

The Role of Government in Promoting Investments and Jobs: Mediating Role of Artificial Intelligence

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abstract

In an era of rapid technological advancement, Artificial Intelligence (AI) has emerged as a transformative force reshaping economic landscapes worldwide. This study examines the critical role of governments in leveraging AI to promote investments and generate employment opportunities, focusing on the mediating influence of AI technologies in these processes. The research explores how governments can transition from traditional methods of economic management to AI-driven strategies, emphasizing the dual potential of AI to enhance policy effectiveness while addressing associated risks.

Key objectives include assessing contemporary government approaches to investment attraction and job creation, evaluating AI's impact on investment behaviors and employment dynamics, identifying challenges in integrating AI into governmental strategies, and proposing frameworks for optimizing AI's role in economic development. The study also examines the risks associated with AI, including potential job displacement and unequal access to technology, and offers strategic recommendations to mitigate these challenges.

Key words : Artificial Intelligence (AI) ,Economic Development ,Investment Promotion , Job Creation , Government Policy

Introduction

In the context of growing global economic integration, authorities focus on AI to improve their approaches to attracting investments and creating new jobs. New technological travels of AI present new ways of enhancing economic policies and employment gains (Saba et al and Ngepah et al, 2024). Transitioning from the traditional way of managing economic activities to AI mode may dramatically reorient government activities to attract investment, address businesses and employers, and supply and demand human capital. Thus, analyzing the roles of AI in mediating these processes becomes essential in almost every strategy, as well as identifying a tactical approach to defining how the technology can affect

economic development and the climate of employment in the industry.

Background of Study

In today's competitive global economy, governments take central roles in shaping investment and employment conditions in their countries. The advent of Artificial Intelligence (AI) has introduced yet another dimension to this role, especially with advanced and probabilistic means of handling the economy and developing policies (Chen, Chu and Zhao, 2024). Government awareness of AI technologies in terms of boosting the growth and productivity of the economy and enhancing productivity and the labour market for public services is increasingly rising. Traditionally, governmental efforts on investment and

employment have only focused on conventional economic policies and plans. The different incentive strategies include tax credits, subsidies, and overhauls. However, incorporating AI into such strategies changes the paradigm (Ying, Cui and Jin, 2023). By utilizing the advantages of talents in big data analysis, competitive forecasting, and de-bureaucratization-bureaucratization, AI systems create new opportunities for governments to attract investment resources and create new employment. For instance, predictive analytics can help define areas that are likely to yield high growth rates; conversely, AI-based solutions can enable employers to match with candidature (Hong and Xiao, 2023).

Because of the current crises relating to economic development, unemployment problems, and the rapid progression of information technology, it is crucial to know how artificial intelligence intervenes in these issues for governments worldwide (Gull, 2023). Many factors tie government policy, investment promotion, job creation, and AI together, making it a promising and unique area for research that could offer significant guidance for policymakers and economic planners.

Problem Statement

Improving AI's role in governmental plans to stimulate investments and employment brings about probable outstanding issues. One of the issues pertinent to this concern is the lack of proper policies on the use of AI in this context (Olaniyi, 2024). Some implementations are difficult because governments have massive databases that can immensely benefit the development of AI solutions for data sharing with attributes (AlQershi, 2023). Developing AI solutions requires ethical considerations from governments, asset infrastructure, and specialized personnel. Furthermore, there needs to be more knowledge about AI's global impact on investment trends and the

employment market. Even though AI can improve the decision-making process and the productivity of several industries, the effect of this technology on various sectors of the economy and its potential to offer long-term employment opportunities still need to be investigated (Liang et al and Li et al, 2023). Such lack of information can contribute to ineffective policy choices and the potential for not harnessing AI's role in enhancing the economic sphere. However, the following questions need an answer regarding what governments can do to maximize the positive impacts of AI while minimizing the negative effects, such as loss of job opportunities through the mechanized approach and uneven distribution of technology resources between developed and developing countries (Chatterjee et al, 2023). Solving these problems requires a complex approach that considers some positive and negative aspects of applying AI for investment promotion and job creation.

