

Adoption of Generative AI and Large Language Models in Danish Public Administration

Troels Oscar Schmitto

Technical University of Denmark
Research Section: Strategy and Leadership Development
Ballerup Campus
Lautrupvang 15
2750 Ballerup
Denmark
Troesch@dtu.dk

Mathilde Buskbjerg Madsen

Technical University of Denmark
Research Section: Strategy and Leadership Development
Ballerup Campus
Lautrupvang 15
2750 Ballerup
Denmark
Mabum@dtu.dk

Kasper Edwards

Technical University of Denmark
Research Section: Strategy and Leadership Development
Ballerup Campus
Lautrupvang 15
2750 Ballerup
Denmark
Kaed@dtu.dk

Adoption of Generative AI and Large Language Models in Danish Public Administration

Abstract

This pilot study examines how employees and managers in Danish public administration experience the use of generative artificial intelligence and large language models in their work. Through workshops and interviews in two municipalities, the study identifies opportunities and challenges in adoption. Participants highlight benefits such as improved efficiency, enhanced text quality, and support for administrative tasks. However, adoption is shaped by legal uncertainty, data security concerns, unclear managerial guidance, and subtle social expectations to use AI efficiently. Use is often self-initiated and driven from the bottom up, creating a disconnect between government and local management aspirations and actual practices. In some cases, AI use remains informal or hidden due to concerns about compliance or perceived norms. These findings suggest that while AI offers real potential, successful implementation depends on more than technical access—it requires organisational readiness, legal clarity, and an awareness of the informal dynamics that shape everyday use.

Wordcount: 4971

1 Introduction

In late 2022, the introduction of ChatGPT marked the beginning of an artificial intelligence gold rush in the Danish public sector, prompting most organisations to adopt generative artificial intelligence to remain relevant (Bright et al., 2024; Damsgaard, 2025; European Union, 2024; Dansk Arbejdsgiverforening & BCG, 2024). The European Union's Artificial Intelligence Act further reinforced this trend, emphasising that AI will be a key factor in maintaining competitiveness (Damsgaard, 2025; European Union, 2024; CFL & Institute for Futures Studies, 2024).

This study focuses on generative artificial intelligence and large language models (LLMs). Generative artificial intelligence is trained on significantly larger datasets than traditional machine learning models and includes broader modalities and use cases such as chatbots and image generators. Generative chatbots like ChatGPT, Microsoft Copilot, and Google Gemini all fall into the LLM subcategory and can generate textual responses based on vast amounts of input data (Deloitte & Kraka, 2024; Implement Consulting Group, 2023). We limit the scope of this study to generative AI and LLMs due to their prominence in public debate and their potential to assist with general administrative tasks (Deloitte & Kraka, 2024; Dansk Arbejdsgiverforening & BCG, 2024; LEAD & Fremfærd, 2024). Henceforth, we refer to generative AI and LLMs simply as *AI*.

AI represents a type of digital technology that stands out by being accessible to anyone with internet access, and with researchers suggesting that employees, rather than management, may drive the initial adoption, AI adoption is also considered more complex than previous IT innovations (Neumann, Guirguis, & Steiner, 2022; Damsgaard, 2025). It is not by default a system that an organisation must purchase to benefit from. As a result, this technology offers significant potential for efficiency gains, quality improvements, and innovation because of this accessibility. Nevertheless, it may also present a governance challenge: its adoption and use often lie in the hands of employees rather than management. Management can prohibit, limit, or recommend usage. However, the effectiveness of such measures ultimately depends on employee behaviour unless employees are entirely blocked from accessing the internet – which is a rarity (Damsgaard, 2025).

AI promises augmentation, task elimination, and smarter workflows, improving efficiency and contributing to economic growth (Dansk Arbejdsgiverforening and BCG, 2024). However, the introduction and use of AI face challenges (Kulal et al., 2024). In Denmark, municipalities and regions experience data challenges regarding insufficient data quality and volumes needed to train a potential new AI (Deloitte, 2024). Furthermore, there are challenges with legal barriers, lack of apparent legal authority for processing personal data, and redundancy concerns for employees and maintaining competence (Deloitte, 2024; Kulal et al., 2024; Deloitte & Kraka, 2024).

