

ARTIFICIAL INTELLIGENCE'S ROLE IN GOVERNANCE

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Abstract

Artificial Intelligence (AI) is changing jobs and bringing big changes to the world. It will change our work and our way of life. What should AI governance, policies and regulations be? How can AI governance, policies and regulations mitigate and alleviate the negative impacts of AI advancements? How will AI governance, policies and regulations impact the future of work and the future of humanity? This longitudinal study will examine the evolution and evolution of AI governance, policy, and regulation, and how governance, policy, and regulation affect and are affected by advances in AI. The research project examines five countries (China, the United States, Japan, the United Kingdom, and Germany) conducting AI research.

Keywords: artificial Intelligence, Machine Learning, Robots, Automation, Governance, Policy and Regulation.

Introduction

Artificial Intelligence (AI) is a general concept and is still present today (Siau and Wang, 2018). Virtual assistants such as Amazon's recommendation advisor, Apple's Siri and Google Assistant, credit card fraud detection, and facial recognition are all powered by AI technology. Self-driving cars and home assistants are popular AI-based applications. These applications perform specific tasks well, and this type of AI technology is called narrow AI (or weak AI). General Artificial Intelligence (AGI or AI) can support many tasks at the same time and is considered an intelligence that can surpass or replace human intelligence. Experts disagree on when AI will become a reality. For example, intelligence researchers Muller and Bostrom reported in a study that there is a 50% chance that AGI will be created between 2040 and 2050, and this rate will reach 90% by 2075 (Health, 2018).

Some intellectuals believe that general intelligence is still hundreds of years old. However, investment and research in intelligence cannot be ignored. In 2017, AI attracted investments of 12 billion US dollars from global investors, which is twice as much as in 2016 (Yu, 2018). It has reached a 152.5 billion dollar industry (Yi, 2017). According to a study by Columbus (2017), 80% of companies already have some form of intellectual property, 30% of companies plan to expand their intellectual property investments, and 62% of companies expect to hire a talented manager. > AI is a double-edged sword. AI can help us in our work and life by relieving us from inefficient work (Siau, 2017). However, AI is replacing human work (Siau and Yang, 2017; Siau, 2018). Amazon Go, a low-cost cashier, has demonstrated the power of AI to replace cashiers.

Another important concern is the ethical issues that intelligence raises. What is the government's role in setting, implementing, and enforcing moral and ethical standards? Artificial intelligence and automation are expected to widen the gap between the rich and the poor. What government policies and regulations can help narrow the gap between the rich and the poor? How can the government help workers relocate through their skills? Do you need to comply with international income? If so, how is international revenue generated? How can the government verify/prove that AI applications, especially those that are illegal, are not affected by human bias? At the time, policymakers were discussing how best to approach this change and manage new technologies in a way that would benefit them while reducing risks. Prior management knowledge will help solve today's AI challenges.

As a new phenomenon, AI can improve governance and control issues that have not been encountered before in the development of technology. This qualitative study will collect information from literature and legislators in different countries to analyze government policies and business management and to analyze how much these policies and laws affect and are affected by the development of skills.

Literature Review

The Nature of Artificial Intelligence

Although artificial intelligence is widely used in sectors such as medicine, finance, education, transportation, construction, family, it has not yet been accepted. Definition of wisdom. Artificial intelligence is seen as an umbrella that covers many disciplines and technologies. Machine learning, automation, and robotics are all related to or part of artificial intelligence technology. Artificial intelligence can be divided into two categories: weak intelligence and strong intelligence. Artificial intelligence is a controversial topic and some people believe that it poses a threat to humanity. There are many weak AI applications, and the adoption of weak AI has raised policy, regulatory, and legal issues. For example, security and privacy issues, as well as issues of fairness and equity. First, the "black box" nature of AI applications (i.e., deep learning applications that can explain their recommendations or decisions) makes it plausible that very few of the effects of AI are known, leading to a lot of information about AI experts and asymmetry between AI users and regulators and policymakers. Second, reaching consensus among different stakeholders is not easy. Third, the undercurrent of the age of intellectual wisdom limits traditional decision-making methods. Advanced management models such as performance matrix theory and hybrid management can provide insight into management skills.

