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Employees' perceptions of artificial intelligence

Is digital transformation inherently beneficial in the context of artificial intelligence adoption?

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Tiivistelmä:

Lisääntynyt kiinnostus digitaaliseen transformaatioon ja tekoälyyn ovat johtaneet kasvavaan uusien toimintojen ja ohjelmien implementaatioon julkisen sektorin organisaatioissa. Digitaalisen transformaation ja tekoälyn hyödyt ovat laajasti ymmärretty julkisella sektorilla sekä akateemisissa piireissä, mutta lisääntyneen digitaalisuuden ja tekoälyn käyttöönoton negatiiviset puolet ovat jääneet vähemmälle käsittelylle. Työntekijöiden käsityksiin, eettisiin kysymyksiin ja inhimillinen valvontaan liittyvät tekijät ovat usein vähemmän ymmärrettyjä lisäten digitaaliseen transformaatioon sekä tekoälyyn liittyviä riskejä ja odottamattomia seurauksia.

Tutkimuksen tarkoituksena on käsitellä kirjallisuudessa ilmenevää rakoa digitaalisen transformaation hyödyistä ja haitoista keskittyen tekoälyyn ja julkisen sektorin työntekijöihin. Tutkimus keskittyy siihen, miten työntekijät kokevat tekoälyn vaikutuksia ja kuinka löydöt heijastavat kirjallisuudessa piilevää olettamusta siitä onko digitalisaatio luonnostaan hyödyllistä. Työntekijöihin vaikuttavia tekijöitä käsitellään kirjallisuuskatsauksessa.

Tutkimuksen teoreettinen osuus suoritettiin kirjallisuuskatsauksena. Tutkimuksen empiirinen osa taas määrällisenä tutkimuksena, missä tarvittava data on kerätty kyselyn muodossa Pirkkalan kunnan työntekijöiltä, jotka ovat osa kunnan tekoäly kokeilua. Kolmekymmentä kaksi työntekijää vastasi kyselyyn.

Jotta tekoäly käyttöönotto olisi onnistunut tekoälystrategioiden eettiseen täytäntöönpanoon täytyy pyrkiä panostamaan. Niiden tulee olla ihmiskeskeisiä ja tunnistaa erilaisia näkökulmia, rakentaa luottamusta, hallita odotuksia realistisesti ja tukea työntekijöiden työtä ja hyvinvointia kaikilla tasoilla. Julkisen sektorin tekoälyinnovaatioiden implementoinnissa tulee yhtäläillä muistaa kokonaiskuva, eikä ainoastaan tavoitella mittavia säästöjä työntekijöiden kustannuksella. Tutkimuksen löydöt heijastavat digitalisaation eri moninaisuuksia sekä kontekstin merkityksellisyyttä tarkastellessa tekoälyn vaikutuksia ja henkilöstön roolia organisaatiossa. Tekoälyn käyttöönoton haitallisissa puolissa esille nousee etenkin työntekijöiden epävarmuus tekoälyn hyödyistä ja tekoälyohjelmien datankäytön turvallisuudesta. Tukeva organisaatiokulttuuri ja työntekijöiden oikeanlainen kouluttaminen tekoälyn käyttöönottoon lieventävät piileviä ongelmia käyttöönotossa. Tulokset haastavat ajatuksen digitaalisen transformaation luonnollisesta positiivisuudesta. Jotta digitaalinen transformaatio olisi luonnostaan positiivista tulisi hyötyjen levittäytymä tasaisemmin henkilöstön kesken eikä keskittyä tiettyihin ryhmiin.

KEYWORDS: Digital transformation, artificial intelligence, public employee, public sector, public administration

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1 Introduction

The increasing implementation of artificial intelligence (AI) into the public sector organisations represents a significant aspect of the current public sector innovation and digital transformation efforts. Around the world public sector organisations are in an ever-increasing rate implementing AI technologies into their operations with the expectations of increased efficiency, improved service delivery and improved decision-making. Alongside these benefits it is crucial to examine the multifaceted effects of AI on the public employees who are the backbone of the public sector organisations.

Digital transformation has been built under the assumption that digital mediation of a number of service activities and processes could be a way to drive better service quality outcomes that are more effective and efficient (Mergel, Dickinson, Stenvall & Gasco, 2024 p.1-2). According to Haug, Dan, & Mergel (2023 p.1963) digital transformation at its core has two purposes. Firstly, the organisation and its processes and routines and secondly in its environment, business models, products and services and its interaction with itself and users. AI has advanced significantly in the past years. Mostly, thanks to the versatility of its use (Panda, Hossain, Puri & Ahmad, 2025 p.1). Holmström (2022, p.329) states that digital transformation has been built upon the assumption that the digitalization of public service activities and processes is a way to provide better service quality as well as become more effective and efficient. AI is often defined as systems designed for achieving specific goals that show intelligent behaviour and analyse their environment as well as taking actions with some degree of autonomy.

AI has seen a growing adoption and has been widely researched in recent years (Mergel, Dickinson, Stenvall & Gasco, 2024 p.1). It is essential that the progress of science in this field is accompanied by the progress of AI in the domain of public administration with the expectations of increased efficiency and optimization of public spending. Covid-19 has considerably sped up the adoption of these digital technologies (Borissov, Hristozov, 2024 p.409-410). Camilleri (2023 p.1) points out that the benefits of AI applications are

being felt across organisations as they can automate repetitive tasks such as data entry, invoice processing and online customer service.

The governance of AI is a complex and a developing field. One of the main challenges is on being how to develop frameworks and institutional governance arrangements that can sustain a jurisdiction while cultivating human-centered values. The literature on AI governance increasingly emphasizes horizontal coordination as well as stakeholder and public engagement. In this way public administrations and public organisations can improve the legitimacy of public decision-making, empower citizens and increase their trust in public administrations (Sigfrids, Leikas, Salo-Pöntinen & Koskimies, 2023 p.1). Factors influencing AI adoption can be categorized as environmental factors, technological factors, organisational factors and individual related factors (Chang, Zhang, Cai & Guo, 2024 p.414). AI's promise in improving government lies in the enhancing of human performance, fostering better human-technology interaction and committing to street level technology development for the benefit humanity and the common good (Sigfrids et.al, 2023 p.1). Papagiannidis, Mikalef & Conboy (2025 p.1) define AI as the ability of a system to make predetermined goals for organisations and societies and to learn, identify and interpret the data given to it.

AI has been seen to have an impact on process transformation and value creation as well as creating a competitive advantage and more intelligent decision-making (Chang et.al, 2024 p.413). It has the possibility to fully or partly automate certain technical processes such as decision-making or data capture. Decision-making can be seen as the heart of public administration and requires capacity for reasoning which means public employees using their discretionary powers. Giving this discretionary power to "digital public servants" would allow the standardization of public service behaviour and makes it possible to minimize variations in decisions (Geneviève, 2024 p.391).

It is essential for public governance that AI design is socially sustainable; therefore it needs to be based on public governance that is inclusive and comprehensive. The

expectations of AI technologies stem from its ability to exceed data processing limitations for the benefit of humans. Mass data, predictive analytics and AI can be used to make peoples' lives easier, contribute to more efficient public services and improve human performance. While AI can be seen to provide major benefits to individuals, business and society there is also debate about the problems and risks involved (Sigfrids et.al, 2023 p.1-2). According to Gupta, Lakhera & Sharma (2024, p.2) work overload, job uncertainty and complexity all contribute to employees' technostress and ultimately performance. Technostress can be defined as stress created by ICT use on individuals (Camarera & Fusi, 2022 p.154) although it is not just the ICTs- that are causing stress, but also the use of technology as a whole (Chang et.al, 2024 p.413). It is unclear who will benefit from AI adoption and who is negatively affected and how different risks, benefits, interests and values in decision making are calculated and how to secure the common good and human flourishing with using AI. AI can be perceived as a threat that diminishes employees' ability to make decisions or influence the outcomes of decision-making processes (Geneviève, 2024 p.392). Policymakers needs to put societal, economic and environmental impacts as well as the needs and values of the people and communities at the centre of AI governance and deployment. Trust must be a part of AI development. This covers trustworthy research, AI designers and developers, organisations, design principles and algorithms, and responsible deployment. Trust is an important social capital that holds society together and is the basis for sustainable data economy and the use of AI (Sigfrids et.al, 2023 p.1-2). Geneviève (2024, p.393) describes the challenges for adopting AI as the erosion of profession, loss of norms and values, loss of flexibility, still needing a human to make decisions, transparency in policies and principles, change in citizen-public servant relationship and digital literacy.

1.1 Research questions

Haug et al. (2023, p.1979) points out that much of the research has been done on the benefits of the digital transformation with not much focus given on the possible negative effects of digitalization. According to Marienfeldt (2023, p.832), there is a lack of

empirical knowledge on how digital transformation affects public employees in their work. These previous findings coupled with a personal interest in the field of digital transformation and AI use in the public administration motivated my formulation of the following research questions.

Research questions:

- (1) How does artificial intelligence (AI) affect public employees? and (2) how do the finding challenge the assumption that digital transformation in the context of AI adoption must inherently be beneficial?

1.2 Structure of the thesis

In the introductory part the study the reader is introduced to the subject and the research question. From the second part starts the theoretical framework. The reader is introduced to the digital transformation and then the AI implementation in the public sector as well as its subtopics. In the third part the impact on employees in the existing literature is covered. In the fifth part the methodology is explained as well as the used research method. Then in the sixth part the data collection method will be explained and the results and the findings of the survey will be addressed. Lastly in the conclusions the results will be discussed as well as the limitations of the research and the recommendations for future research.

2 Digital transformation in the public sector

Integral part of this thesis and continuously surfacing in the literature are the terms digitization, digitalization, e- government, and digital transformation. It is important to differentiate between these concepts that many times are used interchangeably. Haug et.al (2023, p.1977-1978), point out that often in the literature the term “digital transformation” is improperly used, referring to digitization and digitalization rather than true digital transformation. The term “transformative” and the term “digital transformation” refers to indicates the structures of organisations as whole. The external factor influencing digital transformation include legal regulations, economic situation, demands by citizens and the technological readiness of the country. The internal factors include the size and capacity of the organisation or the technological infrastructure. These are incremental in influencing employees in the public organisation and the various stakeholders that provide expertise and resources. The external and internal factors as part of the digital transformation enable the transformative process to take place.

According to Legner, Eymann, Hess, Matt, Böhmman, Drews, Mädche, Urbach & Ahlemann (2017, p.301), digitization refers to the technical process of converting analog signals into a digital form and ultimately into binary digits. It dematerializes information and decouples information from physical carriers and storage, transmission and processing equipment. According to Hess et.al (2017, p.49), digitization leads to make products for the Internet of Things possible to reconfigure. Digitalization can be described as a sociotechnical process of applying digitizing techniques to broader social and institutional context that utilizes digital technologies infrastructure (Holmström, 2022, p.331). According to Holmström (2022, p. 330) digitalization cannot occur without digitization which means the conversion of analog to digital while digitalization is the use of digital technology and digitized data to shape the way we work and how organisations interact with customers. Legner et.al (2017, p.301) describe digitalization as a socio-technical phenomena and processes of adopting and using these technologies in a broader individual, organizational and societal context

As stated by Mergel et.al (2019, p.3) e-government has been extensively studied in the past literature. E-government focuses on the use of Internet of Things and information and communication technology to provide government information to citizens. It has allegedly improved public service delivery and made governments more accessible and efficient for various stakeholders (Dawes, 2008 p.97; Doran, et.al, 2023 p.3). However the transformative effects of e-government on organizations and their environment are still a less studied issue as most of the research is focused on the improvement of services and service delivery which affects the efficiency of government (Mergel, Edelmann & Haug, 2019 p.3).

Digital transformation has been used to describe the majority of the research on the changes in service delivery within the public sector. It has been understood in many ways in previous studies. A main emphasis in the literature has been on the usage of new technologies to make government and public services more accessible to citizens, while others have placed attention to the usage of new technologies to make public services more accessible to citizens. There are also researchers who emphasise the interaction with citizens through ICTs (Kitsios, Kamariotou & Mavromatis, 2023 p.3). Holmström (2022, p.331) describes digital transformation as the profound transformation of organizational activities, boundaries and goals to benefit from the opportunities of digital technologies. The advantages of digital transformation are primarily seen to be in the enhancement of services and the delivery of those services, which will result in the increased effectiveness of the public sector (Kitsios et.al, 2023 p.3). Digital transformation has changed how people communicate, work and live and at its core digital transformation is associated with changes in the organisation's structures, processes, in the culture and in the interactions with the users and the organisations namely between the citizen using the services and the organisation that provides them (Haug et.al, 2023 p.1953; Gong, Yang & Shi, 2020 p.2) It can be seen overhauling public value creation processes and stimulating a modification of inter-organisational relationships established by public sector entities with relevant stakeholders (Palumbo, 2022 p.975). It is often associated with increased efficiency, performance and better service delivery.

