

Innovative Strategies for Supply Chain Management in Textile Enterprises Under Digital Transformation

Guoxing Chen¹

¹ Shaoxing Changduo Textile Co., Ltd., Zhejiang 312000, China

Correspondence: Guoxing Chen, Shaoxing Changduo Textile Co., Ltd., Zhejiang 312000, China.

doi:10.56397/JWE.2024.12.06

Abstract

This paper delves into the impact of digital transformation on the supply chain management of textile enterprises and proposes corresponding innovative strategies. Against the backdrop of global economic integration and rapid development of information technology, digital transformation has become the key to the transformation and upgrading of the textile industry. The paper first analyzes the current situation and challenges faced by the textile industry, then discusses the definition of digital transformation, key technologies, and their impact on the industry. Subsequently, the article discusses in detail the application of information technology in supply chain management and the methods of digitally reengineering supply chain management processes. Through case analysis, this paper reveals successful and failed cases of digital transformation, summarizes the success factors and reasons for failure, and proposes insights for the supply chain management of textile enterprises. Finally, the paper proposes implementation paths for innovative strategies in supply chain management of textile enterprises, including strategic planning, technology investment, talent cultivation, partner relationship management, and continuous improvement and innovation. The paper also discusses the challenges in the digital transformation process and coping strategies, providing theoretical and practical guidance for textile enterprises to improve their supply chain efficiency and market competitiveness.

Keywords: digital transformation, textile enterprises, supply chain management, information technology, innovative strategies, organizational culture, partner relationships, continuous improvement, market competitiveness

1. Overview of the Textile Industry and Digital Transformation

1.1 Analysis of the Current Status of the Textile Industry

1.1.1 Industry Characteristics

The textile industry is a labor-intensive, capital-intensive, and technology-intensive industry, characterized by the following

features:

- Globalization: The supply chain of the textile industry spans the globe, from the cultivation and collection of raw materials to the production and sale of finished products, involving multiple countries and regions.
- Seasonality and Fashionability: Textile

products, especially clothing, are greatly influenced by seasonal changes and fashion trends, requiring a high demand for market response speed.

- **Intense Competition:** With the deepening of globalization, competition in the textile industry is becoming increasingly fierce, and enterprises need to continuously seek differentiation and innovation to maintain competitiveness.

1.1.2 Challenges Faced by the Industry

The challenges currently faced by the textile industry include:

- **Cost Pressure:** Fluctuations in raw material prices and rising labor costs lead to increased production costs.
- **Environmental Issues:** The textile industry is the second-largest polluting industry globally, facing strict environmental regulations and consumer demands for sustainable products.
- **Rapid Market Changes:** Consumer demands are diversifying and personalizing, with rapid market changes, posing higher requirements for the flexibility and response speed of the supply chain.

1.2 Definition and Characteristics of Digital Transformation

1.2.1 Meaning of Digital Transformation

Digital transformation refers to the process by which enterprises use digital technology to change their business models and customer experiences to meet the changing market demands and enhance corporate competitiveness. This involves not only the application of technology but also the transformation of organizational culture, business processes, and value creation methods. (Agarwal, R., & Selen, W., 2009)

1.2.2 Key Technologies for Digital Transformation

The key technologies for digital transformation include:

- **Big Data:** Analyzing large amounts of data to optimize decision-making and business processes.
- **Cloud Computing:** Providing flexible computing resources, reducing IT costs,

and improving data processing capabilities.

- **Internet of Things (IoT):** Collecting real-time data through sensors and smart devices to achieve interconnectivity of devices.
- **Artificial Intelligence (AI):** Using machine learning and deep learning technologies to improve production efficiency and decision quality.

1.3 Impact of Digital Transformation on the Textile Industry

The impact of digital transformation on the textile industry is mainly reflected in the following aspects:

- **Changes in Industry Operation Models:** Digital technology makes the design, production, sales, and service links of the textile industry more intelligent and automated, improving production efficiency and response speed.
- **Transformation of Supply Chain Management:** Through digital technology, textile enterprises can achieve real-time monitoring and optimization of the supply chain, reducing inventory costs and improving the transparency and flexibility of the supply chain.

