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## Alignment Between Artificial Intelligence (AI) and Public Sector Organizations: A Systematic Review

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### Abstract

*The emergence of Artificial Intelligence (AI) has resulted in significant transformations across private sector organisations, in particular, and public sector organisations in general. Therefore, academicians and researchers have been devoting their time to analysing the implementation of AI technologies in public sector organisations, as these technologies offer a wide range of opportunities. Nevertheless, the advancement of integrating AI into the public sector has been constrained by various factors, including data privacy and security concerns, as well as regulatory and ethical considerations. This paper thoroughly examines the possible implementation of AI in public sector organisations and its consequences for public organisations, particularly concerning government aspirations and the development of policies. The study rigorously evaluates existing material and conducts content analysis to attain a thorough comprehension. Given the ongoing distinction between digital transformation and AI, the findings indicate that additional scientific investigation is required in the public sector and government regulation domains. Although the partnership between the public and commercial sectors in the field of AI presents clear benefits, there is also empirical data indicating negative consequences. The paper aims to identify the best alignment strategies between AI and public sector organisations. Thus, it will enhance the research scope by incorporating additional empirical data for the effective implementation of AI in public sector organisations without posing threats to attaining the mission, vision, and major goals of the public sector organization.*

**Key Words:** Artificial Intelligence, Public Organisations, Alignment, Systematic Review

### Introduction

Our individual and communal existence hinges on cultivating fundamental intellect and a profound empathy as we reside and operate within a society characterised by expansive and intricate organisations (Denhardt, 2007). As Thompson (1967:147) pointed out, the key to staying afloat is ensuring that your organisation's structure and design are suitable for the domain you are operating in and your technology and work environment. As mentioned earlier, the observations remain pertinent

in the present day. They are highly applicable to the current landscape of utilising information technology and AI capabilities within public sector entities. AI will be able to increase the US, Germany, and Japan's annual economic growth rates by at least 2% over the course of the next 15 years (Purdy and Daugherty, 2016). AI will be able to increase the US, Germany, and Japan's annual economic growth rates by at least 2% over the course of the next 15 years (Purdy and Daugherty, 2016).

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The Chinese government has demonstrated a remarkable dedication to aligning its AI advancements with the Western world within the upcoming three-year period (Knight, 2017a). The State Council of the People's Republic of China issued a directive in 2017 that calls for a \$147 billion investment in AI by 2030. Disease detection, virtual help for vulnerable people like Be My Eyes, AI-Based Knowledge Management (KM) Software, climate change prediction and mitigation, AI Process Automation Systems like Boeing aircraft, AI-enabled cameras for traffic violations and fraud detection, Identity Analytics like face recognition, Cognitive Robotics and Autonomous Systems, Cognitive Security Analytics, Threat Intelligence, and many more are just a few of the public sector domains where AI has shown significant utility.

Governments can use AI applications to improve internal operations and public affairs as they are successfully implemented in an increasing number of fields. To make public service delivery easy, accessible, and effective, AI could be the new panacea. Conversely, the risks suggest that AI necessitates legislation and regulations grounded in principles and fundamental societal values to ensure widespread advantages (Boyd & Wilson, 2017). Government organisations worldwide have implemented programs to integrate and implement AI in the public sector. However, integrating AI technology presents a significant problem for the public sector. (Cath, Wachter, Taddedo, & Floridi, 2018). But, according to Boyd and Wilson (2017), "Even if humans remain in control of the intelligent systems we design,...AI technologies threaten to make us vulnerable, alienated and, paradoxically, 'automated masters' of our creation".

According to Martin Ford (2021), AI has the potential to drastically alter the labour market and the economy as a whole as it develops. In addition to the effects on employment and the economy, the further development of AI will bring with it a number of other risks. Our general security will be among the most direct dangers. It encompasses dangers to the political process and the social fabric, as well as AI-

enabled cyberattacks on key systems and physical infrastructure that will become more linked and algorithm-managed. Facial recognition and other AI-based technologies are being utilised in surveillance systems in ways that undermine any expectation of personal privacy and significantly increase the authority and reach of totalitarian governments. The development of completely autonomous weapons that may murder without a human providing specific authorization is the scariest near-term threat, according to Martin Ford (2021).