While much of the current debate and strategic planning around AI adoption centres around high-level ambitions, there is limited knowledge about how these tools are actually used in practice, who is driving the adoption, and what challenges arise regarding the employees and, subsequently, management. In this explorative pilot study, we seek to understand AI in public

administration from an employee perspective, focusing on individuals working primarily in administrative functions, as their insights may reveal the everyday benefits and challenges of using AI. We will look for emerging themes, narratives, and practical examples of how AI is currently used in primarily administrative functions. To address the knowledge gap and guide the study, we ask: *How do employees and managers experience the use of AI in their daily work, and what opportunities, barriers, and organisational dynamics are associated with its adoption?*

We base our study in Denmark. According to the European Commission's 2022 Digital Economy and Society Index (DESI), three member states had AI adoption rates exceeding 15 per cent: Denmark at 24 per cent, Portugal at 17 per cent, and Finland at 16 per cent. By examining Denmark's experience and strategies for AI implementation, other countries and organisations may gain insights into effective practices and potential challenges of adopting generative AI in a seemingly AI-ready public sector.

2 Research context

2.1 The potential of AI

In Denmark, debates have focused on the magnitude of the potential of AI and the speed at which it can be realised (Implement Consulting Group, 2023; Dansk Arbejdsgiverforening and BCG, 2024). In 2024, the Danish Employers' Confederation asserts that implementing AI in Denmark's public sector could lead to a productivity increase ranging from 48 to 55 billion DKK (approximately 6.3 to 7.4 billion euros) by 2040. This efficiency increase could free up and reassign around 84.000 to 96.000 full-time positions within the public sector. Specifically, 20.000 to 23.000 of these positions would be administrative (Dansk Arbejdsgiverforening and BCG, 2024). It is suggested that, in administrative departments, AI can assist with tasks such as data analysis, emails, case notes, information retrieval, code work efficiency, HR and employee planning, contract drafting and review, drafting and working with legislation and case management (LEAD and Fremfærd, 2024; Dansk Arbejdsgiverforening and BCG, 2024; Deloitte and Kraka, 2024)

In collaboration with municipal and regional government associations, the Danish government has published a joint strategy primarily based on the expectation that AI holds substantial potential for freeing up public sector resources (Regeringen, KL and Danske Regioner, 2022). These examples emphasise the public sector's growing expectations for managers and employees to use this potential, driven by public debates and development strategies. However, less attention has been paid to the organisational and managerial prerequisites that need to be in place to realise the potential. Experience with using AI has shown that several legal, ethical, and social issues can hinder, slow, or, in some cases, end development (Deloitte, 2024). Although there have been many successful examples of AI applications, there are still significant examples where data security regulations or privacy concerns have slowed down or stopped the use of AI (ibid.) Furthermore, employee concerns have been highlighted in recent studies, mentioning heightened awareness of compliance issues and apprehensions about potential AI errors and job redundancy (LEAD and

Fremfærd, 2024). However, concerns about redundancy may be exaggerated, as only a few employees have reported losing job tasks to AI, and those affected have continued in their positions (Deloitte and Kraka, 2024).

2.2 AI efforts in the public sector

There is a collective effort across various Danish authorities (state, region, municipalities) to utilise AI and attempt to realise the potential specifically in the public sector (Regeringen, KL and Danske Regioner, 2022; Borregaard and Gramstrup, 2021). This effort manifests distinctively in public organisations: Some have an explicit strategy and plan around using AI (KL and Digitaliseringsstyrelsen, 2024), while others are more hesitant and wish to map data security and legal risks before implementing (personal communication).

According to some AI adoption might begin from the bottom up (Damsgaard, 2025). As mentioned, AI is available in a format that allows employees without special software or skills to access and use AI for many different tasks, and there are many examples of employees using AI on their own initiative in their work (Bright et al., 2024). By November 2024, 56% of Danes had tried using LLMs, and 64% used them professionally (IDA Analyse, 2024). In a report on developing employees' AI competencies, 46% of the 757 participants used ChatGPT in a professional context, while only 5% had experience with machine learning (LEAD and Fremfærd, 2024). The extent and the frequency of GenAI usage are somewhat known, but studies about how AI was adopted are lacking (Bright et al., 2024).