2. Traditional Mode and Challenges of Supply Chain Management in Textile Enterprises

2.1 Traditional Mode of Textile Enterprise Supply Chain

2.1.1 Supply Chain Structure

The traditional mode of the textile enterprise supply chain is usually complex, involving multiple links, from the procurement of raw materials, spinning, weaving, dyeing, finishing, to the final garment manufacturing and distribution. This chain includes multiple participants such as farmers, raw material suppliers, spinning mills, weaving mills, dyeing and finishing factories, garment manufacturers, distributors, and retailers. Each link has its specific role and function, but the flow of information, logistics, and capital in these links is often not smooth, leading to low efficiency in the entire supply chain.

2.1.2 Management Processes and Characteristics

In the traditional supply chain management process, textile enterprises often rely on manual

operations and paper records, leading to slow information transmission and easy errors. Inventory management is usually based on forecasts rather than real-time data, leading to frequent stockpiling or stockouts. In addition, due to the lack of effective information technology support, each link in the supply chain often operates independently, lacking collaboration, which restricts the response speed and flexibility of the entire supply chain. Under the traditional model, the transparency of the supply chain is low, making it difficult for enterprises to monitor the status of the supply chain in real-time and respond quickly to market changes. (Agarwal, R., & Selen, W., 2009)

2.2 *Challenges Faced by Traditional Supply Chain Management*

2.2.1 Information Asymmetry Issues

In the traditional textile supply chain, information asymmetry is a prominent issue. Due to the inadequate information sharing mechanisms between various links in the supply chain, demand forecasting is inaccurate. Enterprises upstream in the supply chain have difficulty understanding the actual needs of the downstream market in a timely manner, and downstream enterprises cannot accurately grasp the supply situation upstream. This information asymmetry leads to the “bullwhip effect” in the supply chain, where demand fluctuations are amplified from the retail end to the upstream of the supply chain, causing stockpiling and production waste.

2.2.2 Slow Response Speed

Due to the traditional supply chain management's reliance on a multi-level distribution system, the process of information transmission and decision-making is slow, leading to a slow response speed of the entire supply chain. In the rapidly changing fashion market, this slow response speed makes it difficult for companies to quickly seize market opportunities and respond to market fluctuations, thus affecting their competitiveness.

2.2.3 Difficulties in Inventory Management

Under the traditional supply chain management model, inventory management mainly relies on experience rather than precise data support, making it difficult to control the inventory level accurately. Excessive inventory levels increase the holding costs for companies, while

insufficient inventory levels may lead to stockouts, affecting customer satisfaction and sales performance. In addition, due to the lack of effective demand forecasting tools, companies often find it difficult to predict market demand accurately, further increasing the difficulty of inventory management.

2.2.4 Cost Control Issues

Cost control is another challenge in traditional supply chain management. Due to the lack of transparency and collaboration in the supply chain, companies find it difficult to effectively identify and reduce unnecessary costs. Moreover, due to the complexity of logistics in the supply chain, transportation costs and time costs are often high, further increasing the operational costs of companies. In the fiercely competitive textile industry, cost control is crucial for a company's profitability and market competitiveness.

In summary, the traditional supply chain management model of textile enterprises faces multiple challenges, which limit the company's market response capabilities and cost control capabilities, affecting the competitiveness of the company. With the development of digital technology, textile enterprises need to explore new supply chain management strategies to improve the efficiency and response capabilities of the supply chain, reduce operational costs, and maintain an advantage in fierce market competition.

