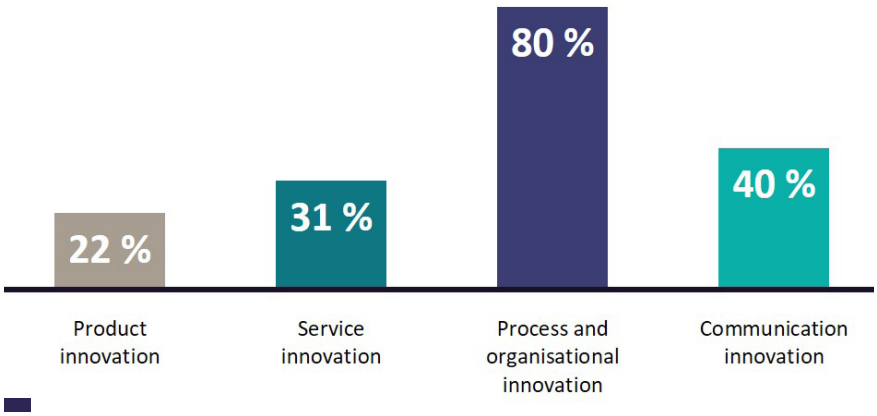

Figure 7: Types of Innovation in Denmark

The figure above showcases the types of innovation identified in the workplace's most recent innovations from 2018-2019. n = 1.877.[39]

38 Digitaliseringsstyrelsen (n.d.), "Signaturprojekter med kunstig intelligens i kommuner og regioner", https://digst.dk/strategier/kunstig-intelligens/signaturprojekter/.

39 COI (ed.) (2021), "New and translated Innovation Barometer figures."

text, data collected for this research indicates that innovation is perceived as being driven by public servants themselves; from front-line workers and employees at all levels of the public service who see opportunities for innovation and leverage those opportunities, and who have the capacity and culture to execute.

While these drivers exist at all levels of government, they play out differently at each. Based on observations from interviewees, regional and municipal level innovation appears to be driven more from the bottom up; fostered by a culture of innovative mind-sets and general tendency amongst the public service, civil society and private sector to push for innovation. This is not to say that political leadership does not have a role in accelerating innovations, but the urgency is created by the service context and emerging needs.

DETERMINANTS OF INNOVATION

The Innovation Determinants Model draws from countries studied a set of factors representing the enabling conditions for innovation at a meta- and country-wide level. Examination against these patterns also informed the interview questions. These patterns lead to questions for future innovation support (e.g., "how might we best support innovation capability?") and provide a lens into the conditions for innovation at the individual, organisational, and system levels.[40] This first level aggregate analysis and further research (usually conducted in public sector innovation reviews) is needed to identify appropriate conditions for innovation at different levels of government.

BOX 2: THE RISE, FALL AND LEGACY OF MINDLAB

MindLab was established in 2002 to lead and support the practice of innovation in the public service; promoting and demonstrating the use of design thinking, experimentation, prototyping, user focus and more. Throughout its 12 years of existence, MindLab went through several waves and strategies, in the end it served as a cross-government innovation lab supporting four different ministries in their innovation endeavours. The structural weakness of the unit was that it concentrated on prototyping new ideas, rather than following through the full implementation of projects - which made the process difficult to sustain. This is common to the experience of many innovation labs. MindLab was closed in 2014 following a shift in political priorities, and was replaced by the Disruption Taskforce, a unit established by the Danish Prime Minister to support digital transformation in the public service.

MindLab was seen as both a source of practical advice as well as a source of inspiration for public sector innovators across the globe: leaving a legacy of innovative culture in the public service, including openness to design-thinking, risk taking and experimentation at the ministerial level and becoming a champion and cultural keystone.

Sources: Carstensen, H.V. and Bason, C., (2012), "Powering collaborative policy innovation: Can innovation labs help". The Public Sector Innovation Journal, 17(1), pp.1-26.

Tõnurist, P., Kattel, R. and Lember, V., (2017), "Innovation labs in the public sector: what they are and what they do?". Public Management Review, 19(10), pp.1455-1479.

Hjelmar, U., (2019), "The institutionalization of public sector innovation". Public Management Review, 23(1), pp.53-69.

40 OECD (2019), The Innovation System of the Public Service of Brazil: An Exploration of its Past, Present and Future Journey.

TABLE 2: INNOVATION DETERMINANTS IN THE DANISH CONTEXT

Determinant and overview	Manifestation in Denmark's system
Clarity: innovation is driven by problems, opportunities, crises, or disruptions, and works best when actors understand those drivers, their role in addressing them, and how innovation fits in. Do individuals and organisations have clarity about how, when, and why to innovate? Ideally, this is aligned across the entire system.	This is becoming more nuanced in Denmark, shifting from an efficiency-driven narrative to increasing attention on societal and citizen value, including for major society-wide challenges. However, clarity about roles and practices of innovation are largely left to jurisdictions and functional areas, aside from a general sense that innovation is a positive force. Recently, COVID-19 has also played a role to accelerate innovation processes and making it clear why innovation in the public sector is urgently needed.
Possibility: there are a range of factors that make innovation possible, from resource requirements, the removal of barriers, or commitments from the organisational or system levels. Is it equally feasible for actors and organisations to take innovative approaches as more status-quo ones? This becomes a sense of parity at the system level.	The possibility to innovate appears higher in the municipal and regional levels with more funding opportunities and urgent needs driven by the citizen interface and service delivery channels. In the national level these incentives are less clear, and interviewee assessments about leadership enablement of innovation are more mixed.
Capability: individuals and organisations must have the capability to act, whether that refers to skills and competencies or how to recognise and engage specialist expertise when needed. In other cases it may be technologies, processes, or infrastructure. This collectively adds up to a system-wide suitability for undertaking innovation.	The Danish civil service is highly capable and most new entrants to the public sector have been through higher education systems that include innovation in the curricula. However, capability for innovation specifically, beyond general knowledge, appears is varied across the public sector. Some organisations have dedicated units to support innovation, on the national government level they are largely lacking. Specifically, leadership misses systemic support in these capabilities in the public sector. The absence of substantial, contextual innovation practice support appears salient as well.
Experience: public servants have reflected the idea that innovation generates virtuous cycles, and is most likely to happen in organisations and systems where it is seen as normal, accepted, and encouraged. A positive experience of innovation helps reinforce future work, resulting in a system that demonstrates that innovation has normality.	In the municipal and regional level public sector employees tend to have more explicit experience with public sector innovation. The positive feedback on the national level is more clustered in agencies and technology-led developments. As well, the experience appears to have a bias towards enhancing existing programmes and services, or generating iterative feedback interfaces with citizens and stakeholders rather than tackling more complex social challenges through innovation.

INNOVATION PORTFOLIO AND PURPOSE

Innovation barometer (2019) data shows that innovation in Denmark varies considerably in focus, with the strongest emphasis on process and organisational innovation, followed by communication innovation, service innovation and product innovation (Figure 7).[41] Often innovations will blend different types of innovation, the outcomes resulting in the creation of multiple types of value.

The same data source indicates that innovations have been successful in achieving a range of outcomes, the most prominent being quality, followed by employee satisfaction, efficiency, political goals and citizen involvement (Figure 8).[42]

This aligns with the result of OPSI's analysis of a sample of 53 Danish innovation awards case submissions from 2019 against the Innovation Facets model, which looks at public sector innovation from a strategic and portfolio-based perspective (Figure 9).[43] This model is intended to capture not only whether innovation is happening, but how and for what purposes. There are different types of innovation, driven by different intents and require different strategies and tactics, which can be used to explore countries' or organisations' tendencies towards innovation. For instance, there could be many innovation projects, but all designed for incremental change of existing programs and services rath-

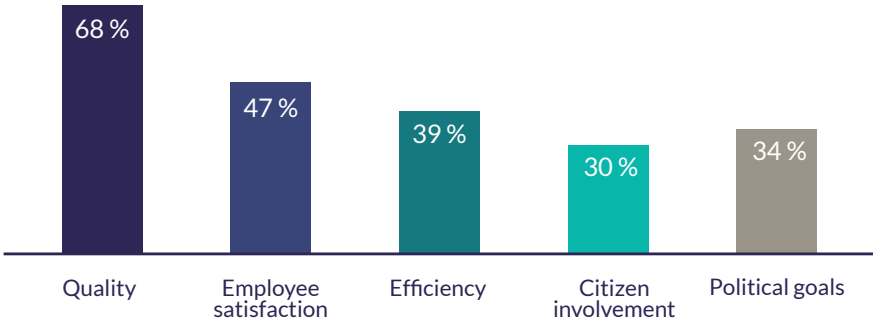

Figure 8: Types of value achieved through innovation

Source: COI (ed.) (2021), "New and translated Innovation Barometer figures."; The figure is based on the question: "Overall, what types of value have been achieved with the most recent innovation." The question is only asked to workplaces that have introduced at least one innovation in the period 2018-2019. The percentages in the figure add up to more than 100% because workplaces had the possibility to choose several answer options. Data are weighted to represent the public sector as a whole. n = 1,877.

Figure 9: 2019 Innovation Awards Case Submissions mapped based on innovation facets[43]

Source: Case data gathered from: COI (2019), "LÆS STJÆL FORTÆL", https://www.coi.dk/viden-og-vaerktoejer/materialer/laes-stjael-fortael; OECD (2019), This diagram maps innovation awards cases from 2019 according to innovation facets based on the key principles of the OPSI innovation facets model, with the assistance of the Innovation Portfolio Exploration Tool which analyses innovation projects and assigns them to a particular innovation facet.

41 COI (2021). "New and translated Innovation Barometer figures." Working paper, February 5th 2021. National Centre for Public Sector Innovation, Copenhagen.

42 Ibid.

43 OECD (2019), The Innovation System of the Public Service of Brazil: An Exploration of its Past, Present and Future Journey.

44 National Centre for Public Sector Innovation (2019), "LÆS STJÆL FORTÆL", https://www.coi.dk/viden-og-vaerktoejer/materialer/laes-stjael-fortael/. ; OECD (2019), The Innovation System of the Public Service of Brazil: An Exploration of its Past, Present and Future Journey.
This diagram maps innovation awards cases from 2019 according to innovation facets based on the key principles of the OPSI innovation facets model, with the assistance of the Innovation Portfolio Exploration Tool which analyses innovation projects and asigns them to a particular innovation facet.

er than exploring potential futures. Alternatively, innovation support systems and cultures may be suited for promoting certain types of innovation over others. OPSI examines innovation within organisations and systems across four facets:[45]

- enhancement-oriented innovation, where the focus is on upgrading practices, achieving efficiencies and better results, and building on existing structures and knowledge bases;
- mission-oriented innovation, where there is a clear overarching goal to be achieved, requiring mobilisation of new approaches and resources;
- adaptive innovation, which focuses on responding to a changing environment with new attempts;
- anticipatory innovation, which is about engaging with new shifts before they become established.

The facets model helps to give insight into the mix of innovative activity taking place and whether it is aligned with organisational or system-level goals, and whether it supports the organisation's capacity to navigate uncertain possible futures.

