

Analysis of Enterprise Leadership Enhancement Strategies in the Generative AI Era

Shan He*

Beijing ZWZ Tech Co., Ltd., Beijing 100000, China

**Author to whom correspondence should be addressed.*

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Abstract: Currently, the transformation and upgrading of digitalization have become a new task that enterprises urgently need to address. To further enhance the leadership of enterprise leaders, relevant enterprise staff should face up to the infinite possibilities that generative AI brings to enterprise management. Based on this, this paper will briefly analyze the value connotation of generative AI empowering the improvement of enterprise leadership and the relevant influencing factors, and discuss the strategies for enhancing enterprise leadership in the generative AI era, in order to promote the smooth progress of enterprises' digital transformation and upgrading.

Keywords: Enhancement strategies; Enterprise leadership; Generative AI

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1. Introduction

With the rapid development of new-quality productive forces such as artificial intelligence (AI) and big data, markets in fields like collaborative office, online education, and online medical care have developed vigorously, and relevant enterprises are facing new development opportunities and growth points. Against this backdrop, enterprises should explore the positive role of generative AI in enterprise operation and management, and use this digital technology to empower the continuous improvement of enterprise leadership, so as to help enterprises make accurate decisions and promote efficient enterprise operation. This enables enterprise leaders to better perform their functions while freeing themselves from traditional management affairs and devoting themselves to more transformative enterprise strategic development.

2. The value connotation of generative AI empowering the improvement of corporate leadership

2.1. Assisting enterprises in making accurate decisions

The accuracy of decisions determines whether an enterprise can develop and grow. With its powerful algorithmic

computing capacity, generative AI can conduct in-depth mining and intelligent analysis of massive amounts of data. Traditional corporate decisions are usually based on basic financial statements and regular market reports, which not only have limited data samples but also relatively delayed data timeliness^[1].

After the introduction of generative AI, enterprise leadership can more accurately understand and grasp diversified data such as real-time market dynamics, consumer behavior, and industry development trends, thereby outlining a specific business landscape and providing strong support for accurate decision-making. For instance, based on the big data report on consumer preferences output by generative AI, enterprise leaders can predict the development direction of the industry, lay out the R&D and marketing strategies for new technologies or products in advance, and further enhance the scientificity and foresight of corporate decisions.

2.2. Promoting efficient operation of enterprises

Corporate operation can be described as a complex and high-speed large-scale machine. Each link is interconnected and closely linked, and a delay in any link may affect the overall operation of the enterprise. With its super-strong automation capability and optimization and upgrading effects, generative AI is regarded as a “magician” for enterprise reform and innovation. Generative AI can not only comprehensively analyze the operation processes of an enterprise, identify the repetitive and ineffective parts, but also realize the automation and intellectualization of work processes^[2].

For example, in terms of supply chain management in the manufacturing industry, by analyzing specific data such as an enterprise’s actual inventory level, production status, and transportation situation, generative AI can automatically generate material procurement plans, production scheduling, and logistics route planning. This helps avoid excessive inventory backlogs, reduce the operating costs of the enterprise, give full play to the positive role of the supply chain, and promote the efficient operation of the enterprise.

3. Influencing factors for the enhancement of corporate leadership in the era of generative AI

3.1. Strategic management level

In the strategic management of an enterprise, leadership undertakes important and specific tasks. These include maintaining the enterprise’s current development momentum and future development standards, defining a clear and compelling vision and mission, appropriately allocating corporate resources to pursue ever-changing market opportunities, continuously monitoring and leveraging the enterprise’s close connection to changes in the external environment, and examining the industry ecosystem to reflect on the enterprise’s core competitiveness^[3].

However, in practice, for many enterprises, the digital transformation of strategic management is an entirely new task. How to drive enterprises to shift from traditional operation and management thinking to a digital strategic management concept enhanced by generative AI often requires enterprises to “cross the river by feeling the stones” based on their actual circumstances. For most executives and employees, digital technology, generative AI, and digital transformation remain abstract theoretical concepts. How to utilize this new form of productive force in corporate management to improve the quality of enterprise strategic management remains a problem that cannot be perfectly solved in the short term.

3.2. Organizational operation level

Although enterprises continue to reform and innovate their organizational operations, the basic organizational

operation structure still operates within the framework of traditional hierarchical management. Within this management structure, leadership that evolves and innovates tends to form a specific leadership style. However, with the introduction of generative AI, changes in the enterprise's organizational operation model may go beyond such incremental adjustments and could even subvert the long-established hierarchical corporate management structure. Digitalization exerts an all-round impact on every level of the enterprise's organizational operation structure ^[4].