Nobody can predict how quickly AI will develop, how it will be used specifically, what new businesses and sectors will emerge, or what threats will be most imminent. Experts in AI expect that the field will be unpredictable in the future due to its disruptive nature. This paper offers a way to prepare and align AI with public organisations' goals and identify the best strategies for public organisations and society in general. The most exciting and significant years in human history are upon us. We can make sure that humanity's ultimate approach is secure and effective by implementing appropriate alignment techniques between AI and public organisations.

## AI

At Dartmouth College in Hanover, New Hampshire, John McCarthy (1927–2011) suggested a two-month study to be carried out by ten people for the following reasons (McCarthy et al., 1956):

*The study is to proceed on the basis of the conjecture that every aspect of learning or any other feature of intelligence can, in principle, be so precisely described that a machine can be made to simulate it. An attempt will be made to find how to make machines use language, from abstractions and concepts, solve kinds of problems now reserved for humans, and improve themselves.*

According to McCarthy, the proposed study field would ultimately automate every other field, called “artificial intelligence” (Martin Childs, 2011; Nello Christianini, 2016). This workshop gave impetus to work on the development of AI, and scientists are working on it with more people. The Chinese tech giant Tencent claims that there were approximately 300,000 “AI researchers and practitioners” globally in 2017 (James Vincent 2017). Jean-Francois Gagne, Grace Kiser, and Yoan Mantha’s 2019 Global AI Talent Report identified 22,400 AI experts who published original research, of whom about 4,000 were deemed to be highly influential (Jean-Francois Gagne et al. 2019). According to the Stanford Institute for Human-Centered AI, more than 141,000 patent applications and 496,000 articles were produced by AI researchers in 2021. (Daniel Zhang et al., 2022).

Kai-Fu-Lee (2021) wrote: “Artificial intelligence is smart software and hardware capable of performing tasks that typically require human intelligence. AI is the elucidation of the human learning process, the quantification of the human thinking process, the explication of human behaviour, and the understanding of what makes intelligence possible.” In 1956, while working on the Dartmouth Summer Research Project on AI, John McCarthy came up with the term “artificial intelligence”. McCarthy claims that (1988), “AI is concerned with methods of achieving goals in situations in which the information available has a certain complex character. The methods that have to be used are related to the problem presented by the situation and are similar whether the problem solver is human, a Martian, or a computer program.” Therefore, robots that are capable of human-like cognitive processes (such as learning, comprehending, reasoning, or interacting) and that help address global issues pertaining to transportation, health, and the environment are referred to as AI (OECD, 2017). Machine learning (ML), deep learning (DL), and neural networks are only a few of the many methods and resources now used in the field of AI (NN). The evolution of AI

across time is crucial to improving our understanding of the philosophy behind AI. Uzun and Önder, (2022). The first examples of AI or thinking machines can be found in Greek tales, such as the bronze robot Talos, the techno-witch Medea, the brilliant artisan Daedalus, the fire-bringer Prometheus, and Pandora, the malevolent fembot made by the god of innovation, Hephaestus (Adrienne Mayor, 2018). The concept of automatons or artificial beings can also be found in Sumerian civilisation, which flourished around 4500-1900 BCE in Mesopotamia, namely, Enkidu, the Sacred Statues, the Golem, the Scorpion-Men, and the Anzu bird. Norse mythology has several examples of automatons or artificial beings: the Huldra’s Cow, the Golem of Volundr, Mimir’s Head, Einherjar, Norms’ Web, and Andvari’s Hand. According to Norbert Wiener (1966), the computing machine is the modern counterpart of the Golem. Arthur C. Clarke’s First Law: “Any sufficiently advanced technology is indistinguishable from magic”, and Third Law: “Any sufficiently advanced technology is indistinguishable from a miracle” (Arthur C. Clarke, 1962) are indicative of tracing the origin of modern technology to the ancient “science-fiction” popularly known as myths. However, the history of modern AI is around 70 years old. After World War II, interest in technology heightened. The accelerated computation of World War II and AI research produced mechanical and electrical equipment for cryptographic analysis. In the years after World War II, Alan Turing developed the basic model for contemporary electronic computers. The pioneers of the technology underlying AI are John Von Neumann and Alan Turing. (Önder & Uzun, 2022).