The preliminary analysis of the Danish cases submitted to the 2019 Awards suggests that public sector innovation in Denmark focuses largely on areas such as enhancement-oriented innovation and adaptive innovation. As represented by the blue clusters, the largest number of innovations fell in the enhancement-oriented category (24), followed by a combination of enhancement-oriented and adaptive innovation (17), and purely adaptive innovations (7). Very few analysed cases demonstrated mission-oriented or anticipatory innovation approaches. While this is a very limited showcase of innovation projects, it is indicative of an orientation of the public service of Denmark to pursue innovation projects that focus on upgrading practices, achieving efficiencies and better results, building on existing structures, and innovating to respond to changing environments. This orientation is common across public sectors around the world, as such projects tend to be safer, more incremental, showcase quick wins and are predominantly driven by common policy and budgetary factors such as austerity.[46]

The absence of strong 'mission-oriented' and 'anticipatory' innovation projects in the 2019 Innovation Awards cases may indicate an opportunity to improve innovation stewardship in these areas, notably to help support future-oriented innovation projects, and innovation that targets specific missions or goals (e.g., Climate targets). Anticipatory innovation tends to be poorly represented in governments in general and new structures to support the innovation facet in the public sector are needed.[47]

Learn more here: https://oecd-opsi.org/projects/innovation-facets/.

46 De Vries, H., Bekkers, V. and Tummers, L., (2016). "Innovation in the public sector: A systematic review and future research agenda." Public administration, 94(1), pp.146-166.

47 Tõnurist, P. and A. Hanson (2020), "Anticipatory innovation governance: Shaping the future through proactive policy making", OECD Working Papers on Public Governance, No. 44, OECD Publishing, Paris, https://doi.org/10.1787/cce14d80-en.

ANALYSIS OF THE PUBLIC SECTOR INNOVATION SYSTEM OF DENMARK

Innovation is central to the culture and workings of the Danish public service. This chapter will analyse and reflect on a number of key factors emerging from desk research and interviews with key stakeholders that can influence the degree of innovativeness and types of innovation prevalent in the public sector in Denmark. Notably the analysis looks into the decentralised governance structure, political drivers and supports for innovation, collaboration across sectors, funding and strategic policy planning, role of evaluation and measurement, capacity building and leadership and grand societal challenges. While there has been strong sign that the public sector overall can produce innovative solutions to meet immediate needs, there remain opportunities for further improvement to ensure that the system can support Denmark's ambitions for action in the face of long-term, horizontal, and complex societal challenges.

OVERALL ASSESSMENT

Denmark has demonstrated a steady track record of innovation, but that does not mean the public service should become complacent, nor that what has worked in the past will suffice for current goals.

Overall, there is a strong perception that the public service of Denmark is innovative, with 81% of those interviewed remarking that Denmark is innovative, 6% as neutral, and 13% as not innovative (Figure 10). Interviewees observed that this innovative nature permeates all levels of the public service, and is strongly driven from the bottom-up, but also often driven from the top with reforms and ambitious political priorities at the national level. There was also a common recognition that one of the greatest strengths of the Danish public sector is the innovative ideas, mindsets and ways of working of the front-line workforce, be they in the public sector, or within private sector and civil

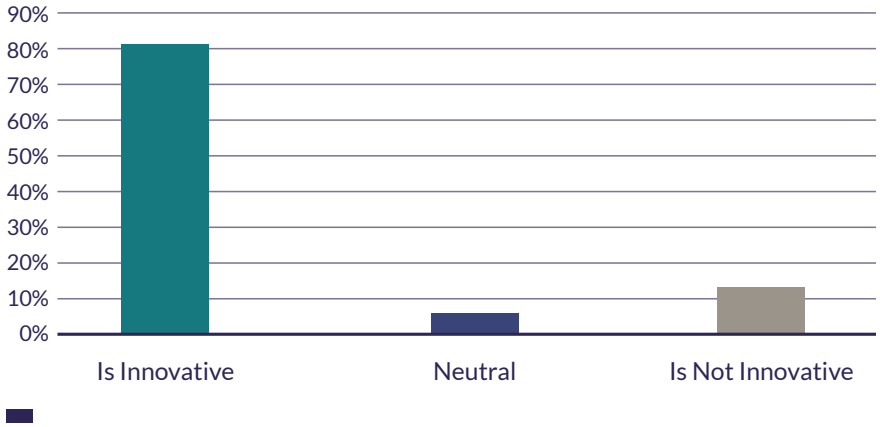

Figure 10: Denmark is Innovative

The above figure graphs the responses of interviewees to the question: do you consider the public service of Denmark to be innovative? (N=27).

society organisations that work closely with the public sector. Innovation barometer data also shows that employees and collaboration are prominent drivers of successful innovation processes (Figure 11).[48]

These findings are consistent with previous research which compared the Nordic countries innovation strategies, finding that Sweden, Finland and Iceland focus more on structural instruments related to incentives and acting environment, while Denmark and Norway to a greater extent have a practice-based and process-oriented approach focusing on tools and support for individual organisations.[49] Norway has started to modify its strategy in public sector innovation recently and taken a more ambitious approach; aiming to lead by central missions and structural supports.[50]

Figure 11: Factors which promoted or hindered innovation

Source: COI (ed.) (2021), "New and translated Innovation Barometer figures."; The figure is based on the question: "Which factors promoted or hindered the innovation work? Specifically consider the most recent innovation at your workplace only." The percentages on the right show the total proportion who have answered "Promoted to some extent" and "Promoted to a great extent" to the individual factor, while the percentages on the left show the total proportion who have answered "Hindered to some extent" and "Hindered to a great extent". The questions are only asked to those workplaces that have introduced at least one innovation in the period. The percentages in each bar do not add up to 100% because the answers "Do not know" and "Not relevant" are omitted. Data are weighted to represent the public sector as a whole. n = 1,877

DECENTRALISED GOVERNANCE

Innovation at the Municipal Level

Throughout interviews conducted as part of this scan, there was a strong consensus that much of innovation at the municipal level is driven from the bottom up. In the municipal context where the connection between public servants and citizens is more direct, innovation often comes as a result from the pressure to meet the evolving, immediate needs of citizens. Many innovations in the areas

48 COI (2021). "New and translated Innovation Barometer figures."

49 NIFU and Ramboll Management Consulting (2019) The Nordic countries' strategies for innovation in the public sector. Report.

50 Kommunal - og moderniseringsdepartementet (2020), "En innovativ offentlig sektor. Kultur, ledelse og kompetanse", Regjeringen, Oslo. https://www.regjeringen.no/contentassets/14fce122212d46668253087e6301cec9/no/pdfs/stm201920200030000dddpdfs.pdf.

of social services, employment access, childcare and early education have resulted from the ideas, ambition and implementation of employees on the front lines at the municipal level. Municipalities have generated huge successes in these areas; developing innovative education solutions, social services and creative approaches to service design, many of which have spread to multiple jurisdictions.

Innovation at the Regional Level

The regions in Denmark have also showcased strong competencies in innovation, as well as effective networks for idea sharing and collaboration across regions. Some regions have chosen to establish innovation hubs alongside the bureaucracy of the regional government (e.g., Health Innovation Centre of South Denmark), while others such as Central Denmark have pushed for an approach of embedding innovation in the everyday life of the region rather than creating a centralised unit; building on the strengths of the innovative culture and mindsets of employees. Innovation at the regional level is often driven by front-line workers, or is developed in response to the pressures faced by the healthcare system with an aging population and shrinking workforce; many interviewees working at the regional level and in the health field saw innovation as a foundational requirement to meet citizens' needs in a challenging and resource-constrained environment.

Innovation at the State Level

Compared to the municipal and regional levels, innovation at the state level was seen to be driven more by top-down drivers such as political priorities rather than bottom-up drivers (e.g., citizens, front line workers). Interviewees indicated that the national government has an important role to play in empowering actors to innovate across all levels of government. Yet, since the closure of MindLab, many interviewees found that the national government and especially ministries had 'withdrawn' from participating in public sector innovation directly. The state is seen to

Photo Credit: Nils Lund, COI

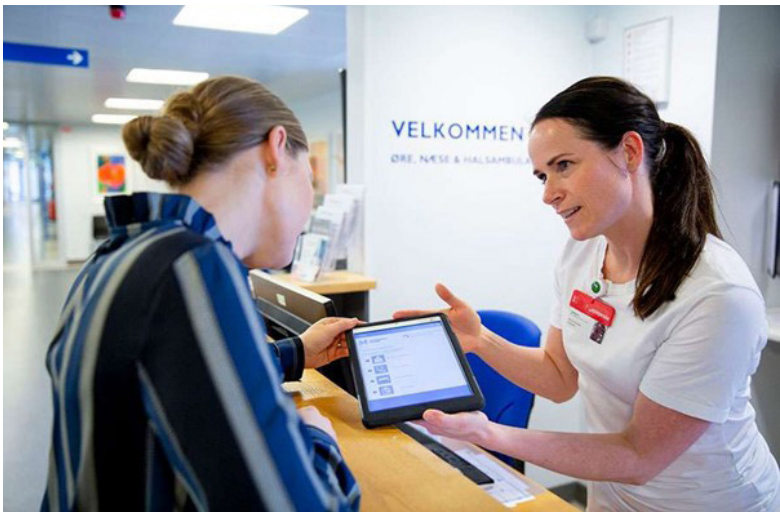

Photo Credit: Nils Lund, COI

"I would say innovation has been kind of sidelined. Yes, there is a recognition of the need of more innovation that is not being fully integrated into the public administrations. And that goes for the regional level, as well as the state level. But I would say the state level is probably the worst; has the worst place in this sense. Less is happening."

– Regional Government Stakeholder

perceive their role as enablers rather than active participants. In this context, innovation may be quickly side-lined in the face of pressing, immediate priorities.

Support from the state was reported to include financial aid, as well as setting a framework for and a culture of experimentation. There is an expectation that national government should provide high level support for experimentation, and to achieve that result, include approaches that generate testable solutions. National government is expected also to foster and create space for organisational learning as an outcome to experimentation rather than greater efficiency or financial savings in the short term. This requires leadership from both political and administrative communities to "walk the talk" of innovation: to demonstrate that failure is tolerated, experimentation is welcome and that innovation is crucial for the successful future of the welfare state. The growing attention on mission-oriented innovations and the need to define across-government challenges and tackle them in a coordinated matter requires national government and ministries to take an active role in public sector innovation.

Municipal and regional innovation has a tendency towards the improvement of existing programs and reacting to uncertainty by engaging directly with citizens and stakeholders; at the state, the focus is more on large-scale transformation plans such as digitisation.

INNOVATION CHALLENGES IN A DECENTRALISED AND DEVOLVED CONTEXT

A current focus on immediate concerns rather than future challenges.

Municipal and regional governments play a crucial role in the delivery of essential services as part of the Danish welfare state. Notably, municipalities are central in the fields of education and social services, while regional governments bear immense responsibility for meeting healthcare demands. As such, the work of municipalities and regional governments is firmly grounded in the needs of users. In this context, innovation often comes directly from frontline workers who develop and implement innovations in response to the evolving needs of users. However, given the immediacy of issues encountered by municipal and regional governments, interviews revealed that innovation projects often largely focus on immediate problems with quick solutions and outcomes rather than engaging with future challenges in these fields. As such, that the analysis indicates limited investment and energy is dedicated to innovation approaches that create broad space to find solutions to major priorities, or engage with possible

Photo Credit: Nils Lund, COI

future problems and solutions. As elsewhere in OECD countries, short-term budgetary and political cycles also tend to favour innovation projects with quick, immediate outcomes over future-focused or highly complex innovation projects and experiments where the outcomes are less tangible and span over longer time horizons.