Furthermore, it is also seen that digital transformation offers greater transparency, participation and cooperation (Fischer, Heuberger, Heine, 2021 p. 4). Vial (2019, p.3) describes digital transformation as a process that intends to improve an entity by generating significant changes to its properties through combinations of information, computing, communication and connectivity technologies. According to Haug et.al (2023, p.1973-1974) employees and leaders are pivotal in the implementation of digital technologies as they are vital for the initiation, support, promotion and legitimization of digital change over time. Employee skills play a major role in implementation of single services or processes that matter for incremental change processes.

Digital governance defines the use of new communication technologies and IT applications by public administrations, with the aim of streamlining the activity of the administrative organisations and increasing the quality of public services. It aims to affect the need for decreasing bureaucracy and reducing access times to information, communication with public institutions through documents, increasing staff costs in funded institutions, reducing the costs of public procurement procedures and reduction of crimes in the public domain (Androniceanu, 2023, p.148).

New technologies like collaborative artificial intelligence, sensory enhancements, augmented reality and blockchains have the potential to provide opportunities for creative and sustained work in various fields (Androniceanu, 2023, p.147). For digital transformation to be effective employees must work together and collaboratively address cross dimensional issues and to learn from one another in order to respond more quickly and consistently to changes in the organisations (Holmström, 2022, p.335).

Haug et.al (2023, p.1971) mention (citing Young, 2020) that digital transformation is driven by availability of technological infrastructure and digital literacy of citizens. Furthermore, Haug et.al (2023, p.1971) point out that the emergence of technologies motivate decision-makers to further experiment and adopt new technologies. According to Haug et.al (2023, p.1974) the quality of government websites improve information

delivery leading to users being more satisfied with digital services due to improved efficiency and accessibility of service. In addition, digital transformation leads to the introduction of new services and products promoting collaborative governance.

According to Haug et.al (2023, p.1975) (citing Kim & Kim, 2020; Im, 2011; Jones et.al, 2019) due to digital transformation employees spend less time working on a single case and travel time is reduced leading to an increase in productivity. Furthermore, new norms, values and tasks are introduced to the workplace. Negatives for this transformative change include (citing Hayes, Introna & Petrakaki, 2014) increasing workplace surveillance measures.

2.1 Artificial intelligence implementation in public sector organisations

Giraldi, Rossi & Rudawska (2024, p.2), point out that even among researchers there is no agreement on what AI is. In academic texts only weak and strong AI are mentioned only which latter is implemented in practice (Leikas, Johri, Latvanen, Wessberg & Hahto, 2022 p.1). AI encompasses a large range of cognitive functions that include learning, reasoning and comprehension. The term artificial on the other hand relates to entities created by humans rather than arising naturally. With these two concepts AI has the capability to independently interpret and learn from external data. Blockchain, Internet of Things and AI are an integral part of public sector's adoption and use of these enabling technologies that would enable harmonious integration of technology and human well-being (Giraldi et.al, 2024 p.2). According to Panda et. al (2025 p.1-2) it aids in our comprehension or learning of intellectual tasks done by people and is thought to play a major role in settling both minor and major societal issues affecting both public and private sectors. Lozie, Omosa, Hesami, Zaman, Kajbaf & Malik (2024, p.2), define AI as the integration of data, methods, technology, processes and people for organisations in a way that creates new opportunities for automation, decision making and collaboration. It enables organisations to achieve goals that would not be possible by traditional means. Employees who

use AI report increased work pace were more likely to report positive impact on work performance and working conditions (Milanez, Lemmens & Ruggiu, 2025 p.3 & 32).

Responsible AI governance should include incentives and sanctions to encourage desirable data collection, administration and utilization behaviours (cited from Jelinek et.al, 2021). It should rely on collaboration between stakeholders and individuals who encompass the system (Papagiannidis et.al, 2025 p.6; cited from Mäntymäki et.al, 2022).

AI systems are built on various methods. The main areas being machine learning, optimization, robotics, language processing, computer vision, speech recognition, planning and scheduling, optimization, robotics and expert systems. To achieve the goals that are set on AI they need to observe the environment, acquire data and make inferences and decisions based on data and information (Leikas, Johri, Latvanen, Wessberg & Hahto, 2022 p.1).

Delegation of management tasks to algorithms or Algorithmic management (AM) has the potential to optimise operations, increase productivity, streamline decision-making and provide data-driven insights (Pape, 2024 p.3). According to Milanez et.al (2025, p.3 & 32) AM means the use of software, which may include AI to fully or partially automate tasks usually carried out by human managers and is already in widespread use in many of the western countries. Managers reported that AM improves the quality of decision-making and could lead to productivity and efficiency improvements. AM also have the potential to reduce bias against certain groups if properly implemented and trained with the right data. By promoting more objective treatment of workers better opportunities can be created.

The risk coming with AM implementation include shifting the power balances within the company, changing work hierarchies, redefining tasks and roles while potentially making certain jobs obsolete and downgrading others. AM can impact job quality and increase the demand for specific skills but can also lead to de-skilling and loss of worker autonomy.

Task execution targets set by AM can lead to increase in workloads and work intensity when workers have to adapt to what is requested by the algorithm (Pape, 2024 p.3). According to Pape (2024, p.3) studies in the field of AI have shown that AM and AI systems assist rather than replace human decision-making. While studies do recognise job losses as a potential risk for AI adoption their use leads more to job reorganization rather than displacement. Pape (2024, p.3) citing an IMF report notes that AI will impact majority of jobs worldwide and that women and college-educated people are more exposed to AI while being more able to reap the benefits. It also points out that older people are less able to adapt to the changing work environment.

2.1.1 AI in public services

Public services supported by AI has emerged as a prominent topic amidst policymakers which has led to heavy investments by governments into AI labs to explore possibilities of replacing human decision-making through automated decision-making (Mergel, et.al, 2024 p.2). The diverse AI tools designed to augment organizational capabilities have increased in the past years (Holmström, 2022 p.331). Despite heavy research and investment into AI applications majority of its use is concentrated into virtual assistants. More advanced applications include pattern detection software, analysis and early warning systems to combat fraud and increase accountability, facial recognition for surveillance and security purposes or fraud detection by tax administrations (Mergel et.al, 2024 p.2). When employing AI it is important to respect the rights of individuals and the existing rules that regulate the protection of personal data and information safety requirements that support the trust of citizens. If employed improperly and without care it creates a risk for the people involved both from an ethical point of view and from a personal safety point of view (Androniceanu, 2023 p.148-149). The presence of humans in AI decision making processes is of the utmost importance. These include supervision of planning oversight, monitoring and retrospective disaster analysis (Papagiannidis, et.al, 2025 p.7).

AI can be seen as one of the most innovative technologies, enabling machines to assume cognitive functions and perform complex tasks such as problem-solving, reasoning and autonomous learning (Santo, Brandão, Veloso & Popoli, 2024 p.2). Research conducted by Bright, et.al (2024, p.7-10) found that AI systems are seen to enhance productivity and creativity and that AI could potentially reduce the time spent on bureaucracy. It can also be used to reduce job related stress. Increasing levels of AI adoption could provide benefits in manufacturing, healthcare and digital marketing with one of the most dynamic developments happening in economy, society and in knowledge-based economy. It opens new opportunities in creating new business opportunities but also creates threats regarding the societal effects of automation of production processes and the sense of security (Giraldi et.al, 2024 p.2).

AI system integration needs administrations to be proficient in several areas of management as it will inevitably require skills such as time management, resource allocation and coordination between teams. AI will require skills in change management as it will cause adjustments in workflows, policies and employee roles (Trajkovski, 2024 p.416). Panda, et al. (2025, p.10) point out that critical challenges in AI adoption in public administration include implementation, regulation, ethics and societal impact. AI can enhance the government's understanding of its citizens and help find more effective solutions to address their needs and problems. Big data and algorithms can help to identify trends and predict what is to come. Augmented reality can help government to plan and implement its urban policies and emergency management. Full potential however depends on how these technologies are adopted and implemented, and employees' perceptions and attitudes toward the new technologies are expected to play a significant role in it (Ahn & Chen, 2021 p.3).

AI has the potential to free up human capacity and those can be moved to complex decision-making processes. AI technology can potentially alter organisational routines by actively suggesting service delivery to citizens that the algorithm selects (Mergel et.al,

2024 p.3). According to Mergel et.al (2024, p.3) some authors even call AI as new colleagues and supervisors.

2.1.2 Generative AI

Generative AI systems possess distinctive capability to deliver responses and originate the content of these responses. It can be defined as *“a systems that can create texts or images on your behalf, often on the basis of prompts”* (Bright, Enock, Esnaashari, Francis, Hashem & Morgan (2024, p.6). Andrei, Matcu-Zaharia & Mariciuc (2024 p.3) describe it as being able to produce previously unseen synthetic content in any form and supporting any tasks through generative modelling. Tools like ChatGPT have gathered attention and changed the landscape of content production and creative endeavours. There is still fear and scepticism that public organisations may become too technocratic, danger privacy, increase inequality and maybe even threaten democracy. With AI tools becoming increasingly more refined and with greater data availability it has become a valuable tool for public services. Generative AI has the potential to increase efficiency, effectiveness and responsiveness in delivering quality services to citizens as it can produce array of human like content. It can decrease the administrative burden and instigate more efficient resource allocation (Giraldi, et.al, 2024 p.3; Andrei, et.al, 2024 p.3) as well as improve employee productivity and efficiency (Pillai, Ghanghorkar, Sivathanu, Algharabat & Rana (2023 p.450). Wang, Hackett, Archer, Xu & Yuan (2025, p.2) point out that the studies on positive impact of generative AI highlight performance improvements such as reduction in repetitive tasks, enhancements work productivity and augmenting employees' cognitive ability. Thus working generative AI can reduce the mental load on employees. Borissov & Hristozov (2024, p.409-410) highlight that the emergence of generative AI is preceded by other achievements in the scientific field such as information and communication technologies (ICT) and systems data enabled the gathering and eventually utilizing big data. Algorithm- based large language models (LLMs) paved way for the next generation of digital technologies. It utilizes deep learning techniques and processing datasets in order to understand and generate added content. Generative AI is strongly

associated with LLMs and is specifically designed to help generate textual and visual content.

These systems have according to Bright et.al (2024, p.2-3) the capability to increase public sector capacity in a range of areas. It can be used for tasks such as documentation and customer support (Andrei et.al, 2024 p.4) and for predictive analysis to support resource allocation or to create heat maps of resident's proximity to services. With many of these technologies the aim is to be able to free up employee time for other more demanding tasks. Generative AIs accessibility means that anyone with an internet access can in theory integrate it into their working life creating a potential for rapid adoption. As a disadvantage its adoption can become chaotic as different people are using it in different ways and guidance is most likely needed to regulate and advice on the use of generative AI Bright et.al (2024 p.2-3).

According to Pillai et.al (2023, p.450-451) AI- driven chatbots help organisations save costs related to employee assistance and engagement and can be used for talent acquisition, employee engagement and communication. Within the area human resources chatbots can create a consistent human resources experience, improve information and search access with automated feedback possibilities. AI could also enhance the efficiency and workforce development in the management sector of human resources. Also, convenience is major factor in how employees perceive digital technologies such as chatbots. Thus employer awareness of is paramount to successful implementation. Panda et.al (2025, p.9-10) state that factors such as ease of use, leadership, innovation culture and personal experience drive the decisions in adopting chatbots in the public sector. The intent in adopting AI is increased by the user confidence in AI that is highly enhanced by trust in AI. Factors such as trust, social influence, performance expectations affect chatbots acceptance in public transport.

Organisations can gather information from the data they gather through interactions with customers and employees. Some can even understand the languages and jargons

used in different organisations. All this allows the employees to dedicate more of their time to high value work (Camilleri, 2023 p.2). It is to be noted that responses are being generated algorithmically and thus are not always completely accurate or not completely address the questions that are being asked.

According to Wang et.al (2024, p.2) if generative AI doesn't perform as expected employees may experience dissatisfaction, disappointment and annoyance. It may also bring up feelings that an employee cannot solve a problem without help from chatbots. In addition, job insecurity concerns may foster proactive career behaviours such as learning new skills and fostering professional networks.

2.2 The concept of pro-innovation bias

At the core of digital transformation lies innovation. It is often seen as being able to keep organisations competitive and efficient. Borins (2006, p.5) points out that innovation culture needs to be supported from the top down and that it often depends on the ability to see things differently, have a thriving diversity of people and the organisations' ability to support organisations' employees so that it encourages innovation. Innovation is one of the main ways in which organisations adapt to their environment (Baumann & Martignoni, 2011 p.395). It is portrayed as a cost-saving alternative to budget cuts and helping to address problems that cannot be solved by normal solutions or by increasing costs (Lagergaard, 2021 p.28). Organisations' that are effective at innovating are successful at finding information from the outside and are able to successfully experiment and evaluate experiments (Borins, 2006 p.5).

According to Karch, Nicholson-Crotty, Woods & Bowman (2016, p.84) pro-innovation bias is defined (citing Rogers, 1995) as the *"implication that innovation should be diffused and adopted by all members of a social system, that it should be diffused more rapidly, and that the innovation should be neither reinvented nor rejected."* Furthermore, Karch et.al (2016, p.83) state that (citing from Rogers, 1995) many scholars suffer from

pro-innovation bias because they examine only the timeline when an innovation was adopted by large number of organisations. To create nonbiased picture of why new innovation spreads or fails to spread, would require a scholar to investigate both the successes and the events of limited adoption or non-adoption (Karch, et.al, 2016 p.83).