3 Methods

This pilot study applies an explorative, participatory approach to investigate emergent themes and narratives surrounding the adoption of AI in public administration. We investigated two organisations representing two municipalities in Denmark. The participating organisations cover different fields: communication, IT, finance, case management; tracking, processing and resolving. We conducted workshops with five to six employees at each organisation and individual interviews with two managers. In total, fourteen participants. No official or comprehensive list of public organisations currently using artificial intelligence exists at the time of writing. Therefore, we have selected the participating organisations through networking, e.g. our alumni network in the continued education program. The alumni are middle managers from private and public organisations studying for a Diploma in management or project management.

3.1 Workshop

We conducted Effect Modifier Assessment (EMA) workshops (Edwards and Winkel, 2018). The EMA workshop is a participatory workshop for identifying events that have influenced the adoption of AI in a specific period. In our case, we will use November 2022 as the beginning of our period. Each organisation contributed five to six employees, primarily engaged in administrative tasks and without personnel management responsibilities, to participate in the one-hour workshops. During the workshop, the participants were asked questions about important events related to the use of AI in their work from November 2022 to the present: *When and how did you first encounter AI? What do you use AI for? Have there*

been any changes to your tasks or working conditions since you first heard about AI? The participants noted one event per Post-it, and the facilitators displayed the responses on a shared timeline for all participants to view and discuss, allowing for a collective assessment of how employees perceive the impact AI has on their work. Finally, a photo of the timeline was taken for later analysis.

3.2 Interviews

We conducted two individual, semi-structured interviews with managers built around the same themes that form the basis for the workshops, supplemented by questions that specifically highlight the manager's role, tasks, and challenges managers experience with the use of AI. The semi-structured interviews include AI's current and future role in their work, the factors that support or hinder its use, and explore their relationship with top managers regarding AI, including the presence and impact of any AI-related strategies or policies on their daily management tasks. The workshops and interviews were conducted in the spring of 2025, and the analysis began in early summer.

3.3 Anonymity

This study aims to gather workshop data from participating employees and managers, which may include statements perceived as controversial by either. To gather candid interview data, we guarantee confidentiality between workshop participants and managers. If shared, the data collection will only be shown in its entirety to prevent the identification of any specific organisation. Data from interviews and workshops will be anonymised and stored in compliance with Danish legislation and GDPR.

3.4 Analysis

This study is a pilot project that applies an explorative and inductive research approach. We chose not to anchor our analysis in a predefined theoretical framework. The decision to avoid a fixed theoretical lens is deliberate, allowing us to remain open to the perspectives, language, and experiences that emerge organically within each organisation. Applying a theoretical framework at this stage would risk narrowing the scope of our inquiry or filtering out unexpected insights that do not fit neatly into existing models.

The analysis is based on an Affinity Diagram by Holtzblatt, Wendell and Wood (2004), which is a wall-sized, hierarchical visual tool used to organise large amounts of qualitative data – especially user insights – into thematic groupings. Built from the bottom-up using Post-its, the diagram clusters related observations into categories of Post-its that reflect recurring themes. All workshops were recorded and transcribed. From each participant's statement, a label was created using "I" and "We" phrasing—as if the participant were speaking directly to us—in line with the approach described by Holtzblatt, Wendell, and Wood (2004). The following section describes the clusters.

4 Results

4.1 The participants experience that AI enables new and generally more efficient ways of working

4.1.1 *Participants use AI to carry out a variety of tasks*

Participants use AI to solve many different administrative tasks. Particularly those involving generating text. These include information retrieval, simplifying and condensing text, structuring and quality assuring text, writing agendas and summaries of meetings, supporting the legal aspects of case processing and assisting with creative work involving text, "tone-of-voice," and idea generation.

Beyond text generation, workshop participants use AI to work with visual elements – mainly graphics rather than realistic images. Legal and ethical considerations prevent participants from using AI to create photo-like images. In these cases, AI is a practical resource supporting content-related work that previously required more manual effort. AI functions more as a supplement to professional work than a replacement.

Several informants use AI to support text-related tasks, particularly for language quality assurance, including grammar, spelling, and tone of voice. Additionally, AI is used to structure and compress text, especially when the content is considered too lengthy. Finally, AI is used in programming for code generation and numerical calculations.