In 1950, Alan Turing authored a paper titled “Computing Machinery and Intelligence.” Turing saw the immense capabilities of computers and authored this article with the intention of equipping humanity for the future. In this article, Alan Turing asks an important question: “Can machines think?” and defines the terms “machine” and “think” and develops the concept of the imitation game, which was later recognised as the “Turing Test”, a method

used to evaluate the cognitive abilities of machines (Turing 1950). Turing posits that computers can replicate all cognitive functions performed by humans. The Turing test assesses a computer's ability to execute tasks that are indistinguishable from those performed by a human.

It was during the Dartmouth Summer Research Project on AI (DSRPAI) meeting that the phrase "artificial intelligence" was first used. This meeting establishes the fundamental principles of AI in its contemporary form. The Rockefeller Institute financially supported the conference. This conference convened a cohort of esteemed scientists, trailblazers, and prominent personalities in the AI sector, marking a significant milestone in its history. Claude Shannon, a researcher at IBM; Nathaniel Rochester; Marvin Minsky, who founded the AI lab at the Massachusetts Institute of Technology (MIT); Allen Newell, the first president of the American Artificial Intelligence Association; and Herbert Simon, a Nobel Prize winner and the creator of AI, are among the notable figures in the field of AI (Bench-Capon et al., 2012; B. G. Buchanan, 2005; Haenlein & Kaplan, 2019).

The paper "Can a Machine Think and How Can It Think?" was published in 1959 by Prof. Cahit Arf in the Erzurum Atatürk University journal and aimed to address whether machines possess the ability to reason. Herbert A. Simon, J. C. Shaw, and Allen Newell developed the General Problem Solver to have the theoretical ability to solve any problem that could be expressed as a set of well-formed formulas (WFEs) (Kruzweil, 2024), which the RAND Corporation launched in 1959. The GPS was a computer software that solved logical puzzles by combining basic mathematical assumptions. AI research advanced quickly during the 1960s and into the middle of the 1970s. Joseph Weizenbaum built the first chatbot, ELIZA, in the 1960s at the MIT Artificial Intelligence Laboratory (Haenlein & Kaplan, 2019). The United States and Europe were the first to create AI task groups and laboratories. At the onset of significant advancements in AI, notable progress was made in natural language processing

(NLP). (Önder & Uzun, 2022). "The AI Winter" refers to the second half of the 1970s. By mid-1974, there was a growing criticism of AI, and the allocation of funds towards AI was perceived as futile. Nevertheless, during the 1980s, expert systems ignited a fresh, enthusiastic interest in AI research. During this era, the Japanese spearheaded the advancements in expert systems and robots. (Önder & Uzun, 2022).

The Kasparov-Deep Blue match in 1997 was a pivotal moment in the development of AI. Computer scientists have long regarded chess as a benchmark for AI. The advent of chess-playing calculators can be traced back to the latter part of the 1970s. However, it was not until the following decade that a group of graduate students from Carnegie Mellon University successfully developed the inaugural computer, known as "Deep Thought," which achieved victory over a chess player in a conventional tournament match. Similarly, DeepMind and Google developed AlphaGo, an AI-powered Go player. It achieved victory over Go master Lee Sedol in 2015. Alpha Go was trained using "reinforcement learning," a method that has been popular throughout the 2000s, to achieve the aforementioned success (Chen, 2016; Silver et al., 2017; Wang et al., 2016). The development of numerous AI techniques for machine learning experienced a notable uptick in the 2000s. The symbolic and connectionist approaches are the two methods or strategies for developing automated solutions to issues, according to Marvin Minsky (1927–2016). (Kurzweil, 2024).

In the context of history, the science of AI has gradually developed into an interdisciplinary field of study. From the 1990s to the present, scientists working together—including neurologists, biologists, physiologists, engineers, mathematicians, and psychologists—have significantly advanced AI (Nilsson, 2019). Since the early 2000s, governments have been increasingly concerned about AI. Many countries have started working on their national AI agendas, especially since 2017.