Balancing autonomy with direction and support

Another challenge with a highly distributed governance structure is balancing the autonomy of municipal and regional governments, with the need for national government support to enable innovation. While this can be a difficult balance, the state has an important role to play in enabling innovation to happen at all levels of government: supported by strategic direction paired with investments in learning, capacity, and funding. This was also the topic with most discord on aspects of how to tackle the issue in both analysed interviews and the validation session. Many of those interviewed remarked on the success of the digitalisation strategy in balancing the role of actors at all levels of government, with the need for strategic direction and supports to implement such an ambitious agenda. Some interviewees associated this success with the fact that the strategy was co-designed with all levels of government involved, and that it enabled actors across levels of government to be innovative. Examples of innovation strategies can be found around the world (see Irish example in Box 3).

A number of interviewees also reflected that the Danish governance model based on consensus might unintentionally produce a clash between national priorities and local needs. While consensus-based decision making seemed to work well when it could be aligned with administrative multi-jurisdiction planning and budgetary processes, some interviewees commented on the fact that this can make collaboration difficult when balancing varied funding and political cycles and priorities which can crowd out more niche, locally contextualized problems and solutions.

> *"We acknowledge that there's a lot of innovation going on. And there's a lot of development going on within all sectors and also across sectors to some extent. But we believe that there is a lack of, of thorough, deep, radical innovation, real tests at larger scale, and also a need for developing a culture of sharing knowledge, ideas, experience, across philosophies and logics and sectors."*
>
> – Regional Government Stakeholder

BOX 3: IRELAND'S PUBLIC SERVICE INNOVATION STRATEGY

Ireland's recently published Public Service Innovation Strategy "coordinates the Government's ambitions and commitment to grow innovation across Ireland's Public Service," centred around four priorities:

1. Putting users at the heart of services
2. Developing a permanent culture of innovation
3. Sharing successful innovations to maximise lessons learned and collaboration
4. Involving more and new voices in public sector transformation, and experimenting with new technologies and emerging policy approaches.

The Strategy itself comes with multiple implementation supports, such as detailed guidance, tools, and templates.

Source: Our Public Service. "Innovation Strategy." Irish Department of Public Expenditure and Reform, Dublin. https://www.ops2020.gov.ie/actions/innovating-for-our-future/innovation/innovation-strategy/.

> *"It's easier in the state, to control everything to manage our employees in the local sector to set checks in schemes and et cetera, and make the big analysis forming the legislation. But the problem is that it's not conforming the real solutions at a local level."*
>
> – Municipal Government Stakeholder

FOSTERING A CULTURE OF EXPERIMENTATION

In the context of a distributed system, the national government can play an important role in setting the space and culture for experimentation; enabling actors at the municipal and regional levels to innovate and test non-conventional solutions and approaches. One example of this type of approach is with the Free Municipality experiments (Frikommuner). With similar experimental structures in place in other Nordic countries since 1980s, the aim is to exempt municipalities from state rules to allow municipalities to focus on innovating and experimenting in response to local needs. Initial evaluations of these experiments highlight that they led to an increase in citizen involvement in the use of public services, and have provided opportunities for new solutions in areas such as social services, supports for vulnerable citizens, education, child welfare and more.[51] The success of many of the Free Municipality experiments has also been tied to the informal networks established between municipalities that provided a forum to discuss experiments and spread solutions.[52] These experiments have provided an opportunity for bottom-up innovation, to allow front-line actors and citizens to find innovative solutions and improvements to the welfare state.

> ***"We are very much looking to each other also for innovation and innovative ideas that we can steal. Happily."***
>
> – Municipal Government Stakeholder

BOX 4: PUBLIC SECTOR INNOVATION FUNDING IN NORWAY

In 2020, the Research Council of Norway announced up to NOK 200 million in R&D support for Innovation Projects for the Public Sector. This funding is for projects in which public sector bodies are in need of research in connection with innovation activities. The projects are to be designed to generate sustainable value creation. It will be possible to apply for support for projects in a range of different thematic areas, and many sectors and service areas will find this to be an appropriate funding instrument for their needs. Funding will also be available for projects that extend across sectors and service areas.

Source: The Research Council of Norway (2020), "Innovation Project for the Public Sector." https://www.forskningsradet.no/en/call-for-proposals/2020/innovation-project-for-the-public-sector.

Despite these successes, interviewees commented on the challenges of high administrative burdens, and lack of funding to support these experiments as barriers to success of this initiative. For example, in Free Municipality Trials the Danish Municipal Association found that the administrative costs outweighed the benefits in 2019, advising local governments to not apply for the scheme.[53] Supporting the experiments and public sector innovation with dedicated funding, as seen in the Norwegian example (Box 4) could help to further enhance the conditions for experimentation. Currently funding is spread out among different initiatives (add examples) and no dedicate public sector innovation funds exist as due for example in Sweden under Vinnova. In some cases, grant schemes from private sector companies and foundations can play a bigger role in supporting risk-funds in the Danish public sector, but the projects they support may not be in line with the government's broader strategic aims. There is a risk of efficiency is lost due to a lack of strategic coordina-

51 Hjelmar, Ulf (2021), "Ni år med frikommuner har skabt bedre løsninger for borgerne", Det Nationale Forsknings- og Analysecenter For Velfærd, Kronik. https://www.vive.dk/da/udgivelser/ni-aar-med-frikommuner-har-skabt-bedre-loesninger-for-borgerne-15820/.

52 Hjelmar, U., (2019), "The institutionalization of public sector innovation".

53 KL til kommunerne (2019), "Lad være med at søge om nye frikommuneforsøg" https://www.dr.dk/nyheder/regionale/hovedstadsomraadet/kl-til-kommunerne-lad-vaere-med-soege-om-nye-frikommuneforsoeg.

tion with private sector foundations that also fund a significant and growing share of R&D activity in the private sector.[54]

Denmark's culture of innovation is at odds with an interpretation of professionalism that strives to avoid error. This requires additional attention on how to communicate and enable the culture and practice of experimentation.

Political Support for Innovation

Political leaders play an important role in steering reform agendas, setting the tone for a culture of innovation, and enabling innovation within the system.[55] The interaction between the civil service and the political leadership is crucial for driving, initiating, enabling and implementing innovation.[56] Innovation barometer data has pointed to the fact that political decisions have played a positive role in six out of ten public innovations.[57] Yet, some research also shows that the types of innovations that politicians support may be slightly different from public administration-led innovations.[58] There is a particularly strong drive in the political agenda in Denmark for innovation in the face of budget cuts, as well as innovation in the face of ambitious climate targets and increasing pressures on the welfare state due to ageing. However, in these latter areas, the political drive is largely a push from the public sector to deliver results, than an explicit request for innovation. As such, innovation still has to be supported and driven at the administrative level. Despite a drive from the political realm to push innovation in certain areas, there remains a gap in explicit political support for the practical components of a diversity of innovation approaches, notably in supporting experimentation, opening up tolerance to failure (see Box 6), and investing in innovation efforts with a longer term focus (e.g., futures exploration, anticipatory innovation governance and foresight). In OECD member countries, the declaration of public sector inno-

BOX 5: CASE STUDY - THE RISE AND FALL OF THE MINISTER OF PUBLIC SECTOR INNOVATION

In 2016, the Danish government established the position of a Minister for Public Sector Innovation within the Ministry of Finance. The goals of the minister were to implement the coherency reform programme (transparency, digital transformation, simplifying lives). While establishing this position demonstrated a political priority in the area of innovation, there was little knowledge of the Minister's role, and the position ceased to exist after the government term ended in 2019. One reason for the former could have been the fact that a support structure that would have speered on more strategic initiatives at the Ministry of Finance was missing and the role was absorbed into day-to-day politics.

Source: Greve, C. (2019), "Reform og forandring: Sammenhængsreformen." https://slideplayer.dk/slide/17578618/

"If you scan the political agendas of political parties or if you scan this the strategies of public sector institutions, innovation is not very high on the agenda."

– Regional Government Stakeholder

54 Ketels, C., Hanouz, M.D., Hunter, J., Kuhlmann, S., Raven, T., Heringa, P., Gabai, U., Marklund, G. and Palmberg, C., 2019. Peer Review of the Danish R&I System: Ten steps, and a leap forward: Taking Danish innovation to the next level.

55 Hartley, J. (2013), "Public and Private Features of Innovation." In Handbook of Innovation in Public Services, edited by S. P. Osborne and L. Brown, 44–59. Cheltenham, UK: Edward Elgar Publishing.; Emre Cinar, Paul Trott & Christopher Simms (2019), "A systematic review of barriers to public sector innovation process", Public Management Review, 21:2, 264-290, DOI: 10.1080/14719037.2018.1473477.

56 COI (Fortcoming), "Kommunalpolitikeres og embedsværkets roller i innovationsprocesser", Working paper.

57 COI (2020). "Innovationsbarometeret".

58 Thøgersen, D., Waldorff, S.B. and Steffensen, T., (2020), "Public Value through Innovation: Danish Public Managers' Views on Barriers and Boosters". International Journal of Public Administration, pp.1-10.

vation has supported the emergence of political support to public sector innovation.[59]

> *"Often our politicians and the ministry is much too focused on not making these mistakes so that we look professional, than they are focused on creating better solutions for the problem. If we could get rid of this, I think that we could make faster innovation, and I think we will see civil servants that will be much more brave."*
>
> – State Government Stakeholder

Governments are known for their tendency to be risk-averse and opposed to failure, largely due to the pressure to be resources-effective and accountability to the public for their decisions. This context makes it difficult to justify the risk and possible failures that are inevitable with innovative and experimental approaches.[60] The public sector of Denmark is certainly not immune from this challenge, as actors across levels of government, including the political level, have been fired for failures. This makes it all the more crucial to invest in structures to learn from failure and evaluate innovation in ways that ensure at that learning is an outcome, regardless of whether the original objective of the innovation was achieved. This also requires a culture and narrative shift from the highest levels to demonstrate that failure will be necessary for innovative ideas and projects to progress, particularly in the face of complex futures.

Political support – and understanding of the innovation process – can be crucial, particularly in mission-oriented, cross-portfolio agendas. This must be balanced with a different kind of hands-off, but financially and culturally enabling, support for distributed, bottom-up, and locally relevant innovation.

Spreading innovation[61]

Interviewees noted that the trend towards spreading innovative solutions horizontally and between levels of government continues to grow. Despite this, there was a common narrative throughout interviews that "not invented here" syndrome still hinders the spread of innovation, notably on the municipal and regional levels. This demonstrates a degree of reluctance to spread or scale solutions that were developed in other contexts, notably in cases where there was no cross-involvement in problem definition, ideation, development or implementation of solutions. Innovation Barometer data also points to the fact that only 49% of innovations are being shared to enable others to reuse this solution (Figure 12).[62] At the same

Figure 12: Half of public innovations are shared so that others can reuse the solution

Source: COI (ed.) (2021), "New and translated Innovation Barometer figures."; The figure is based on the question: "Have you actively done anything to share the most recent innovation so others are able to reuse your solution(s)?" The question was only asked of workplaces that have introduced at least one innovation in the period 2018-2019. Data are weighted to represent the public sector as a whole. n = 1,877.

59 OECD Legal Instruments (2019), "Declaration on Public Sector Innovation." https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0450.