4.1.2 *Some participants – though not all – save time and expect to save more time in the future*

Workshop participants had very different experiences regarding how AI contributes to time savings in writing, communication tasks, and information retrieval. Some participants reported significant time savings and/or quality improvements in their work, while others experienced improvements to a lesser degree. A few did not perceive any clear benefit, for example, because the initial time saved was entirely offset by the need to verify AI-generated results.

Most participants expressed a positive outlook on the future potential of AI. Nearly all expect the technology to improve in quality and reliability, which they believe will increase its benefits. Many - though not all - have already observed that the technology is evolving and becoming more useful over time. A clear majority anticipate that the use of AI will contribute to increased organisational capacity by reducing time spent on routine tasks. These gains are used to complete more tasks, improve the quality of work (e.g. by allowing more time to focus on more complex tasks or more time for citizen-oriented interaction), or reduce individual workload. The workshops left the impression that, in most cases, the individual employee decides how to use these gains – whether to save time, shift focus, or increase productivity.

4.1.3 *Participants experience that AI improves the quality of task performance*

The extent to which participants use generative AI varies widely. Some use it daily and as a routine tool, while others use it weekly or less frequently. Naturally, the frequency of use

depends on the nature of their tasks and the degree to which AI is - or is perceived to be - relevant. Participants also noted that gender, age, professional background, and personal traits such as openness to change influence how individual colleagues respond to AI.

AI helps some employees perform their tasks better – especially in roles where they typically work alone on a specific type of task. In these cases, AI functions as the insightful and competent "colleague" they have been missing in their daily work. Legal professionals and some IT employees particularly emphasised this. Participants highlighted that the technology is changing their work processes and increasing capacity and quality. However, it was also noted that greater capacity does not necessarily result in reduced workload.

4.2 Participants experience barriers and concerns that inhibit their use of AI

4.2.1 *Participants hold ethical and societal concerns towards AI*

Participants are concerned that AI may lead to cutbacks and threaten existing jobs, with graphic design and legal work specifically being highlighted. They are also concerned that AI, over time, could weaken their competencies. This is partly because the technology takes over tasks they would otherwise have handled themselves, thereby reducing the learning and professional immersion they commonly experience through their work. In addition, several participants worry about the dependence on non-European big tech companies, which they would prefer to see replaced by European alternatives.

4.2.2 *Participants experience technological immaturity and lack of trust in AI*

One barrier to adopting AI is scepticism about the tools' capabilities. Some participants already have this scepticism upon being introduced to AI, while others develop it through or have it confirmed by their practical hands-on experience. The workshop participants generally believe that the tools cannot replace 100 per cent of their work as they believe there is still a need to critically assess AI-generated output. As a result, most participants reported reading through and checking the outputs for errors. For some, the time spent doing quality checks outweighs the immediate time savings – so much so that a few eventually abandon using AI altogether. Others note that the extent to which they check the results depends on workload and deadlines, meaning that sometimes they skip the review process or only perform it to a limited extent.

4.2.3 *Participants consider legal and data security concerns*

Workshop participants explain that dilemmas arise between the great potential of AI and its challenges with data security and their own responsibilities. Some employees report a lack of clear guidance on how to act when using AI. Sometimes, "clear guidance" is provided through instructions and guidelines developed and distributed by management. However, employees might not necessarily read them. Some participants know the guidelines and follow them to be safe, while others know they exist but have either not read them or have forgotten them. Still others are unaware of them altogether, even though they do exist. The dilemmas, therefore, can apply to both employees and managers.

4.2.4 Participants experience organisational and social pressure to use AI

Participants mention that their views on AI have changed over time. Initially, AI was perceived as a form of cheating and its use kept secret. However, it has since become a tool one is expected to use to improve quality and complete tasks efficiently. This shift also puts collegial relationships to the test, as there is a growing expectation that one consults AI before asking a colleague—either because colleagues are too busy or too specialised. The chatbot is described as a "brilliant colleague" that can be adapted to the user's professional domain and as an extra resource for new tasks. Others see AI as a tool that plays a role in internal competition among employees to appear the most efficient and/or capable.

4.2.5 Not all participants use AI – some try but ultimately give up

In several cases, participants choose not to use artificial intelligence due to technological or functional limitations. This may be due to insufficient or cumbersome access, low trust in output quality and data security, or a perception that AI is not relevant or applicable in their specific work context. Moreover, several participants prefer ChatGPT over their organisation's own systems – often a company-specific, closed version of Copilot – even if certain work documents cannot be included in their use of AI.

