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Artificial Intelligence Empowering University Governance: Risks and Countermeasures

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Abstract: Against the backdrop of the new era, artificial intelligence (AI), as a key driver for industrial transformation and upgrading, is accelerating innovation and development in the field of education. Obviously, it undoubtedly brings new challenges to university governance. Based on this, this paper mainly conducts relevant analysis and research on the risks and countermeasures of AI empowering university governance. The purpose is to further promote the digital development of universities, thereby providing students with better education and management services, and hoping to offer some references for peers.

Keywords: Artificial intelligence; Universities; Governance risks; Countermeasures

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1. Introduction

Governance is a core link in the current education and management work of universities. Its implementation plays an extremely important role in promoting the modernization of educational governance and advancing the high-quality development of higher education [1]. Carrying out university governance relying on artificial intelligence (AI) is an important reform for universities to build a high-quality governance system, and it is also an inherent requirement for improving the effectiveness of university governance, which is conducive to better promoting the modernization of universities.

2. Risks of AI empowering university governance

2.1. Limitations in cognition

As an emerging technology, AI has increasingly complex technical characteristics with the continuous innovation of technology and expansion of application fields. Moreover, the specific implementation paths for its application in the current university governance system still need optimization and improvement, and may conflict with

traditional governance concepts [2]. Over time, such cognitive limitations may lead to hidden risks in university governance.

Currently, in the practice of university governance, there is a common problem of incomplete understanding of AI technology. There are two main reasons for this: on one hand, there is relative unfamiliarity with the technology itself; on the other hand, there is excessive concern about the potential security risks brought by the technology. This lack of cognition often causes university managers to overlook the capabilities of AI, and even develop a repulsive attitude towards it. Obviously, if this attitude persists, it will restrict the in-depth application of AI in university governance to a certain extent.

Furthermore, cognitive biases towards AI, which can be specifically divided into two extreme tendencies. One of them is technological skepticism, which manifests as a skeptical attitude towards AI empowering university governance. AI is only regarded as a simple tool to replace human labor, without fully understanding its technical principles and governance value [3]. This cognitive bias easily causes university managers to ignore AI's unique advantages in data analysis, process optimization, trend prediction, and other aspects, thereby leading to a disconnect between intelligent governance solutions and the university's development strategy [4]. The other is the tendency of technological worship, which manifests as blind optimism and over-reliance on the capabilities of AI, considering it a "panacea" that can solve all governance problems. This cognitive bias places technical means above governance goals, entrusts governance decision-making power entirely to technical systems, ignores the complexity of university governance, and easily deviates from the original intention of university governance.

2.2. Inadequate institutional framework

The application of AI in university governance requires re-examining and optimizing the governance structure, governance process, supervision mechanism, and other aspects. Only in this way can the adaptability between AI and university governance be better improved [5]. The effective application of AI technology relies on large-scale data collection and in-depth analysis. However, in some universities, there are often problems such as information barriers, insufficient collaboration, and communication obstacles between various departments and colleges. A lack of cooperation exists among them, and the phenomenon of "information silos" has not been broken. This greatly restricts the functional play of AI in efficient governance. From the perspective of the governance process, university governance requires the coordination of multiple departments. In practice, however, institutional loopholes often lead to ambiguous division of responsibilities, lack of coordination mechanisms, and low implementation efficiency. These problems will not only seriously affect the enabling effect of AI but also further amplify institutional risks [6]. From the aspect of the supervision mechanism, the application of AI in university governance needs to establish a sound supervision system to ensure the legality and security of its operation.

2.3. Relative lack of ethical norms

As a representative achievement of contemporary technological development, AI has the dual attributes of practical function orientation and humanistic value pursuit. The emergence and development of this emerging technology inevitably carry specific value orientations. However, its essence still belongs to the category of mechanical intelligence, which is always different from human intelligence. Therefore, when universities apply AI to carry out relevant governance work, they are very likely to face ethical risks such as value deviations and intelligent out-of-control. The specific manifestations are as follows:

(1) The blurring of human-machine boundaries may cause confusion in the ethical framework. In the initial

stage of governance, the application of AI in university governance will inevitably involve the processing and integration of personal information and data. In this process, the boundary between "humans" and "machines" is gradually blurred. Machine equipment has gone beyond the scope of traditional tools and gradually evolved into "monitors" and "data collectors" that can penetrate into personal life fields. At this time, without a sound ethical norm and a strict privacy protection mechanism, individuals' privacy rights will undoubtedly face the risk of being invisibly violated or improperly used. In addition, in terms of the governance process and effectiveness, the human-machine collaboration model may complicate the division of decision-making responsibilities. When decision-making deviations or negative impacts occur, it is difficult to clearly define whether the responsible subject is the algorithm developer, the data provider, or the final decision-maker [7]. This ambiguity in responsibility identification may easily lead to the phenomenon of shirking responsibilities and cause confusion in the ethical framework;

(2) Over-reliance on technology may lead to moral anomie. In the actual governance process of some universities, there is an over-emphasis on the efficiency advantages and practical value of AI. AI is simply positioned as a technical tool, while its involved ethical norms, legal boundaries, and social impacts are ignored. This tendency will inevitably trigger moral and ethical problems;

(3) Over-reliance on technology may lead to the lack of humanistic care. Humanistic care is an indispensable soul of higher education and an important foundation for the construction of a modern university governance system. In the process of AI empowering university governance, the excessive pursuit of efficiency may cause humanistic care to be overshadowed by the "halo" of technology, resulting in the imbalance of ethical values. As a result, university governance work may rely too much on data and information, ignoring interpersonal communication and emotional connection on campus. Eventually, a mechanical governance model lacking value guidance, ideological inspiration, and humanistic warmth will be formed [8].