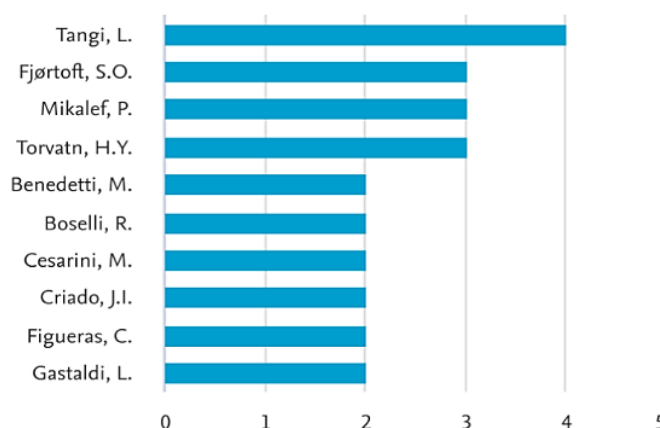
## Methodology:

A systematic literature review is the method we have selected because it is a “systematic, explicit, and reproducible method for identifying, evaluating, and synthesising the existing body of completed and recorded work produced by researchers, scholars and practitioners” (Fink, A. 2019). The researchers have conducted a systematic literature review using the “Preferred Reporting Items for Systematic Reviews and Meta-Analyses” (PRISMA) guidelines to ensure a transparent and replicable methodology (Moher, D. et al., 2009). The PRISMA statement claims that the technique aids researchers in providing a clear, thorough, and transparent step-by-step process for summarising the information that is currently available. (A. Libererati, 2009)

## 1. Identification:

The researchers retrieved and analysed literature using the prestigious academic database SCOPUS, owned by Elsevier. The documents inside the SCOPUS database were carefully chosen due to their interdisciplinary nature. The SCOPUS database contains 197 publications on Public Administration and 247 journals on AI. As per the Scimago Journal Ranking (scimago.com), it is deemed acceptable. This scientific bibliographic database is widely recognised as one of the most authoritative in its field. The researcher found 2,852 results from a search conducted on January 24, 2024, in the SCOPUS database. 210 duplicates were removed from the results.

Documents by author



**Figure No. 1:** Number of articles contributed by the authors in alignment between public organisation and AI (source: based on SCOPUS data)

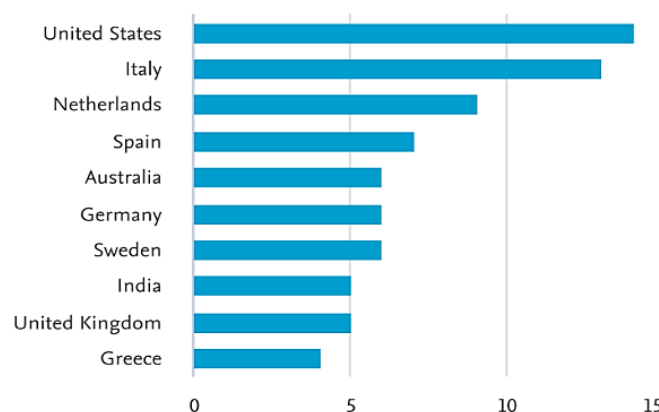
## 2. Screening:

Through the use of keywords, abstracts, and titles, the researcher refined the search results to 112 documents. To maintain objectivity, the study relied solely on scholarly journals and conference proceedings. After checking the accessibility of paper, 66 potential documents were identified for inclusion, and no duplicate content was found among

them. Eight papers were excluded because they were unavailable in English—two in Spanish, two in Russian, one in Catalan, one in Portuguese, one in Italian, and one in Hungarian—to avoid translation errors and misinterpretations. Thirty-four papers were eliminated because of a high technical and natural science theme.