60 Tõnurist, P. and A. Hanson (2020), "Anticipatory innovation governance: Shaping the future through proactive policy making", OECD Working Papers on Public Governance, No. 44, OECD Publishing, Paris, https://doi.org/10.1787/cce14d80-en.
Brown, L., & Osborne, S. P. (2013), "Risk and innovation." Public Management Review, 15(2), 186–208. doi:10.1080/14719037.2012.707681.

61 "Spreading innovation" is used in the Danish public sector frequently and the definition overlaps concepts such as scaling, innovation diffusion and dissemination. When any of the former specific terms are meant in the upcoming analysis then a specific note will be made.

62 COI (ed.) (2021), "New and translated Innovation Barometer figures."

time, the Innovation Barometer data shows that 72% of the innovations are either inspired by others solutions or copied and only 18% are the first of their kind meaning that in some form spreading of innovations happens (Figure 13).[63]

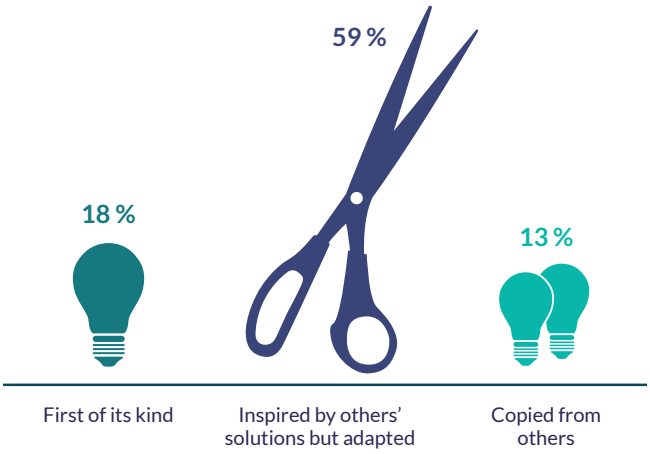

Figure 13: The majority of innovations are either inspired by the solutions of others or copied from others

Source: COI (ed.) (2021), "New and translated Innovation Barometer figures."; The figure is based on the question "For the latest innovation was ..." with the answer categories "your workplace was the first to develop and implement the innovation (as far as you know)", "innovation inspired by other people's solutions, but significantly adapted to your workplace", "Innovation to a large extent a copy of other people's solutions" and "Do not know". The question was only asked of workplaces that have introduced at least one innovation in the period 2018-2019. The percentages in the figure do not add up to 100%, as the figure does not show the 10% who have the answer "Do not know". Data are weighted to represent the public sector as a whole. n = 1,877

Photo Credit: COI

Public servants who participated in the interviews tended to see the public sector community in Denmark as small and well-connected, and that they would naturally hear about innovations from people they knew, relying on this as a system, however, this informal connection of networks may not be sufficient to move from the more simple dissemination of solutions and ideas into the concrete act of spreading and scaling innovations. There may be many different reasons for this that apply in different contexts that also came forth during the validation session of the scan. There are specific systemic factors that specifically inhibit the spreading of innovation. Notably, funding sources for innovation focus on providing funding for new projects which establish new ideas and solutions, rather than on financing the spread of an already existing innovation. Moving from idea to implementation is difficult in all circumstances, but the barriers to do so are extenuated with a lack of, or non-existence of funding through the entirety of a project cycle including scaling. Support measures to also incentivise 'last mile' innovations (things that will make innovations cost-effective on a larger scale at the final user end) may be also missing. This may contribute to innovation 'project sickness,' where public sector innovations do not have established value chains and development does not move from problem to problem, but rather from project to project. Moreover, there is a need to evaluate innovations and help them scale once the experiments in different public sector organisations have provided a proof of concept. At the moment these functions on the municipal and regional level are largely missing and based on informal collaborations.

These barriers to spreading and scaling innovation solutions can also be related to the lack of collaboration between the public and private sectors , where the public sector tends to claim owner-

63 Ibid.

ship of problems and problem definition, thereby excluding the private and civil society sectors at early stages in the innovation process. Challenges internationally have been used to tackle these issues (see Box 7 for Canadian experience). This is often demonstrated in strict procurement rules and lack of involvement of the private sector in early stages of the tendering process.

Innovation barometer data also points to the importance of professional relationships or networks for inspiring innovations across the public service (Figure 14).[64] While many networks are informal, some more formal communities such as the Danish Municipal Association and Danish Regions have played an important role in facilitating the spread of innovation to reduce duplication of research and experimentation efforts.

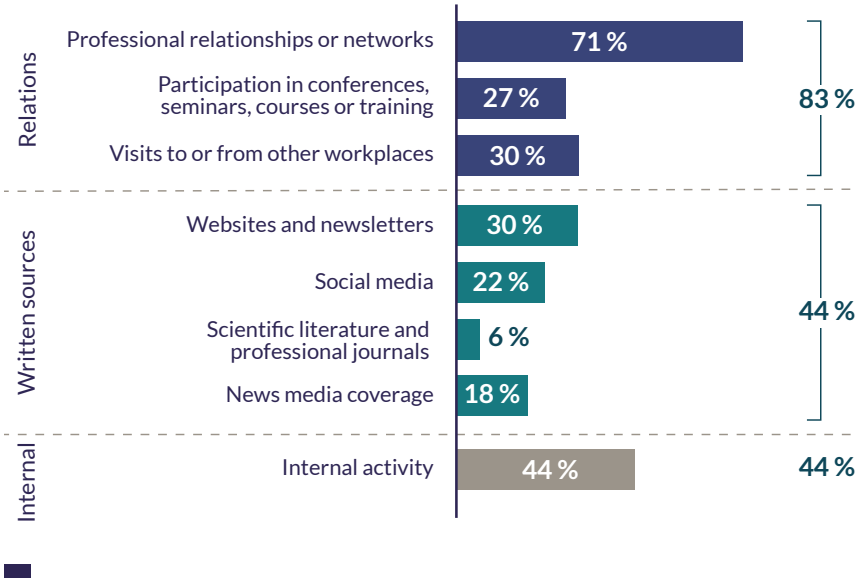

Figure 14: Channels used to spread innovation

Source: COI (ed.) (2021), "New and translated Innovation Barometer figures."; This figure shows the channels through which workplaces have tried to share their latest innovation so that others can reuse the solution. The percentages farthest to the right show the percentage who have selected at least one of the sharing channels within the category. The categories are an analytical addition and have not been shown as part of the question. This figure is based on the question: "What channels have you used to try to spread the innovation?". The question is only asked of workplaces that have tried to share their latest innovation so that others can reuse the solution. The percentages in the figure add up to more than 100% because the workplaces have had the opportunity to choose several answer options. The figure does not show the 12% who answered "Other" or "Do not know". Data are weighted to represent the public sector as a whole. n = 950.

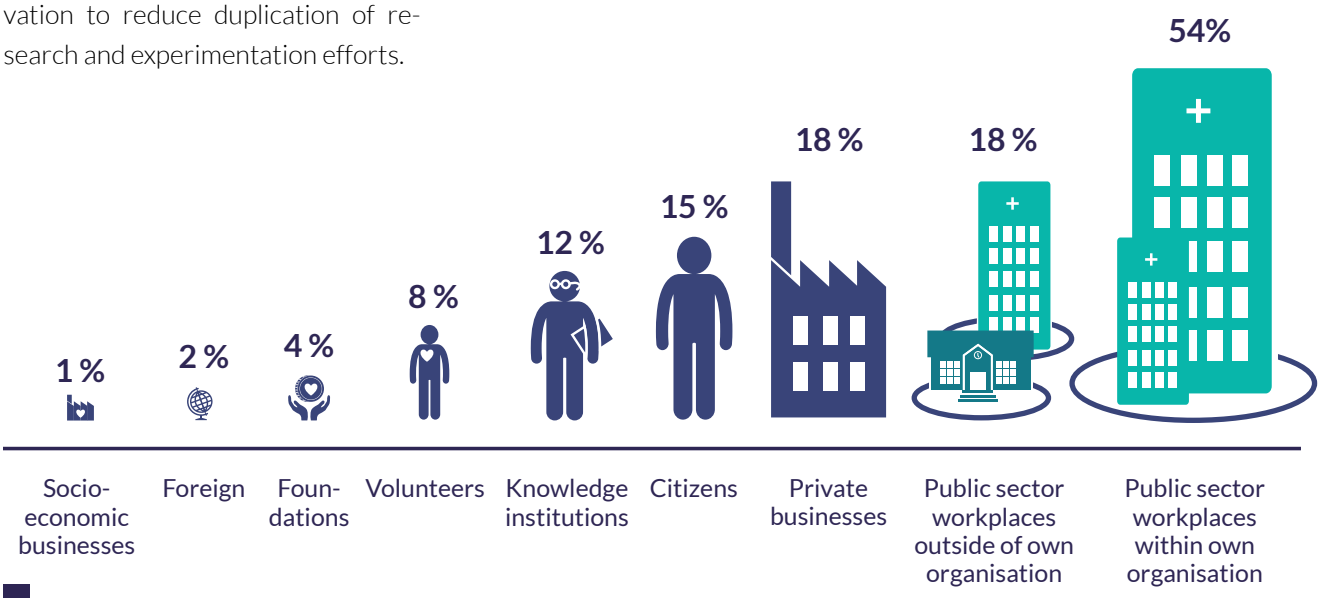

Figure 15: Collaboration with partners in innovations between 2018-2019

Based on the responses of organisations that have collaborated with other partners in innovations conducted between 2018-2019, the following figure represents the diversity of collaboration partners.

Source: COI (ed.) (2021), "New and translated Innovation Barometer figures."; The figure is based on the question: "During the development of the most recent innovation, did your workplace collaborate with any of the following?" The question is only asked of workplaces that have introduced at least one innovation in the period 2018-2019. The shares in the figure add up to more than 100% because workplaces were able to select multiple responses. The figure only shows workplaces that collaborated on their latest innovation. Data are weighted to represent the public sector as a whole. n = 1,877.

64 COI (ed.) (2021), "New and translated Innovation Barometer figures."

Denmark's system includes a range of overlapping innovation areas, particularly for social and health care outcomes. Any improvements to information flow, particularly upstream the problem definition, scoping, and experimental design phases, could bring research and practice benefits.

Collaboration within and across sectors

While collaboration does exist in the public sector innovation space in Denmark, collaboration with actors outside of the public sector and especially private businesses and third sector remains limited according to interviewees. Overall collaboration with both internal and external parties is relatively high at 69% according to Innovation Barometer data, exactly half involving external stakeholders. Figure 15 shows the diversity of actors involved in public sector innovation. Collaboration was reported throughout different stages of solution development, most commonly during the development or adaptation of solutions, and sometimes involving two or more partners (See Figure 16).[65] While innovative procurement and collaboration options may be available, these options may not always be widely known or leveraged. Given the prominence of innovation in private sector and civil society organisations, collaboration in this area can be further enhanced. The lack of collaboration reflects a gap between knowledge and problem holders – in order to bridge this gap, a diversity of actors need to be brought into the problem defining, solution development, and implementation. Governmental silos may have an effect here as specific ministries may define problems and also collaboration in discrete terms meaning that more complex issues and interconnected topics are not explored. Some of these issues may start in ministries, but trickle down through programmes and funding measures also to municipalities and regions. Furthermore, many interviewees from the private and civil sector also referenced an excessive "problem ownership" of the public sector, where outside partners were not invited early behind the table and public sector mostly valued innovations coming out of the sector itself rather than through collaborations with other parties.

