

Intelligent Strategy Layout: International Business and Global Value Chain Theory of Enterprises under Digital Leadership

Hongwei Tang

*Sichuan Fine Arts Institute, Chongqing, 400010, China
330812372@qq.com*

Abstract: *The rise of digitalization has not only changed the operational methods within enterprises, but also shaped a new competitive landscape on a global scale. This article introduces the impact of the digital age on international business operations of enterprises, emphasizing the digital trend and opportunities for artificial intelligence; Explore the impact of intelligent strategic layout on enterprise competitiveness, including data-driven decision-making and digital innovation of customer experience; The experience of successfully implementing intelligent strategies was demonstrated through enterprise cases; The challenges and prospects section includes security and privacy issues, technological updates and response strategies, and the symbiotic issues of artificial intelligence. An analysis was conducted on the trend of intelligent strategic layout, the impact of emerging technologies on the global value chain, and the relationship between artificial intelligence and international competition.*

Keywords: *The digital age; Global value chain; Artificial Intelligence and International Competition*

1. Introduction

Digitization involves the rapid dissemination of information, the widespread application of data, and the widespread application of emerging technologies such as artificial intelligence and big data analysis. This digital transformation has had a profound impact on the international operations of enterprises, driving them to expand into global markets and accelerate their internationalization pace. By utilizing technologies such as artificial intelligence and machine learning, enterprises can better understand market demands, optimize operational processes, and achieve intelligent decision-making^[1]. The impact of digitalization on enterprise competitiveness is also reflected in data-driven decision-making and the promotion of digital innovation, which will be analyzed in detail in the paper; The global value chain theory, as a classic theory in the international economic field, combined with intelligent strategic layout, will enable enterprises to allocate resources more efficiently on a global scale; The application of digital technology in the global value chain, intelligent manufacturing, and digitalization of supply chains will be further studied in subsequent chapters.

2. International Operations of Enterprises in the Digital Era

(1) The definition and characteristics of digitization

Digitization is a product of the rapid development of information technology, marking the transition from traditional modular to digital forms. In the context of international business operations, digitalization encompasses multiple levels, not only technological progress, but also a comprehensive transformation. Digitization is reflected in the rapid flow of information. In the past, the speed of information transmission was limited by physical media, and in the digital age, through technologies such as networks and cloud computing, information can be transmitted in real-time on a global scale^[2]. This feature encourages enterprises to make more agile decisions internationally and respond promptly to market changes. The characteristics of digitization also include the widespread application of big data. Enterprises generate massive amounts of data in their operations, and digital technology enables these data to be captured, stored, and analyzed, providing more accurate basis for decision-making. The Digitization process is shown in Figure 1.

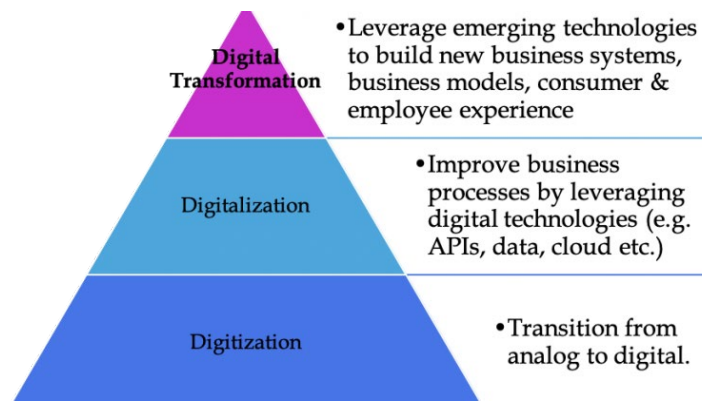


Figure 1: Digitization process

(2) The Internationalization Trend Driven by Digitalization

The rise of digitalization has given rise to a new pattern of enterprise internationalization, profoundly changing the traditional international business model. Through digital channels, enterprises can directly reach global consumers, achieve global promotion of goods and services, and eliminate time and space constraints^[3]. Enterprises have utilized digital technology to optimize production, logistics, and supply chain management, achieving efficient allocation of global resources. This efficiency not only reduces operating costs, but also increases the sensitivity of enterprises to international market demand. Through digital platforms and online collaboration tools, enterprises can communicate in real-time with global partners, jointly create value, break geographical limitations, and promote closer integration of the global business ecosystem.