## Documents by country/territory

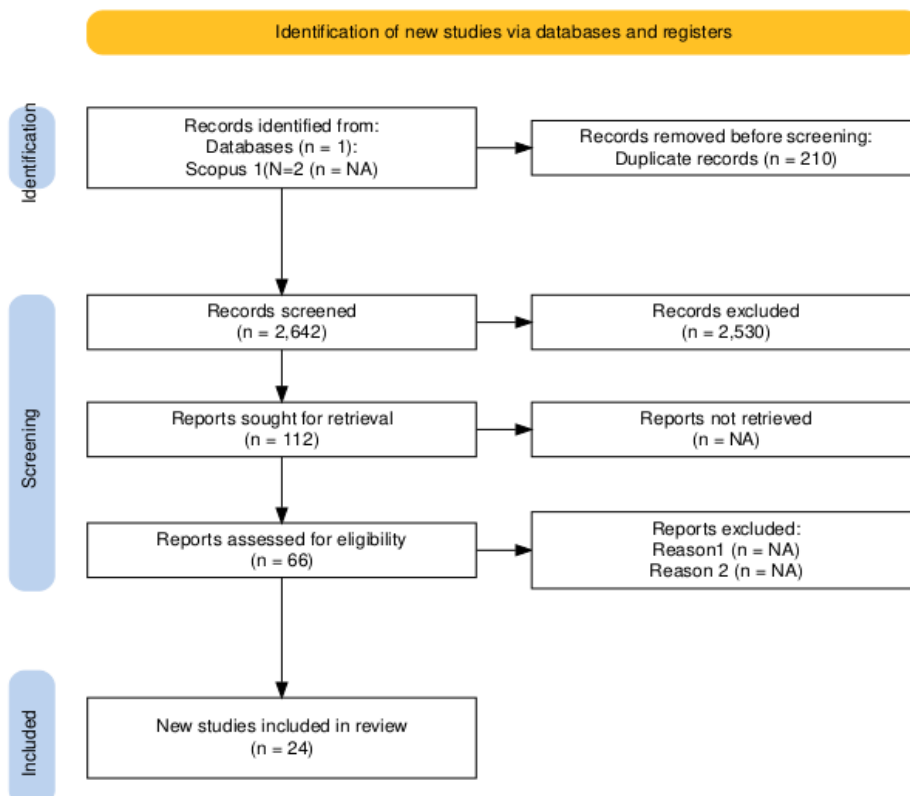


**Figure No. 2:** Country-wise categorisation of found documents on alignment between public organisations and AI (source: based on SCOPUS data)

### 3. Eligibility and Synthesis:

Considering the methodological limitations of relying primarily on keywords, the researcher acknowledged that some relevant items might have been missed. The study highlights the need for comprehensive and analytical literature assessments

in future research. Due to space constraints, a complete list of references could not be included; however, these can be obtained by contacting the author. The database also provided manuscript representations by country, aiding in the synthesis of interdisciplinary insights.



Haddaway, N. R., Page, M. J., Pritchard, C. C., & McGuinness, L. A. (2022). *PRISMA2020: An R package and Shiny app for producing*

*PRISMA 2020-compliant flow diagrams, with interactivity for optimised digital transparency and Open Synthesis. Campbell Systematic Reviews, 18(1), e1230.*

## Discussion

Through the analysis of the chosen manuscripts, we have identified two fundamental domains that, in our perspective, warrant further investigation. There are two main categories: the process and impact of alignment between public organisations and AI. To make the discussion more precise, we discussed the separate manuscripts that fall into both categories. It was impossible to discuss each and every manuscript; only a few were discussed; the rest of the manuscripts could be produced for the readers at their request. Based on our examination of the selected publications, we have identified two primary areas that, from our standpoint, necessitate additional exploration. The alignment between public organisations and AI can be broadly classified into two basic categories: the process and the impact. We have examined the papers that belong to each category individually to enhance the clarity of our conversation. Discussing every single text was unfeasible; only a select number were addressed; the remaining manuscripts might be provided to the readers at their request.

| Category                                                | Articles                                                                                                                                     |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Process of Alignment between Public Organisation and AI | (Selten, F., & Klievink, B., 2024), (Mikalef et al. 2019), (Van Noordt & Tangi, 2023), (Vandercruysse et al. 2023), (Casalino et al., 2020). |
| Impact of Alignment between Public Organisation and AI  | (Newman et al. 2022), (Maragno et al. 2022), (Bullock et al., 2020), (Drobotowicz et al. 2023), (Criado & De Zárate-Alcarazo, 2022).         |