Through the data integration technology of generative AI, enterprise decision-making will shift from developing a single decision-making plan through research to evaluating and selecting among multiple decision-making plans. In particular, with the rapid advancement of natural language technology and machine learning technology, the proportion of manual management in enterprise organizational operations is gradually decreasing, and the organizational structure of enterprises is becoming simpler and flatter. In response to this, corporate leadership must break through traditional paradigms and embrace the changes and opportunities brought about by the era of generative AI.

3.3. Talent team level

The application and implementation of generative AI in enhancing corporate leadership cannot be achieved without the support of professional talent teams. Managers and employees with strong digital literacy are key factors influencing the effectiveness of leadership in applying AI technologies. On one hand, in addition to functional departments and business departments, enterprises should establish new-quality productive forces support departments equipped with technical capabilities such as algorithm development, data governance, and model optimization. This ensures the stable operation and continuous iteration of generative AI within the enterprise ^[5].

If an enterprise lacks professional AI operation and maintenance talents, it will be unable to promptly fix data security vulnerabilities or model failures in its intelligent platforms. This not only disrupts normal operations and causes losses to the enterprise but also undermines leaders' ability to control technical risks. On the other hand, enterprises should cultivate interdisciplinary talents who possess both expertise in generative AI technology and a good understanding of the enterprise's business processes. This helps eliminate "communication barriers" between technical teams and business teams, thereby enabling generative AI to fully exert its value in enhancing corporate leadership.

4. Strategies for enhancing corporate leadership in the generative AI era

4.1. Transform the role positioning of corporate leaders

In the tide of digital transformation, the transformation of leaders' role positioning is the primary step for them to acquire leadership capabilities in the era of generative AI, as listed:

- (1) Enterprise leaders need to recognize that although the effectiveness of leadership in the generative AI era does not merely depend on how leaders apply AI technology, it is more about how to protect the rights and interests of employees;
- (2) To achieve this transformation of role positioning, enterprise leaders need to understand the essence and demands of leadership in the generative AI era, clarify the supporting role of leadership in the enterprise's digital transformation and cultural development, strengthen their digital thinking, and always maintain an open attitude towards generative AI technology. This helps them gain access to cutting-edge technologies

at the earliest opportunity and guide the enterprise's development path ^[6];

- (3) Against the backdrop of the new era, leaders should clarify their own responsibilities and tasks, understand the impact of human-machine collaboration on leadership efficiency, and anticipate issues that generative AI may bring about, such as imbalances in autonomy and a decline in self-efficacy, so as to proactively address challenges in future management work.

In addition, the effectiveness of a leader's leadership is reflected not only in their own transformation but also in their guidance of employees. In daily work, if leaders demonstrate enthusiasm, acceptance, and recognition for generative AI technology, their leadership will receive higher evaluation, which will ultimately affect employees' initiative and enthusiasm in the enterprise's digital transformation. Therefore, enterprise leaders should provide appropriate guidance to employees during the transformation of their role positioning and leverage all available resources to jointly drive the enterprise's digital transformation.

4.2. Optimizing the training system for enterprise leaders

To enhance enterprise leadership in the era of generative AI, a comprehensive and sustainable leadership training system should be established to further improve enterprise leaders' digital literacy and ability to apply generative AI, as shown:

- (1) Leaders' theoretical literacy in AI technology should be strengthened, where enterprises should design a progressive and hierarchical AI technology training system based on leaders' cognitive abilities and development needs, focusing on content such as theoretical knowledge of AI technology, big data analysis technology, and risk prediction and management ^[7]. For instance, in the training of AI technology theory, specific cases of Tesla's AI Factory can be used to help leaders understand the core principles of generative AI—such as large language models and diffusion models—as well as its capability boundaries (e.g., inability to replace human emotional judgment and complex ethical decision-making). This enables leaders to develop a scientific and accurate knowledge system;
- (2) Leaders' practical ability to use generative AI in business scenarios should be enhanced as well. For example, during meetings related to corporate marketing decisions, leaders can be invited to participate in formulating AI-driven marketing plans. This includes, but is not limited to, setting marketing goals for the technical team, clarifying the characteristics of target audiences, and collaborating with the marketing team to evaluate the feasibility of AI-generated marketing plans, make detailed adjustments, and finalize the overall marketing strategy. Through such practices, leaders' ability to solve practical problems using generative AI is gradually improved ^[8];
- (3) The cultivation of leaders' digital literacy should be integrated into the enterprise's long term strategy. For example, in the enterprise's three-year strategic plan, "driving product innovation with generative AI" can be identified as a key development direction and broken down into quantifiable phased goals—such as achieving full coverage of generative AI in raw material procurement and production processes within the first year. This ensures the steady optimization of the leadership training system.