Research Aim and Objectives

Aim

The primary aim of this research is *to investigate the role of government in promoting investments and jobs through the mediating influence of Artificial Intelligence*. This paper aims to determine how AI technologies may be implemented in government initiatives for economic development and job creation, with a focus on possible opportunities and risks.

Objectives

- To examine the contemporary perspective of government in investment attraction and employment generation.
- To assess the effects of AI technologies on investment behaviours and employment relations.
- The purpose of this study is to evaluate potential issues and

obstacles to the adoption of AI in government strategies.

- To assess a framework on how AI can be used to better promote investments and jobs.
- To assess the potential risks associated with AI integration and recommend strategies to mitigate them.

Significance of the Study

The significance of the study is relevant because it provides practical solutions for policymakers, economic planners, and AI experts. Focusing on how AI can facilitate the government's efforts in attracting investments and creating jobs, this research seeks to contribute to the existing literature by providing a systematic account of the advantages and disadvantages of integrating AI (Senadjki, 2023). The results could create new policies, intelligent, and sensitive economic policies that use AI to boost the economy and employment. Furthermore, it also tries to complement the existing literature and discourses on the future of work and the place of technology in constructing economic environments (Sernaqué, 2023). Given the current global trends on how governments approach the issue of AI, this study offers a timely and appropriate understanding of the nature of AI and its impact on economic development (Alghamdi, 2023).

Rationale of Research

The rationale for this research is based on the emerging trend of acknowledging Artificial Intelligence as a revolutionary influence in nearly all industries, including economic development. Despite the global emergence of AI applications across industries, including financial services, healthcare, and manufacturing, the application of AI in government-led economic development strategies is relatively uncharted territory (Zhao et al, 2023). However, this research aims to address this gap by assessing how AI

can assist the government in encouraging investment and generating employment. Due to the technological development and growing role of AI systems in the world economy, it is especially important to determine how state governments can use these technologies to solve major economic problems (Rawashdeh et al, 2023). This research will reveal how AI can fuel economic growth and create jobs; at the same time, it will outline problems and solutions that may help to organise this process efficiently

Literature Review

Integration of AI in governmental policies on investment and employment is a revolutionary improvement in the formulation and control of the policies of the economy. This literature review aims to reveal how modern AI interventions are incorporated into governmental strategies for stimulating economic development and raising the employment rate. The review is organized around five key themes: the state of AI and economic development, spreading investments into AI, the contribution of AI to new occupations, and the problems of deploying AI and AI integration into governmental plans.

The Role of AI in Economic Development

In recent years, AI has changed its role and started to be regarded as a source of change in economic development processes. Beginning with machine learning, predictive analysis and automation, introducing AI technologies in governments is educating them on new methods of managing and improving their economic policies. AI systems can perform several analyses that concern sizable economic data and search for patterns and other components that may not be easily discernible through normal computational procedures (Tong et al., 2022). This capability helps enhance the efficiency of decisions made by governments

about an economic policy and providing resources. Predictive analytics, another large segment of the AI landscape, utilizes prior conditions to evaluate future economics. Predicting economic shifts is sometimes possible, and if governments can do so, they are also able to adapt their policies to the new market realities (Rawashdeh et al, 2023). For example, it is possible to predict the consequences in the sphere of the economy concerning certain decisions and use this information to form a policy that would promote some industries and restrain changes. AI also leads to a diminishment of the efficiency of public service delivery since it depletes most of the administrative functions and boosts the usage of resources. Management automation can bring about a reduction in bureaucratic processes with improvement in public services (Zhao et al, 2023). However, certain disadvantages require consideration – first, the AI and data protection issues, and second, the need for specialized specialized personnel to integrate the tool into the concept of economic development (Wang et al., 2023).

