



Role of Legacy Systems in Shaping Europe's Digital Public Administration Landscape

Amizan Raul*

Department of Management, University of Bradford, Bradford, United Kingdom

DESCRIPTION

The integration of Artificial Intelligence (AI) into public service is becoming increasingly relevant as governments strive to enhance operational efficiency, improve service delivery and meet the growing expectations of their citizens. While the potential benefits are vast, the adoption of AI in public services is not without challenges. It requires careful consideration of various factors, including infrastructure, policy frameworks and the skill sets needed to manage and deploy AI technologies effectively. One of the most significant factors influencing the adoption of AI in public services is the demand for greater efficiency. Governments are under pressure to deliver more with fewer resources and AI presents a potential solution to this challenge. Automation of routine tasks, such as data entry and document processing, can free up public servants to focus on higher-value activities, thus improving overall productivity. AI systems, equipped with advanced data analytics and machine learning capabilities, can also enable governments to make data-driven decisions that lead to better outcomes for citizens. For example, predictive analytics can help forecast trends and allocate resources more effectively, while natural language processing tools can automate responses to public inquiries, reducing waiting times and improving service delivery.

However, the implementation of AI in public service is not a simple task. Many governments face significant hurdles, including outdated technological infrastructures, lack of technical expertise and concerns about data privacy and security. AI systems require substantial computational power and access to high-quality data, which may not always be available in public sector organizations. Furthermore, integrating AI with existing systems often requires significant investments in technology and training, which can be a deterrent for cash-strapped governments. These barriers must be addressed in order to realize the full potential of AI in public service. Another key challenge is the need for clear regulations and ethical frameworks that govern the use of AI in the public sector. There is a risk that AI systems could perpetuate biases or make

decisions that are difficult to explain, which could erode public trust in government institutions. Ensuring that AI systems are designed and implemented in a manner that is transparent and accountable is essential to maintaining the public's confidence in their effectiveness. Governments will need to collaborate with technologists, ethicists and other stakeholders to develop guidelines that ensure AI technologies are used responsibly and ethically.

Public service employees also need to adapt to the changing landscape brought about by AI. The automation of routine tasks may result in some job displacement, which could create resistance among the workforce. It is therefore important for governments to prioritize retraining and upskilling programs to ensure that employees are equipped with the skills needed to work alongside AI systems. This shift in skill requirements may also lead to the creation of new roles focused on AI management, data analysis and system maintenance, which will contribute to the growth of the digital economy. By investing in the workforce of the future, governments can mitigate the risk of job loss and create new opportunities for public service employees. Despite the challenges, there are numerous examples of AI being successfully adopted in public service, highlighting the potential for positive change. In healthcare, AI-powered tools are being used to assist in diagnosing medical conditions, predicting patient outcomes and optimizing the distribution of healthcare resources. In education, AI can personalize learning experiences for students, offering tailored educational content and support based on individual needs and progress. In transportation, AI is being used to optimize traffic management, reduce congestion and improve the efficiency of public transport systems. These examples demonstrate how AI can enhance the delivery of public services and improve outcomes for citizens. In public service will likely involve greater collaboration between the public and private sectors. Many of the most advanced AI technologies are developed by private companies and governments will need to work closely with these organizations to ensure that AI tools are aligned with public sector goals and are accessible to all citizens. Public-private partnerships could

Correspondence to: Amizan Raul, Department of Management, University of Bradford, Bradford, United Kingdom; E-mail: amizanra@gmail.com

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provide the necessary funding and expertise to accelerate the adoption of AI in government operations. Additionally, as AI continues to evolve, new applications and opportunities will emerge, allowing governments to further expand their use of AI to tackle complex social and economic challenges.

As AI continues to be integrated into the public sector, it is essential that governments remain flexible and adaptive in their approach. The pace of technological change means that public service organizations must be willing to experiment with new tools and strategies, while also maintaining a focus on ethical considerations and the potential impact on citizens. Governments will need to stay informed about developments in

AI research and consider how emerging technologies can be applied to improve service delivery. The key to successful AI adoption in public service will be finding the right balance between innovation, regulation and public trust. While the adoption process presents a range of challenges, including infrastructure limitations, ethical concerns and workforce adaptation, the benefits of AI are too significant to ignore. By investing in the necessary technology, expertise and regulations, governments can harness the power of AI to create better services for citizens and meet the demands of a rapidly changing world.