3. **Innovative Strategies for Supply Chain Management Under Digital Transformation**

3.1 *Application of Information Technology in Supply Chain Management*

3.1.1 Introduction to Information Technology Tools

The innovative strategies for supply chain management under digital transformation rely on the application of a series of information technology tools. These tools include:

- **Enterprise Resource Planning (ERP) Systems:** Integrate all internal business processes of the enterprise, including procurement, inventory, production, and sales, to achieve real-time data sharing and process automation.
- **Supply Chain Management (SCM) Software:** Provides tools for supply chain planning, execution, and monitoring, helping enterprises

optimize supply chain processes.

- **Warehouse Management Systems (WMS):** Improve the efficiency and accuracy of warehouse operations, enabling real-time tracking and management of inventory.
- **Internet of Things (IoT):** Collect real-time data through sensors and smart devices to monitor the physical flow within the supply chain.
- **Big Data Analytics:** Analyze large amounts of data in the supply chain to provide insights that support decision-making.
- **Cloud Computing Platforms:** Provide flexible computing resources to support the deployment of supply chain management software and data storage.
- **Artificial Intelligence (AI) and Machine Learning:** Predict market demand, optimize inventory levels, and enhance the intelligence of the supply chain.

3.1.2 Specific Impacts of Information Technology on Supply Chain Management

The application of information technology has a profound impact on supply chain management: (Bressgott, T., 2018)

- **Improved Transparency:** Through real-time data sharing, each link in the supply chain can clearly understand the status of the entire supply chain, improving the accuracy of decision-making.
- **Enhanced Collaboration:** Information technology tools enable tighter cooperation among supply chain participants, allowing for information sharing and coordinated actions.
- **Optimized Inventory Management:** Through precise demand forecasting and inventory monitoring, the risk of stockpiling and stockouts is reduced.
- **Increased Response Speed:** Information technology enables the supply chain to quickly respond to market changes, shortening the time from design to market.
- **Cost Reduction:** By automating and optimizing processes, unnecessary cost expenditures are minimized.

3.2 Digital Reconstruction of Supply Chain Management Processes

3.2.1 Digital Procurement Management

Digital procurement management simplifies procurement processes and improves procurement efficiency and transparency through online platforms and automation tools. For example, electronic procurement systems can automatically match supplier quotes to optimize procurement decisions.

3.2.2 Digital Production Management

Digital production management utilizes smart manufacturing and industrial IoT technologies to achieve real-time monitoring and optimization of production processes. This includes automated production lines, predictive maintenance, and quality control.

3.2.3 Digital Logistics Management

Digital logistics management enhances logistics efficiency and reduces costs through GPS tracking, automated warehouses, and optimization algorithms. For instance, logistics companies can use big data analytics to optimize transportation routes, reducing transportation time and costs.

3.2.4 Digital Customer Relationship Management

Digital customer relationship management (CRM) systems enable enterprises to better understand customer needs and provide personalized services. Through channels such as social media, online chat, and mobile applications, enterprises can interact with customers in real-time, collect feedback, and enhance customer satisfaction.

3.3 Innovative Strategies for Supply Chain Management

3.3.1 Supply Chain Visualization

Supply chain visualization technology allows enterprises to monitor the flow of goods and inventory status in real-time, improving the transparency and responsiveness of the supply chain. This helps enterprises identify problems promptly and take action.

3.3.2 Supply Chain Collaboration

Supply chain collaboration strategies encourage all parties in the supply chain to share information and resources, jointly optimizing supply chain processes. By establishing partnerships, enterprises can better coordinate

actions and enhance the efficiency of the entire supply chain.

3.3.3 Agile Supply Chain

An agile supply chain can quickly respond to market changes and adapt to demand fluctuations. Through flexible supply chain design and rapid information flow, enterprises can swiftly adjust production and logistics plans to meet customer demands.

3.3.4 Green Supply Chain

Green supply chain management focuses on environmental impacts, reducing the environmental footprint of the supply chain by optimizing logistics, minimizing waste, and using sustainable materials. This not only helps enterprises fulfill their social responsibilities but also enhances brand image and attracts environmentally conscious consumers.