**Figure No. 3:** Categorization of literature.

## A) Process of Alignment between AI and Public Organizations

Selten and Klievink discussed two modes of the AI alignment process:

First, structural separation: By combining data analytics and statistics departments into specialised data science departments, organisations can improve AI innovation. In addition to focusing on researching and creating AI and data science solutions, this department will primarily support operational divisions with challenging big data issues. To increase the potential of cutting-edge AI technologies and technological know-how, the data science team works with universities. For example, the Ministry of Electronics and Information Technology in the Government of India supplies all the necessary technological tools and personnel to help other ministries with AI innovation.

Secondly, Contextual integration: AI innovation can be integrated into operational departments, enabling conventional data teams to explore AI technologies—this integration within context results in creating AI systems tailored to operational requirements. Various AI advancements focus on enhancing current functions, like chatbots, natural language processing, and crime forecasting. These advancements are backed by operational professionals and management, with cooperation from users and senior management being crucial in securing support.

The adoption of each mode is accompanied by various barriers, processes, and routines, which underscore the interdependent relationship between structural isolation and contextual integration. The publication highlights the need for businesses to prioritise establishing robust social connections and demonstrate responsiveness towards obstacles to adoption to facilitate the implementation of a hybrid configuration (Selten & Klievink, 2024).

In this study, Mikalef et al. (2019) examine the significance of AI within organisational contexts, emphasising its capacity to augment efficiency and decision-making processes employing a theoretical framework known as augmented intelligence. Furthermore, it explores the mutually beneficial connection between humans and AI, highlighting the synergistic capabilities of both entities. Their study seeks to construct a conceptual framework for evaluating and comparing the level of advancement of businesses' AI capabilities, utilising the Resource-Based View (RBV) and existing scholarly works. Furthermore, it highlights using AI in marketing, innovation initiatives, and creative vocations. The framework seeks to provide enterprises with guidance on how to utilise AI to generate business value effectively.

According to Mikalef et al. (2019), public organisations' use of AI has the potential to either reduce or increase society and individual harm. The author makes six claims about how AI may impact the likelihood of administrative evil in government agencies. Both normative and descriptive categories are used in the statements. While normative propositions deal with decision-making policies, values, and attitudes, descriptive propositions deal with the quantity and calibre of information available for decision-making.

According to Mikalef et al. (2019), the use of AI in public institutions could either lessen or increase suffering for both individuals and society as a whole. This essay presents six hypotheses that investigate how AI might affect the likelihood of administrative evil in government agencies. The statements fall into two different groups: normative and descriptive. While normative propositions relate to decision-making policies, values, and attitudes, descriptive propositions in decision-making relate to the amount and quality of information available. The following are the six propositions:

- i. Harm Detection: AI can detect instances of administrative wrongdoing that might remain undetected, reducing the likelihood of harm.

- ii. Lack of Technical Clarity: AI may make decision-making less transparent, which could increase the risk of administrative malpractice. Quantification Bias: The growing dependence on quantitative data resulting from AI may overshadow alternative sources of knowledge, hence heightening the potential for institutional misconduct.
- iii. AI Exuberance: Relying excessively on AI as a tool for making decisions, especially when it is hazardous or unsuitable, can heighten the likelihood of administrative malevolence.
- iv. The misalignment between decision-making values and organisational values resulting from the implementation of the potential for AI to increase the likelihood of administrative evil.
- v. Centralized decision-making could arise from the application of AI. So, diminishes the decision-making autonomy of professionalised bureaucrats and heightens the vulnerability to administrative malevolence.

Although AI may present options to reduce the incidence of administrative evil, it also creates avenues for public organisations to be more likely to commit administrative evil. The provided ethical framework seeks to enlighten discussion and decision-making, as well as direct future theoretical and empirical study.

Organizational adjustments, such as hiring staff with AI experience, implementing new work procedures, and allocating resources, are also required to support the expansion and depth of AI deployment. Additionally, it highlights how crucial leadership is to the development and application of AI (Van Noordt & Tangi, 2023).