4.3. Building a multi-dimensional talent pool for enterprise leaders

In terms of recruitment, enterprises should increase the introduction of AI professionals such as algorithm engineers and AI product managers, giving priority to candidates with relevant work experience. For talent development, enterprises can establish a "mentor + project" talent growth system, where senior leaders guide

newly promoted leaders to jointly participate in the company's practical projects and provide regular training. This ensures that professionals have the ability to use generative AI to solve practical business problems.

Moreover, enterprises should also select internal employees from the digital technology support team who have business work experience—such as algorithm engineers who have participated in AI marketing projects—to take rotating positions in business departments, so that they can gain an in-depth understanding of customer needs and business processes^[9]. At the same time, select business backbones to study the basic principles and application methods of generative AI in the digital technology support department, so as to improve their ability to express business needs and interpret the output results of generative AI. In addition, enterprises should target practitioners who have been responsible for AI marketing in Internet companies and hire them as the “technology-business liaison personnel” of the enterprise.

Enterprises also need to establish an AI talent echelon to avoid talent gaps. They should cultivate basic-level talents who are proficient in operating generative AI tools and capable of processing basic data; build a middle management team that can lead teams to use generative AI to advance business projects and coordinate technology and business; and for senior corporate managers, require them to formulate AI talent strategies and lead corporate technological innovation. Through the establishment of the above-mentioned talent echelon, enterprises can ensure that there are outstanding talents with good leadership at all levels.

4.4. Improving the governance mechanism for generative AI applications

Enterprises should take the lead with senior leaders, and work together with legal, compliance, technology, and business departments to formulate the Generative AI Application Manual, clarifying usage standards and regulatory provisions as follows:

- (1) There are data privacy protection standards, which include obtaining authorization for user information through the explicit consent of users, encrypting data during storage, conducting regular backups, limiting access rights to specific business purposes, and prohibiting external disclosure. For instance, when using customer data in AI marketing, sensitive information such as ID card numbers must be deleted, and only non-identifiable data like consumption preferences should be retained;
- (2) There are algorithmic fairness guidelines, which aim to prevent biases in training data during the establishment of AI models. For example, when an AI system is used for recruitment, the database of its candidate selection model must include job seekers of different genders, ages, and educational backgrounds; if necessary, audits should be conducted on algorithm results. When the pass rate of a certain group is lower than expected, it is necessary to check whether the model has discriminatory issues;
- (3) There are responsibility delineation standards, which define the responsibilities that various entities should bear in the application of generative AI. When problems arise in AI decisions, the technical team is responsible for improving the model, the business department is responsible for judging requirements, and senior leaders are responsible for making final decisions to avoid mutual shirking of responsibilities.

After the standards are formulated, a dedicated review team for supervision should be established to pre-audit the compliance of projects involving AI-generated content; during the process, relevant technical tools should be used to monitor the application behavior of generative AI in real time, such as conducting keyword monitoring on the conversation content of AI customer service to prevent the leakage of customer privacy; after the event, the review team should take the lead in conducting a comprehensive audit of business projects using generative AI tools, evaluate the management of enterprise leaders on the compliance of AI-generated content applications, and

hold the corresponding leaders accountable if there are non-compliant projects.

5. Conclusion

To sum up, the key to generative AI empowering the improvement of enterprise leadership does not lie in AI technology itself, but in whether enterprise leaders can apply generative AI correctly and avoid its negative impacts. In practical implementation, it is necessary to implement strategies such as transforming the role positioning of enterprise leaders, optimizing the training system for enterprise leaders, building a multi-dimensional talent pool for enterprise leaders, and improving the governance mechanism for generative AI applications. These efforts will encourage enterprise leaders to integrate knowledge and action—based on an innovative concept of AI technology application and enthusiasm for practice—to truly realize the empowerment of generative AI in enhancing enterprise leadership.

Disclosure statement

The authors declare no conflict of interest.

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