BOX 7: IMPACT CANADA: ENABLING INNOVATION TO MEET SOCIETAL CHALLENGES

Incentivizing innovation in the private and civil society sector can be difficult when immediate gains and benefits are not clear. This is particularly difficult in the face of complex societal challenges where considerable R&D investment is needed in advance of bringing a product or service to market.

The Government of Canada introduced a government-wide effort, Impact Canada, to help accelerate innovative funding, innovation and challenge-based procurement of innovate products and services to incentivise innovation in complex areas.

These challenges include:

- Food Waste Reduction Challenge
- Deep Space Food Challenge
- Drug Checking Technology Challenge

The challenges are open to any for-profit or not-for-profit organisations across civil society, industry, academia and beyond and are aimed at supporting the development of innovative solutions in the face of economic, environmental and social problems.

Source: Impact Canada (2021), https://impact.canada.ca/en.

65 COI (ed.) (2021), "New and translated Innovation Barometer figures."

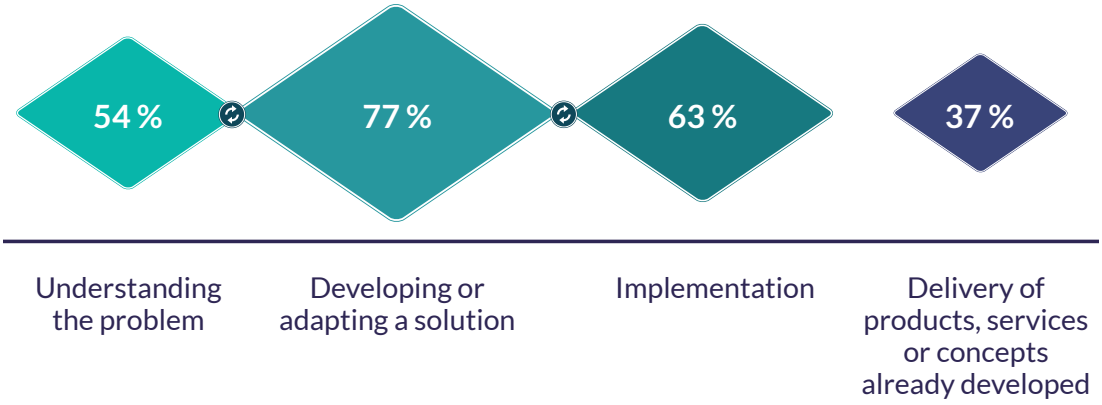

Figure 16: Involvement of collaborators in various stages of innovation work

Source: COI (ed.) (2021), "New and translated Innovation Barometer figures."; The figure is based on the question: "What innovation work did the collaborator(s) take part in?" Respondents were asked to answer the question for each partner they have worked with. The question is only asked to those workplaces that have collaborated with someone on the latest innovation. The percentages in the figure add up to more than 100% as respondents were able to select multiple responses. The figure does not show the 8% who answered "Other kind of cooperation" or the 7% who answered "Do not know" to the question. Data are weighted to represent the public sector as a whole. n = 1,334.

Collaboration on innovation in the Danish public sector is high, but there could be other opportunities to take it further (e.g., using procurement to spur on innovation). While ties between public, private and third sector exist, there is opportunity for the public sector, particularly at the state level, to do more to lead in this space.

FUNDING AND STRATEGIC POLICY PLANNING

One of the key challenges raised by interviewees is the lack of consistent funding for innovation projects, particularly, funding that spans through all project phases (including implementation), and funding for longer-term innovation projects that utilise methods like mission-driven and anticipatory innovation.[66] Most innovation projects are self-funded by individual organisations. Interviewees noted that while funding exists, it is often linked to short-term budgetary or political cycles, and that it rarely provides funding for all stages of projects: from idea to implementation. In particular, there appears to be a lack of funding for future focused projects, high-risk projects and

66 COI (2020). "Innovationsbarometeret"; Innovation barometer data shows that the majority of innovations are funded by a workplace's own budget (54%) or central funds within an organisation (22%).

"First of all, you have to find out what kind of problems do we want to solve, and then you have to convene the right competences and the right people and the right institutions around the table."

— Stakeholder from outside the public sector in Denmark

BOX 8: CASE STUDY: AARHUSKOMPASSET

This experimental initiative in Aarhus Municipality is aimed at improving cooperation across sectors and with citizens to better frame problems, engage actors, and develop solutions. The key principles include focus on value, strengthened co-creation and knowledge-informed practice and management.

Source: Aarhus Kommune (2021) "Aarhuskompasset - Aarhus Kommunes udvikling af en ny forståelsesramme", https://nyeveje.aarhus.dk/nye-veje-til-velfaerd-og-vaekst/aarhuskompasset-aarhus-kommunes-udvikling-af-en-ny-forstaaelses-ramme/#1.

complex experiments that are more difficult to evaluate and are dealing with long-term outcomes. These budgetary pressures are particularly strong at the municipal and regional level where innovation funding consistently favours projects with short time horizons; that focus on immediate concerns over projects that span multiple budgetary cycles. For example, while the Free Municipality experiments are an excellent opportunity for experimentation, there is no dedicated funding through the program to support these experiments, and limited coordination to support municipalities in this process.

Current budgetary processes tend to favour incremental and enhancement-oriented innovations driving forward innovations through yearly cuts and business cases for new public sector development projects. Furthermore, in the current funding system where public sector innovation is financed through similar measures to those of the private sector, the dominance of narrow, project-oriented funding streams do not support the evolution of ecosystems and broader innovation domains that are becoming increasingly critical in mission-oriented innovations. There is a diversity of public and private funds available to support innovative projects (e.g., Signaturprojekter, Fremfærd, Landdistriktspuljen); however, these funds are often designated to a specific topic area or jurisdiction and not specific to public sector innovation. The Innovation Fund in Denmark is currently trying to tackle this in their mission-driven approaches, but it remains to be seen how successful they will be in building holistic cross-sectoral funding measures. The role of public procurement for innovation could play a large role here if strategically used.

Budget processes remain better suited to funding work with short-term outputs and high degrees of perceived certainty, as well as enhancing existing programmes and services. More forward-looking initiatives may go unsupported.

"Innovation is a budget consumer, it can be very expensive, and it can be very unpredictable. So therefore, it doesn't go very well, along with a system that we have in many countries, where the budget is for one year, and where the budget is something that you should, you should keep, it's not being regarded as an investment. Just like a highway that you invest in for five years. innovation has never been seen like that. Which means that it becomes short sighted and restrained."

– Regional Government Stakeholder

BOX 9: VINNOVA, SWEDEN'S INNOVATION AGENCY

Vinnova is a 200-employee government agency within the portfolio of the Ministry of Enterprise and Innovation. Mandated to nurture the innovation capacity and impact of Swedish organisations, Vinnova provides funding of approximately 300 million EUR annually to innovation in technology, research and development, and societal challenges. In 2021, Vinnova is pivoting towards a mission-driven approach and a renewed set of focus areas, including health, school food systems, and vibrant and sustainable cities. Somewhat uniquely, Vinnova funds across sectors, including the public sector; for instance, the Municipal Ideas Hubs programme was designed to create and support structures for bottom-up feedback loops and citizen service innovations.

Source: https://www.vinnova.se/en/

EVALUATION AND MEASUREMENT

One of the greatest barriers to supporting and sustaining innovation globally is the inability to measure results and systematically learn from experimentation.[67] Innovative projects are difficult to evaluate as they – correctly – set outcome goals but not necessarily process outputs that tend to be easier to measure, but more difficult to define (experimenting with multiple possible solutions throughout their lifecycle, generating learning and knowledge as interim outputs). However, public organisations still need to report on public spending and provide, as best they can, accountability in both the short and long terms, which is often at odds with experimental approaches.

> ***"We don't have risky money in the public sector, it's within the businesses. And if you look at it, a lot of innovation, especially in healthcare is very risky and very expensive."***
>
> — Regional Government Stakeholder

While tools such as the VIVE methodological framework and other innovation evaluation resources exist in Denmark, interviewees noted that they are not being systematically used, and people are often unaware of where to find these resources. Some of these resources are already provided by the National Centre for Public Sector Innovation such as the Guide to Evaluating Public Sector Innovation.[68]

> ***"Mistakes are some of the most important things, at least when you only make the same mistake once."***
>
> — Regional Government Stakeholder

In this context, there is an opportunity to strengthen awareness, understanding and diffusion of existing evaluation frameworks but particularly in the area of innovation as it relate to grand societal challenges. This action could be coupled with others focused on supporting the use of existing tools and building relationships between funders, evaluators and project implementers to support innovative project development and evaluation. Such tools and relationships can help improve the longevity of innovation projects, and create opportunities for better understanding and learning from outcomes.

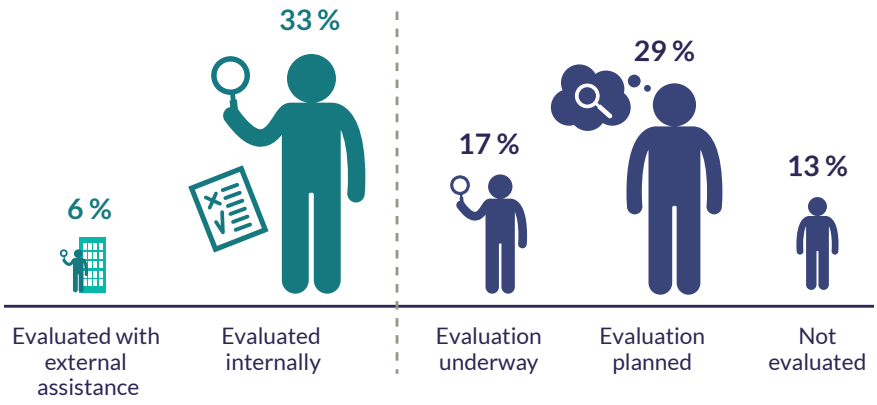

Figure 17: Four out of ten public sector innovations have been evaluated internally or with external assistance

Source: COI (ed.) (2021), "New and translated Innovation Barometer figures."; The figure is based on the question: "Has your workplace evaluated the most recent innovation?" The question is only asked of workplaces that have introduced at least one innovation in the period 2018-2019. The percentages in the figure do not add up to 100%, because the 2% which answered "Do not know" are omitted. Data are weighted to represent the public sector as a whole. n = 1,877.

67 OECD (2018), "Evaluating Public Sector Innovation: Support or hindrance to innovation?" Observatory of Public Sector Innovation, Paris. https://oecd-opsi.org/wp-content/uploads/2019/05/Evaluating-Public-Sector-InnovationPart-5a-of-Lifecycle-Report.pdf.