In order to make it easier to incorporate AI into service delivery, Vandercruysse et al. (2023) investigate the potential deployment of personal data stores (PDS) in the public sector, with an emphasis on the Flemish region of Belgium. The text provides insights derived from 13 expert interviews and presents an overview of the factors that drive, hinder,



and necessitate the implementation of solid-enabled PDS for AI-based service delivery.

There is a need for digital skills in the public sector, as well as the development of educational workshops to bring public institutions up to speed on AI. The primary emphasis of the implementing agency should be directed at select curriculum domains, including disruptive technologies, digital integration, and big data management. The curriculum development technique should prioritise customisation, enrichment, application, and critical analysis. Furthermore, it highlights the engagement of pertinent networks and stakeholders. Furthermore, it is critical to recognise the complex and multidimensional nature of the public sector's digital transformation, highlighting the necessity of strong governance and management (Casalino et al., 2020).

## **B) Impact of Alignment between AI and Public Organisations**

Technological breakthroughs have significantly enhanced the government's operations and public services. The advent of technology, such as AI and ICT, has brought about a significant transformation in accountability, data collection, cost reduction, and the establishment of formal bureaucratic regulations and procedures. Using AI-enabled video cameras, electronic databases, and high-resolution cameras integrated into mobile phones has significantly enhanced accountability and facilitated citizens' access to government services. Furthermore, the introduction of technology has permitted the capture of huge volumes of data important to formulating policies while simultaneously reducing expenses by automating jobs that would conventionally necessitate human labour. Moreover, technology has enabled the establishment of formal bureaucratic regulations and protocols, reducing human mistakes and prejudices and guaranteeing uniform and foreseeable circumstances for service accessibility. Newman et al. (2022) underscore the significance of forthcoming technological breakthroughs in changing the public sector in the forthcoming years.

Maragno et al. (2022) investigate AI's effects on public bodies' organisational structure. Their research examines six instances and identifies innovative strategies that these businesses devised to tackle the ubiquitous challenges of organisation, including work division, task allocation, information provision, and reward distribution. The paper presents the notion of an "AI team" as an innovative method of organisation comprising a multi-agent system (AI solutions, AI trainers, and public managers) with defined parameters to improve service delivery through the adoption of chatbots. The study includes cases that exhibit diverse organisational and project features, including but not limited to geographical location, target demographic, governmental level, personnel count, commencement year, level of maturity, and range of services rendered. In essence, the study seeks to enhance both the theoretical comprehension and the significant influence of AI on organisational design in the public sector.

The use of ICT by public organisations is growing, and as the tools' capabilities and scope expand, administrative work changes and new types of bureaucracy emerge. With an emphasis on the effects of AI and the distribution and application of discretion across many policy domains, the theory of ICT-driven organisational change from street- to system-level bureaucrats is evident throughout (Bullock et al., 2020). The results of a case study and a theoretical framework are connected to theoretical expectations. Additionally, it cites a number of Government Accountability Office papers about AI, including its implications, problems, and new prospects.

European municipalities are leading the way in adopting artificial intelligence. Three European countries, namely Finland, Germany, and Norway, have demonstrated a commendable technological approach for aspiring countries by incorporating AI into public organisations such as municipalities. Mikalef et al. (2022) presented the perspectives of citizens, specialists, and significant stakeholders regarding the extent of the influence on citizens'

lives following the implementation of AI in public organisations such as municipalities.

AI-enabled government organisations should look for hygiene, governance, and clusters in the PDS-based data ecosystem. The study highlights the potential of PDS to provide citizens with greater agency and transparency over their data, as well as to maximise the value of personal data through optimal use and sharing. The study's main focus is the Flemish government's dedication to providing its inhabitants with a PDS based on sound criteria. The local government's small "digital innovation" in South Korea has significantly influenced the global government structure. The South Korean government has achieved high levels of synergy by utilising new digital technologies and applications to drive service innovation. In their study, Bullock et al. (2020) investigated ongoing projects implemented by local governments that have demonstrated positive outcomes for citizens by transforming service delivery methods. Additionally, it states that most of the chosen examples were categorised as "minor advancements" yet had the potential to have substantial effects. The study also focused on the "innovation case map" and examined the main causes and outcomes that affect innovation in the public sector initiated by the Korean government.

