PLATFORM MODEL OF ENTERPRISE DIGITAL TRANSFORMATION UNDER THE BACKGROUND OF DIGITAL ECONOMY

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In the process of continuous development of digital economy, with the rapid development of various modern information technology, digital transformation has promoted and disrupted many traditional industries. This paper analyses the digital transformation of enterprises from the perspective of the digital economy, hoping to provide reference and help to more enterprise managers, promote enterprise innovation and upgrading, and promote the long-term development of the national economy.

Keywords: digital economy; information technology; digital transformation; management.

Digital transformation concepts for businesses

The digital transformation of enterprises is the transformation from an enterprise operation mode with physical space as the carrier to a digital operation mode with the integration of physical space and digital space as the carrier. Based on the integration of physical and digital space carriers, the basic labour, material, capital and information elements of enterprise operation are constructed, and key support systems such as digital product development, digital research and production management and digital enterprise management are formed to achieve an agile response to the market, accurate and orderly production and stable and efficient management of enterprise operation [2].

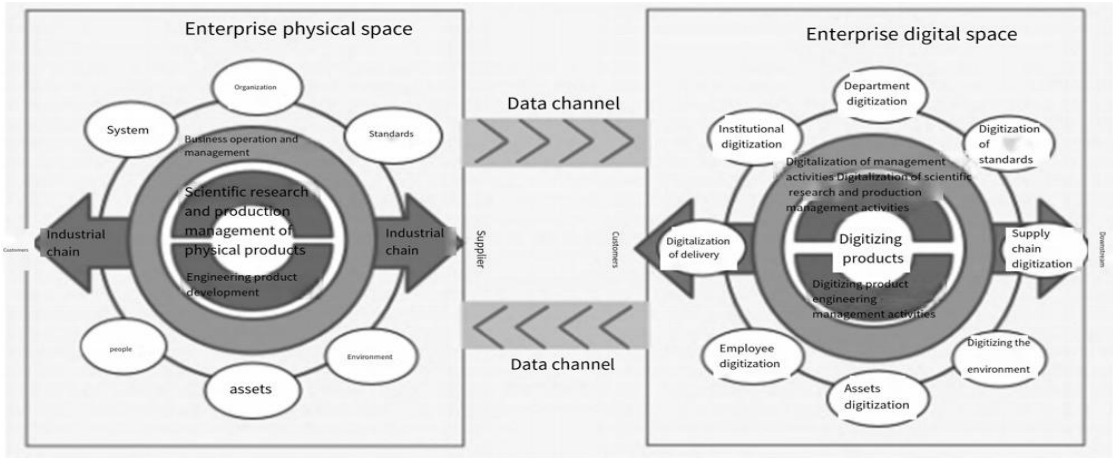

Fig. 1. The digital transformation operating model for manufacturing companies [2]

The connotation of enterprise digital transformation

The digital transformation of enterprises encompasses not only the digitalisation of industries, but also embodies digital industries, which means realising the digital combination between advanced information technology and traditional enterprises, and making continuous progress towards digital trends, such as the use of high technology such as big data and cloud computing in industries such as retail, services and manufacturing to improve the structure of enterprises' previous processes such as production, sales and processing. Companies that carry out analysis that uses digital technology as a basis are able to more effectively promote the innovation and upgrading of traditional industries and the digitalisation of their businesses when they form an industrialisation. According to the analysis of the current development, the digital transformation of enterprises has been slowly transformed from the consumer-oriented side towards the production and industrial side. The digitalisation of any industry is consumer-oriented and has gradually matured, while the digital transformation of business and industry has gained initial momentum and needs to be supported by traditional industries and relevant government departments.

Enterprise Digital Transformation Platform Framework

The digital platform is an institutional digital service hub that integrates technology, aggregates data and empowers applications. With intelligent digital technology as components, data as production resources and standard digital services as outputs, it enables institutional business innovation and efficient operations, helps institutional data management and value mining, and reduces the complexity of institutional technology operations and technology management.

1. Converging technologies: The digital platform itself is based on emerging technologies such as cloud computing, big data, video technology, the Internet of Things, artificial intelligence and next-generation security as core components, continuously integrating existing technologies while continuously incorporating new technologies, and doing a comprehensive integration of new and existing technologies, encapsulating the organisation's technological mastery within the platform and providing technological enablement for business development and organisation operations.