3.3.5 Supply Chain Risk Management

Supply chain risk management involves identifying, assessing, and mitigating potential risks in the supply chain to protect enterprises from disruptions and losses. Digital tools can help enterprises monitor risk factors and develop response strategies, enhancing the resilience of the supply chain.

Through these innovative strategies, textile enterprises can improve the efficiency, responsiveness, and sustainability of their supply chains during the digital transformation process, thereby maintaining a competitive edge in a fiercely competitive market.

4. Case Analysis of Supply Chain Management in the Context of Digital Transformation

4.1 Domestic and International Textile Enterprise Supply Chain Management Digital Transformation Cases

4.1.1 Successful Case Analysis

When analyzing successful cases, we can take Zara and H&M as exemplary models of digital transformation in the textile industry.

Zara: Zara has achieved the ability to rapidly respond to market changes through its efficient supply chain management system. Zara's supply chain integrates the latest information technology, including ERP systems, IoT devices, and big data analysis, to achieve real-time monitoring of inventory and rapid response to demand. Zara's supply chain from design to store is extremely short, thanks to its close cooperation and information sharing at all levels

of the supply chain. This agile supply chain management allows Zara to quickly capture fashion trends, reduce inventory backlogs, and improve customer satisfaction. (Chong, A. Y., & Perrott, B. 2008)

H&M: H&M has optimized its supply chain management through digital tools, especially in inventory management and customer relationship management. H&M uses AI and machine learning technologies for demand forecasting, optimizing inventory levels, and reducing the risk of excess inventory. At the same time, H&M uses digital customer interaction platforms, such as social media and mobile applications, to collect customer feedback to guide product development and marketing strategies.

4.1.2 Failed Case Analysis

Failed cases: Some textile enterprises have not succeeded in the process of digital transformation, usually due to a lack of a clear transformation strategy, insufficient investment in technology, or organizational culture not adapting to digital change.

For example, a textile enterprise that failed to adapt to digital transformation may have encountered difficulties when introducing an ERP system. Due to a lack of adequate employee training and technical support, the system implementation was not thorough, failing to achieve the expected efficiency improvement. Additionally, if a company fails to integrate digital transformation with its corporate culture and strategic goals, it may lead to the execution of the transformation plan being inadequate, ultimately leading to failure. (Deloitte, 2018)

4.2 Case Comparison and Enlightenment

4.2.1 Analysis of Success Factors

Through the analysis of successful cases, we can summarize the following success factors:

- **Clear Digital Strategy:** Successful companies usually have a clear digital transformation strategy and closely integrate it with the overall strategy of the company.
- **Investment in Technology:** Successful companies have made significant investments in information technology and digital tools to support the optimization of supply chain management.

- **Organizational Culture Adaptation:** Successful companies can cultivate an organizational culture that adapts to digital transformation, encouraging innovation and continuous improvement.
- **Customer-Centric:** Successful companies place the needs and feedback of customers at the core, using digital tools to improve customer satisfaction.

4.2.2 Summary of Failure Reasons

The reasons for failure may include:

- **Lack of Strategic Planning:** Without a clear digital transformation strategy, the direction of transformation is unclear, and the execution is not in place.
- **Insufficient Investment in Technology:** Insufficient investment in digital tools and technology fails to support the optimization of supply chain management.
- **Organizational Resistance to Change:** Corporate culture and organizational structure have not adapted to digital transformation, resisting the introduction of new technologies.
- **Neglect of Customer Feedback:** Failure to effectively use digital tools to collect and respond to customer feedback, leading to a disconnect between products and the market.

4.2.3 Enlightenment for Textile Enterprise Supply Chain Management

From these cases, textile enterprises can draw the following insights:

- **Formulate a Clear Digital Transformation Strategy:** Enterprises need to formulate a clear digital transformation strategy and ensure that all departments are involved.
- **Increase Investment in Technology:** Invest in the latest information technology and digital tools to improve the efficiency and responsiveness of the supply chain.
- **Cultivate an Organizational Culture Adapted to Digitalization:** Enterprises need to cultivate an organizational culture that encourages innovation and continuous improvement to adapt to digital transformation.

