

2 Digital application methods in healthcare systems

2. 1 Optimization of medical service processes by digital technology

Digital technologies optimize the healthcare process through the following paths: (1) remote diagnosis and treatment to reduce geographic constraints; (2) AI-assisted diagnosis to improve accuracy; and (3) automated management to reduce administrative costs. For example, Shanghai has reduced average patient waiting time by 40% by integrating data through a regional health platform. Figure 2 demonstrates the optimization path of the digital diagnosis and treatment process.

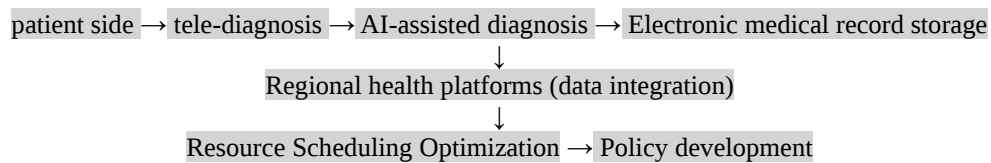


Figure 2 - Digital healthcare delivery process

In addition, the Zhongguancun Digital Healthcare Industrial Park promotes technological innovation and industrial synergy through the three-phase strategy of “nurturing ecology - expanding base - setting up benchmarks”, which verifies the economic feasibility of digital healthcare in large-scale application.

2. 2 Economic value and management of medical data

The economic value of medical data is reflected in two aspects: first, optimizing resource allocation through data analysis; and second, supporting scientific research and commercial transformation. Blockchain technology can improve the security of data sharing, but its standardization and privacy protection issues still need to be resolved. For example, the “Four Clouds” platform in Tianjin has increased the utilization rate of medical resources by 25% through data interconnection [4].

However, the risk of data abuse should not be ignored. In the context of digital healthcare, it is necessary to strengthen the education of medical humanities to avoid the weakening of patient experience by technology supremacy [5].

Conclusion. Drawing on economic theory, this paper reveals the central role of digital healthcare in cost control, efficiency improvement and data management. It shows that digital tools can effectively address the inherent shortcomings of the healthcare market, but their success relies on the synergy of technological standardization, ethical regulation and policy support. Future research could further explore strategies for applying digital healthcare in regional disparities, as well as data governance frameworks in the context of globalization.

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RESEARCH ON THE ORGANIZATIONAL AND ECONOMIC MECHANISMS OF CHINA'S INDUSTRIAL ENTERPRISES DIGITAL SUPPLY CHAIN MANAGEMENT AND PRACTICAL PATHS FOR OPTIMIZATION IN THE SCOPE OF GLOBALIZATION

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Resume. This study builds a ‘technology-organization-economy’ dynamic adaptation model to help China's industrial supply chains compete globally. Technology integration enhances transparency and responsiveness, performance incentives increase resilience, and case studies break through the limitations of traditional unidimensional optimization. Policies need to balance efficiency, resilience and sustainability, and rely on the ‘double cycle’ to promote quality-led transformation of enterprises.

Keywords: Digital supply chain optimization, dynamic adaptation mechanisms, global competitiveness

Introduction. The global supply chain faces challenges such as overcapacity and accelerated technological

iteration. As a manufacturing center for electronics, machinery and new energy, China is constrained by technological shortcomings and a low brand premium and is deeply embedded in the middle of the global value chain. This is compounded by structural contradictions such as geopolitics, lagging ESG and insufficient investment in digitalization. The study constructs a dynamic adaptation framework of ‘technology-organization-economy’, theoretically expanding the boundaries of digital research, and in practice reducing operating costs by improving supply chain transparency. A closed-loop green model helps break through trade barriers, driving industrial upgrading and value chain migration in two directions.

1. Theoretical basis and global experience

1. 1. Core content of digital supply chain management

Digital Supply Chain Management relies on a cloud platform to break through information silos. Its core advantages are real-time data for agile supply and demand matching; blockchain for tamper-proof transparency; and cloud ecosystems for real-time collaboration to match resources and ultimately reduce costs, enhance efficiency and reduce risk. [1]

1. 2. Theoretical Framework of Organizational and Economic Mechanisms

The digital supply chain management framework focuses on three core drivers: organization, resources and incentives. The organizational layer focuses on networking, the resource layer on digitalization, and the incentive layer on performance evaluation. [2] In terms of technology empowerment, AI and blockchain enable real-time logistics collaboration, a trusted ecosystem, accurate location of inventory bottlenecks, and improved efficiency of decision-making. [3]

2. Current situation and problems of digital supply chain management in Chinese industrial enterprises

2. 1. Analysis of the current situation

China's industrial digital supply chain is being transformed by government policy. The Ministry of Industry and Information Technology's 2024 guidelines rely on 'Made in China 2025' to promote identity resolution and AI specialization. Headquartered enterprises are adopting digital twin technology; SMEs are stuck in basic ERP applications. Lack of standards and insufficient collaboration are hindering progress. [4]

2. 2. Current problem

There are data silos and system compatibility problems in the technology layer, the government-led industrial internet logo resolution is in the pilot stage, and heterogeneous blockchain platforms are making collaboration difficult. In the organizational layer, the pyramid structure is causing inefficient collaboration, the excessive focus on financial indicators is restricting digital talent promotion, and the effectiveness of innovation is being undermined. Innovation effectiveness.