AI's Impact on Investment Promotion

Over the years, various governments have used different mechanisms to attract investors, and among them were tax credits, subsidies, and policy changes. Therefore, incorporating AI within such strategic plans has provided new potential for enhancing the promotion of investments. Machine learning techniques can identify market trends, investors' activity, and potentially interesting new investment objects more accurately than manual methods (Bokhari & Myeong, 2022). AI solutions can also assist in identifying trends and preferences on the side of investors, which governments can use to target promotional efforts to get a specific type of investor (Yigitcanlar, 2023). For example, AI can search for potential themes and markets for investment in various world regions and recommend the directions in

which investors can be offered especially favourable conditions for their activity (Yigitcanlar et al., 2021). The strategy enhances investment promotion methods and leads to important value investments. In addition, AI can enhance efficiency in the monitoring and evaluating investment promotion activities. By examining the consequences of numerous promotions, AI becomes beneficial in informing the governments' decision of the effectiveness of the implemented strategies and the need for alterations. Such a continuous feedback system helps fine-tune the investment promotion initiatives and ensures they are relevant to contemporary market trends and developments (Wamba-Taguimdje et al., 2020).

The Influence of AI on Job Creation

AI has become a centre of discussion and controversy regarding its effects on employment generation. Firstly, with the help of AI, new jobs could be created as it brings innovation and helps support the development of new industries. For instance, the emergence of AI technologies has created some emerging sectors like AI ethics, data analysis, and machine learning engineering, where one must acquire specialized skills and knowledge (Reis et al., 2021). These new roles could create jobs and give chances towards workforce progression. However, the downside of AI is that it may lead to unemployment since machines can take over repetitive tasks from employees. According to research, AI can displace people in some industries. However, as much as it challenges certain parts, it also brings opportunities in other sectors (Odugbesan et al., 2023). For example, while using robots in production and assembly lines decreases the need for employees to work with their hands, it will lead to specialists – mechanical and electronics engineers- maintaining and programming robots. To overcome these challenges, governments must develop

working policies for workforce transitions and education and training for workers affected by automation. Using job matching and mining skills in the labour market is an area where AI applications can function effectively (Yigitcanlar et al, 2023). Most AI applications in the labour market will enable governments to improve programs and career placement services to create more jobs and integrate workers into AI-driven work (Zhang, 2023).

Challenges and Barriers to AI Integration

Using AI for investment promotion and job creation in government strategies has challenges and barriers. The major challenges are privacy, ethical questions, demand for special expertise, and adequate facilities. Solving these issues is crucial for the further adoption of AI and gaining more significant advantages in this sphere.

Data Privacy and Security: The ability to progressively negotiate conflicting data privacy and security concerns is one of the biggest factors in implementing AI systems. Governments need to ensure that no one can gain access to or misuse personal information the government has stored for various uses, all while obeying data protection laws. AI technologies imply the need to process a significant amount of data on which they are trained, causing worries over its acquisition and utilization utilization (Damerji & Salimi, 2021). Data protection measures and transparency within data handling and processes should be the pinnacle of attention to avoid the erosion of public trust in using artificial intelligence systems.

Ethical Considerations: The effectiveness of integrating AI in smart cities or other settings depends on solving ethical dilemmas of model implementation, including algorithm bias and fairness. AI models and algorithms, by default, reproduce the prejudice if they were developed based on prejudice or discrimination (Duberry, 2022). Governments should develop policies and

regulations on the appropriate use of artificial intelligence because they should be accurate, explainable, and answerable.

Skills and Infrastructure: AI implementation is not limited to technical acumen but follows guidelines and favourable preconditions to the organization. Governments need to fund the development of the proper skills and competencies to apply and oversee AI solutions. This entails capacity building for public sector workers, enhancing AI assets, and promoting partnerships between the government, technology companies, and universities (Kumar et al., 2022). Filling these resource deficits is crucial to unlocking AI's full potential in government plans.