(3) Opportunities for International Business in the Age of Artificial Intelligence

With the rapid development of artificial intelligence (AI) technology, international business has entered an era full of opportunities. Artificial intelligence provides enterprises with more intelligent decision support systems. By analyzing massive amounts of data, artificial intelligence can accurately predict market trends, optimize supply chains, reduce risks, and enable enterprises to make more scientific and accurate decisions in the international market^[4]. The application of automated production, intelligent logistics, and intelligent customer service has improved the efficiency of international business for enterprises, shortened delivery cycles, and enhanced competitiveness in the global market. Through deep learning and natural language processing, companies can better understand the needs of consumers in a global multicultural context, provide personalized products and services, and better adapt to market differences in different countries and regions.

3. Intelligent strategic layout and enterprise competitiveness

(1) The concept of intelligent strategic layout

The intelligent strategic layout marks a new stage of enterprise strategic management, and its core concept is to fully utilize intelligent technology in the digital era to promote the long-term development of enterprises. The intelligent strategic layout focuses on the comprehensive application of data^[5]. By collecting, analyzing, and utilizing big data, enterprises can gain a more comprehensive understanding of the market, consumers, and competitors, providing more accurate basis for strategic planning. Data is not only used for decision-making, but also a key factor for enterprises to gain information advantages in international competition. The intelligent strategic layout is reflected in the widespread application of technology. The integration and application of advanced technologies such as artificial intelligence, machine learning, and the Internet of Things enable enterprises to achieve more efficient production, supply chain management, and interaction with customers.

(2) The Impact of Digitization on Enterprise Competitiveness

1) Data driven decision-making

Through in-depth analysis of big data, enterprises can quickly obtain key information such as market trends, customer demands, and competitive dynamics. This not only provides decision-makers with a comprehensive information foundation, but also optimizes prediction models and algorithms to make decisions more scientific and accurate. Data-driven decision-making not only helps enterprises to

standardize their strategies, but also supports real-time adjustments, enabling enterprises to adapt more flexibly to the dynamic changes of the international market and achieve sustained advantages. This method not only improves decision-making efficiency, but also injects new vitality into the international competitiveness of enterprises.

2) Customer experience and digital innovation

The intelligent strategic layout emphasizes enhancing customer experience through digital innovation. Through intelligent technology, enterprises can personalize their products and services, achieving more precise market positioning. Digital innovation also plays a role in customer interaction, improving customer communication and engagement experiences through technologies such as intelligent customer service and virtual reality^[6]. This not only improves customer satisfaction, but also encourages customers to participate more deeply in the enterprise ecosystem, thus forming a stronger customer relationship. Digital innovation not only improves customer experience, but also provides strong support for enterprises to win more market share in the international market.

(3) *The international competitive landscape in the era of artificial intelligence*

With the vigorous development of artificial intelligence (AI) technology, international competition is undergoing profound changes. AI technology makes the competition for enterprises in the global market more intense and intelligent. Enterprises that can fully utilize AI technology can not only improve production efficiency and reduce costs, but also gain greater advantages in product innovation and service provision, thereby occupying a commanding position in the international market. Artificial intelligence has redefined industry boundaries and is driving the rise of emerging industries. This trend has brought new business models and redefined the pattern of international competition, prompting enterprises to cross multiple fields and seek broader market share.