The Concept of Governance and Policy Change

Governance refers to many aspects of cooperation in life. It has become a popular term in many scientific fields, and this has led to discussions about the various uses of the

term. Toikka (2011, p.10) defines governance as “self-governing, collaborative organizational responsibility for decision-making”. Policy change refers to changes in existing structures or new, emerging policies (Cerna, 2013). However, liberal models argue that policies are often difficult to change because institutions are often sticky and policies are difficult to change (Greener, 2002). Policy learning is an important aspect of policy change, and suggests that countries and regions can change policies by learning from others and changing beliefs (Hecló, 1974).

Previous study of Governance and policy change of AI

There is not much research on the governance, policy, and management of artificial intelligence. However, the potential insights into AI and the problems it poses should be of interest to policymakers. More than 20,000 scientists signed a letter warning policymakers about the dangers of arms control that would use algorithms to kill specific targets (Zeichner, 2017). The original case stemmed from concerns about the use of AI for military purposes. Policy changes and administrative control can come from the street level (bottom-up theory) and from the top-down theory (Ewalt, 2001). Governance, policy, and management issues. In the spring of 2016, the United States Government announced the White House Project on the Future of Artificial Intelligence to investigate the impact of AI (Lyons, 2017). The AI Ethics and Governance Fund began with an initial \$27 million grant to “support global research to support the development of AI in the public sector, focusing on research and learning” (Slotnick, 2017, para. 4).

Governance Theory

Good governance should be transparent, accountable, efficient, and fair, and should eliminate fear of business based on broad consensus on business, social, and political issues. In order for management that provides an organizational perspective to be implemented, the goals of management must be clearly defined. According to Ewalt (2001), the goals of management include, but are not limited to, the end of public values, the actual compliance with standards, defining roles, services, and things people use, creating accountability, separating services from management, and expanding customer choice.

Regulation and control are inevitable and necessary because the threat of AI is truly unpredictable. A distinction is often made between business management and social management (Den Hertog, 1999). Business monitoring can be divided into positive thinking and positive thinking. According to governance theory, governance occurs because "government tends to overcome information asymmetries with workers and to make workers happy with the government" ("The Law of Law, "n.d.). Another regulation theory, regulatory policy theory, concludes that regulators should minimize the costs of information asymmetries, provide pricing structures that improve the economy, ensure monitoring according to the law, and create organizations that provide independence,



transparency, predictability, and quality control. From an economic perspective, economic policies encourage tax cuts to stimulate economic growth.

However, tax cuts can cause budget deficits and unemployment can remain high (Economic Policy Theory, n.d.). The governance theory will not be a one-size-fits-all solution, but a holistic approach where each implementation can be differentiated according to the characteristics of the culture and the details. AI governance will ultimately transcend national borders and support the global governance of organizations. Global AI regulation should be “flexible enough to adapt to different cultures and bridge the gaps between different national legal systems” (Gasser and Almeida, 2017, p. 58). Werlin (2003) believes that the difference between poor and rich countries is more about governance than resources. Governance will play an important role in ensuring appropriate economic distribution and minimizing job losses from AI and how governance, policy, and regulation affect and are affected by developments in the field of intelligence.

RESEARCH QUESTIONS AND PROCEDURE

The research project covers five countries in intelligence research: China, the United States, Japan, the United Kingdom, and Germany. I am not sure. Case studies are a great way to explore and understand complex, detailed, and in-depth topics in real-world settings. It is recommended to answer how, why, and specific research questions (Harrison, Birks, Franklin, & Mills, 2017). This investigation will be a multidisciplinary investigation. Target participants are policy makers and government officials from the five countries that publish the most AI research (Jacobsen, 2018).

To better understand the research questions and to follow the rapid changes in the technological environment, longitudinal studies will be conducted to track the changes and changes in AI governance, laws and regulations in these five countries. Understanding and addressing the regulatory, policy and regulatory issues related to AI is still in its infancy. However, AI is changing rapidly and regulatory, policy and regulatory issues are important and need to be discussed immediately.

CONCLUSION

This study aims to call on policymakers and government officials to pay attention to the urgency of these issues. As we work to create models for AI governance, policy and management, we will provide information on the future development of AI technology to better understand business, social quality and AI policies and to improve our understanding of governance, policy and regulatory frameworks. Understand and apply. This research should support education in the field and support the development and implementation of intelligence-related governance, policy and policies.



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