Sveiby, Gripenberg & Segercrantz (2012, p.5) citing Rogers (1983) describe innovation as *“an idea, practice, or object that is perceived as new by an individual or other unit of adoption.”* Furthermore, (citing Can de Ven, 1986) innovation is defined as *“a new idea, which may be a recombination of old ideas, a scheme that challenges the present order, formula, or a unique approach which is perceived as new by the individuals involved.”*

Often organisations tend to follow the risk-free and well-known strategies and practises that often appear more attractive than exploring the less known and risky alternatives (Bauman & Martignoni, 2011 p.395).

Innovation is perceived as vital for organisational survival and necessary for economic growth where there is a constant strive to innovate. This leads to a situation where the idea that innovation is always good becomes the norm. Innovation research tends to be built on the assumption that innovation is always good, regardless of its effects. It can be seen to limit the ability of decision-makers and change agents to predict unintended consequences and undesirable consequences. It is explained that this bias stems from the economic boom of the U.S after World War II when innovations had such a positive outcome (Sveiby, et.al, 2012 p.1-2).

2.3 The ethics of AI

According to Leikas et.al (2022, p.2), there is a need for constant ethical reflection alongside AI development. Administrations often lack the understanding of ethical principles and norms, such as privacy consent and algorithmic bias. The lack of ethical literacy can lead to administrative overreach and discrimination and potentially undermining public

trust. Papagiannidis, Mikalef & Conboy (2025, p.2) point out that keeping to responsible AI principles is often deprioritized during the implementation and management of AI projects and that there needs to be a balance between performance, transparency and ethical conduct. Administrations have to be competent in the ethical dimensions that AI presents. These include transparency, accountability and equity issues (Trajkovski, 2024 p.415-416). Public governments must be transparent with their implementations with AI in order to foster citizen trust (Leikas, et.al, 2022 p.2). While transparency is an important factor in AI ethics it may function as a tool that accelerates technology without questioning its desirability, when ideally it would also restrict the use of certain technologies (Franzke, 2021 p.407).

Human centrality has emerged as a vocal point in AI strategies mainly used to bundle together ethical and human rights principles as a basis for AI strategy, goal or vision. The goal of AI systems should be for the common good and to improve welfare and freedom. Human values should be central and the respect for fundamental rights as well as increasing wellbeing (Sigfrids et.al, 2023, p.3). The challenges faced by public administrations on AI could be combated by creating coordination mechanisms and legal guidelines to improve collaborative decision-making. This approach however demands more of a bottom-up approach and regulation toward procedural improvements in decision-making and governance increasing participation through coordinated means (Sigfrids, Nieminen et.al, 2022 p.2).

Ensuring accountability, AI systems demand for building and maintaining trust of social and technical structures. Trust as a context must be tied to local setting, institutions, stakeholders and technologies in which AI is used. It is essential to consider organisational structures, processes and technical components in terms of how they enable trust in AI systems (Sigfrids, et.al 2023, p.4). The flexible forms of government provide answers to challenges brought by emerging technologies while ethical governance seeks to formulate and apply ethical guidelines to challenges brought by these emerging technologies. (Sigfrids, Nieminen et.al, 2022 p.2). The prevalent ethics guidelines prioritise

seeking the greatest good for the greatest number over duty-based approach (Franzke, 2021 p.407) which in theory could lead to the negligence of minority rights, moral trade-offs and to a lack of clear moral boundaries.

Sigfrids, Nieminen, et.al. (2022, p. 2) point out that regulatory standards offer some tools for governing AI, they are not by themselves sufficient to steer AI to a socially beneficial direction. That is why ethical considerations are needed. Problems of the arise from weak operationalization and implementation of ethical principles.

Mergel, et.al (2024, p.4) raise concerns over the ethics of AI applications. Risks of AI to individuals, organisations and society come from its potential to alter core public values such as transparency, fairness and equity. AI could also cause breaches of privacy, security and biases as well as discrimination in public service delivery that could cause lack of access to public services by vulnerable and marginalized communities. Mergel, et.al (2024, p.4) cited from Tsamados, et.al (2022) bring up three groups of ethical challenges in public sector organisations. The first one addresses the fact that incomplete data may lead to conclusions or misleading results. Also, if the data is biased it might also lead to AI making unfair decisions. In addition, the machine learning that AI models employ continuously improve decision-making models based on available data facilitating the creation of black boxes where public employees find it difficult to explain or justify decision made by AI. In the second group challenges rise from normative concerns with regards to ethical impact of AI -driven actions and decisions that include unfair outcomes and unintended consequences. The final group addresses the issues regarding accountability and responsibility which are often the result of cognitive and normative concerns. Mergel, et.al (2024, p.4) explain this as a situation could be developed by AI where no single individual or team could be held responsible.

According to Papagiannidis, et. al (2025, p.9) there is a lack of understanding and therefore a lack of trust among users that may be hesitant to use AI (cited from Toreini, et.al, 2020). To be able to explain both the technological process and the human judgment

that result from these processes (cited from Larsson et.al, 2019). Therefore the transparency of AI applications can be seen as one of the most important aspects of AI adoption and is needed for traceability. When AI systems influence peoples' lives there should be sufficient explanation available of the systems decision-making processes.

2.4 Data concerns

Data openness and issues of privacy are important but not easy to implement. If we want people to be able to make use or be able to safeguard privacy there is a need to create not only awareness but also the ability to engage meaningfully. Data and privacy issues are well documented ranging from unethical use of data, lack of data privacy and the lack of data security (Leikas et.al, 2022 p.3). With regarding privacy concerns Golda, Mekonen, Pandey, Singh, Hassija & Chamola (2024 p.15) mention that the data used for training the AI models can potentially include personal information and with inadequate anonymization could in turn lead to identification and surveillance risks. Number of organizations are not well versed with the legal frameworks that govern data protection, accountability and procurement which are essential for AI adoption (Trajkovski, 2024 p.415). Often unseen intentions of AI is that it has the capability to collect data and information from any digital source highlighting the need for user awareness of the extent that AI can be found from our lives. It can also be used for fake news, propaganda and surveillance. It is necessary to have legal regulations and ethical practices to mitigate these risks (Andrei et.al, 2024 p.12-13).

According to Golda, et.al (2024, p.2) the Italian data protection agency has already taken steps to dress this issue. According to the agency, extensive gathering and retention of personal data lacks legal legitimate legal foundation. Governments have tackled these potential misuses with regulations such as the General Data Protection Regulation (GDPR) and the Californian Consumer Privacy Act (CCPA). These mandate that organisations must handle personal data with transparency and obtain consent from users in order to use it (Golda et.al, 2024 p.11).

The European union proposed The Artificial Intelligence Act (AI Act). It brought forward principles for legal framework in the field of AI. At its core it highlighted high quality datasets to reduce the risks of discrimination, human oversight, tracing login activities, robustness and security (Camilleri, 2023 p.4).

Golda, et. al (2024, p.15) point out that malware and cyber threats may become harder to detect and counter than traditional threats. AI -generated files could for instance trick users into launching malware which could potentially infect whole databases and spread throughout the affected organisation.

3 Impact of AI on public employees

Individuals' beliefs and perceptions shape the intentions of using new technologies (Schmidt, Biessmann, Teubner, 2020 p.263). Also the responsible AI use requires the right level of user trust in the system (Schmidt et.al, 2020 p.270). According to Sigfrids, Nieminen, et.al (2022, p.1) the use of AI for efficiency, optimization and maximizing profit could lead to increase in inequality and discrepancies in power. The challenge for organisations in this new digital age is to successfully adapt their culture, mindset and competencies to the new digital way of working rather than focusing on technological trends, disruptive innovation or new customer behaviour. This shift towards culture, mindset and competencies demands focusing on employees (Giraldi et.al, 2024 p.4).

Employees' attitudes play a key role in the employment of AI technologies in its fullest and their perception influencing the way new technologies will be used and regulated (Ahn & Chen, 2021 p.1). It can be efficiently used to assist the employees in the administrations but not replace them. The development of technology increases the likelihood that citizens will engage with the administration through chatbots on routine issues (Borissov & Hristozov, 2024 p.422). According to Sigfrids et.al (2023, p.2) the ideal of human-centricity contains three perspectives: user-centeredness, community centeredness and society-centeredness. These three perspectives are needed for successful usage of the technology. The human-centric approach aims to ensure that human values are central to the way in which AI systems are developed, deployed, used, monitored and by ensuring respect for fundamental rights (AI HLEG, 2019 p.37). The responsible research and innovation (RRI) approach supports the development of public governance and by extension human-centricity. The RRI approach ensures stakeholder involvement, dialogue and considerations of different perspectives. These are fundamental in ensuring that societal and organisational values and interests are accounted for in decision-making (Sigfrids, Nieminen et.al, 2022 p.2).

When employing AI it is important to respect the rights of individuals and the existing rules that regulate the protection of personal data and information safety requirements

that support the trust of citizens. If employed improperly and without care it creates a risk for the people involved both from an ethical point of view and from a personal safety point of view (Androniceanu, 2023 p.148-149). Santos et. al (2024, p.15) suggests for AI to be implemented in stages to assess the sentiment and reactions in order to avoid the spread of negative feelings that might arise. AI systems should also be designed with transparency, informativity and safety in mind to gain trust from users. It is a challenge for public administrations to implement AI systems that guarantee the safekeeping of public values.

The adoption of AI is impacted by behavioural intentions for events such as disaster relief operations which are shaped by resources such as money, time and skills (Panda et.al, 2025 p.9). With the increased adoption of AI technologies question arises about boundaries of AI and how far are we going to allow AI to make decisions. With the increased availability of data and advancements of the machine learning tools AI could start making more important policy decisions in the future. With its ability to continuously learn and adapt to changing environments it could, given enough time make decisions superior to humans. (Ahn & Chen, 2021 p.2).

It is important to question how AI will make decisions and ethical judgements. An example pointed by Ahn & Chen (2021, p.3) about the COMPAS algorithm created to determine how likely a convicted criminal is to commit more crimes ones released. It was found that the algorithm tended to be more biased to minorities. Transparency regarding data and the code are crucial in creating trust with AI while upholding accountability and transparency while being consistent with human values and aspirations. Santos et.al (2024, p.5) describe the lack of transparency as a “black box”. As the technology becomes more complex and challenging to analyse the users need help to understand the processes behind the tasks that are being performed. This in turn can generate distrust, perceived complexity and resistance to the systems. The “black box” nature of AI restricts the implementation of accountability processes despite it being able to produce accurate analytical findings (cited from Caner & Bhatti, 2020). This is why technologies

that detect weaknesses and evaluate AI systems are critical (cited from Matthews, 2020) (Papagiannidis, et.al, 2025 p.7).

As AI systems are becoming more complex and challenging and less predictable it is unclear for most governments how AI affects public governance processes and outcomes. Challenges in AI adoption arise from unclear responsibility and accountability, when AI is used in decision making by governments as it is being used in diverse organisational practices to create new human-machine configurations (Holmström, 2022 p.329). The stakes are raised for governments since failures due to AI use in government may have strong implications for governments and society. The use of AI in the public sector should be transparent to gain citizen's trust. The use of AI has unique challenges to the public sector such as the requirement that AI adoption in the public sector advances the public good (Zuiderwijk, Chen & Salem, 2021 p.1-3).

Study conducted by the Silva & Weißler (21.3.2025) for the European Central Bank (ECB) found that 41% of workers believe that new technologies will have positive effects on their productivity and opportunities while 20% had negative expectations. Significant portion of the positive views came from younger individuals and those with a university education. These individuals also use AI more frequently in their work. The study found that managers and professionals are more likely to implement AI into their daily tasks. The study found that more than half of managers view AI positively and that there is a link between the amount of training received and the level of AI adoption.

3.1 Digital skills

Digital skills are referred in literature as ICT skills, e-skills, digital literacy skills, digital competence, digital fluency and technology skills. Relevant employee digital skills are a combination of a digital mindset, knowledge, competence and attitude. Employee digital skills are essential for organisations to succeed in the world of digital transformation. It is increasingly required to have basic digital skills to be able to live and operate in digital

society (Manana & Mawela, 2022 p.1). AI literacy can be defined as skill sets that enable individuals to critically evaluate AI technologies to communicate and collaborate effectively and use AI as tool (Leikas et.al, 2022 p.10). It is seen that AI will significantly alter the nature of work in the coming decade. Demand for workers with “mid-ranged” skills are already declining but skills like critical thinking and problem solving may become more valuable as AI continues to advance (Moradini, Fraboni, Angelis, Puzzo, Giusino & Pietrantoni, 2023 p.41).

Technical skills gap is a big issue in public organizations that is caused by an interplay of various competencies. This stems from the lack of technical training in data analytics and AI systems that causes the diminished ability to implement AI solutions or interpret algorithmic models effectively. It is also important to foster effective collaboration between administrations, data scientists, lawyers, ethicists and other external parents in order to coordinate AI initiatives effectively (Trajkovski, 2024 p.415).