5 Discussion

5.1 The potential versus reality

It appears that the potential of AI in public administration might not be as straightforward as top managers and policymakers seem to expect or at least hope for. The participants in our study generally find that using AI has a positive effect on the efficiency and/or quality of their work, but still, some did not experience any noticeable improvements overall, and some had even stopped using AI altogether. Some participants expressed uncertainty about the impact of AI, mentioning that AI has not yet had a noticeable effect on their unit's productivity or outcomes. Our data includes examples of managers who do not observe a significant difference in their employees' time spent on tasks—even when the employees themselves report feeling a clear improvement. It also includes employees who have not yet experienced a boost in efficiency but rather a change in work processes.

There is an interesting difference between adopting and implementing AI. In this study, participants describe their introduction to and learning about artificial intelligence as self-initiated. They began using AI in their private lives either during studies to assist with writing assignments, inspired by media, or by learning through hands-on experimentation rather than formal courses or seminars. Another group was introduced to AI through workplace events, but these were often insufficient to lead to active use of AI. Most often, it was colleagues who inspired others to use AI. Concrete tips for solving specific tasks helped increase adoption. Since the introduction of AI was self-initiated more than the result of a management decision, it is hard to say whether the potential that the Danish Employer's Confederation and the Danish Government put forth can be realised (Dansk Arbejdsgiverforening and BCG, 2024; Regeringen, KL and Danske Regioner, 2022). These insights give the impression that we still lack knowledge on the topic of AI adoption and implementation in public administration.

5.2 Prioritising speed over legal accuracy

The study also includes examples of employees discussing legal concerns and organisational and social pressure to use AI. It is regulated by law that sensitive data and confidential information must be "processed in a manner that ensures appropriate security of the personal data, including protection against unauthorised or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organisational measures" (European Union, 2016, chapter II, article 5, (f)). Publicly accessible AI tools and many internal chatbots cannot currently guarantee such protection at the moment. Since employees feel pressured to use AI to become more efficient (see 4.2.6), there might be a dilemma regarding what needs to be prioritised: legal accuracy or speed? It is a managerial responsibility to ensure that employees know and comply with these regulations. In practice, however, this is challenging:

Legal quality and making correct decisions have always been the fundamental principles of public administration. Additionally, efficiency improvements (understood as producing more with fewer resources) have also been a central and often dominant objective in the public sector for many years and, thus, a management task (Andersen et al., 2024). In many places, the result is considerable pressure on employees to complete their tasks at a high pace. Here, the dilemma might ensue: In practice, some managers might turn a blind eye to the fact that their employees, in their effort to complete tasks, may not fully meet the legal and regulatory requirements. On the one hand, "clear guidance" and rules are made by managers for employees to follow, but on the other hand, these are not always read by employees. Possibly, the guidelines primarily serve to legitimise the broader use of AI and shift responsibility away from management if errors occur or are discovered and lead to criticism.

5.3 Shadow themes

AI seems to raise expectations and feed broadly accepted "truths" about its potential for improvements in efficiency and quality. Participants' responses may be shaped by a sense of what constitutes a suitable answer to meet imagined expectations. We can only rely on what participants say, which is the truth we must assume. However, during the workshops, we observed that a slightly more confidential atmosphere often developed, in which participants would confess things (e.g., not always being thorough when checking AI-generated content for errors or not familiarising themselves with the guidelines for AI use in the organisation, etc.)

Moreover, upon contacting public organisations, some declined participation, stating that without AI strategies, employees do not yet utilise these technologies even though literature about the use of AI and GenAI proposes a different view (Damsgaard, 2025; Bright et al., 2024). The organisations' reports may underscore a potential presence of underreported use of AI workplace settings. It seems, therefore, plausible that some individuals may be reluctant to disclose their actual AI usage due to their uncertainties regarding its appropriateness.

These observations may indicate a gap between policy and actual use, as some employees may refrain from openly discussing their engagement with AI due to fear of making mistakes or acting outside perceived organisational norms. The observations also suggest that AI use

may, in some cases, constitute what Stacey and Mowles (2015) refer to as "shadow themes" within organisations – topics and agendas discussed confidentially among employees, often in (very) small groups. Awareness of such shadow themes may be crucial for leaders when assessing the likely concrete implications of decisions related to AI implementation.