3. Mechanism Optimization Model and Practical Path Design

3. 1. Modelling Optimization of Organizational and Economic Mechanisms

Chinese industrial enterprises need to integrate technology, organization and economic mechanisms to optimize the digital supply chain: the technology layer relies on the industrial Internet, blockchain and AI; the organizational layer adopts the ‘project system + flattening’ model; and the economic layer builds resilience through incentives such as Huawei's ‘risk sharing fund’. The three-layer structure is linked through real-time data streams – the technology module monitors market changes, the organizational module dynamically adjusts the regional layout, and the economic module allocates funds for green technology in a targeted manner, forming an agile response system. Figure 1 shows the operating mechanism and data loop of this technology-organization-economy dynamic adaptation framework.

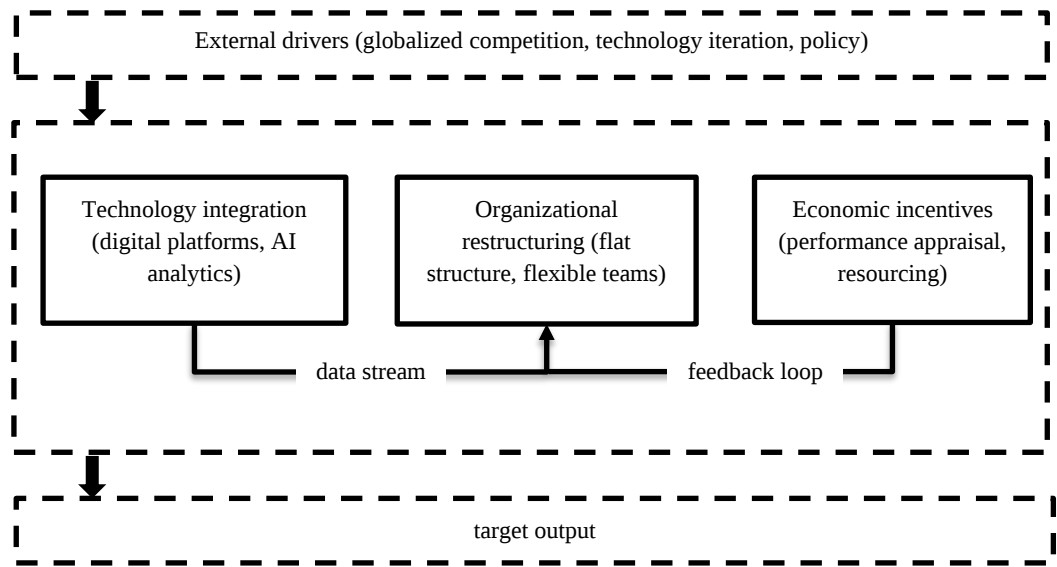


Figure 1 - Dynamic Framework Diagram of the Optimization Model of Organizational and Economic Mechanisms

Indicator system

The model is built around three dimensions: efficiency, resilience and sustainability. Efficiency focuses on resource turnover and cost control; resilience focuses on the emergency response capabilities of the supply chain; and sustainability emphasizes environmental value.

3. 2. Practical Path Suggestions

The path to digital optimization of China's industrial supply chain focuses on three core areas: Technology layer constructs an integrated platform [5]; Organizational layer implements flattened reforms and empowers frontline staff with real-time decision-making power; Economic layer establishes a performance-oriented mechanism, sets up a green transformation fund and innovates 'data pledge' loans, and signs a flexible freight agreement with logistics providers.

3. 3. Implementation safeguards

Policy coordination needs to balance government guidance and market-oriented operations. It should rely on the 'Made in China 2025' strategy to reduce technology costs, extend the Ministry of Industry and Information Technology's industrial Internet identification and analysis system to small and medium-sized enterprises, and incentivize the joint construction of regional digital infrastructure through third-party certification. International cooperation should focus on the competition for standard-setting power.

Conclusion. China's industrial supply chain needs to break down silos through closed-loop data decision-making, enhance collaboration efficiency through flat architecture, and balance long-term and short-term values at the economic level with green resources and financial instruments. The limitations of the study are the lack of case breadth and long-term effect validation. In the future, we should deepen the assessment of regional resilience in the context of carbon neutrality and promote the supply chain to leapfrog to 'global dominance'.

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INTERNATIONAL TRADE IN LIQUID FUEL HYBRID AND ELECTRIC VEHICLES AS A NEW PATH TO SUSTAINABLE DEVELOPMENT OF THE GLOBAL ECONOMY

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Resume. *This article examines international trade in liquid fuel hybrid and electric vehicles as a promising factor in the sustainable development of the global economy. It analyzes the trends and prospects for the development of this market, as well as its impact on the environmental situation and economic growth. The study covers key countries-producers and consumers of hybrid and electric vehicles, and also considers the legal regulation and incentive measures aimed at supporting the development of this sector. The author concludes that the development of international trade in hybrid and electric vehicles helps to reduce greenhouse gas emissions, improve energy efficiency and create new jobs, which makes it an important element of the strategy for sustainable development of the global economy.*

Key words. *international trade, hybrid cars, electric cars, sustainable development, global economy, energy efficiency, ecology, transport, incentive measures.*

Introduction. New energy vehicles use new power systems and use new energy as partial or full power, mainly including all-electric vehicles, plug-in hybrid vehicles and fuel cell vehicles. The market demand and technological innovation of new energy vehicles worldwide have shown a rapid growth trend, which has brought great opportunities for the development of the new energy vehicle industry.

Main part. In order to promote the development of new energy vehicles, governments around the world have introduced a series of policies, including financial subsidies, tax incentives, vehicle purchase quotas, charging stations, emission standards, etc., to provide incentives for the production, sale, use, maintenance and recycling of new energy vehicles. According to the International Energy Agency, the global subsidies and government incentives amounted to about US\$30 billion in 2024, double the previous year. Such policies not only promote the expansion of the new energy