3. Countermeasures for AI empowering university governance

3.1. Concept innovation and cognitive reconstruction

The transformation of thinking and concepts is a crucial prerequisite for enhancing the effectiveness of AI in empowering university governance [9]. Therefore, universities should establish a correct governance concept, break through cognitive barriers, and thus better lead the high-quality development of universities.

Universities should foster a people-centered intelligent governance awareness, focusing on human values and basic rights. Specifically, it emphasizes that in the process of intelligent governance, all technologies serve humans. AI should always be regarded as an important auxiliary means to promote the effectiveness of university governance, rather than a substitute for or superior to humans. At the same time, universities should break the constraints of traditional governance thinking. Through activities such as AI-related knowledge lectures, skill training, and campus promotion, they can help governance personnel further deepen their correct understanding and application of AI. On the other hand, universities should establish a sound concept of multi-stakeholder collaborative governance [10].

In the era of AI, university governance is not led by a single subject, but requires the participation of multiple roles. Therefore, this means that each subject must clearly define its own role and responsibilities in university governance, and then promote the achievement of governance goals through the joint efforts of co-governance.

3.2. Institutional guarantee and targeting good governance

Institutional guarantee can provide support for the application of AI in university governance, and help promote the modernization of the university governance system. Therefore, universities should target the goal of good governance and establish a sound institutional mechanism.

Universities should formulate rules and regulations, build a complete management system, and do a good job in top-level planning and design. Specifically, it can start from the following aspects:

(1) It is necessary to clarify the relevant laws and regulations, define the legal boundaries of data collection, use, processing, storage and other stages, establish a system of responsibilities, rights and interests, and protect personal information security and data security, so as to provide a strong legal basis for the intelligent governance of universities [11];

(2) Introduce specific policy guidelines and requirements to encourage universities to explore the specific application of AI in governance in accordance with the law, so as to promote the in-depth integration of technology and governance [12];

(3) Emphasize top-level planning and design, incorporate the promotion of university governance by AI into the long-term development plan of universities, clarify the development orientation, key points and specific paths, so as to ensure the orderly development of the entire governance work.

On top of that, universities should balance public and private interests, and further improve the governance framework and cooperation mechanism. Specifically:

(1) Create a co-governance pattern and give full play to the leading role of the government in formulating policies, implementing supervision and other aspects; universities should mainly assume the responsibility of governance and scientifically formulate an AI governance framework and strategy more suitable for their own development according to their own characteristics and needs;

(2) Optimize the management model, where universities should clarify the main governance issues and key work contents, build a cross-organizational and cross-departmental coordination system, remove obstacles, and at the same time actively build a sharing platform to enhance mutual communication and interaction, promote information exchange and resource sharing, and eliminate redundant steps, so as to improve the efficiency of governance decision-making;

(3) Vigorously promote university-enterprise cooperation, whereby universities should strengthen cooperation with enterprises to jointly explore AI technology products and services suitable for universities. At the same time, they need to vigorously promote resource sharing among the government, universities and enterprises, so as to promote win-win results for all parties.

Universities should also clarify powers and responsibilities. They should actively establish and improve an accountability mechanism to enhance the awareness and ability of relevant personnel in implementing the system. Meantime, they should establish a systematic supervision and inspection mechanism to check and evaluate the implementation of the system, and promptly identify existing problems and defects and put forward improvement requirements or suggestions to relevant departments [13]. Additionally, universities can also build an intelligent supervision platform integrating multiple subjects such as the government, schools and society to form an all-round supervision force, which can better ensure the rapid response when risks occur.

3.3. Ecosystem optimization and improvement of intelligent governance ethics

In addition to issues such as internal data management, optimization of governance processes, and maintenance

of teacher-student relationships, university governance also needs to consider its harmonious coexistence with the external environment. Therefore, universities should start from the perspective of ecosystem optimization, improve governance ethics, and thereby further enhance safety awareness. Only in this way can the actual effectiveness of AI-empowered governance be better ensured.

With the deepening of human-machine interaction, universities need to clarify the boundary between humans and machines, identify new human-machine ethical norms, and build a sound code of ethical conduct for AI. This includes clearly defining the rights and obligations of machines in university governance, as well as establishing behavioral standards to protect privacy [14]. At the same time, at the legal level, it is necessary to strengthen the supervision of AI behaviors to avoid shirking of responsibilities, thereby better maintaining the fairness of the governance system. Other than that, universities should abandon the "technology-only theory" and integrate ethics, law, social responsibility, and other factors into the considerations of governance decision-making. This is to achieve a comprehensive assessment of potential ethical issues. At the same time, it is necessary to strengthen the full-process and all-round supervision of AI application and implementation.

Once ethical issues are identified, timely corrections are required. Universities need to handle the relationship between technological development and humanistic care, and actively promote the humanistic spirit [15]. In the process of AI governance, universities should attach importance to interpersonal communication and emotional connection. They should not only give full play to AI's functional advantages, such as data analysis, independent execution, and accurate prediction, but also balance "efficiency" and "humanistic care" to avoid abuse of technology. In this way, the harmonious coexistence of technology and humanity can be truly realized.

4. Conclusion

In summary, carrying out university governance relying on AI is an important measure to promote the digital transformation of universities, and is conducive to making outstanding contributions to the comprehensive advancement of Chinese-style educational modernization. To address the current risks in AI-empowered university governance, such as limited cognition, inadequate institutional framework, and relative lack of ethical norms, universities can take measures, including innovating concepts to reshape cognitive perspectives, strengthening institutional guarantees to target the goal of good governance, and optimizing the ecosystem to improve intelligent governance ethics. Through these efforts, the in-depth integration of AI and university governance can be better promoted.

Disclosure statement

The author declares no conflict of interest.

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