68 Read more: https://www.coi.dk/en/tools-and-publications/download/a-guide-to-evaluating-public-sector-innovation/.

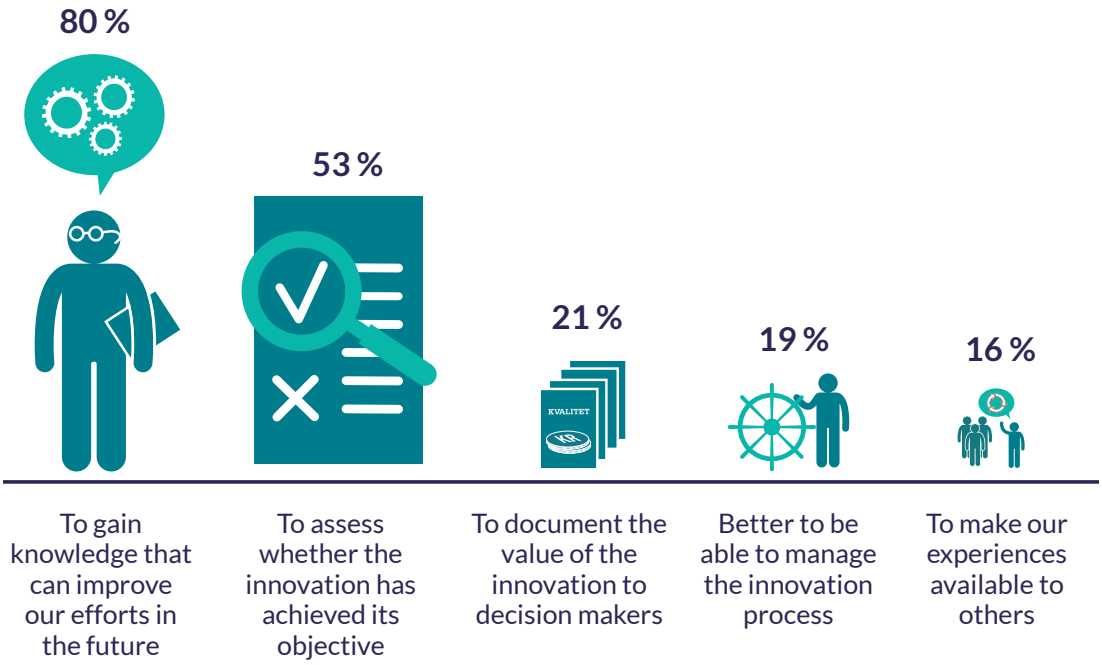

Figure 18: Purposes of evaluating public sector innovation

Source: COI (ed.) (2021), "New and translated Innovation Barometer figures."; The figure is based on the question: "What was/were the most important objective(s) with the evaluation?" The question was only asked of workplaces that have evaluated the latest innovation internally or with external assistance. The percentages in the figure add up to more than 100% because the workplaces have had the opportunity to choose several responses. The figure does not show the 5% who answered "Other". Data are weighted to represent the public sector as a whole. n = 749.

Innovation barometer results have highlighted that, beyond assessing whether the innovation has met its objective, evaluation can be an important tool for gaining knowledge on how to improve efforts in the future (Figure 18).[69] Denmark has also taken a leadership role in the area of public sector innovation measurement and coordinated the work of a community-led initiative on public sector innovation measurement culminating with the creation of the Copenhagen Manual (Box 10).

Evaluation of innovation remains one of the persistent challenges for many countries, but even so, limits Denmark's progress potential. While tools and guidance are available, there are communications, cultural, and capacity pillars that require sustained attention.

BOX 10: COPENHAGEN MANUAL

Copenhagen Manual is a practical guide to how and why a country can benefit from measuring public sector innovation. Launched in the binning of 2021, it is based predominantly on the Innovation Barometer experience in Denmark, Norway, Sweden, Finland, Iceland, Germany, the Netherlands and New Zealand. Overall experts from 20 country participated in the co-creation process of the manual under the leadership of the National Centre for Public Sector Innovation (COI).

Source: COI (ed.) (2021), "Copenhagen Manual", National Centre for Public Sector Innovation (ed.), Copenhagen. https://www.innovationbarometer.org/copenhagen-manual/.

69 COI (ed.) (2021), "New and translated Innovation Barometer figures."

CULTURE, LEADERSHIP AND CAPACITY BUILDING

There was a strong sense from interviewees that innovation is featured as a central part of the culture of the public sector in Denmark. This in part comes from the desire to maintain a highly effective welfare state. Public servants pointed to the existence of an innovations that were well-received by citizens. This has created a sense that innovation is a genuine force for positive societal development. In the face of budget cuts, as well as the desire to create value for citizens, employees at all levels of government, notably on the front lines, have consistently played a fundamental role in the innovation process. There is also a strong culture among the Danish public service that is supportive of new ideas, is open to new technology solutions, is willing to engage with new possibilities and experiments, and is open to learning from mistakes (Figure 19).[70] These cultural strengths are conducive to bottom-up innovation.

Figure 19: Innovation and workplace culture (Innovation Barometer, 2019)

Source: COI (ed.) (2021), "New and translated Innovation Barometer figures."; The figure shows the extent to which a number of statements fit with the culture of the workplace. The percentages on the right show the total proportion who have answered "Completely agree" and "Partially agree" with each statement, while the percentages on the left show the total proportion who have answered "Completely disagree" and "Partially disagree". The questions are asked under the wording: "To what extent do you agree or disagree with the following statements about your workplace?" The percentages in each bar do not add up to 100% because the answers "Do not know" and "Not relevant" are omitted. Data are weighted to represent the public sector as a whole. n = 2,271.

Innovation Barometer data in Denmark also produces an image that is in stark contrast to popular myths containing anecdotes about employees being resistant to change: employee contributions to innovation are remarkably high (Figure 20).[71] Not unlikely, social trust (belief in honesty, integrity and reliability of others) plays a role in this. Actively contributing to an innovation process as an employee requires confidence in both oneself and in others, not to mention one's belief in the ca-

70 COI (ed.) (2021), "New and translated Innovation Barometer figures."
71 Ibid.

pacity to contribute to change for the benefit of others. The Nordic countries have high levels of social trust in the world.[72] A low power distance from employees to managers is also likely to enhance innovation.[73]

Interviewees noted, however, a lack of deliberate action from leaders in public sector organisations to take a more active role in supporting innovation. They argued that in some cases this is due to a lack of knowledge, while in others, it is due to a fear of failure. There is a need for investment in both education and capacity building at all levels of government. Notably, senior leaders in public sector organisations should be systematically trained in innovation to guide them in understanding how different types of innovation are both strategic tools and necessities for the public service to meet the complex challenges ahead. Moreover, the interviews indicated a need for stronger support from the leadership level to provide the conditions for innovation capacity building and skills development. These conditions should include a direct requirement for innovation capacity building throughout all levels of government, supported by consistent funding for it to happen. This includes building systematic learning loops around innovation projects.

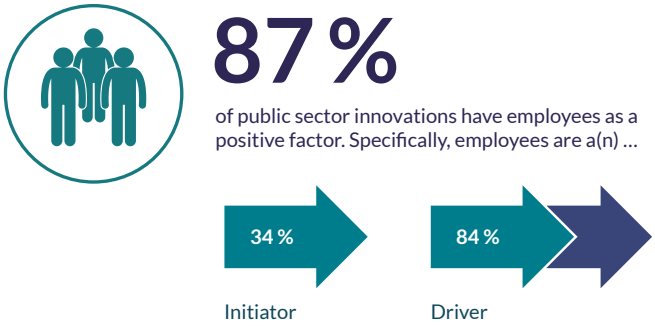

Figure 20: The role of employees in innovation

Source: COI (ed.) (2021), "New and translated Innovation Barometer figures."; The figure shows the proportion of public innovations in which employees played a positive role. The percentage covers the workplaces that have indicated a positive role for the employees in at least one of two questions: Whether the employees have been one of the reasons why the latest innovation was launched and whether the employees promoted the most recent innovation. The two questions are only asked to workplaces that have introduced at least one innovation in the period 2018-2019. The two sub-elements add up to more than 87% because employees may have played a positive role in innovation in more ways than one. Data are weighted to represent the public sector as a whole. n = 1,877.

> ***"There's a critical mass of culture and capacity and norms in the Danish public sector that lead towards innovative outcomes."***
>
> — Regional Government Stakeholder

Education and understanding is crucial to enhancing the role of both senior public servants and ministers in promoting innovation, experimentation and a willingness to learn from failure. In the face of heavy media scrutiny, it can be difficult to justify high-risk and transformative projects that require experimental and innovative approaches. Building learning loops around all possible project outcomes, including failure, might help to alleviate the burden of failure, and frame failure as a learning opportunity rather than lack of success.

The leadership cadre of the Danish public sector is well-trained and understands the need for, and concept of, innovation. However, there remain gaps in translating innovation into practice, organisational design and enablement, and in particular, communicating and supporting experimentation and future-oriented innovation.

72 Connaughton, Aidan (2020), "Social trust in advanced economies is lower among young people and those with less education." Pew Research – Fact Tank, News in the Numbers. https://www.pewresearch.org/fact-tank/2020/12/03/social-trust-in-advanced-economies-is-lower-among-young-people-and-those-with-less-education/.

73 Rinne, T., Steel, G.D. and Fairweather, J. (2012), "Hofstede and Shane revisited: The role of power distance and individualism in national-level innovation success." Cross-cultural research, 46(2), pp.91-108; Power distance means the "extent to which less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally." Low power distance countries value equality among their members and encourage democratic forms of participation.

Innovation in the face of grand societal challenges and a complex future

The COVID-19 crisis has demonstrated the extent of the complex, wicked problems ahead. This increasing complexity demands future-focused innovation, foresight, exploration and experimentation to help steer the public service and society towards preferred futures. Interviews and innovation barometer data have highlighted that the existing drivers, organisational factors and structures supporting innovation in Denmark are largely focused on responding to immediate challenges with quick returns on investment rather than engaging with complex challenges ahead. Moreover, budgetary and political cycles in Denmark do not favour projects with longer timeframes aimed at achieving complex outcomes beyond the current political and budgetary cycles. The research indicates that for the public service to achieve long-term and transformative outcomes and anticipate disruptions, investment in future-oriented innovation methods that engage with future challenges is required. This is particularly important at the municipal and regional levels where the immediate needs of citizens are ever-present and demanding on the public sector.

There is also an opportunity to deploy specific innovative methods (notably, mission-oriented innovation and anticipatory innovation) in the face of two known challenges: the demographic challenges facing Denmark (i.e. ageing and diminishing workforce), as well as climate change. Recent OECD research indicates that a blend of anticipatory and mission-oriented approaches in this area could help to set a clear strategy and intent for innovation in these areas, create mechanisms for deliberate problem definition, funding and evaluation, and a could encompass cross-sectoral and pan-governmental approach in the face of what might otherwise be unsolvable problems. For example in Norway and Finland, future life-events are tied to missions connected to better future welfare (see the example of the Aurora AI project in Finland.[74] Moreover, anticipatory innovation governance approaches could be leveraged to deliberately engage with the complexity of possible futures in these areas, and steer towards preferred futures.

Denmark's stated goals for innovation at the national level require an evolution beyond the current experience and capacity set, and should be paired with a capacity for future-oriented thinking that safeguards investments towards complex and uncertain challenge areas.

74 Berryhill, J., et al. (2019), "Hello, World: Artificial intelligence and its use in the public sector", OECD Working Papers on Public Governance, No. 36, OECD Publishing, Paris, https://doi.org/10.1787/726fd39d-en.