- **Customer-Centric Approach:** Enterprises should take customer needs and feedback as the core of supply chain management, using digital tools to improve customer satisfaction and loyalty.
- **Continuous Learning and Improvement:** Enterprises should continuously monitor the effects of digital transformation and adjust and optimize according to market changes and internal feedback.

Through these insights, textile enterprises can better understand the importance of digital transformation and adopt corresponding strategies to optimize their supply chain management, enhancing competitiveness and market adaptability.

5. Implementation Path for Innovative Strategies in Supply Chain Management of Textile Enterprises Under Digital Transformation

5.1 Strategic Planning and Organizational Structure Adjustment

5.1.1 Formulating a Digital Transformation Strategy

The formulation of a digital transformation strategy is the first step in the innovation of supply chain management for textile enterprises. This strategy should include clear objectives, key milestones, and expected outcomes. Enterprises need to assess the current state of the supply chain, identify opportunities and challenges for digital transformation, and develop corresponding action plans. This involves in-depth analysis of market trends, as well as continuous monitoring of customer needs and behaviors. The strategy should also include an assessment of emerging technologies, such as blockchain, 3D printing, and augmented reality, which may have a significant impact on supply chain management. Additionally, the strategy should encompass risk assessment and management plans to ensure that potential risks during the transformation process are controlled.

5.1.2 Optimizing Organizational Structure

As digital transformation progresses, the organizational structure of textile enterprises also needs to be adjusted accordingly. This may involve the creation of new departments, such as a digital innovation department, or the

redefinition of the responsibilities of existing departments to better adapt to the digital environment. The optimization of the organizational structure also includes promoting cross-departmental collaboration, breaking down information silos, and ensuring the free flow of data and information throughout the organization. Furthermore, an optimized organizational structure should encourage flexibility and agility, enabling the enterprise to respond quickly to market changes and internal innovation needs.

5.2 Technology Investment and Talent Cultivation

5.2.1 Technology Investment Strategy

Technology investment is at the core of digital transformation. Textile enterprises need to invest in key technologies, such as ERP systems, SCM software, WMS, IoT devices, and big data analytics tools. These technologies can help enterprises achieve automation, optimization, and visualization of the supply chain. The technology investment strategy should include an assessment of existing technologies, determining which technologies need to be upgraded or replaced, and how to integrate new technologies to improve efficiency. Additionally, enterprises need to consider the scalability and compatibility of technologies to ensure smooth future technology upgrades.

5.2.2 Talent Cultivation and Team Building

Digital transformation requires not only technological investment but also the support of corresponding talent. Textile enterprises need to cultivate talents with digital skills, including experts in data analysis, system management, cybersecurity, and user experience design. Enterprises can cultivate these talents through internal training, external recruitment, or cooperation with educational institutions. At the same time, enterprises also need to establish cross-functional teams, composed of members with different backgrounds, capable of solving problems from multiple perspectives and promoting innovation.

5.3 Partner Relationship Management

5.3.1 Supplier Management

In the process of digital transformation, the cooperation with suppliers becomes more important. Textile enterprises need to establish closer cooperation with suppliers through digital tools, such as online procurement platforms and supply chain collaboration tools.

This helps to improve the transparency of the supply chain, reduce unnecessary costs, and increase response speed. Enterprises also need to evaluate and select suppliers who can support their digital transformation, ensuring that the technological capabilities and service levels of suppliers meet the needs of the enterprise.

5.3.2 Customer Relationship Management

Digital transformation provides new tools for customer relationship management for textile enterprises, such as social media, mobile applications, and online customer service systems. Enterprises need to use these tools to collect customer feedback, analyze customer behavior, provide personalized services, and establish long-term customer relationships. In addition, enterprises also need to communicate effectively with customers through digital channels to improve customer satisfaction and loyalty.