4. The combination of global value chain theory and intelligent strategy

(1) *The basic principles of global value chain theory*

The global value chain theory is built on the basis of division of labor and cooperation, emphasizing cooperation and collaboration among enterprises on a global scale. The core principle is to divide the manufacturing and provision process of products or services into multiple stages, which can be carried out globally to achieve optimal resource allocation and maximum efficiency. By concentrating different links in the industrial chain in the most suitable regions, enterprises can focus on their core competitiveness, improve production efficiency, and reduce costs^[7]. The global value chain theory emphasizes cooperation and partnership between enterprises. Enterprises are no longer independent economies, but part of the global production network. This cooperative relationship is not only developed internationally, but also reflected in the domestic industrial chain, allowing for more flexible flow of resources on a global scale. The steps to value-chain analysis are shown in Figure 2.



Figure 2: Steps to ValueChain Analysis

(2) The Interaction between Digitalization and Global Value Chain

1) The application of digital technology in the value chain

The application of digital technology in the global value chain provides enterprises with unique competitive advantages. By adopting advanced production automation and IoT technology, enterprises can achieve digital monitoring and optimization of production processes, improving production efficiency. Digital supply chain management enables enterprises to predict demand more accurately, coordinate supplier relationships, and achieve agility and flexibility in the supply chain. The application of these digital technologies not only reduces costs in international competition, but also provides more strategic choices for enterprises to position and cooperate on the global value chain, promoting industrial innovation and collaboration on a global scale.

2) Intelligent manufacturing and digitalization of supply chain

The combination of intelligent manufacturing and digitalization of supply chain has brought comprehensive upgrading of production and supply chain for enterprises. Intelligent manufacturing improves the flexibility and efficiency of production lines by introducing automation, machine learning, and the Internet of Things. Digitization of the supply chain enables enterprises to achieve real-time monitoring and collaborative management of the entire supply chain, thereby responding more quickly to market demand fluctuations. This combination not only optimizes the production process, reduces inventory costs, but also enables enterprises to launch new products more quickly, improving market response speed.

5. Case study: Enterprises that successfully implement intelligent strategic layout

(1) Enterprise Case One: A's Intelligent Strategic Layout

As a leader in intelligent strategic layout, Enterprise A fully demonstrates how to successfully implement intelligent strategies in the digital age to enhance international competitiveness. Through big data analysis and artificial intelligence technology, Company A has gained a deep insight into the demands and trends of the international market, making its strategy more forward-looking. Significant achievements have been made in digital innovation, quickly adapting to the diverse needs of the global market and improving customer experience through intelligent production lines and personalized product customization. In terms of global value chain, Company A has achieved efficient collaboration with global suppliers and partners through digital technology. From raw material procurement to product delivery, digital monitoring throughout the entire process enables enterprises to better grasp every aspect of the supply chain and achieve precise resource allocation.

(2) Enterprise Case 2: B's Intelligent Strategic Layout

Enterprise B has demonstrated excellent examples of successfully implementing intelligent strategies in the digital age. Firstly, Company B conducts comprehensive digital market analysis and utilizes advanced data mining techniques to accurately understand changes in the international market and make quick decision adjustments. Through artificial intelligence and big data analysis, enterprises have achieved personalized customization of products and services, improving customer satisfaction. Digital innovation has also extended to sales channels and after-sales service, enabling Company B to better interact with customers and establish closer customer relationships. In terms of global value chain integration, Company B has achieved high intelligence in the production process and global collaboration in the supply chain through intelligent manufacturing and digitalization of the supply chain. This digital integration not only improves production efficiency and reduces costs, but also enables Company B to better adapt to the diversified needs of the international market.

6. Challenges and Prospects

(1) The challenges brought by digitization

1) Security and privacy issues

With the deepening implementation of intelligent strategic layout, enterprises are facing challenges in security and privacy issues. The information exchange in the digital age poses higher risks to enterprise data, and it is necessary to strengthen information security measures to protect sensitive information of customers and enterprises. Meanwhile, with the advancement of personalized services, enterprises need

to handle user privacy more cautiously, comply with data collection and use, to avoid potential legal and reputational risks. Therefore, enterprises need to comprehensively consider technological security and user privacy in their intelligent strategic layout, and develop sound policies and processes to ensure the comprehensive development of the digital era without sacrificing security and privacy protection.

