

Research on Digital Scientific Enterprise Management Promoting the Development of Industrial Chain

Zhengju Mu

Zhengzhou Institute of Aviation Industry Management, Zhengzhou 450015, China.

Abstract: Based on the mode of enterprise operation and management, the digital transformation of enterprise management in the context of digital economy should be reflected in four aspects: first, supply chain management tends to be informatization, horizontal integration and digitalization of logistics system, which can make enterprise production and R&D gradually modular, versioned and open, and third, the complexity of organizational structure, the constant updating of information technology and other factors affect enterprise business process reengineering, Fourth, data and related technologies promote the accuracy of customer relationship management. This change provides endless possibilities for business innovation, fundamentally changes the traditional business logic and management ideas, and challenges the existing operation and management processes.

Keywords: Digital Economy; Management Transformation; Manufacturing Enterprise

Introduction

The digital economy refers to a series of economic activities that take the use of digital knowledge and information as the key production factors, take the modern information network as the carrier, and take the effective use of information and communication technology as the important driving force for efficiency improvement and economic structure optimization. It has the characteristics of interconnection of everything, intelligence of knowledge and data elements. The data reported at the second Digital China Construction Summit shows that China's digital economy has effectively promoted GDP growth, and data resources have become an important factor driving the development of manufacturing industry. Promoting the deep integration of digital economy and manufacturing industry plays an important role in the development strategy of digital economy in all countries.

1. Necessity of management transformation

China's manufacturing industry has a large scale and complete system, but there are still many problems. Only by continuously improving the competitiveness of products and increasing the capacity of independent innovation can Chinese manufacturing enterprises develop and grow better. According to the connotation of China's "Internet plus" action plan, modern manufacturing should be combined with advanced technologies such as mobile Internet, cloud computing, big data, and the Internet of Things to promote the digital transformation and upgrading of manufacturing enterprises and guide manufacturing enterprises to expand the international market.

2. Enterprise supply chain management transformation under the background of digital economy

In the era of digital economy, the networked supply chain platform has become the support for the improvement of supply chain efficiency. The gradual maturity of advanced digital technologies such as cloud computing and artificial intelligence has effectively solved the problems of links, indexes and interactions in the supply chain, realized the organic integration of different links in the supply chain, and greatly improved the efficiency of the supply chain.

Secondly, under the traditional management mode, enterprises often adopt vertical integration to achieve high control in order to pursue resource integration. Therefore, the level of horizontal integration of supply chain is also one of the important factors that affect the transformation of enterprise management in the context of digital economy.

Third, in the era of digital economy, online and offline transactions are intertwined, and logistics has become an important part of enterprise operation. Its degree of digitalization has an important impact on the completion of enterprise transactions.

In this way, enterprises can improve customer experience, innovate value proposition and improve organizational efficiency. First, supply chain management, the establishment of fast cooperation and communication channels with suppliers and distributors, and the overall structure of planning, designing and implementing the entire business activities from the perspective of the market in the supply chain.

The above three aspects are interconnected and coordinated, laying the foundation for the digital transformation of enterprise management.

3. The dynamic matching between the opportunities in the digital era and the strategic guiding role of enterprises with long industrial chain

The digital strategy has a forward-looking guiding role, which determines whether the industry leaders can flexibly use new technologies, change their business models, effectively solve key problems in the industrial chain, and lead the evolution of the industrial ecosystem. Digitalization is not only a short-term opportunity, but also a long-term strategic consensus. The essence of enterprise digital transformation is strategic change and model updating, which requires enterprises to establish long-term value thinking, carry out top-level design and strategic planning based on digitalization and intelligence, including formulating clear mission, vision, development strategy, institutional system and establishing clear cultural values.

The digital technology innovation system is composed of enterprise digital R&D capability, industrial digital infrastructure and large-scale application of digital technology. Promote the large-scale application of digital technology and the release of the value of data elements, strengthen the traction ability of industrial innovation, and promote the development of industrial digitalization.

4. Integration of digital scenes to solve the pain points of industry digitalization and realize continuous innovation

The integration capability of digital scene is the engine that drives the continuous innovation of enterprises, faces specific industrial scenes and pain points, realizes the collaborative coupling of the core capabilities of digital technology and digital management, and forms the industrial digital dynamic capabilities that promote the continuous innovation and leap of the industry. It can open up the digital technology capabilities and digital management capabilities of enterprises, build the co-creation platform required for industrial digital transformation with multiple entities, build the co-creation symbiosis ecosystem, expand the integration capabilities of internal and external resources of the industry, and create the dynamic core capabilities of the industry for digital transformation.

5. Digital development trend of supply chain quality management

With the continuous development and deepening of digitalization, the digitalization of supply chain quality management is also continuously optimized and improved. Only by fully combining the development trend of digitalization, can we further solve many uncertain problems in supply chain quality management. The digitalization of supply chain quality management and manufacturing enterprise quality management is gradually integrated. Manufacturing enterprises will implement the overall digital development plan, and build the industrial chain and supply chain quality collaboration platform represented by leading enterprises. Deepen quality information sharing and knowledge co-creation among suppliers. In the future, under the influence and role of digital technology development such as digital twinning, digital analysis and modeling, data analysis, reliability design and simulation, the digital intelligent lean supply chain system will be further improved, and digital resources will be more fully integrated.

6. Development suggestions

6.1 Strengthen the research and implementation at the planning level and optimize the supply chain quality management mode

The state and local governments should continue to support and promote the development of digital supply chain quality management of manufacturing enterprises, and constantly optimize and improve the policy guarantee and corresponding supporting environment. we should pay attention to the collaborative cooperation between different suppliers, and further improve the collaborative development level of the quality of each supplier.

6.2 Strengthen the basic supporting conditions of supply chain quality management

The digital development of supply chain quality management cannot be separated from the support of policies, and it also requires manufacturing enterprises to have certain basic support conditions.

6.3 Establish and improve the digital standard system of supply chain quality management

Based on the current situation of digital development and standardization requirements of supply chain quality management in manufacturing enterprises, focusing on the key links in supply chain quality management, and centering on infrastructure, platform construction, supply chain information network security application, quality data security management, On the basis of fully integrating data resources, we should focus on the construction of data standards. Timely summarize and refine the typical practices and experiences that can be replicated and popularized in the exploration of supply chain quality management digitalization, and convert them into standards.

Conclusion

The dynamic capability of industrial digitalization provides a new capability paradigm opportunity to drive industrial innovation and development. Looking forward to the future, the digital economic policy should not be limited to the improvement of the digital economic performance of a single enterprise, but should organically coordinate the development needs of enterprises, industries and society, and form an integrated national digital innovation ecosystem with strategic guidance, major scenario-driven and open cooperation. Only in this way can enterprises, under the guidance of the national innovation-driven development strategy, integrate and promote the digital transformation of enterprises and industries, improve the digital driven innovation system and the digital ecological development system, and help to become stronger and stronger

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