Case Studies of AI Integration in Government Strategies

Here are three examples of how governments have incorporated artificial intelligence into effective investment promotion and employment generation. Such observations offer useful lessons on how AI can be deployed to improve economic performance and meet labour market challenges.

Singapore's Smart Nation Initiative

Singapore is a good example of how Smart Nation, an advanced digital environment, supports economic performance and employment through AI. This push aims to turn Singapore into one of the world's digital economies for excellence in government services, economic positions, and future job openings using AI and other related technologies. Some of the components of the identified initiative encompass the use of artificial intelligence for public services and data for policy-making, promotion of innovations, and support for startups (Bokhari & Myeong, 2023). Therefore, the drive has worked well, pulling in investment and innovation, meaning employment and economic growth.

Estonia's E-Residency Program

Estonia's E-Residency is another example of AI integration in government strategies. Such an approach enables persons interested in conducting business in Estonia to leave the country alone legally. AI enables a series of repetitions, enhances productivity and contributes to business initiatives (Xiong et al., 2020). Through this program, Estonia has opened for international investors and establishments, resulting in employment and business in Estonia.

The UK's AI Sector Deal

The UK government unveiled the AI Sector Deal, which aims to support the development of AI and its effect on the economy. The deal engagements foster research and development in the effectiveness of AI technologies, the training and development of human capital in AI, and the assimilation of AI in business and government (Wamba-Taguimdje et al., 2020). The sector deal will further increase the funding to AI startups and research, giving employment and boosting innovative technologies.

These cases present the utilization of AI and how it can help implement the government's investment promotion and employment objectives. Governments can improve conditions in their countries by applying AI technologies to the indicated fields: business policy improvement, investment, and skill development.

The literature review focuses on one potential area of alignment of AI with governments' strategies for investment attraction and employment creation. AI technologies are defined as progressive tools in the management system for decision-making in selective investment attraction and successful employment placement (Nam and Ryu, 2023). Nevertheless, certain barriers to AI implementation need to be overcome, including data privacy ethical concerns and resource constraints. Singapore, Estonia, and the UK have offered real-life examples of how AI can improve economic performance

and contribute to future research and policy improvement. Governments must comprehend these dynamics to leverage AI to provide economic development and solutions to the challenges of the labour market.

Conceptual Framework

This conceptual framework for this study looks at how the application of AI detail moderates the advancement of investments and the creation of jobs by the government. According to this framework, AI is recognized as a key success factor that facilitates an increase in the effectiveness of government activities related to economic development strategies (Nam and Ryu, 2023). Fundamentally, the framework considers how some AI technologies like machine learning, predictive analytics, and natural language processing spearhead modern government data analysis and decision-making tools. These technologies help governments better understand market conditions, investors, and employment patterns. Consequently, the present research improves the understanding of policy impacts, efficiently directing policy intervention for investment promotion and job creation.

Another way in which AI is involved in the communication of government strategies is through its consequences on investment promotion (Shen and Zhang, 2024). The AI systems can use significant economic data to search for highly promising investment opportunities and adjust advertising appeals to these potentialities. Each of these changes increases the effectiveness of investment incentives and makes them closer to the market's needs. In the same way, it impacts job creation as it aids in creating new industries and positions while simultaneously solving the issue of job losses due to automation (Ajayi-Nifise, 2024). AI technology platforms can help governments find the right candidate for existing or new positions, find out existing shortages of

specific skills, and then create relevant programs for skill development. Finally, it is crucial in the framework to point out that in addition to improving the outcomes of governmental strategies, integration with AI

also considers new requirements for the development of the economy and can act as an impetus for sustainable economic growth and employment.