5.4 Limitations

This is a pilot study, and we acknowledge the limitations of its generalisability. With a small sample size of two organisations, two manager interviews, and two workshops with five to six employees – fourteen respondents – we will avoid generalising beyond this scope.

We asked the organisations to provide employees with opinions on AI. We did not specify whether the participants had positive or negative opinions, but we hinted that we would appreciate people who were sceptics as well as people who were excited. While this approach helped ensure rich, experience-based insights, it also introduced a potential sample bias. Specifically, it may have excluded employees who are indifferent, undecided, or unaware of AI developments in their workplace. Finally, while scepticism was traceable within the data, no complete resistance towards AI was found.

Additionally, we relied on alumni networks from extended education in leadership transformation for participant recruitment, which introduces another risk of sample bias, as these networks may overrepresent individuals who are more professionally engaged, reflective, or already interested in topics such as digital transformation.

5.5 Contribution

This study offers examples of opportunities and challenges that AI presents regarding daily use and task-solving within public administration, which currently seems lacking in literature (Damsgaard, 2025; Madsen, 2025). Drawing on workshop and interview data from 12 employees and two managers, we highlight practical benefits (AI is used to carry out a variety of tasks, improves quality and task performance, and some expect to save time), barriers (ethical and societal concerns, technological immaturity and lack of trust in AI, legal and data security concerns, organisational and social pressure to use AI and not everyone uses AI - some try but ultimately give up). Here, we also discuss that there is a perceived potential of the technology expressed by the Danish government (Regeringen, KL and Danske Regioner, 2022), the Danish Employer's Confederation (Dansk Arbejdsgiverforening and BCG, 2024) and researchers (Damsgaard, 2025) which might be misaligned with the current realities experienced by employees in public administration.

5.6 Future research

As this is a pilot study intended to lay the groundwork for future research, we acknowledge the limitations of the sample size. However, the data collected already reveals meaningful patterns that can inform more focused lines of inquiry. These initial insights suggest several promising directions for further research, including the opportunity to recruit participants based on more specific emerging themes. Below, we outline some of the potential avenues for future exploration based on our findings:

The study shows that introducing and using AI is surrounded by several legitimate yet conflicting concerns. AI raises dilemmas such as *shadow themes* (Stacey and Mowles, 2026), where informal and sometimes hidden practices or concerns emerge among employees outside of formal channels or official narratives and *speed over legal accuracy*, where employees, under pressure to deliver faster and more efficiently, may feel compelled to use AI tools even when doing so potentially conflicts with data protection regulations. We would be curious about how managers and employees handle these dilemmas in practice. Such an investigation might be complex because their actions might not fully align with formal rules, legal requirements, or public expectations. Data collection would, therefore, require carefully considered methods. However, insights from this study could potentially help identify key characteristics of the organisational environment where AI-related management decisions are carried out, which are crucial for choosing implementation strategies and improving the chances of success.

This consideration also points to how we might manage a tool like AI in practice. The study seems to show that AI emerges bottom-up through employees. Managers support and encourage the use of AI, but the actual, concrete use primarily happens through the exchange of knowledge about specific examples of task-solving. We believe more knowledge about how managers and organisations can best lead, organise, and coordinate the use of AI in public administration is needed.

Lastly, from a neo-institutionalist perspective, we could try to understand the spread of AI through isomorphism – where organisations are said to imitate one another to gain legitimacy (Powell and DiMaggio, 1991). This perspective could be contrasted with the actual implementation, as our study suggests that the practical use of AI is far more fragmented, incidental, and less controlled than official strategies and reports indicate (Dansk Arbejdsgiverforening and BCG, 2024; Regeringen, KL and Danske Regioner, 2022).

6 Conclusion

We set out to answer the question: *How do employees and managers experience the use of artificial intelligence in their work, and what opportunities, barriers, and organisational dynamics are associated with its adoption?*

Our results suggest that the adoption of AI in Danish public administration is nuanced and multifaceted – more so than originally thought. In practice, employees and managers experience AI as both a helpful tool and a source of uncertainty. Participants generally find that AI enables more efficient and higher-quality task performance, particularly in text-based and administrative work. While not all experience immediate time savings, most expect the benefits to grow as the technology matures.