Critical thinking, problem solving, communication and teamwork are seen as vital for the efficient use of AI. Other studies highlight the importance of cognitive skills for human-robot interactions. Increasing the explainability of AI so that employees are able to interpret and examine the explanations is needed (Cetindamar, Kitto, Wu, Zhang, Abedin & Knight, 2022 p.15).

It is important to acknowledge that generative AI models often provide illogical or inaccurate information to certain questions (Lozie et.al, 2024 p.4). This is why awareness and training are necessary for successful implementation of AI technologies.

Technological capabilities of organisations are seen as a vital factor in AI literacy. Data, technology and technical skills are the three critical factors that organisations need to focus on. High quality data is needed to build an efficient technological infrastructure and skilled AI literate employees to utilize it (Cetindamar et.al, 2022 p.14).

3.2 Technostress

Technostress is often understood as an inability to adapt or cope with new computer technologies in a healthy manner. Techno-complexity means someone has difficulty understanding certain tasks or conditions. Techno insecurity can come up when individuals are in the risk of losing their jobs due to insufficient understanding of technologies or as a consequence of technological improvements. Sanots et. al (2024, p.5) defines technostress as a physical and psychological condition resulting from excessive use of technology. The consequences of stress are divided into short- and long-term consequences. These affect the individual and social environments and organisations, potentially triggering spirals of stress (Rohwer, Flöther, Harth & Mache, 2022 p.1-2). The use of AI and the growth of digital data are shown to enhance the performance procedures but also cause problems for the employees such as technostress. The main factor in reducing this stress is to implement flexibility to working hours (Gupta, Lakhera & Sharma 2024 p.16). According to Camarena & Fusi (2022, p.162-163) technostress increases from greater demands and workload and the pressure to learn and adopt multiple working applications, while younger generations are more prone to technostress than older generations. Rohwer et.al (2022, p.15) point out that employees of younger generations who are used to dealing with different medias or are viewed as digital natives can deal more easily with more complex digital tools but are also more prone to being overloaded as they consume more media on their free time. Also, different technologies might affect the intensity of technostress or may even reduce it. Organisational policies on ICT technologies decrease technostress especially among public managers who need less time on figuring out the correct ways to use the technology. The effects on technostress have been various in the previous research. Some scholars point out that technostress increases productivity and innovation while others state that it induces negative emotions such as anxiety, nervousness, uneasiness and fatigue. Technology stressors include learning new technical skills, utilizing new AI technology to handle big workloads, managing multitasking and project assignment and solving complex problems. When AI adoption is viewed as a challenge technostress positively influences it. But when it seen as a

hinderance it hampers AI adoption due to AI anxiety (Chang, P, Zhang, W, Cai & Quo, 2024 p.414-424).

Zhou, Chen & Cheng (2024, p.1-2) point out that with changes in work tasks, characteristics and execution that comes with AI it could pressure employees to increase their workload and work pace. AI stress can be seen to cause decreased career satisfaction, well-being, job insecurity and incivility. It can however be noted that individuals' perceptions and capabilities shape how they experience the increased AI adoption. Implementation and utilization of AI can trigger a continuous learning process for employees. This active learning can help cope with AI stress and help achieve significant and positive work outcomes. Learning process triggered by AI stress can result in increased employee job performance and digital transformative supportive behaviour. The amount of trust that the employee has on AI may play a significant role on whether they experience increased stress or not.

3.3 Employee identity

Through their long educational and socialization processes employees develop a deep connection to their work. These experiences can be seen to shape their identity, influencing how they see themselves in relation to the goals, values, norms and ways of interacting (Strich, Mayer & Fiedler, 2021 p.2). Identity threats associated with AI adoption could lead to strong opposition (Gull, Ashfag & Aslam, 2023 p.81). The work becomes a core part of how they see themselves because they internalize the culture and organisations principles over a long period of time. Employees may also experience identity threats from loss of status in their work (Wang et.al, 2024 p.2). Strich et.al (2021, p.3) specify that due to this natural development of work identity, employees can perceive changes to their role as threat to their role identity. Employees that feel that their identity is threatened often reject the new mechanisms making it difficult for organisations to promote change.

AI systems have the capability to go beyond automation and substitute complex processes to reduce and even eliminate employee involvement in certain processes. When AI handles tasks that have required human participation, it can limit employee interaction opportunities that in turn hinders knowledge exchange and relationship building which essentially are the cornerstones of employees' professional identity and workplace culture. The possible unpredictability of the quality of generated results that AI can produce can make it challenging for employees to understand AI-driven processes. In addition the decision-making processes are not always fully transparent or understood by employees thus creating trust issues and make it difficult for employees to justify or explain decisions made by AI (Strich et.al, 2021 p.3). Employees that show higher level of skill variety and adaptability are more likely to see advancements in AI as a means to alleviate job instability (Gull et.al, 2023 p.81).

4 Research methodology

This chapter contains the research paradigm and the reason for selecting this methodology. The research methodology used in this thesis is quantitative approach. The data will be collected via a survey.

Rajasekar, Philominathan & Chinnathambi (2006, p.2) describe research as a logical and systematic search for new information on a specific topic. Its aim is to find solutions through investigation into scientific and social problems via objective and systematic analysis. According to Nenty (2009, p.29) the research topic is a product of a detailed and insightful analysis of the research problem. The research problem should reflect three variables. The independent variable, the dependent variable and the participant that are under study. The independent variable is the one that is being studied to establish how it influences the dependent variable. The dependent variable is the problem variable, the one that is being studied.

The process of this research can be worded as a step-by-step process of developing a research study. It guides the researcher into following a clear path through which one should follow. For this thesis the following research process was created.

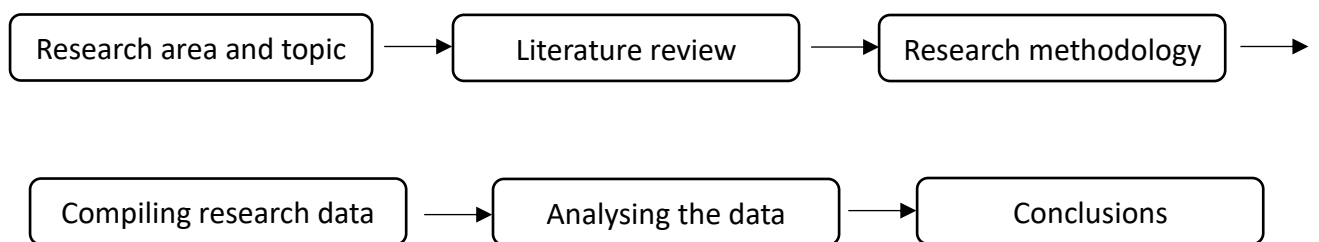


Figure 1. Research process

4.1 Research approach

Quantitative research can be seen as the corner stone of evidence-based decision making. Quantitative is aimed at understanding social phenomena through variables that can be measured. It implies that complex issues can be dissected into smaller, more quantifiable units for analysis (Lim, 2024 p.1). In its basics, quantitative research method is about the collection and analysis of data and is heavily affected by the effectiveness of data processing, analysis and interpretation (Goertzen, 2017 p.12; Gunter, 2016 p.210). In its core there is a commitment to impartiality and detachment from the subject matter. This type of research seeks to minimize biases and produce results that are generalizable across various contexts.

Although usually the intention of quantitative research is hypothesis testing this research does not include a hypothesis. According to Lim (2024, p.1-3) its aim is to validate or disprove existing hypotheses, to produce empirically validated predictions or create cause and effect relationships among variables. The research employs numerical data, which is collected via structured instruments such as surveys which is well suited for statistical analysis. Surveys are a major part of any quantitative research. They are used to explore relationships and behaviours between variables (Gunter, 2016 p.214). The strength of quantitative research is in its capacity for generalizability, its focus on hypothesis testing and proficiency in establishing causality (Lim, 2024 p.3).

Quantitative method offers the benefits of standardization in which data is collected in a consistent manner. The speed in which data can be collected is one of the key features. Fixed answer surveys gather data rapidly and allows the real time analysis and immediate adjustments (Lim, 2024 p.3). It allows the researcher to uncover behaviours and trends into the subject that they are studying.

Lim (2024 p.4) points out two shortcomings of a quantitative research. The first being limited contextual understanding which may result in overlooking essential nuances which in turn affect the depth and interpretation of findings. It does not provide insight

into the reasoning behind certain answers. Thus the research will lack the information about the participants motivation (Goertzen, 2017 p.12). The researcher in their attempt to draw a comprehensive conclusion may be drawn to speculate potential rationales from existing studies which in turn may or may not be true and therefore necessitating further research and validation. The second shortcoming identified is restricted complexity. Quantitative research may oversimplify complex phenomena, losing depth and meaningful insights. Mitigating it demands understanding the complex relationships that may exist between them (Lim, 2024 p.4).

According to Lim (2024, p.5) data collection also brings its own challenges. The limited flexibility of and fixed answer survey makes it less amenable to unanticipated changes once the data collection has commenced. Often this is solved by implementing mixed methods research to allow follow-up interviews to take place.

Quantitative methods are effective in studying groups of people and generalizing the research into a broader concept (Holton & Burnett, 2005 p.30).

Table 1. Quantitative and Qualitative attributes (Lee, 1992 p.89)

Attributes	Quantitative	Qualitative
Ontological assumption	Objectivity	Subjectivity
Epistemological assumption	Positivism	Phenomenology
Aims of Inquiry	Universality	Particularity
Role of researcher	Outsider	Insider
Researcher-Respondent Relationship	Detachment	Involvement
Research methods	Statistic	Description

1. Remaining objective during the research is one of the main reasons for choosing quantitative approach. Since the researcher's role is limited to being an outsider and maintaining a detachment to the respondents.

2. Other factors that influenced the decision for choosing quantitative approach was to be able to interpret the results through reason and logic.

4.2 Survey

According to Janes (2001, p.419) surveys are a good way to get an understanding of current state of a group or population with getting the right representation being the biggest concern for the researcher. Stantcheva (2023, p.206) states that often elements like perceptions, knowledge, beliefs, attitudes and reasoning might remain undetected. That's where surveys become essential. Surveys can be an integral part of the research process. Well-designed research question allow the researcher to create an own controlled variation but since the researcher is the one creates the data it also presents many challenges.

For the goal of the survey it is important to well define the purpose and the objectives of the survey so it will produce meaningful results. It is essential for collecting valid and reliable data. Wording and format should be clear to enhance the answer rates in responses. Response rates are more strongly affected by creating multiple contact points such as prenotification messages, reminders and follow-ups (Bartlett, 2005 p.100-102).

Stantcheva (2023, p.215-219) identifies three biases that could affect the outcome of the survey and how to minimize and deal with effects. Sources of biases in answer selection which may occur when respondents try to take shortcuts in order to minimize cognitive load. Unintended question order effects can be divided into cognitive -based which arise from the mental processes such as certain ideas becoming more salient than others or when respondents employ similar thought processes for other question and normative -based order effects which arise from the social and behavioural tendencies such as a situation where respondents adjust their answers to appear fairer or when respondents avoid extreme answers. Acquiescence bias is the tendency to answer provided questions

in a positive way regardless of their content which may be the consequence of wanting to spend less time and effort to think pros and cons of an issue.

4.3 Ethical considerations

Confidentiality and anonymity crucial ethical practises that aim to protect the privacy of subjects during the data collection and analysis. Thus anonymity refers to data collection without gathering any identifying information therefore the researcher nor anyone can trace the data to an individual participant (Coffelt, 2017 p.228).

To protect the privacy of the participant maintaining confidentiality is important. Participants may be more comfortable with completing a survey if they are aware that their answers were kept private (Coffelt, 2017 p.229).

The following ethical considerations were taken into account in this survey.

Anonymity:

- The participants were informed that the survey would be conducted anonymously.

Confidentiality:

- The participants were informed that their answers would be kept confidential and their privacy would be respected.

Consent:

- The participants were informed about the purpose of the survey and acknowledged their right to participate.

4.4 Validity of the thesis

According to Carmin & Zeller (1979, p.11-12) reliability concerns the extent to which an experiment produces the same results on repeated tests. It is to be noted however that

repeated measurements never exactly equal one other but tend to be similar. Sireci, Braun & Wainer (2005, p.11) note that measurement process is valid if it measures what it's supposed to measure. The term validity refers to appropriateness, meaningfulness and usefulness of the specific inferences that are made from the measurement processes. Mellinger & Hanson (2020, p.177) refers to (Litwin, 1995 & Messick, 1995) that validity can be described as the property of the scale to produce a measurement that accurately reflects the underlying construct. It can also be described as an alignment between the measure and theoretical definitions, relationships and predictions. Furthermore Mellinger & Hanson (2020, p.177) refer to Borsboom (Kane, 2004) that a validity is a holistic evaluation that a scale is appropriate, useful and meaningful in measuring a construct.

Regarding the validity of this study, the research method in this study is endorsed by previous key studies in this field.

5 Data collection and analysis

The survey consisted of twelve questions and was directed to group of approximately sixty employees that are participating in the municipality's trial with Microsoft Copilot. Thirty-two employees answered the survey.