2) Technological updates and response strategies

Technological updates are an inevitable challenge in the layout of intelligent strategies. Enterprises need to constantly pay attention to the emergence of emerging technologies and upgrade them in a timely manner to maintain their competitive advantage. Developing a flexible technology update plan, including regular team training and establishing strategic partnerships, can help companies better adapt to technological progress. In addition, enterprises should reserve sufficient resources for research and innovation, ensuring that they can keep up with trends in technological updates and promote sustainable development of intelligent strategic layout.

3) The symbiotic problem of artificial intelligence

The widespread application of artificial intelligence has led to the problem of symbiosis, which is the collaborative cooperation between humans and intelligent systems. Enterprises need to conduct in-depth research on how to organically integrate artificial intelligence with human employees to avoid substitutive employment issues. Establishing a training program to enhance employees' digital skills and help them work better with intelligent systems is one of the solutions to symbiotic problems. In addition, enterprises need to establish a good communication mechanism to enable employees to participate in intelligent decision-making processes, enhance their sense of participation and belonging, and jointly promote the sustainable development of the enterprise.

(2) Future development direction

1) Trends in intelligent strategic layout

In the future, the intelligent strategic layout will further integrate digital technology, including more advanced artificial intelligence, machine learning, blockchain, etc. The data-driven approach will emphasize more, and enterprises will strengthen their utilization of big data to achieve more accurate decision-making and personalized services. In terms of global value chain integration, enterprises will pay more attention to global collaborative innovation and build more flexible supply chain networks. In addition, the intelligent strategic layout will pay more attention to sustainable development, and promote enterprises to achieve sustainable operations that integrate environmental protection, social responsibility, and governance through digital technology, in order to adapt to the continuous evolution of the future competitive environment.

2) The impact of emerging technologies on the global value chain

Emerging technologies will have a profound impact on the global value chain. The application of blockchain technology will enhance the transparency and traceability of the supply chain, strengthen transaction security, and change the cooperation mode of the global value chain. The widespread application of artificial intelligence in production, design, and decision-making will promote greater flexibility and intelligence in the global value chain. The introduction of these emerging technologies will drive enterprises to expand into more fields, innovate business models, form a stronger global cooperation ecosystem, and bring new opportunities and challenges to the upgrading of the global value chain [8].

3) The Relationship between Artificial Intelligence and International Competition

The widespread application of artificial intelligence will profoundly shape the international competitive landscape. Enterprises that can flexibly utilize artificial intelligence to enhance productivity, innovate products and services will have a more competitive advantage. At the same time, international standards and regulations for artificial intelligence will become important factors in international trade, and enterprises need to pay more attention to complying with and participating in the formulation of these norms to ensure the stability and sustainability of global cooperation. Therefore, the role of artificial intelligence in international competition is not only to drive innovation and efficiency improvement, but also a key driving force in shaping the global business environment.

7. Conclusion

The intelligent strategic layout provides strong support for enterprises to gain competitive advantages

in the international market through practices such as digital innovation, integration of global value chains, and talent cultivation. Security and privacy issues, technological updates and response strategies, and the symbiosis of artificial intelligence require enterprises to continuously explore solutions in practice. In the future, the layout of intelligent strategies will tend towards the comprehensive application of digital technology, including more advanced artificial intelligence, blockchain, etc., as well as a greater emphasis on sustainable development. In terms of the impact of emerging technologies on the global value chain, enterprises need to closely monitor the development of technologies such as blockchain, Internet of Things, and artificial intelligence, and flexibly respond to changes. At the same time, the relationship between artificial intelligence and international competition will deepen, and enterprises need to fully leverage the potential of artificial intelligence in production, innovation, and cooperation to help them gain competitive advantages in the global market.

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