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The Concept and Connotation of Enterprise Digital Transformation

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The Concept and Connotation of Enterprise Digital Transformation

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1. INTRODUCTION AND RESEARCH QUESTIONS

In the era of digital economy, digital technology is changing the way of enterprise operation and management, which makes enterprises need to constantly seek more efficient and flexible operation mode to maintain market competitiveness. Digital transformation has become a key strategic choice for enterprise survival and development. However, there are only a few leading enterprises in China 's digital field due to the high cost, long cycle, difficulty and high uncertainty of digital transformation [1], and the digital transformation of enterprise is full of challenges.

The digital transformation of enterprise is necessary and urgent, but the development of relevant theories lags behind the practice at present. The concept and connotation, motivation, key factors and other basic issues of digital transformation are not systematically clarified, and there are certain confusion of views and knowledge misunderstandings. This paper systematically summarizes the concept and connotation of digital transformation in order to make up for the lack of relevant theoretical research, and gives the definition according to the subject, technology, scope and expected results. This paper explores the internal and external factors that promote the digital transformation of enterprise, elaborate the current research situation of digital transformation from the perspective of technological innovation and application, process, results, and industrial application [2], and predict the future development direction for improving the knowledge of the theoretical research of digital transformation and providing insights into the practice of digital transformation.

2. THEORY AND RESEARCH FRAMEWORK

This paper defines enterprise digital transformation based on four parts: subject, technology, scope and expected results, analyzes the research status of enterprise digital transformation at the level of technological innovation and application, process, results and industrial application, and discusses the development direction of future digital transformation (Fig. 1).

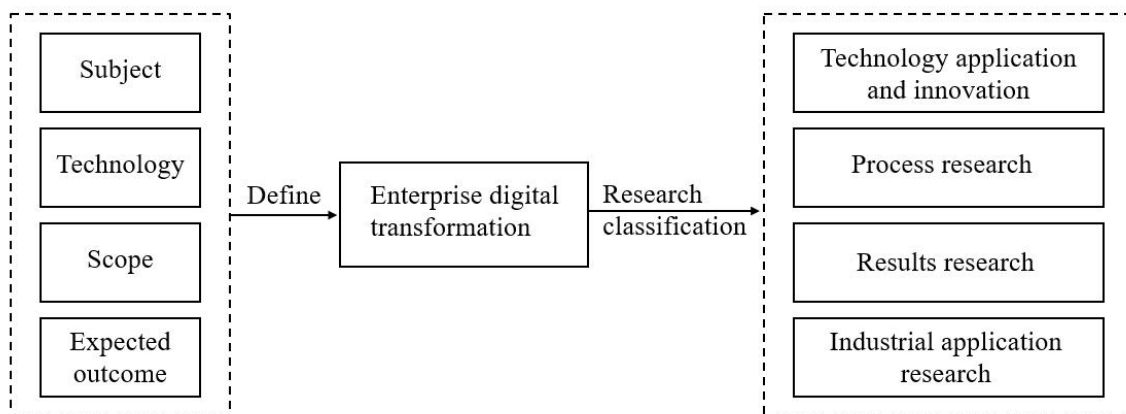


Fig 1. Research framework

3. RESULTS AND FINDINGS

Firstly, this paper defines the digital transformation of enterprises as following: enterprises (subject) apply digital technology to build a digital world with full perception, full link, full scene and full intelligence (the technology involved), and then optimize and reconstruct the business of the physical world, innovate and reshape the traditional management

model and business model (scope), and finally achieve business success (expected results).

Secondly, the digital transformation of enterprises is an inevitable product driven by internal and external factors. Digital transformation is the key strategic choice for enterprises to improve competitiveness, accelerate innovation and achieve high-level development in the view of internal motivation. Digital transformation is an inevitable choice for enterprises to cope with the "two-way squeeze" challenges of developed countries and other developing countries and achieve cost reduction and efficiency increase in the context of the rapid growth of the global digital economy in the view of external motivation [3].

The research achievements can be summarized into four aspects as following: the perspective of technological innovation and application, the process and results of digital transformation, and the perspective of industrial application. The research on technology innovation and application mainly focuses on the cross-system transformation of enterprises, and the research on digital infrastructure management and digital platform construction should be strengthened in the future. The research from the process perspective focuses on the transformation process and realization path of enterprises in different management fields, the resources and capabilities required for transformation, and the management measures to promote transformation. It is necessary to further explore the specific mechanism driving digital transformation in the future. The digital transformation of enterprises may bring positive results, improve the production efficiency and organizational performance of enterprises, and may also pose a threat to data security. Future research needs to further focus on the impact of digital transformation on enterprise performance, and how enterprises respond to the market structural challenges brought by transformation. It mainly focuses on the research of industry survey, industrial policy and management strategy, and provides practical cases and data of enterprise digital transformation in industrial application. In our understanding, the relevant theories of enterprise digital transformation lag behind the real world best practices. The academic community should strengthen cooperation with the industry and feed back or inspire the industry through the research results. In addition, it is also necessary to improve the research on the architecture and mechanism of the digital ecosystem.

4. CONTRIBUTIONS

This paper systematically summarizes the concept of enterprise digital transformation, defines enterprise digital transformation from four aspects as following: subject, technology, scope and expected results, and expounds its connotation. This paper enriches the theoretical research on digital transformation, not only plays a role of knowledge enhancement but also provides insights into the practice of digital transformation. This article categorizes current research in this field into four categories: technological innovation and application, process, results, and industrial applications, and elaborates on the research status of each category. It proposes possible future directions and calls for greater cooperation between academia and industry.

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REFERENCES

1. Yao Xiaotao, Qi Hui, Liu Linlin, et al.: Enterprise Digital Transformation: Re-Understanding and Re-Starting. *Journal of Xi'an Jiaotong University (Social Science Edition)* 42 (3), 1-9(2022). (in Chinese)
2. Xiao Jinghua: Cross-system Digital Transformation and Adaptive Changes of Management. *Reform* 2020 (4), 37-49(2020). (in Chinese)
3. Wang Yuyan, Lin Hanchuan: Effects of Global Value Chain Embeddedness on Industrial Transformation and Upgrading: An Empirical Study on China's Industrial Panel Data. *Journal of International Trade* 2015 (11), 51-61(2015). (in Chinese)