5.1 Research context

Microsoft copilot is an intelligent assistant that is embedded into Microsoft applications such as Word, Excel, PowerPoint, Outlook and Teams. Its' aim is to assist with generating content and ideas, automating projects and streamlining tasks as well as creating intelligent suggestions and insights. It can be viewed as a productivity tool leveraging AI the way employees engage with their work (Spataro, 2023). The data for this thesis was collected via a survey using the webropol survey tool from the public sector employees in the municipal government of Pirkkala, Finland. It is to be noted that Microsoft Copilot is used in a wide variety of tasks in the organisation and the specific use case is not identified. The implementation of copilot is usually done with the aim of boosting productivity in different organisational contexts. It can be used for example to write documents and analyse data (Korhonen, 2024; City of Turku, 2024).

5.2 Survey results

The following section will address the results of the survey from each of the groups. For simplicity the supervisor and leadership groups are combined under the term management when going through the results.

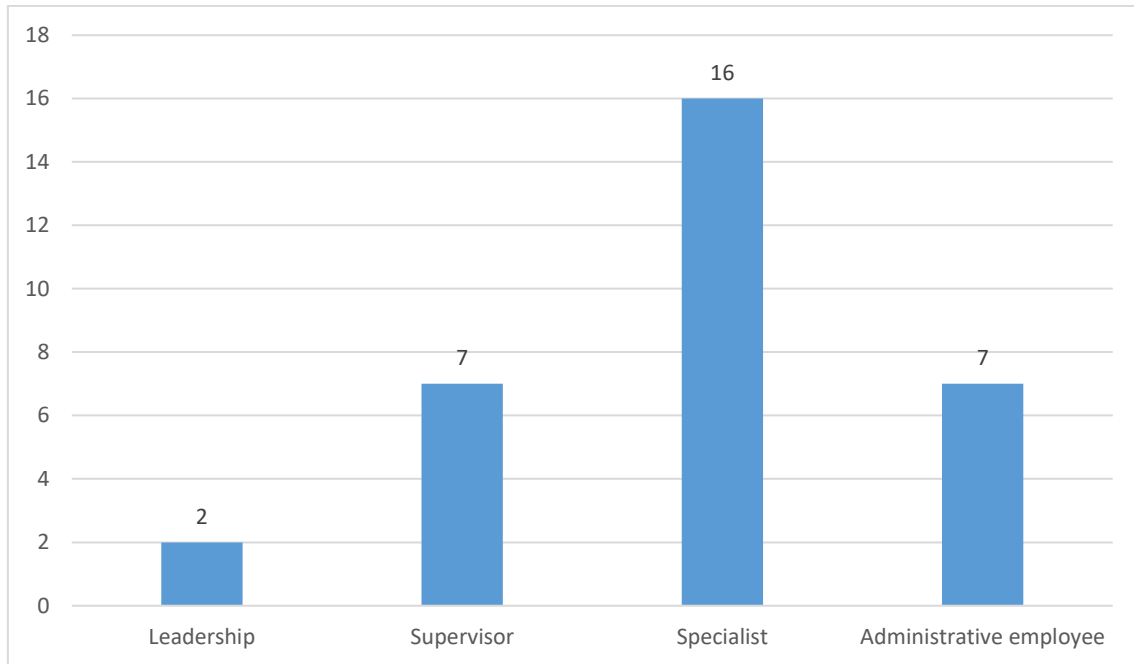


Figure 2. What is your current role?

The largest group was specialists with 50% of answers to the survey, followed by the administrative employees at 22% and the supervisors at 19%. The upper management contributed 6% of the responses to the survey.

The position of the participants in the organisations was important to know in order to determine if there was a difference in viewpoints between the management, the professionals and other administrative staff.

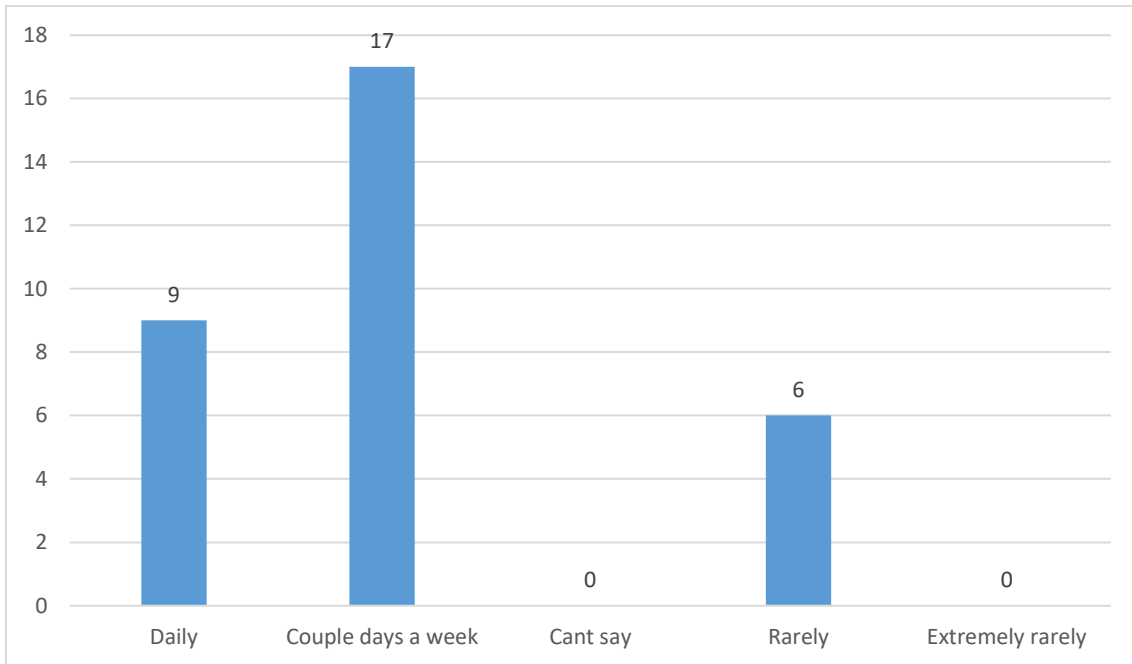


Figure 3. How often do you interact with AI at your workplace?

The importance of the frequency of use of AI in the workplace indicates the employees' exposure and the level of understanding of the subject and helps to understand the level of digital transformation in the organisation. This can also be analysed in order to understand if there is a correlation between the other questions.

Majority of the respondents interacting with AI couple "daily" or "couple days a week" (28.1% and 53.1%). Only 18.8% of respondents reported "rarely" interacting with AI.

Among the management majority interact "couple days a week" (55.6%) with AI applications, 33.3% "daily" and 11.1% "rarely". Specialists reported 31.2% "daily" use of AI, 50% "couple days a week" and 18.8% "rarely". Administrative employees reported 14.3% "daily", 57.1% "couple days a week" and 28.6% reported "rarely".

It can be observed that the management interact with AI the most among the group. Specialists align with the median and administrative employees interact slightly less with AI.

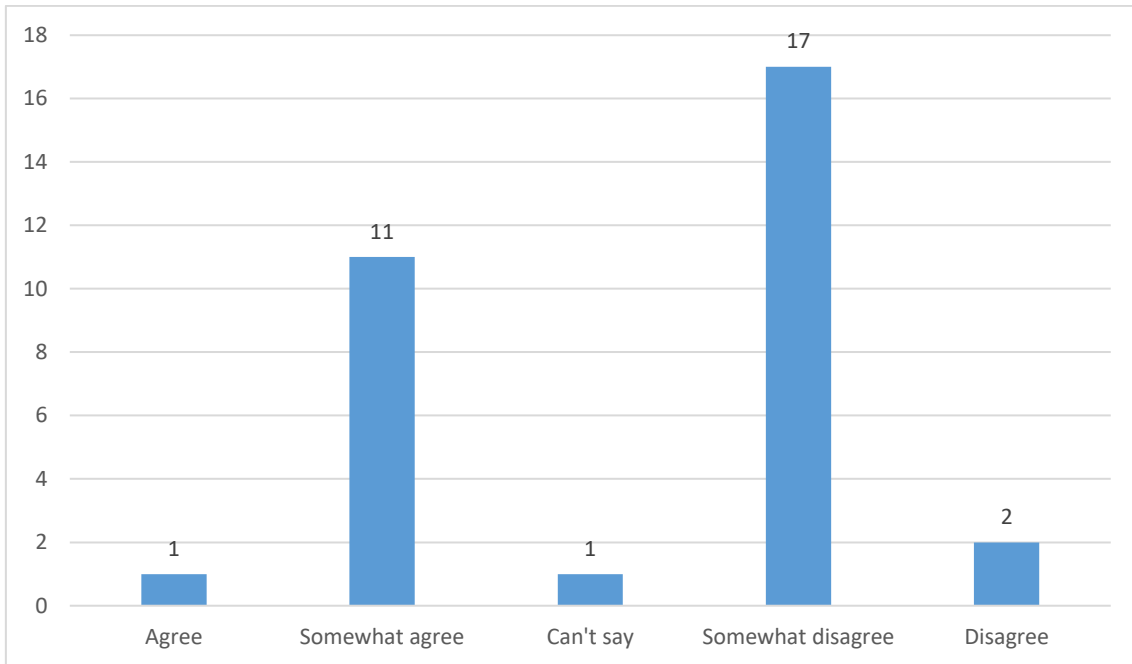


Figure 4. AI has significantly changed the nature of my work.

This allows to track implementation the influence of AI on the workforce and the employee perceptions of AI. The data from this can be compared to other questions and AI interaction frequency.

Majority of participants “somewhat disagreed” with the statement which stands at 53.1% while 34.4% of participants “somewhat agreed” with the statement.

Among management the results were somewhat divided with 55.6% somewhat agreeing with the statement and 44.4% somewhat disagreeing with the statement. Specialists reported 6.2% “agree”, 31.2% “somewhat agree”, 56.3% “somewhat disagree” and 6.3% disagree. Administrative employees reported 14.3% “somewhat agree”, 14.3% “can’t say”, 57.1% “somewhat disagree” and 14.3% “disagree”.

The management perceives the most change, administrative employees the least and specialists align with the median. The participants were asked how much time they spend with AI at work. Majority responded daily or multiple times a week indicating

strong use of AI in the group which is ideal for the purpose of this study. Using AI often allows employees to properly familiarize themselves with the AI application improving their understanding of the technology and also develop their own views and opinions of the subject.

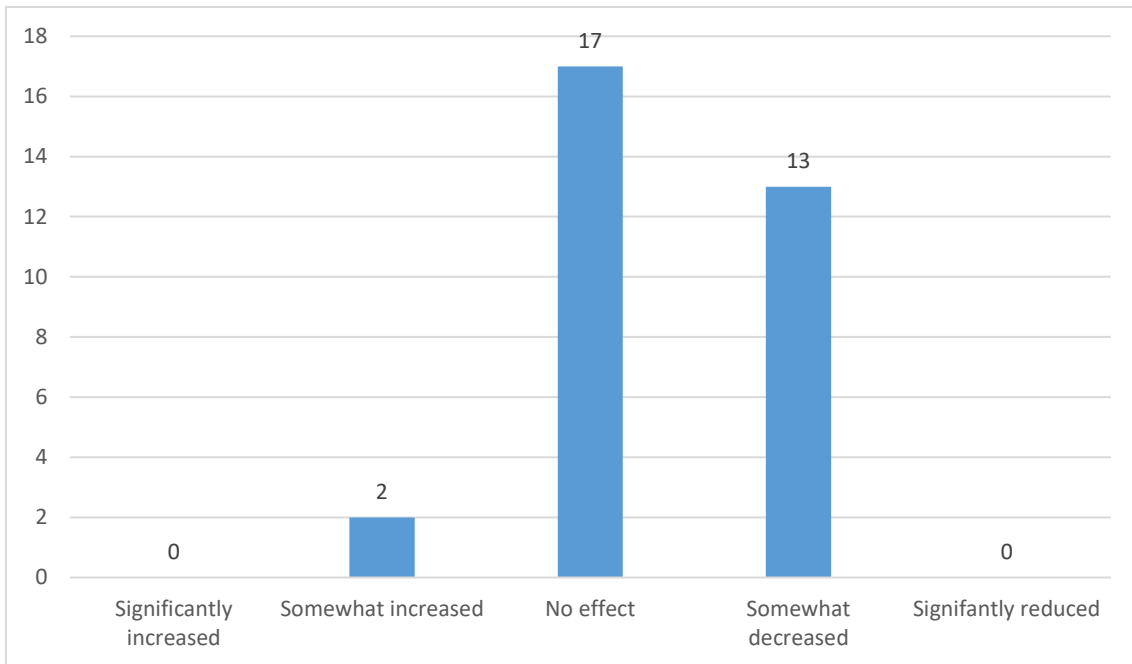


Figure 5. AI has affected my workload

Majority of the participants reported that there was “no effect” (53.1%) if AI had affected their workload, while 40.6% reported that their workload had “somewhat decreased” and only 6.3% reported slight increase in the workload.

Among management 33.3% reported “no effect” and 66.7% reported some decrease in workload. Specialists reported “somewhat increased” at 12.5%, “no effect” at 68.8% and “somewhat decreased” at 18.7%. Administrative employees reported 42.9% “no effect”, and 57.1% “somewhat decreased”.