References

- Tong, L., Yan, W., & Manta, O. (2022). Artificial intelligence influences intelligent automation in tourism: A mediating role of Kot, S., Hussain, H. I., Bilan, S., Haseeb, M., & Mihardjo, L. W. (2021). The role of artificial intelligence recruitment and quality to explain the phenomenon of employer reputation. *Journal of Business Economics and Management*, 22(4), 867-883.
- Wang, Q., Sun, T., & Li, R. (2023). Does artificial intelligence promote green innovation? An assessment based on direct, indirect, spillover, and heterogeneity effects. *Energy & Environment*, 0958305X231220520.
- Bokhari, S. A. A., & Myeong, S. (2022). Artificial Intelligence-Based Technological-Oriented Knowledge Management, Innovation, and E-Service Delivery in Smart Cities: Moderating Role of E-Governance. *Applied Sciences*, 12(17), 8732.
- Yigitcanlar, T., Corchado, J. M., Mehmood, R., Li, R. Y. M., Mossberger, K., & Desouza, K. (2021). Responsible urban innovation with local government artificial intelligence (AI): A conceptual framework and research agenda. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 71.
- Wamba-Taguimdje, S. L., Wamba, S. F., Kamdjoug, J. R. K., & Wanko, C. E. T. (2020). Impact of artificial intelligence on firm performance: exploring the mediating effect of process-oriented dynamic capabilities. In *Digital Business Transformation: Organizing, Managing and Controlling in the Information Age* (pp. 3-18). Springer International Publishing.
- Reis, J., Santo, P. E., & Melão, N. (2021). Influence of artificial intelligence on public employment and its impact on politics: a systematic literature review. *Brazilian Journal of Operations & Production Management*, 18(3), 1-22.
- the internet of things and environmental, social, and governance investment. *Frontiers in Environmental Science*, 10, 853302.
- Odugbesan, J. A., Aghazadeh, S., Al Qaralleh, R. E., & Sogeke, O. S. (2023). Green talent management and employees' innovative work behaviour: the roles of artificial intelligence and transformational leadership. *Journal of Knowledge Management*, 27(3), 696-716.
- Zhang, Z. (2023). The impact of the artificial intelligence industry on the number and structure of employment in the digital economy environment. *Technological Forecasting and Social Change*, 197, 122881.
- Damerji, H., & Salimi, A. (2021). The mediating effect of use perceptions on technology readiness and adoption of artificial intelligence in accounting. *Accounting Education*, 30(2), 107-130.
- Duberry, J. (2022). Artificial intelligence and democracy: risks and promises of AI-mediated citizen-government relations. In *Artificial Intelligence and Democracy*. Edward Elgar Publishing.
- Kumar, M., Raut, R. D., Mangla, S. K., Ferraris, A., & Choubey, V. K. (2022). The adoption of artificial intelligence-powered workforce management for effective revenue growth of micro, small, and medium-scale enterprises (MSMEs). *Production Planning & Control*, 1-17.
- Bokhari, S. A. A., & Myeong, S. (2023). The influence of artificial intelligence on e-Governance and cybersecurity in smart cities: A stakeholder's perspective. *IEEE Access*.
- Xiong, Y., Xia, S., & Wang, X. (2020). Artificial intelligence and business applications, an introduction. *International Journal of Technology Management*, 84(1-2), 1-7.
- Wamba-Taguimdje, S. L., Wamba, S. F., Kamdjoug, J. R. K., & Wanko, C. E. T. (2020). Influence of artificial intelligence