2. Aggregate data: Data is the productive resource of the digital platform, and the two are mutually dependent on each other. Different data scales and data types require different digital platforms to support them, and digital platforms of different maturity levels can handle different scales and types of data resources. At the same time, the process of processing data by platforms is also constantly precipitating industry experience, gradually forming the platform's intelligent and intelligent output capabilities.

3. Enabling applications: The digital platform provides standard digital services based on APIs to the outside world, enabling interfacing with networks, terminals, applications and other platforms in a standardised manner. The construction of the digital platform not only provides assistance to the business development and operation of the organisation, but also has the potential to become a digital business as a differentiated competitive advantage [1].

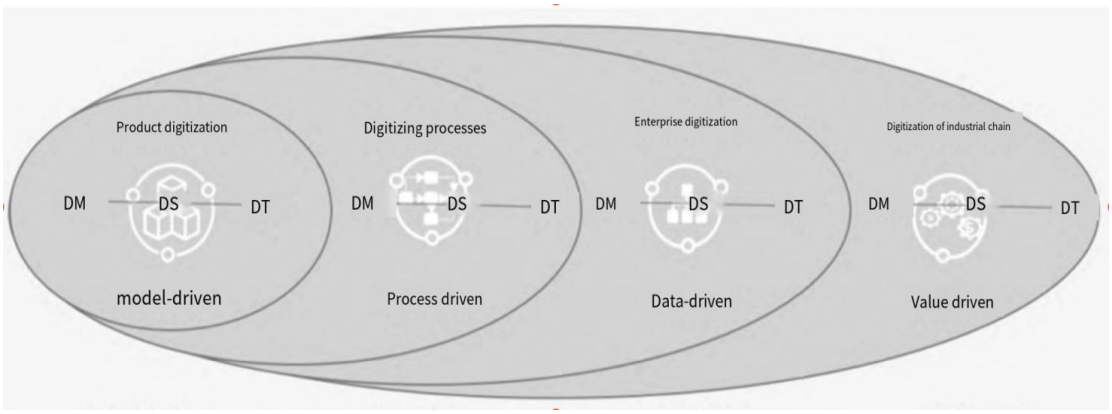

Fig. 2. Enterprise Digital Transformation Platform Framework

Based on the understanding of enterprise digital transformation, it can be considered that the enterprise digital transformation is to reconstruct the enterprise business operation base and operation framework, as shown in Figure 2, DM, DS and DT are digital model (DM), digital simulation (DS) and digital twin (DT) respectively.

It is crucial to establish operational elements that are adapted to the digital operation model of an enterprise, to realise their modelled representation and to build its digital continuity capability system. In the framework of enterprise digital transformation capabilities include object digital capabilities and enterprise digital continuity capabilities. On the basis of these two capabilities, a data and model-driven enterprise digital operation system is built to support the operation of key business scenarios and realise the digital transformation of the enterprise.

Conclusions

The digitalisation of the enterprise supports data-driven digital operations by modelling enterprise elements and establishing key operational control models such as digital organisational control, supply chain control and enterprise operational decision models to optimise enterprise operations. The digitalisation of the industrial chain supports the construction of value-driven digital industrial chains through the modelling of industrial partners, the definition of industrial chains and the optimisation of models. A long-term perspective on the digitalisation of all elements and processes of the enterprise. In the ac-

tual transformation process, we combine the enterprise's information technology infrastructure and application level, and focus on the digitisation of products, processes and enterprises to promote the digitisation of the enterprise itself. At the same time, in the external part of the enterprise, we make full use of new digital technologies to promote the digitalisation of the enterprise's supply chain, drive the digitalisation process of partners, support the digital construction of the value-driven industry chain, and improve the level and quality of the enterprise's digital operation from the inside out. We will continue to strengthen the application of technologies such as immersive interaction, artificial intelligence and new infrastructure computing power to provide productivity upgrade support for the digital transformation of enterprises, innovate more digital application scenarios and promote the digitalisation of the whole product, the whole process, the whole enterprise and the whole industry chain digital transformation goals.

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