The management and administrative employees report decrease in workload, while specialists report little to no effect. When looking at whole result it can be perceived that there was no effect or a slight decrease in workload.

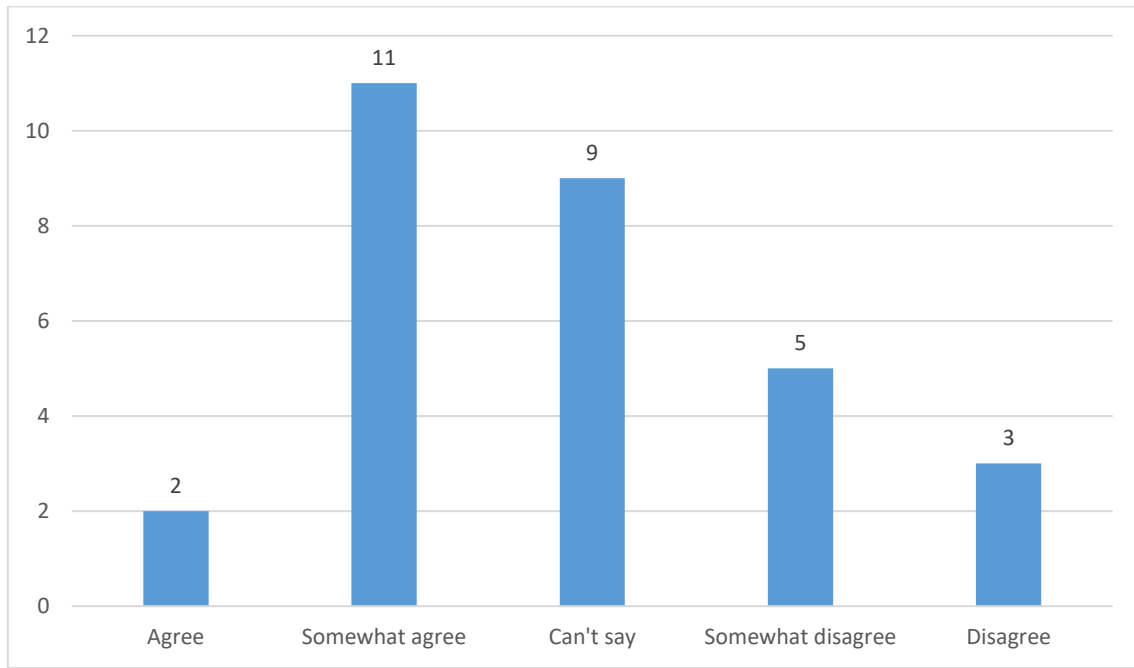


Figure 6. AI has improved the efficiency of my daily tasks

A single biggest group “somewhat agreed” (35.5%) with the statement while the “can’t say” is also high at 29%. When combining with those who “somewhat disagree” (19.4%) and “disagree” (9.7%) with the statement the median moves around the middle point.

Among management the participants slightly agreed with the statement with the results being 44,5% “somewhat agree” and 11.1% “agree” while 33.3% “can’t say” and 11.1% “disagree”. Specialists report “agree” at 6.2%, 37.5% “somewhat agree”, 25% “can’t say” and 25% “somewhat disagree”. Administrative employees reported 16.7% “somewhat agree”, 33.3% “can’t say”, 33.3% “somewhat disagree” and 16.7% “disagree”.

The management reported slightly more efficiency on daily tasks and administrative employees perceived the least changes while specialists reported neutral views. When

looking at the reports from the whole group they are somewhat mixed but those reporting efficiency improvements are in majority with a notable portion being on a neutral stance. The results can be perceived that there is lack of strong efficiency gains in the group. High portion of “can’t say” suggests lack of clear impact for many.

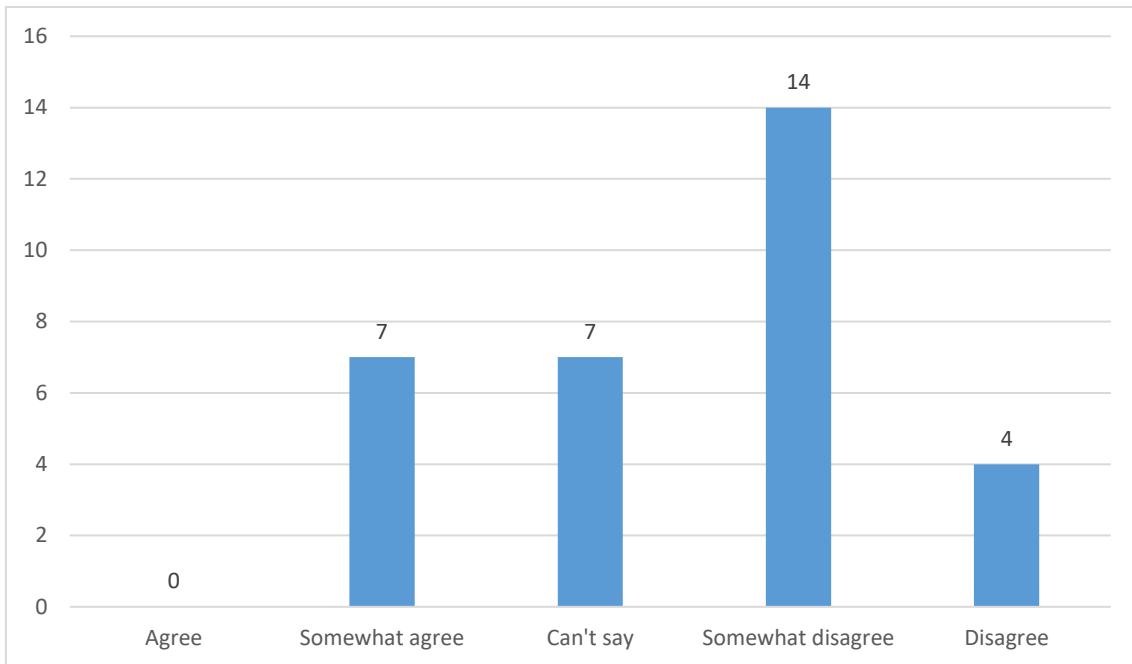


Figure 7. The adoption of AI has been challenging at my workplace.

Majority of the participants “somewhat disagreed” with the statement (43.7%) while answers “somewhat agree” and “can’t say” both have 21.9% answers each.

Among management majority reported that the adoption of AI hasn’t been challenging with 55.6% of the participants “somewhat disagree” and 22.2% “disagree”. Rest of results were 11.1% “somewhat agree” and 11.1% “can’t say”. Specialists reported 31.2% at “somewhat agree”, 18.8% “can’t say”, 37.5% “somewhat disagree” and 12.5% “disagree”. Administrative employees reported 14.3% “somewhat agree”, 42.8% “can’t say” and 42.9% “somewhat disagree”.

The management found AI adoption the least difficult while specialists found it slightly more challenging than the group median. Administrative employees were the most uncertain and leaned towards AI adoption being challenging. It can be observed that majority of participants disagreed with the statement. The notable level of uncertainty suggest varied experiences with implementation or that there have been newer implementations where challenges might have not been fully assessed yet.

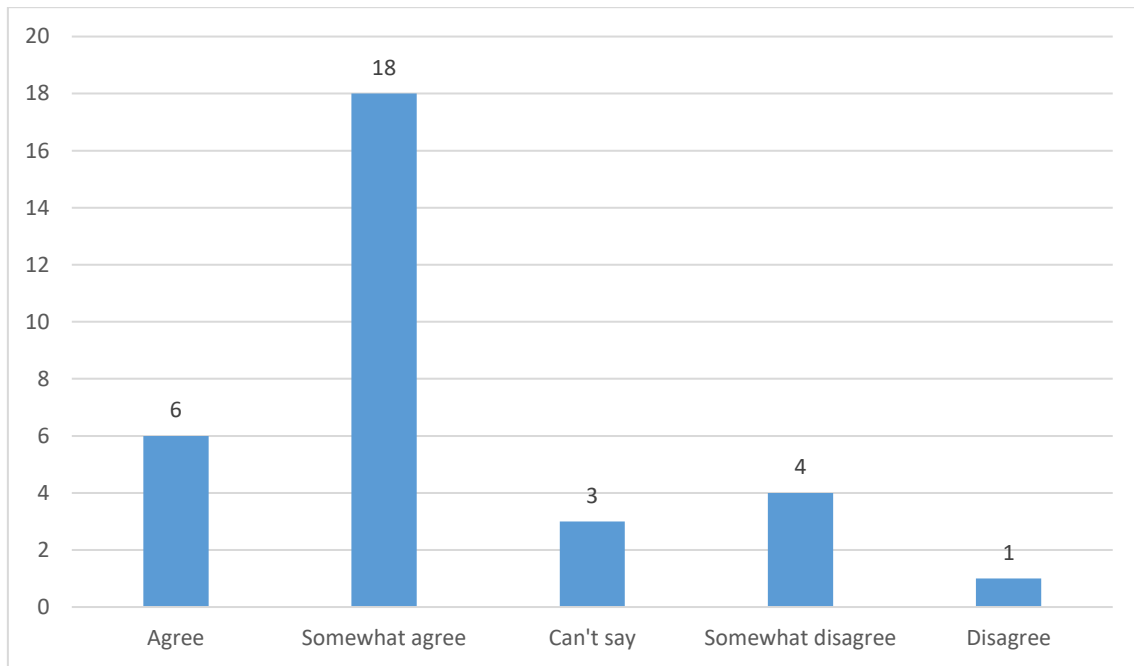


Figure 8. I feel prepared for future AI developments in my workplace.

Combining results from “agree and somewhat agree” result in total of 75% of answer while disagreement is rather low at 15.6%.

Among management majority “somewhat agree” (66.7%) with the statement and 11.1% “agree” while only 22.2% “somewhat disagree”. Majority of specialists “somewhat agreed” at 50% and 18.7% “agree” with the statement. While 12.5% “can’t say”, 12.5% “somewhat disagree” and 6.3% “disagree. Administrative employees reported 28.8% “agree”, 56.1% “somewhat agree” and 14.3% “can’t say”.

The answers indicate preparedness with AI developments that could indicate sufficient and ongoing training, proper communication and supportive organisational culture. There were no major discrepancies with the answers from different groups.

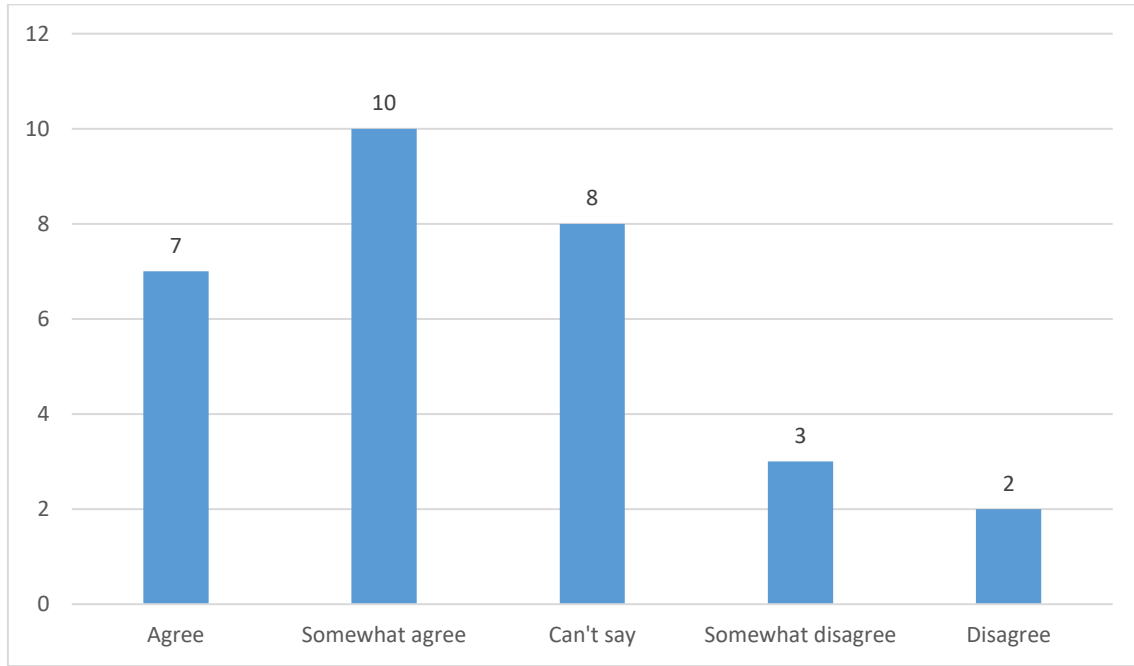


Figure 9. To what degree do you trust that AI systems in your workplace handle personal or confidential data responsibly?

Agreements, when combined together have 53.1% of total answers, create the largest group and clearly outweighs “somewhat disagree” at 9.4% and “disagree” at 6.3%. Those who couldn’t answer (31.2%) is quite high tipping the median of the answers between somewhat agreeing and can’t say.