SUMMARY

The section above has presented the emerging elements that frame Denmark's public sector innovation system including the decentralised structures, culture and experimentation, funding and strategic policy planning, evaluation and measurement and leadership and capacity building that most visibly influence decision-making processes and innovation outcomes. These coalesce into three themes, combining many of the above elements, which are key to considering the implications for Denmark's future innovation and the challenges and opportunities they present:

1. **Innovation as a core capability, sustained by networks and momentum**
2. **Balancing common priorities with decentralised contexts**
3. **Building on leadership and closing gaps: culture, capacity, and evaluation**

INNOVATION IS A CORE CAPABILITY, SUSTAINED BY NETWORKS AND MOMENTUM

Denmark represents an almost paradoxical duality, in that innovation is seen as part of the fabric of the public sector, enabled by a critical mass of competent and professional employees with innovation backgrounds, yet is characterised by few government-wide structural supports and goals. No actor or organisation is responsible, beyond advice, for providing stewardship on innovation goals, capacity, and structures. While culture can be a powerful force, it is invariably shaped by structures and incentives that turn into experiences and interpretations. There are innovation teams, labs, and case studies throughout the jurisdictions and levels, but few overarching layers beyond the small team at the National Centre for Public Sector Innovation to ensure coverage in gaps, or to connect the parts of the system together. This is the paradox: innovation is seen to be working as a capability for the public sector but there is a reliance on support structures that are invisible, informal, asymmetrical, and, to some extent, fragile. This means that innovation is working only where current drivers direct it, which leaves the question of what is happening where these conditions are not supportive and there may be gaps. This was also showcased by the fact that innovation cases analysed in this scan from the innovation awards and the reflections of interviewees were largely adaptive or enhancement-oriented in nature (see Figure 9 in section above). While the country's priorities in public sector innovation are shifting towards public values, welfare state transformation, variety of missions and upcoming complex and uncertain challenges, this may not be sufficient anymore. There is a need for different types of innovation and thus, what is naturally occurring will not be enough. New support measures, structures and roles are needed to respond to the aforementioned challenges and this should be facilitated in a strategic manner. This also includes funding and other feedback mechanisms that currently are focused on efficiency-based value calculations for developments and innovations.

Balancing common priorities with decentralised contexts

This reliance on informal structures may be adequate, albeit subject to shocks and backslide. However, there is a parallel theme that carries implications for the resilience of innovation capability,

which is the increasing importance of marshalling multi-sectoral innovation and attention towards complex, horizontal, long-term societal challenges. These include COVID-19, climate goals, and increasing pressures on the welfare state driven by changing demographics. One government level alone will not be able to tackle these issues and this is especially the case in Denmark with a devolved/decentralised governance structure. National government cannot respond to these challenges without the involvement of municipalities and regions, and coordination on the national level may be required to avoid system fragmentation and duplication.

Ultimately, however, it is about balance: to what extent should the national level lead discussions, propose problems and analyse learnings from local experiments? While there is a crucial role for central authorities to play in convening discussion, funding, and supports for innovation aligned towards common goals, this cannot completely crowd out local experimentation. Municipal and regional funding and innovation space is important for contextually-aware approaches and goals across Denmark's socio-demographic, governance, and regional landscape. The national government should learn how to open up problem spaces for collaborative innovations across government levels and co-design visions for the future that allow for local experimentation. This may help the government to both provide direction that municipalities and regions are looking for, without dismantling the self-governance principles held in high regard. This may also help to tackle silo-issues on the national level that trickle down into regional and municipal level policy initiatives: if policy innovations and reform start on the national level in silos, they tend to manifest in the same way in lower levels.

> ***"I think we innovate in the outer layer of the onion, but we rarely, very rarely, get to the centre of things."***
>
> — Regional Government Stakeholder

BUILDING ON LEADERSHIP AND CLOSING GAPS: CULTURE, CAPACITY, AND EVALUATION

Denmark is in a very positive situation: it can rely on a public service that appreciates innovation, sees it value and has skills and knowledge within the topic. Yet, while innovation is seen as core to the fabric of the public service, there is an equally strong sense that the accountability deserved by citizens of a strong welfare state should suggest a nearly "error-free" administration, optimised efficiency, and an avoidance of failure. This is a duality of a pro-innovation culture and a remarkably consistent assessment that there is a "fear of failure." With recent signals from the system around accountability, internal legitimacy (largely due process and fear of failure) has become more important than external legitimacy (good outcomes). This has seeped into procurement and external collaboration practises with civic society and private businesses – both which could serve as ripe sources of innovation. More ambition and support for transformative innovation in leadership is needed and also systemic capacity building on that level.

Denmark, at an advanced stage of the maturity spectrum, still has gaps to close: addressing evaluation approaches in a system designed for regular results reporting and accountability, and the culture and incentives questions that brings. However, if any country is positioned to experiment – and reap the benefits – of promising practices to address these challenges and lead globally in extending the innovation maturity spectrum, it may be Denmark,

KEY CONSIDERATIONS

LEVERAGE MISSION-ORIENTED INNOVATION APPROACHES

Denmark is facing several key challenges including climate change and ambitious climate targets, and an aging population which places demands on the welfare state. The government may consider developing a coherent mission-driven approach that incorporates public sector innovation at its core.

There is a strong drive from government leadership to address these issues, as well as a bottom-up push from citizens and front-line workers for change in these areas. This leaves the country ripe for a mission-driven approach to innovation in these fields, supported by political drive, strategic intent, dedicated funding and a strategy co-developed across levels of government to define and address specific mission areas. In this area there are also ample opportunities to test and experiment with new ways of working across government levels (state, regional and municipal) and also sectors. Capacity to support this process in the public sector needs to be built up. While missions may be coordinated and spurred from different ministries and even levels of government, sufficient innovation support measures should exist (capacity, evaluation, tools and methods) and need to be provided. This may also include support in using demand-side measures for missions and addressing issues around risk-taking. This may also mean that there is a need for an action-oriented innovation support role that the National Centre for Public Sector Innovation could undertake with the support of other partners.

Steps to consider:

- Analyse the possible ongoing and upcoming mission areas.
- Conduct a needs assessment on the capacity needs and possible barriers for mission-driven work (e.g., procurement, ecosystem management).
- Establish action-oriented capacity building programs for mission-oriented innovations that support ongoing processes and new missions.
- Experiment with different mission-driven support systems: bottom-up/movement-driven approaches and top-down moonshots. Allow for flexibility in approaches.

- Facilitate a structured learning process from bottom-up experimentation connected to missions, support for scaling and last-mile innovations.
- Establish and support portfolio management practises for missions so that interventions can be continuously analysed in a systemic way and their contribution to the mission achievement analysed in context.

BUILD ANTICIPATORY INNOVATION GOVERNANCE CAPACITY

Denmark needs to prepared for complex, volatile and uncertain challenges. For this, the Danish government can consider whether more structural sensemaking on emerging issues and commitment to futures and foresight in the public sector is needed. Without such approaches, the Danish government may fall behind from its international leadership role in areas such as digital government. This should be tied concretely to innovation efforts so there is room to take action and explore these challenges in practice.

Most innovation efforts and funding cycles in Denmark favour innovations with tangible and rapid outcomes. Notably, on municipal and regional levels, innovation often comes in response to immediate concerns of citizens, or drive from frontline workers to improve processes to better address citizen needs. Radical innovation currently is not on the government's radar, while there is dire need for radical solutions.[75]

As such, further consideration can be given to strengthening anticipatory innovation governance approaches that support experimental innovation, foresight and futures thinking with dedicated funding, evaluation mechanisms, governance structures and supports on long-term time horizons. Such approaches should directly involve engagement with citizens, front-line workers, private sector, civil society and other key actors to build on the success of bottom-up innovation in Denmark while focusing deliberately on future and complex challenges.

Solid and well-developed anticipatory mechanisms can safeguard all other program and policy spending against future shocks, negative futures, and inaccuracies in assumptions by enabling decision makers to envision the implications of a range of scenarios. In addition, anticipatory mechanisms can help highlight common future needs across Denmark (this could replace or refine the current approach where jurisdictions conduct overlapping experiments with social and governance interventions, which may then spread through networks). Anticipatory governance can instead help proactively identify emerging challenges and allow jurisdictions to align on, and triage, a portfolio of experiments to generate knowledge about promising policy and programme approaches.

75 BETA/COI (2020), "Søges: Radikale løsninger", https://www.coi.dk/viden-og-vaerktoejer/materialer/toplederanalyse/.

Steps to consider:

- Conduct an environmental scan to collect and convene any existing futures work.
- Establish a community of practice around anticipatory innovation, connected futures and foresight tools and methods.
- Establish demand for anticipation in strategic planning processes (e.g., a yearly report co-created across sectors on upcoming trends and challenges).
- Align the products with political cycles and analyse when and how to communicate this information most productively to different stakeholders.
- Select and conduct demonstration cases in concrete areas on how futures and foresight can contribute to policy innovations and spur on radical experimentation on the ground.

IMPROVED CAPACITY FOR EVALUATION, LEARNING AND SPREADING INNOVATION

Innovation capacities on the leadership level to engage with both mission-oriented innovations and anticipatory change can be further developed and reinforced through communities of practice, capacity building programs, better tools for evaluation and communication. Additionally, more could be done to share learnings and evaluate innovation as the first step towards more systemically spreading innovations across the sector.

One of the greatest barriers to innovation is the lack of knowledge on how to evaluate, measure and learn from outcomes. Without evaluation of outcomes, it is difficult to justify investments, particularly for high-risk projects where failure may occur as an outcome. Existing structures, benchmarks, tools and resources for evaluating innovation and supporting innovation through evaluation are not being systematically used, and people are often unaware of where to find these resources. As such, investment should be made in systematically supporting innovation evaluation across levels of government, and building knowledge and competencies in how to measure, evaluate and systematically learn from innovation. The capacity to spread innovation across government levels should increase with concrete measures to help public servants dedicate time and effort to spread innovation. This may also require new tools and support measures to incentivize innovation dissemination, diffusion and scaling.

Governance approaches that mitigate false perceptions of risk, such as open communication about experimental approaches, citizen and civil society programme engagement, and programmes like the Free Municipality experiments can be useful additions. Moreover, leadership could benefit from additional training and information about the importance of innovation, despite the levels of risk, to foster a culture that is more open to innovation. This should be paired with a renewed commitment to innovation capacity at the managerial and executive levels to ensure that innovation is not an invisible assumption for program and service areas that are prepared to leverage it as a toolset and mindset, but rather, a reliable, government-wide capability for navigating complex problems.

This can be paired with a paradigm shift for knowledge and policy transfer between jurisdictions. The ingenuity and professionalism of Danish public servants can form the core of learning and experimentation approaches, leading to a focus on peer-to-peer learning paired with more conventional training. In lockstep, these structures could focus less on spreading innovations and more on the practices that led to the innovation, as well as the evaluation and impact. In this way, knowledge transfer can be maximized while supporting jurisdictions in ensuring that novel approaches suit local contexts. This could be led by The National Centre for Public Sector Innovation (COI) in a coordinating role.

Steps to consider:

- Establish a community of practitioners from across sectors on innovation management to share learnings and spread innovations.
- Carry out a needs assessment for senior leadership innovation management support.
- Create a senior leadership innovation capacity building program.
- Address risk aversion and fear of failure in public sector competency frameworks and performance management systems. Create an expectation for innovation and (controlled) risk taking.
- Set up internal and external communications strategies to help ensure people know what others are doing and to share lessons as well as communicate progress and success.

CONSISTENT FUNDING FOR INNOVATION

Public sector innovation is currently dependent on various unstable funding streams with different intents. This tends to create an ad hoc innovation portfolio that is not systematically and consistently supported with feedback mechanisms. More dedicated resources coupled with risk funding for upcoming topics such as missions and anticipatory innovation could be explored.