The study by Drobotowicz et al. (2023) examines the use of digital technology and AI-based services in Finland's public sector, with an emphasis on the City of Helsinki. The study examines the attitudes, behaviours, and obstacles to civic empowerment and inclusivity among practitioners in AI-related activities. Their research demonstrates that AI has the potential to enhance inclusivity and involve individuals in the process of governing. The primary obstacle to AI-enabled public service is the empowerment of citizens. Implementing seminars and training programs can effectively facilitate the alignment of effective organisations with public organisations and AI.

The central focus of AI plans is mostly on their technological skills and functionalities, with a proclivity towards a techno-centric perspective. The

moral and human conundrums that governmental organisations encounter when managing AI and engaging with the public, however, appear to receive little attention. The aforementioned difficulties include algorithmic bias and opacity, issues of justice in AI, and data privacy, among others. The presence of assumptions regarding AI within the framework of big data, connectivity, and algorithmic incomprehensibility poses challenges for public sector managers in effectively assessing the potential risks and benefits associated with public services, policy-making processes, and public decisions. These challenges arise from the use of biased datasets or unethical algorithms (Criado & De Zárate-Alcarazo, 2022).

The protection of data and the privacy of persons is of utmost importance for governments and public administrations. The degree of confidence and trust in equitable procedures and interactions will dictate how well AI is used. Hence, it is imperative to promote widespread and prudent awareness of AI technology's potential advantages and drawbacks within public organisations in governmental environments, including political appointees, general managers, and street-level bureaucrats. Therefore, it is necessary to reveal and create technical frameworks that promote the general good and utilise AI for positive purposes (Criado & De Zárate-Alcarazo, 2022).

Given the discussion above, it is clear that the alignment of AI with public sector organisations is a transformative socio-administrative process that alters institutional behaviour and governance ethos, rather than just a technological integration. The literature review shows that although AI has enormous potential to improve public value creation, administrative efficiency, and transparency, it also raises ethical and normative issues regarding discretion, accountability, and public confidence. The combination of models for contextual integration and structural separation suggests that no single route guarantees successful alignment; instead, hybrid institutional methods grounded in contextual realities yield more adaptable outcomes.

The current body of research, despite its abundance of descriptive analysis, tends to downplay the ethical and human aspects of AI-driven governance. Therefore, future studies must go beyond the technocentric narrative and examine how citizen-centric design, leadership ethics, and bureaucratic learning may all work together to create an AI-enabled public administration that is responsive and equitable.

## Conclusion

This article facilitated an exploratory classification of materials about the alignment of public organisations and AI. The categorisation was divided into two overarching categories: the process of alignment and its impact. AI is a revolutionary technology that will profoundly influence every facet of existence. However, it is essential to acknowledge that this phenomenon presents other obstacles, including privacy and ethical concerns. Public institutions are accountable governmental bodies that consistently prioritise the interests and welfare of the general public. AI can boost efficiency, accountability, and decision-making without bias, as it is currently demonstrating strong performance across specific public organisations in the UK, USA, and South Korea. The effectiveness of public service delivery, such as fraud detection in welfare systems and tax collection, has been highly demonstrated in India.

On the contrary, replicating a technologically advanced state without a validated foundation carries significant risks. The primary issue lies in using AI in public areas, such as the military and warfare, where it can autonomously take human lives without human intervention. AI-enabled services require technical expertise, which public employees need to improve. Consequently, teaching employees becomes another hurdle. The business sector has already undergone a significant transformation driven by AI, and the public sector must adopt AI technology promptly.

Aligning public organisations and AI necessitates a collaborative endeavour involving

technocrats, politicians, and, notably, scientific contributions from the field of public administration. The governance perspective will only be overlooked by technical decisions. We propose further investigation to enhance the theoretical comprehension of the process and consequences of Alignment between AI and public organisations. Barth and Arnold (1999) argue that the primary risk posed by AI in government lies in researchers who need to be more familiar with the field of public administration scholars and practitioners. These researchers make technological decisions without fully comprehending the consequences of the governance of the administrative state. This demonstrates the significance of public administration scholars' contributions to integrating AI into public organisations.

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