Among management 33.3% “agree” and 44.5% “somewhat agree”, only 11.1% “can’t say” and 11.1% “somewhat disagree”. The specialists reported “agree” at 21.9%, “somewhat agree” at 25% and “Can’t say” at 43.8%, 6.2% “somewhat disagree” and 6.3% disagree. Administrative employees reported 14.3% “agree”, 28.5% “somewhat agree”, 28.6% “can’t say”, 14.3% “somewhat disagree” and 14.3% “disagree”.

The management shows highest trust while specialists show high uncertainty and low trust. Administrative employees also show lower trust than average. The somewhat high uncertainty shows potential need for transparency and communication around data handling. Although it could also mean that participants have not thought about data handling or are not familiar with the subject.

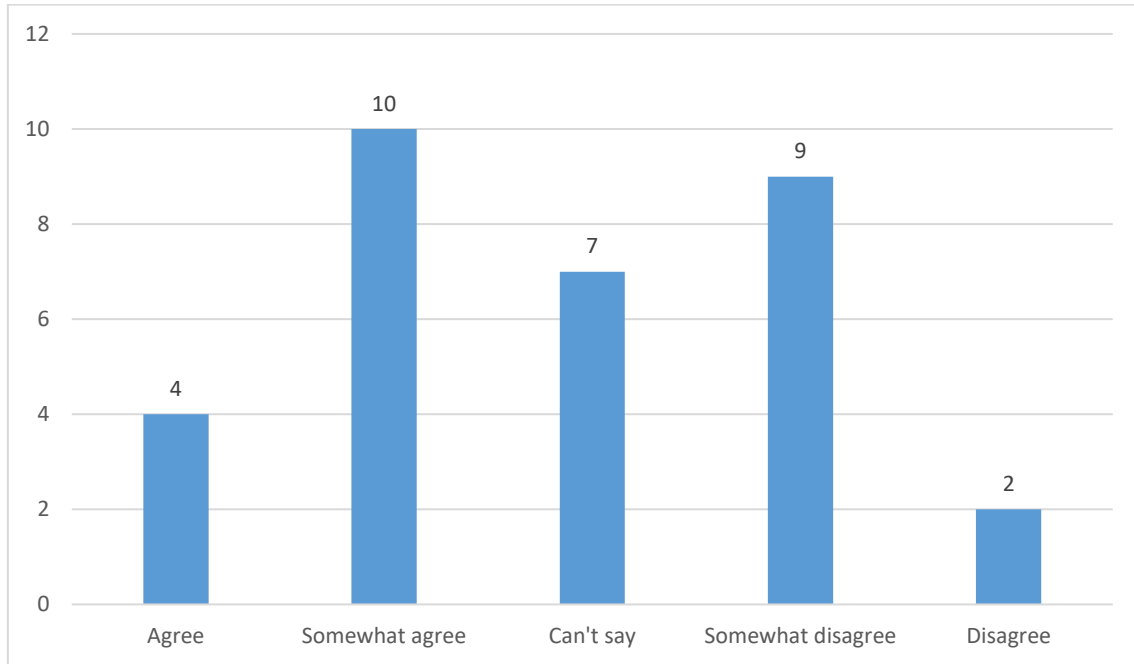


Figure 10. How much do you agree with the statement: AI increases the risks of data misuse in public sector organizations?

Respondents' results are divided. Majority "somewhat agree" at 31.2% and "agree" at 12.5% with the statement followed closely by "somewhat disagree" at 28.1%. The "can't say" category being at 21.9% also is rather significant.

Among management 22.2% "somewhat agree", 34.4% "can't say", 33.3% "somewhat disagree" and 11.1% "disagree". With specialists 12.5% "agree", 37.5% "somewhat agree", 18.7% "can't say", 25% "somewhat disagree" and 6.3% "disagree". Administrative employees reported 28.5% "agree", 28.6% "somewhat agree", 28.6% "somewhat disagree", 14.3% "can't say" and 28.6% "somewhat disagree".

Among the administrative employees there can be observed highest perception of risk while the management perceive lowest risk. Specialists only show slight concern. For the whole group results indicate that the median is “can’t say” with slight lean towards perceived risk.

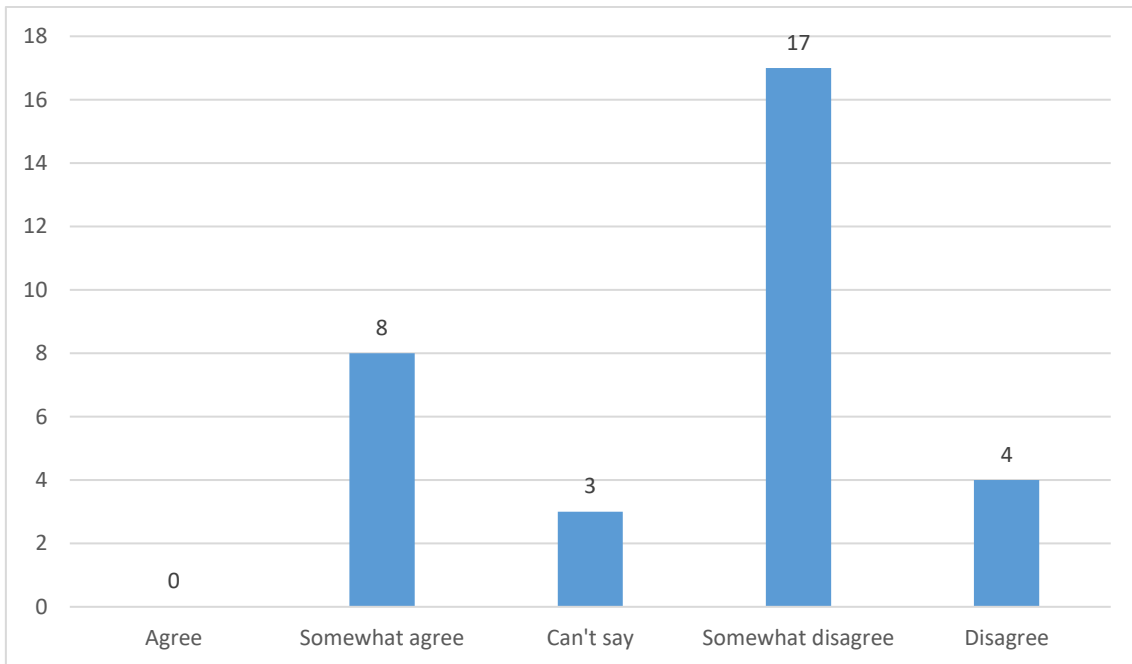


Figure 11. To what extent do you agree with the statement: AI adoption always leads to positive outcomes?

Majority of participants responded “somewhat disagree” 53.1% showing clear dominance with “disagree” at 12.5% while 25% responded with “somewhat agree and “can’t say” at 9.4%.

Among management 55.6% “somewhat agree”, 11.1% “can’t say” and 33.3% somewhat disagree”. With specialists 12.5% “somewhat agree”, 6.2% “can’t say”, 68.8% “somewhat disagree” and 12.5% disagree. Administrative employees reported 14.3% “somewhat agree”, 14.3% “can’t say”, 42.8% “somewhat disagree” and 28.6% “disagree”.

The management shows the highest optimism while specialists and administrative employees report highest scepticism. Responses indicate strong disagreement with the

statement indicating that respondents maintain a nuanced view of AI and acknowledging possible non-positive outcomes.

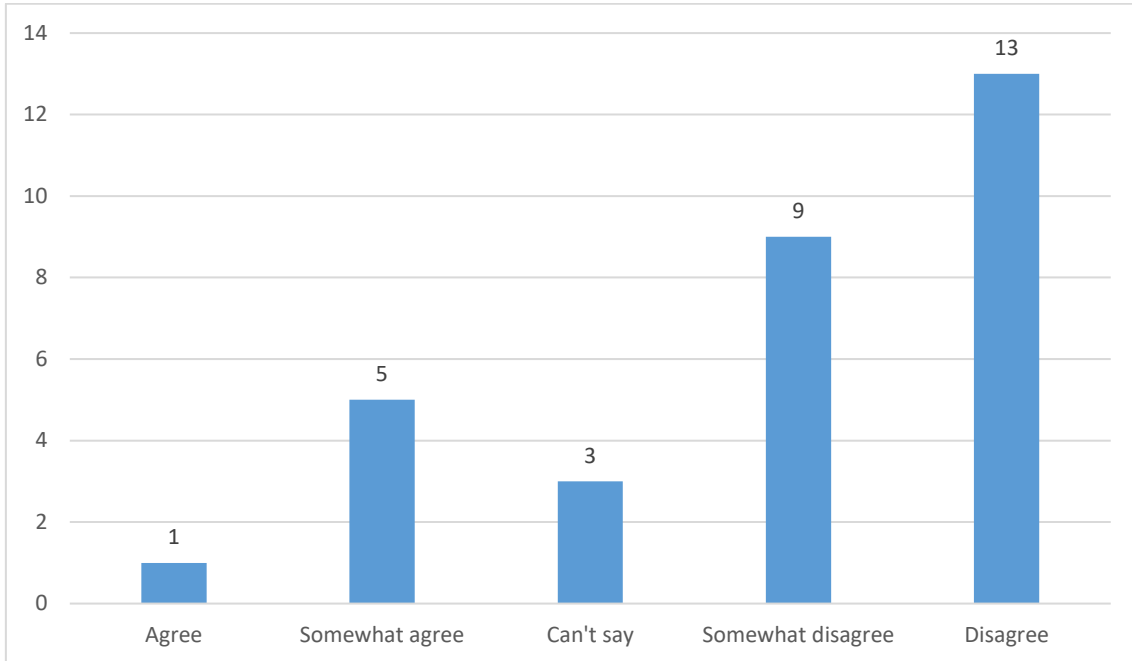


Figure 12. I have experienced increased stress related to AI adoption at my workplace.

Disagreement continues from the previous with those who “disagree” being at 42% and “somewhat disagree” at 29%. Participants who “somewhat agree” is at 16.1% and “agree” at 3.2%. “Can’t say” is at 9.7%. Median being at “somewhat disagree”.

Among management majority “disagree” with the statement at 66.7% and 22% “somewhat disagree”. Only 11.1% “somewhat agree” with the statement. With specialists 6.6% “agree” with the statement, 20% “somewhat agree”, 20% “can’t say”, 26.7% “somewhat disagree” and 26.7% disagree. Administrative employees reported 14.3% “somewhat agree”, 42.8% “somewhat disagree” and 42.9% “disagree”

The management reports the lowest levels of increased stress while specialists report slightly higher stress but still low overall. Administrative employees also report low stress. The majority of participants reported no increased stress from AI adoption.

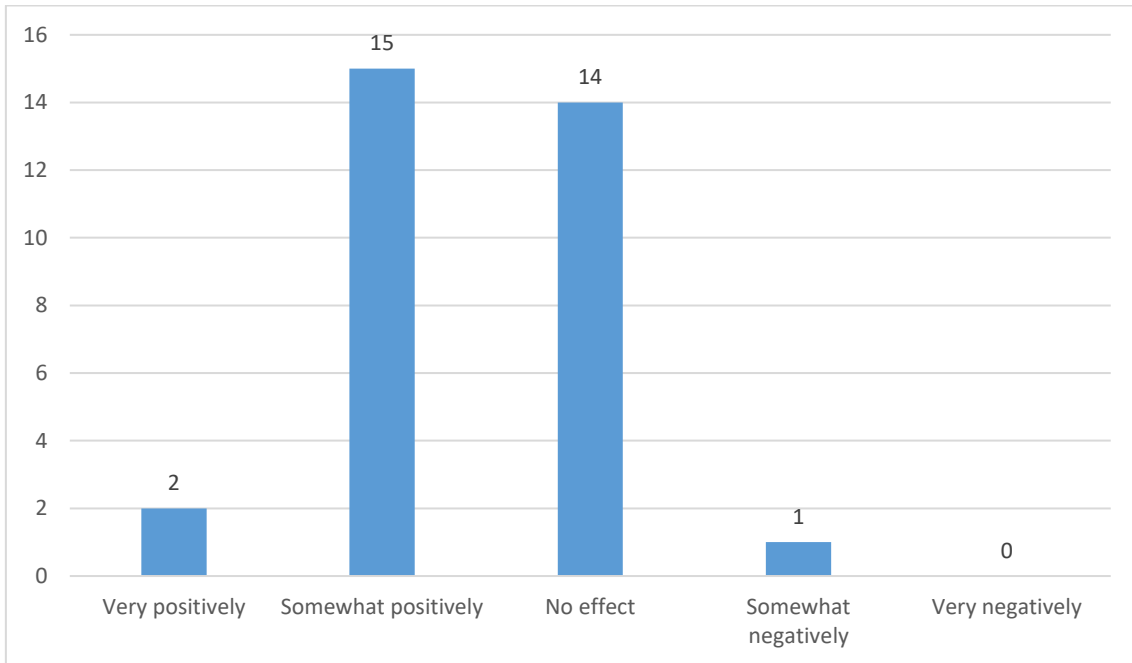


Figure 13. How has AI affected my job satisfaction?

Majority of participants reported positive effects with “somewhat positively” at 46.9% and “very positively” being at 6.2%. 43.8% reported “no effect”.