Development of such funding schemes should go hand in hand with the public sector innovation strategy, where the purpose of innovation could be put in line with different avenues of resourcing. A diversity of innovation approaches is needed to respond to immediate challenges, be better prepared for future challenges, and to steer towards better futures for society. However, a diverse innovation portfolio will not be possible nor successful without consistent and deliberate investment in innovation. This investment could include support for innovation which runs beyond typical political and budgetary cycles, support for capacity building, and supports for innovation evaluation in long-term time horizons. There is room to seek out synergies and areas where common needs and goals could be convened for greater impact and also seek to fund innovations on scale across different parties or with a high likelihood of being scaled. This could also secure funding for the implementation of innovation. Without such investments, innovation which focuses on future challenges will consistently be de-prioritised in the face of immediate challenges, despite its importance for successful future societal outcomes.

Steps to consider:

- Carry out a needs assessment for innovation funding.
- Establish dedicated public sector innovation funding schemes that incentivise values beyond cost-efficiency.
- Create a transformative innovation fund for more radical experimentation and risk-taking in the public sector.
- Create long-term financing for public sector innovation, particularly, mission-driven programs.
- Set shared strategic priorities for public sector innovation

OUTLINE AN OVERARCHING INNOVATION STRATEGY.

There is a need for a more systemic integration of individual innovation support mechanisms, incentives, tools and methods aimed towards common goals and policy challenges; building synergies between individual programs and institutions. Hence, shared priorities for strategic strengthening of the overall innovation system could be established as part of a flagship innovation strategy.

An innovation strategy could be established that creates a strategic direction and objectives for innovation, establishes supports for mission-oriented and anticipatory innovation governance, and focuses on enabling bottom-up innovation from the private sector, civil society, regional, municipal and state levels, rather than an environment of command and control. This strategy could be led by a central agency in the Danish public sector either leading on public sector innovation (Ministry of Finance) or core policy development goals (Prime Minister's Office), but generated in a co-creative manner. Synergies with the digital strategy could also be built up more clearly.

Such a strategy could prioritise specific key societal challenges, and establish dedicated efforts to support innovation that spans beyond political and budgetary cycles. The development process could be given as much attention as the product itself; innovation strategic planning provides an opportunity for actors in a decentralised system to recognise their roles, articulate common goals, and commit to collective action. Such a strategy would create ambition and strategic demand for innovation, while focusing on enabling innovation at all levels of government. In order for a strategy of this nature to succeed, it needs to enable and build-up mechanisms for collaboration across levels of government and with actors outside of the public sector, including civil society organisations, citizens, academia and the private sector.

The strategy could be developed in a step-by-step approach similar to Norway, which approved the Public Sector Innovation White Paper recently and has since integrated its goals into digitalisation and other strategies connected to the topic. It is important to tie the strategy to core challenges government is facing today such as climate change, demographic issues, UNSDGs etc. to make sure public sector has a whole is able to deliver on these challenges in innovative ways.

Steps to consider:

- Establish a clear mandate for the creation of an innovation strategy.
- Create a pan-governmental leadership group with senior executives from all levels of government and a secretariat to establish the innovation strategy.
- Analyse upcoming policy areas, problems and their concrete needs for innovation and link these to structural supports needed.
- Establish a co-design process with concrete aims and actions for the strategy that is open to participants across sectors.
- If needed, adopt a step-wise approach going from a white paper to a concrete public sector innovation action plan.[76]

CONCLUSION

The Danish public service has strong competencies in public sector innovation and is internationally recognised for its success in the realms of digitalisation, welfare services, and bottom-up innovation. The Danish approach to innovation is aligned with the government's adherence to the OECD Declaration on Public Sector Innovation, but more ambition could be introduced to the system. While the Danish approach to innovation has been perceived successful, the possibilities for innovation are constantly evolving, particularly in a context of growing uncertainty and complexity in the modern world.

This innovation scan has provided a critical preliminary reflection on the public sector innovation system of Denmark, built on the analysis of existing research, interviews with stakeholders from across levels of government and sectors, and insights from a wide range of actors across the system. The resulting key considerations provide an opportunity for discussion and action to build on existing success of the innovation system to enhance how innovation is leveraged and supported moving forward. As noted in the outlined considerations, scans are only partial analyses of the system and more analysis is needed (such as that carried out in OECD reviews) to fully appreciate the complexity of the Danish public sector innovation system.

While the Danish approach to innovation has been largely successful to date, awarding the country international recognition for innovation and digitalisation, the context of increasing complexity demands for further refinement of the public sector innovation system. Despite the fact that innovation is a core capability of the Danish public sector, few systematic, government-wide supports exist to sustain a diversity of innovation approaches across levels of government. More structural support for innovation across different levels of government is needed. A common strategy to drive and support innovation in the face of large societal challenges (e.g., Climate change) could

76 See further information here: https://oecd-opsi.org/what-makes-for-a-good-innovation-strategy/.

help spur on innovation in a context of decentralised governance and avoid duplication and waste and accelerate scaling of successful innovations. Moreover, mission-oriented approaches to innovation (innovation with a clear goal), paired with anticipatory innovation (engaging with new shifts and possible futures) should be leveraged to support deliberate innovative efforts that go beyond immediate challenges to support better future outcomes. All of these innovation efforts could be supported by consistent funding, evaluation capacity, learning loops, and innovation capacity building to steer the Danish public sector towards continued success.

Throughout the evolution and steering of the Danish public sector innovation system, the following checklist of key actions could be considered:

1. **Recognise the public sector innovation system is dynamic and evolving: there is no perfection or end point.** As such, the system needs to be constantly questioned, shaped and evolved based on changing conditions – success to date should not result in complacency.

2. **Build on the strengths of the system.** Denmark is known for its culture of innovation and for the excellence of front-line workers in developing and supporting innovative ideas and projects. In this context, innovation should be supported to enable innovators to build on these strengths and successes.

3. **Gather around common goals and challenges.** There is an opportunity to build on the unique strengths of municipal, regional and state-level governments, paired with the diverse knowledge of actors outside of the public sector to collectively define, explore and innovate in the face of complex problems to steer towards better societal outcomes for all.

> ***"COVID-19…. not a lot of good things to say about COVID-19, but it has shown that everyone is ready, to correct, or to adjust, their first impressions, for the higher goals of tools for reaching higher goals… The problem is that we don't have that much of a burning platform."***
>
> — Municipal Government Stakeholder

4. **Invest in constant learning.** In a constantly evolving world, the process of learning and capacity building is never complete. To support innovation in this context, a consistent investment in capacity building, knowledge sharing and innovation evaluation is needed to ensure that innovation, regardless of outcome, is contributing to learning and improvement in the public sector.

5. **Invest in the future.** While Denmark has demonstrated huge successes in innovation in the face of immediate challenges, a future of complexity and uncertainty awaits. A deliberate financial, resource and strategic investment should be made in innovation that engages with uncertainty to steer towards preferred futures for Danish society.

The Danish public sector has an opportunity to build on the immediate learnings from the COVID-19 crisis, paired with decades of practice and success in public sector innovation. The innovative culture and capabilities of the Danish public sector can be supported and steered to improve societal outcomes both in the face of immediate challenges, but also in the face of a future burdened with complexity. While this task is far from easy, strategic direction and supports that enable innovation and collaboration across sectors and levels of government will enhance the possibility of positive outcomes.

ANNEX

A. LIST OF INTERVIEWEES

Torsten Andersen, Deputy Director General, Danish Business Authority
Diana Arsovic Nielsen, Director, Regional Development, Capital Region of Denmark
Laura Auken Larsen, Head, Danish Institute for Voluntary Effort (DIVE)
Jakob Bigum Lundsberg, Director of Social Services, Næstved Kommune
Christian Bruhn Rieper, Deputy Director General, Danish Environmental Protection Agency
Henning S. Christensen, Director, Regional Development, Region of Northern Denmark
Anders Folmer Buhelt, Head, Danish Social Innovation Academy
Sophus Garfiel, Permanent Secretary, Ministry of Social Affairs and the Interior
Carsten Greve, Professor, Copenhagen Business School
Pernille Halberg Salamon, Municipal Director, Hørsholm Kommune
Stefan Hermann, Rector & Vice Chancellor, University College Copenhagen
Niels Højberg, Municipal Director, Aarhus Kommune
Tessa Lind Gjødesen, Head of Innovation, Odense University Hospital, Region of Southern Denmark
Lene Krogh Jeppesen, Chief Consultant, National Centre for Public Sector Innovation
Morten Mandøe, Chief Economist, KL – Local Government Denmark
Dorte McEwen, Head, Strategy and Analysis, Gentofte Kommune
Annemarie Munk Riis, Vice Director, Innovation Fund Denmark
Jesper Nygård, CEO, Realdania Foundation
Jette Petersen, Director General, Danish Agricultural Agency
Majken Præstbro, Head of Relations, National Centre for Public Sector Innovation
Jakob Riis, President and CEO, Falck
Eva Sørensen, Professor, Roskilde University
Peter Stensgaard Mørch, Permanent Secretary, Ministry of Finance
Helle Vibeke Carstensen, Municipal Director, Faaborg Midtfyn Kommune
Louise Weikop, Head, Aalborg Kommune
Adam Wolf, CEO, Danish Regions
Anonymous, Political Representative from State Level

B. VALIDATION WORKSHOP

A validation workshop, held on 22 February 2021, was used to discuss preliminary findings from interviews, innovation barometer data, and coded interview data with a range of stakeholders from across levels of government, civil society, academia and the private sector. The preliminary insights were shared with participants who were thereafter asked to share whether they agree with the insight, disagree, or have specific comments as to how the insight impacts there organisation or a specific level of government. Thereafter, participants entered breakout discussions to engage with the following questions:

- Were there any drivers, challenges, needs or recommendations that you think are missing?
- What role should the state play in supporting innovation across levels of government?
- Did anything stand out to you as a driver, challenge, need or recommendation that is unique or particularly apparent at your level of government?
- What role should COI play in supporting innovation

The workshop was concluded with two questions to participants:

- What is the greatest need that needs to be addressed in order for the Danish public sector to be more innovative? (Choice whether to send to everybody, or just the host)
- What would you like to see come out of this innovation scan?

This workshop served an important function in refining the scan insights, and steering the direction of recommendations.

Workshop Participants:

Observatory of Public Sector Innovation: Kent Aitken, Heather Buisman, Angela Hanson, and Piret Tõnurist.

National Centre for Public Sector Innovation: Ole Bech Lykkebo, Pia Gjellerup, Lene Krogh Jeppesen, Majken Præstbro and Paul Sauer.

Stakeholders: Mikkel Bech, Majbrit Berlau, Helene Bie Lilleør, Jonas Dahl, May-Britt Diechmann, Sine Egede, Poul Erik Lauridsen, Andreas Espersen, Peter Frost, Michael Hansen, Ulf Hjelmar, Morten Hyllegaard, Sune Knudsen, Kim Kofod Hansen, Henning Langberg, Simon Lindegaard, Mette Lindstrøm Lage, Andreas Maaløe Jespersen, Käthe Munk Ryom, Tina Øllgaard Bentzen, Rie Perry, Nathalie Phuong Nguyen, Jette Runchel, Henrik Schødts, Jette Søndergaard, Marianne Thyrring, Anne Vest Hansen and Jeppe Villumsen.