Adoption also reveals deeper organisational tensions: Employees face legal uncertainty, data security dilemmas, and varying degrees of clarity in managerial guidance. While some know the formal rules and might follow them, others do not remember or are unaware of their existence. In parallel, social and organisational expectations are emerging – using AI is increasingly viewed as a sign of competence and efficiency, which puts subtle pressure on

employees. These expectations can conflict with legal responsibilities, prompting dilemmas such as whether to prioritise speed over compliance.

AI use is largely driven from the bottom up. Employees adopt tools based on peer learning, experimentation, or private use, rather than formal training or management mandates. This decentralised approach creates a gap between high-level ambitions and everyday realities. In some cases, AI use becomes a "shadow theme" – an informal practice not openly discussed, either due to uncertainty, lack of confidence, or fear of being caught acting outside official norms.

In sum, our findings indicate that while AI holds real potential for supporting daily tasks in public administration, realising this potential depends on more than access to the tools. It requires organisational readiness, legal clarity, and an understanding of the informal cultures shaping adoption. Without addressing these dynamics, strategies for AI implementation risk being disconnected from the lived experiences of employees.

7 Reference list

- Andersen, N.Å. and Pors, J.G. (2024). *Velfærdsledelse: Mellem styring potentialisering*. 2nd ed. Hans Reitzels Forlag.
- Borregaard, M. and Gramstrup, S.D. (2021). *Stort potentiale i brugen af kunstig intelligens i staten og især inden for offentlig administration - DI*. [online] DI Analyse. Available at: <https://www.danskindustri.dk/arkiv/analyser/2024/4/stort-potentiale-i-brug-af-kunstig-intelligens-i-staten-og-isar-inden-for-offentlig-administration/> [Accessed 10 Jun. 2025].
- Bright, J., Enock, F., Esnaashari, S., Francis, J., Hashem, Y. and Morgan, D. (2024). Generative AI is already widespread in the public sector: evidence from a survey of UK public sector professionals. *Digital Government Research and Practice*, 6(1). doi:<https://doi.org/10.1145/3700140>.
- CFL and Instituttet for Fremtidsforskning (2024). *Toplederbarometer 2035: En undersøgelse af danske topledere fremtidsperspektiver*. [online] CFL. CFL. Available at: <https://www.cfl.dk/artikler/download-rapport-med-toplederbarometer-2035> [Accessed 10 Jun. 2025].
- Damsgaard, J. (2025). *AI: mellem fornuft og følelse*. 2nd ed. Djøf forlag.
- Dansk Arbejdsgiverforening and BCG (2024). *GenAI - et væsentligt potential for den danske offentlige sektor i 2040*. [online] Dansk Arbejdsgiverforening. Available at: <https://www.da.dk/globalassets/besk%C3%A6ftigelse/genai---et-v%C3%A6sentligt-potentiale-for-den-danske-offentlige-sektor-i-2040.pdf>.
- Deloitte (2024). *Evaluering af AI-signaturprojekter*. [online] Digitaliseringsstyrelsen. Deloitte. Available at: <https://digst.dk/kunstig-intelligens/signaturprojekter/signaturprojekternes-erfaringer/> [Accessed 12 Jun. 2025].
- Deloitte and Kraka (2024). 'Small Great Nation: Fra hype til håb - hvordan kan AI generere et rigere Danmark'. [online] Small Great Nation. Small Great Nation. Available at: <https://sgnation.dk/rapporter/fra-hype-til-hab-hvordan-kan-ai-generere-et-rigere-danmark#:~:text=Selvom%20der%20er%20store%20usikkerheder%2C%20kan%20teknologier%20som,intelligens%20og%20automatisering%20ud%20fra%20flere%20datadrevne%20analyser.> [Accessed 12 Jun. 2025].
- Edwards, K. and Winkel, J. (2018). A method for effect modifier assessment (EMA) in ergonomic intervention research. *Applied Ergonomics*, [online] 72, pp.113–120. doi:<https://doi.org/10.1016/j.apergo.2018.05.007>.
- European Commission (2022). *DESI - Full European Analysis 2022: Digital Economy and Society Index (DESI) 2022: Thematic chapters*. [online] European Commission. European Commission. Available at: <https://digital-strategy.ec.europa.eu/en/library/digital-economy-and-society-index-desi-2022#:~:text=The%20Digital%20Economy%20and%20Society%20Index%20%28DESI%29%20monitors,English%20and%20in%20the%20country%27s%20official%20language%20%28s%29.> [Accessed 12 Jun. 2025].