Among management majority reported “somewhat positively” at 66.7% and “very positively” at 11.1%, while 22.2% reported “no effect”. With specialists 6.2% reported “very positively”, 31.2% reported “somewhat positively”, 56.3% reported “no effect” and 6.3% reported “somewhat negatively”. Administrative employees reported 57.1% “somewhat positively” and 42.9% reported “no effect”.

The management reports highest positive impact while specialists report lowest impact. The administrative employees report overall averagely. For the whole group the results indicate a neutral tendency or slightly positive effects on job satisfaction. It would appear that AI integration doesn’t appear to affect negatively on job satisfaction and might offer slight benefits for a significant portion.

5.3 Findings of the study

The proper and responsible AI governance frameworks are of vital importance in successful AI implementation. There needs to be respect for individuals and personal data and according to Leikas, et.al (2022, p.3) not many organisations are knowledgeable in legal frameworks for data protection, accountability and procurement. The governance of AI needs to be responsible as to encourage desirable data collection, administration and utilization efforts (Papagiannidis et.al, 2025 p.6). AI being able to collect data and information from any digital source the user itself needs to be aware of the extent to which AI can draw data (Trajkovski, 2024 p.415; Anderi et.al, 2024 p.12). Thus proper training to use AI is of paramount importance. Data and privacy are major factors in ethical and responsible use of AI even though they are often not prioritized during the implementation AI. Papagiannidis, et.al (2025, p. 2) raise the importance of creating balance between performance, transparency and ethical conduct. The policymakers need to keep in mind the potential effects that AI adoption might have on employees and to improve common good.

There was a clear lack of knowledge about the positive impacts on work processes despite frequent interaction with AI and there was no consensus whether AI improved the efficiency of daily tasks or not. The specialists' subgroup and the administrative employee subgroup both felt similarly suggesting that AI does not automatically translate into perceived efficiency gains. In the literature Borisso & Hristozov (2024. p.422) claim that AI can be used efficiently to assist employees but not to replace them. The employee experiences would indicate same. Furthermore, both groups also felt that AI had not significantly changed the nature of their work. While employees generally felt prepared about the future developments of AI indicating to have the required digital skills (Manana & Mawela, 2022 p.1; Santos, et.al, 2024 p. 15) there would seem to be a gap between the employees' expectations and with the actual benefits delivered so far.

There would seem to be a strong disagreement between the groups about the statement that AI adoption always leads to positive outcomes. Particularly the specialists and the

administrative employees feel that AI adoption does not guarantee improvements and may involve negative consequences. Considerable scepticism also whether AI systems can handle data confidentially and while majority feels that AI is able to handle data confidentially there is still a considerable number of participants that feel wary about data handling.

The degree of uncertainty regarding data handling and data misuse, especially among specialists' and administrative employees shows concerns regarding the "black box" characteristics of AI (Santos, et.al, 2024 p.5; Papagiannidis, et.al, 2025 p.7). When the processes are vague and not transparent enough (Strich et.al, 2021 p.3) and responsibility and accountability are unclear (Papagiannidis et.al, 2025 p.7; Holmström, 2022 p.329) it can create uncertainty and resistance among employees hampering successful adoption.

The differences between different job roles is also prevalent. The management subgroup can be observed to be much more positive and optimistic in their view of AI adoption than other groups. The management perceived much greater change to their nature of work, were more likely to report workload decrease, saw slightly higher efficiency gains, didn't find implementation as challenging, were less worried about risks, showed higher optimism about AI adoption being always positive and reported greater positive impact on job satisfaction. This could be viewed as an example of the pro-innovation bias where in the management level AI adoption is seen as having more of a strategic potential and provide more opportunities for future development whereas the specialists and the administrative workers face AI more in their day-to-day operations with its limitations and challenges. This challenges the idea of pro-innovation bias where new innovations are viewed inherently beneficial and focus only on the benefits that it brings rather than paying attention to the risk and downsides.

The survey did not however find any major connections between AI adoption and technostress. Rohwer et.al (2022 p.162-163) & Zhou et.al (2024 p.1-2) indicate that

technostress is one of main challenges when it comes to future digital transformation. The reported low stress levels could indicate effective stress mitigation mechanisms and that the workplace has sufficient flexibility regarding workhours (Gupta, et.al, 2024 p.16). It could also be that the AI systems in place are not threatening the core job identity (Wang et.al, 2024 p.2) as employees who feel significant change to their nature of work may perceive the change as a threat and reject the new mechanisms causing more stress (Strict et.al, 2021 p.3). The low stress levels could also be because AI is seen as a tool that helps to perform better rather than a threat that would radically transform the core job identity or would eventually lead to making the employee obsolete. It could also be that employees have not felt pressured into learning and adopting complex work applications as shown in the research done by Camarena & Fusi (2022 p.162-163).

The successful AI implementation in the public sector can be viewed as a human challenge not just a technological one. The concerns regarding trust and transparency and the scepticism about the positive outcomes highlight the limitations of a technologically focused results. Fostering a supportive organisational culture, developing appropriate digital mindset and competencies (Manana & Mawela, 2022 p.1), assuring transparency of AI processes to mitigate the “black box” effect of AI (Santos et.al, 2024 p.422) and implementing AI through human-centric approach (Sigfirds et.al, 2023 p.2).

The results from the survey suggest that depending on the job role employees feel differently about the impact of AI and that there is scepticism and practical concerns about the adoption AI. Generally speaking the employees feel prepared for future AI developments suggesting a degree of readiness and openness to change. However, their experiences and attitudes present a more subtle reality. The findings indicate a mixed results regarding perceived efficiency gains, giving a limited sense that AI has significantly changed the fundamental nature of their work and there is scepticism about the positive outcomes. Additionally, there seems to be somewhat significant amount of uncertainty concerning the responsible handling of data by AI systems. This could relate to the “black box” nature of AI. Where employees find it difficult to explain the decisions made by AI

models due to their complexity and seemingly hidden decision-making criteria's (Mergel, et.al, 2024 p.4).

6 Conclusions

Digital transformation is a complex phenomenon with its own myriads of internal and external factors. The promises of digital transformation are vast as it promises to modernize operations, improve citizen engagement and public services. The expectations of citizens towards public administration, improving digital interactions and optimization of public spending are major drivers for it. To streamline bureaucratic processes and to improve efficiency as well as accessibility to government information continuous advancements in technological capabilities are needed. Similar reasonings are behind the AI adoption as it is an integral part of the public sectors digital transformation efforts. It is about building resilience and the ability to function in an ever-increasing digitalized world. AI is seen to have the capability to optimize operations, increase quality of decisions, enhance productivity and creativity, reduce stress and improve the quality of services. With proper implementation of governance and management procedures these are possible to achieve. Employee awareness is of most vital importance when training to use AI and proper governance frameworks are needed to make its management effective.

The main purpose of this study was to determine what are the effects of digital transformation in the context of AI adoption and is it inherently beneficial as most of the scholarly articles portray it to be. The underlying research problem was linked to public sector employees to provide quantitative data in order to determine this. The current almost intensifying speed of which technological progress is being made and personal interests in the subject matter are the reasons for this study. The previous scholarly findings addressed in this study support the fact that digital transformation and the subsequent AI adoption are the future for many organisations at one point or another. The approach to the subject was started from the two following research questions:

1. How does AI affect public sector employees?
2. How do the findings challenge the assumption that digital transformation in the context of AI adoption must inherently be beneficial?

The aim of the first research question was to gain insight through data on how employees perceive AI adoption. The aim of the second research question was to utilize the existing scholarly articles and the data derived from the first research question to determine if the findings do in fact challenge this assumption.

The data gathering for this thesis was done by quantitative methods via a survey. The questions for the survey were created by first getting introduced to the thematics of the subject. The thesis was started by first researching and getting to know the previous research done on digital transformation, AI adoption and employee perceptions on AI.

Pro-innovation bias, where new innovations are seen as positive and its negative effects downplayed can be observed from the survey results especially from the differences between the management and the two other groups. The management group showed more optimism when it came to the effects of AI. This strong belief in the benefits of AI could be a sign of pro-innovation bias, where the strategic potential and technological promises are highlighted. The two other groups showed more reservations towards AI as their experiences regarding perceived efficiency was more neutral and even slightly negative and they showed more observable scepticism towards perceived positivity of AI. These differentiating views challenge the idea that digital transformation in the context of AI adoption is inherently beneficial. If the benefits would be inherent then they would be expected to spread more evenly. The results support the view that the technological benefits are context dependent and depend on how they are experienced in different roles.

All groups showed relative preparedness for future AI developments which indicates of having relevant digital skills or feeling confident for ability to learn. The specialists reported slightly higher stress and difficulties in adoption compared to other groups. This could be the result of feeling pressure on updating necessary skills or adapting their skills when AI is changing their way of work. Their employee identity, which is often build upon

their expertise can feel threatened if AI is used to start increasingly automating tasks previously needing human competence or if they lack the knowledge to use these new programs. The previously discussed “black box” effect can also be viewed as a reason for lowering the feeling of control and competence. When AI takes control of tasks that have traditionally required human participation and expertise it could limit the employees’ interaction opportunities between themselves and therefore limit the exchange of knowledge and building of work relationships. These are essential for the building of employee identity and the workplace culture. Additionally if the employees don’t understand the decisions made by the AI it can cause fractures in their professional identity. This is especially relevant for specialists where their position is often based on their ability to analyse and explain complex issues. When AI starts to gain more foothold in daily life skills like critical thinking and problem-solving become even more important which can ultimately have an effect on the skills that employees view important for their professional identity.

The adoption of AI seemingly had very little effect on stress among the participants. In the literature technostress is covered widely and is seen as a major challenge in the implementation of digital technologies (Rohwer et.al, 2022; Zhou et.al, 2024; Gupta et.al, 2024). The results of the survey however did not illustrate this. There could be a number of reasons for this. Firstly, the adoption of AI could be in an early stage within the organisation. Secondly, the AI tools in place are not viewed as a threat to core job identity or the applications in use are perceived as a threat for job identity, skills and the preservation of employment. Thirdly, the organisation may have established procedures to reduce stress that could or could have been created such as flexibility with office hours or offered sufficient support and training. Lastly, the overall perceived readiness for future developments of AI could also indicate that employees view the change in a proactive way and with trust. The specialists reported slightly more increased stress compared to the other groups. It could indicate that certain groups can be affected by technostress more than others. The stress these individuals experience could be the result of knowledge and identity pressures or that they experience more difficulties when interacting with AI.

Even though the results didn't perceive the effects of technostress it doesn't disprove possibility of it but could imply that technostress could be situational or role-related.

The research would suggest that the benefits of AI are dependent on the context they are applied, role specific and would require a human-centric management. It provides information on how the pro-innovation bias can present itself on different levels of organisations and how it contradicts the real, varied experiences of employees. The emphasis can be seen on digital skills and the need for continuous learning but also on how technological transparency and its impacts on work tasks and the feeling of competence. It supports the views in the literature that the focus of digital transformation should be on the employees, the organisational culture and in the skills and knowledge. It confirms the importance of employee attitudes and the effects of the "black box" on trust in AI. The results show that the management views AI more beneficially than the rest of the groups. This suggests that the benefits are not inherent but role dependent. If the adoption of AI would be inherently beneficial, its benefits would be experienced more broadly and evenly between different groups. The results challenge the idea of digital transformation being inherently beneficial and the support the concept of pro-innovation bias and offer a more complicated view on technostress where stress is not necessarily common but can focus on certain groups. The digital transformation in the context of AI adoption is not inherently beneficial.

6.1 Limitations of the research

While the findings do provide valuable insight into employees' perceptions towards AI in the public sector the sample size (N=32) and the subgroup sizes (N=9, N=16 and N=7) are rather small, creating limitations for generalizability of the results. The study reflects the perceptions in a specific context and results might differ in other contexts, sectors, countries or even with different types of AI applications. Therefore, the results of this study should be seen as potential patterns or indicative. Further research with larger and more diverse sample sizes would provide more variation and validation to the research.

Additionally, the participants of the survey did not only use AI for a single specific purpose, but for a wide range of tasks, causing limitations for the generalizability for the study as it is not exactly known what kind of use of AI could be behind the results.

6.2 Recommendations for future research

The future research could focus on specific AI tools that are used in various public sector organisations and how different organisational contexts influence AI adoption. Furthermore, a larger sample size would allow more sufficient statistical analysis and better generalization. Research could also be conducted in a qualitative manner to gain insights into the thoughts behind the answers especially between the different job roles. The future research could also focus on how different implementation strategies affect the employee perceptions and acceptance of AI adoption.

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Survey questions

1. What is your current role?
2. How often do you interact with AI at your workplace?
3. AI has significantly changed the nature of my work.
4. AI has affected my workload.
5. AI has improved the efficiency of my daily tasks.
6. The adoption of AI has been challenging at my workplace.
7. I feel prepared for future AI developments in my workplace.
8. To what degree do you trust that AI systems in your workplace handle personal or confidential data responsibly?
9. How much do you agree with the statement: AI increases the risks of data misuse in public sector organizations?
10. To what extent do you agree with the statement: AI adoption always leads to positive outcomes?
11. I have experienced increased stress related to AI adoption at my workplace.
12. How has AI affected your job satisfaction?