- (AI) on firm performance: the business value of AI-based transformation projects. *Business Process Management Journal*, 26(7), 1893-1924.
- Saba, C.S. and Ngepah, N. (2024). The impact of artificial intelligence (AI) on employment and economic growth in BRICS: Does the moderating role of governance Matter?. *Research in Globalization*, 8, p.10 0213.
- Ying, Y., Cui, X. and Jin, S. (2023). Artificial intelligence and green total factor productivity: the moderating effect of slack resources. *Systems*, 11(7), p.356.
- Hong, Z. and Xiao, K. (2024). Digital economy structuring for sustainable development: the role of blockchain and artificial intelligence in improving supply chain and reducing negative environmental impacts. *Scientific Reports*, 14(1), p.3912.
- Gull, A., Dilawar, S., & Sher, F. (2023). Data-driven Artificial Intelligence at the Crossroads: Investigating the Role of Affective Job Insecurity in the relationship between Artificial Intelligence Identity Threat and Employee Well-Being. *The Asian Bulletin of Big Data Management*, 3(1), 18-34.
- Chen, P., Chu, Z., & Zhao, M. (2024). The Road to corporate sustainability: The importance of artificial intelligence. *Technology in Society*, 76, 102440.
- Olaniyi, O. O., Ezeugwa, F. A., Okatta, C., Arigbabu, A. S., & Joeaneke, P. (2024). Dynamics of the digital workforce: Assessing the interplay and impact of AI, automation, and employment policies. *Automation, and Employment Policies (April 24, 2024)*.
- AlQershi, N., Saufi, R. B. A., Yaziz, M. F. B. A., Permarupan, P. Y., Muhammad, N. M. N., Yusoff, M. N. H. B., & Ramayah, T. (2023). The threat of robots to career sustainability, and the pivotal role of knowledge management and human capital. *Journal of Innovation & Knowledge*, 8(3), 100386.
- Liang, L., & Li, Y. (2023). How does government support promote digital economy development in China? The mediating role of regional innovation ecosystem resilience. *Technological Forecasting and Social Change*, 188, 122328.
- Chatterjee, S., Chaudhuri, R., Kamble, S., Gupta, S., & Sivarajah, U. (2023). Adoption of artificial intelligence and cutting-edge technologies for production system sustainability: a moderator-mediation analysis. *Information Systems Frontiers*, 25(5), 1779-1794.
- Senadjki, A., Ogbeibu, S., Mohd, S., Hui Nee, A. Y., & Awal, I. M. (2023). Harnessing artificial intelligence for business competitiveness in achieving sustainable development goals. *Journal of Asia-Pacific Business*, 24(3), 149-169.
- Sernaqué, M. A. C., Romero, M. Á. M., Paricahua, E. W. P., Saavedra, E. A. J., Acosta, D. B., Huamán-Cuya, A., ... & Carranza, C. P. M. (2023). The Role of Artificial Intelligence in Shaping Modern Education in the Kurdish Region: Mediating Role of Smart Learning. *Kurdish Studies*, 11(1), 107-119.
- Alghamdi, O. A., & Agag, G. (2023). Boosting innovation performance through big data analytics powered by artificial intelligence use: An empirical exploration of the role of strategic agility and market turbulence. *Sustainability*, 15(19), 14296.
- Zhao, Y., Song, Z., Chen, J., & Dai, W. (2023). The mediating effect of urbanisation on digital technology policy and economic development: Evidence from China. *Journal of Innovation & Knowledge*, 8(1), 1 00318.
- Rawashdeh, A. (2023). The consequences of artificial intelligence: an investigation into

the impact of AI on job displacement in accounting. *Journal of Science and Technology Policy Management*

Shen, Y. and Zhang, X. (2024). The impact of artificial intelligence on employment: the role of virtual agglomeration. *Humanities and Social Sciences Communications*, 11(1), pp.1-14.

Ajayi-Nifise, A.O., Tula, S.T., Asuzu, O.F., Mhlongo, N.Z., Olatoye, F.O. and Ibeh, C.V.

(2024). The role of government policy in fostering entrepreneurship: a USA and Africa review. *International Journal of Management & Entrepreneurship Research*, 6(2), pp.352-367.

Nam, H.J. and Ryu, D. (2023). FDI and human development: The role of governance, ODA, and national competitiveness. *Journal of International Financial Markets, Institutions and Money*, 85, p.101769.