- European Union (2016). *REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)*. [online] EUR Lex. Available at: <https://eur-lex.europa.eu/eli/reg/2016/679> [Accessed 26 Jun. 2025].
- European Union (2024). Artificial Intelligence Act. *Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act) (Text with EEA relevance)*, [online] 1689. Available at: <https://eur-lex.europa.eu/eli/reg/2024/1689/oj/eng> [Accessed 12 Jun. 2025].
- Holtzblatt, K., Wendell, J.B. and Wood, S. (2004). Chapter 8: Building an Affinity Diagram. In: *Rapid Contextual Design*. Elsevier.
- IDA Analyse (2024). *Digitalisering og AI: Befolkningens brug af og holdninger til sprogmodeller*. [online] IDA. IDA. Available at: <https://ida.dk/media/16265/befolkningens-brug-af-og-holdninger-til-sprogmodeller.pdf> [Accessed 12 Jun. 2025].
- Implement Consulting Group (2023). *Sprogmodeller i Danmark - En analyse af mulige strategiske valg og scenarier*. [online] KL Kombit. KL Kombit. Available at: <https://www.kl.dk/videncenter/nyheder/2023/ny-analyse-kaster-lys-over-potentialet-med-store-sprogmodeller-i-den-offentlige-sektor> [Accessed 12 Jun. 2025].
- Kulal, A., Rahiman, H.U., Suvarna, H., Abhishek, N. and Dinesh, S. (2024). Enhancing public service delivery efficiency: Exploring the impact of ai. *Journal of open innovation*, 10(3). doi:<https://doi.org/10.1016/j.joitmc.2024.100329>.
- LEAD and Fremfærd (2024). *Kunstig Intelligens - mellem hallucinationer og hverdagspraksis*. [online] LEAD. Available at: <https://lead.eu/artikel/e-bog-kunstig-intelligens-mellem-hallucinationer-og-hverdagspraksis#:~:text=I%20den%20nye%20ebog%20%E2%80%9DKunstig%20intelligens%20%E2%80%93%20mellem,kommunerne%20%E2%80%93%20og%20ikke%20kun%20for%20de%20teknologientusiastiske> [Accessed 13 Jun. 2025].
- Madsen, C.S. (2025). *Ny strategisk indsats skal bane vej for kunstig intelligens i Danmark*. [online] Digmin.dk. Available at: <https://www.digmin.dk/digitalisering/nyheder/nyhedsarkiv/2024/dec/ny-strategisk-indsats-skal-bane-vej-for-kunstig-intelligens-i-danmark> [Accessed 26 Jun. 2025].
- Neumann, O., Guirguis, K. and Steiner, R. (2022). Exploring artificial intelligence adoption in public organizations: a comparative case study. *Public Management Review*, [online] 26(1), pp.1–27. doi:<https://doi.org/10.1080/14719037.2022.2048685>.
- Powell, W.W. and DiMaggio, P. (1991). *The New institutionalism in organizational analysis*. Chicago: University of Chicago Press.

- Regeringen, KL and Danske Regioner (2022). *Digitalisering, der løfter samfundet: den fællesoffentlige digitaliseringsstrategi 2022-2025*. [online] Finansministeriet. Available at: <https://fm.dk/nyheder/nyhedsarkiv/2022/juni/regeringen-kl-og-danske-regioner-enige-om-ny-faellesoffentlig-digitaliseringsstrategi/#:~:text=Med%20Den%C3%A6llesoffentlige%20digitaliseringsstrategi%20for%202022-2025%20vil%20regeringen%2C,mangel%20p%C3%A5%20arbejdskraft%20og%20styrke%20den%20gr%C3%B8nne%20omstilling>. [Accessed 13 Jun. 2025].
- Stacey, R.D. and Mowles, C. (2016). Chapter 16: Complex responsive processes: implications for thinking about organisational dynamics and strategy. In: *Strategic management and organisational dynamics the challenge of complexity to ways of thinking about organisations*. Pearson Education: Harlow, United Kingdom.