5.3.3 Third-Party Logistics Cooperation

Third-Party Logistics (3PL) plays an important role in the supply chain of textile enterprises. Digital transformation enables enterprises to establish closer cooperation with 3PL, optimizing logistics processes, reducing costs, and improving service quality through real-time tracking and data analysis. Enterprises need to choose 3PL partners who can provide advanced logistics technologies and services to support the digital transformation of their supply chain management.

5.4 Continuous Improvement and Innovation

5.4.1 Continuous Improvement Mechanism

Continuous improvement is key to supply chain management innovation. Textile enterprises need to establish continuous improvement mechanisms, such as regularly reviewing supply chain processes, collecting internal and external feedback, and implementing quality control and performance monitoring. These mechanisms help enterprises identify opportunities for improvement, implement necessary changes, and track the effects of improvements.

5.4.2 Innovation Incentive Mechanism

To promote innovation, textile enterprises need to establish innovation incentive mechanisms. This may include providing innovation training for employees, setting up an innovation fund, and rewarding employees who propose innovative ideas and solutions. Enterprises also need to establish an open culture that

encourages employees to propose new ideas and supports the implementation and testing of these ideas.

Through these implementation paths, textile enterprises can ensure the effective execution of their supply chain management innovation strategies, improving the efficiency and competitiveness of the supply chain, and ultimately achieving successful digital transformation.

6. Challenges and Countermeasures in Supply Chain Management Under Digital Transformation

6.1 Challenges in Digital Transformation

6.1.1 Technical Challenges

Technical challenges are one of the most direct challenges in digital transformation. Textile enterprises may encounter the following technical issues when implementing digital transformation in supply chain management:

- **System Integration Issues:** Existing ERP, SCM, and other management systems may be difficult to integrate with new digital tools, leading to data silos and process breakpoints.
- **Data Security and Privacy:** With the increase in data volume, the risk of protecting sensitive information from cyber attacks and data leaks also increases.
- **Technology Updates and Upgrades:** The rapid development of technology requires enterprises to continuously update hardware and software, which not only requires financial investment but also corresponding technical support and staff training.
- **Technical Adaptability:** Enterprises of different scales and types need to choose technology solutions suitable for their own characteristics, which may require customized development, increasing the complexity of technology implementation.

6.1.2 Organizational Culture Challenges

Organizational culture is crucial for the success of digital transformation. Textile enterprises may face the following organizational culture challenges:

- **Resistance to Change:** Employees may be skeptical about new processes and

technologies and are unwilling to give up traditional ways of working.

- **Lack of Digital Awareness:** There may be a lack of understanding of the importance of digital transformation within the enterprise, leading to insufficient support and execution of transformation plans.
- **Communication Barriers:** Poor communication across departments and levels can hinder the flow of information and the efficiency of collaboration.

6.1.3 Legal and Regulatory Challenges

Legal and regulatory challenges are also an issue that cannot be ignored in digital transformation. Textile enterprises need to pay attention to:

- **Data Protection Regulations:** Different countries and regions have different laws and regulations on data protection, and enterprises need to ensure that their global business complies with local data protection requirements.
- **Intellectual Property Protection:** In the digital environment, the protection of intellectual property is particularly important, and enterprises need to take measures to protect their technological patents and trade secrets.
- **Cross-Border E-Commerce Regulations:** With the globalization of supply chains, enterprises need to comply with e-commerce regulations in different countries, including tax, customs, and product compliance.

6.2 Countermeasures

6.2.1 Technical Risk Management

To address technical challenges, textile enterprises can adopt the following strategies:

- **Establish a Technology Assessment and Integration Team:** Specifically responsible for assessing the adaptability of new technologies and integrating with existing systems.
- **Strengthen Data Security Measures:** Invest in advanced data encryption technologies, conduct regular security audits and risk assessments to ensure data security.
- **Establish a Technology Update Plan:**

Develop a long-term technology update plan, including budget and timetable, to ensure continuous technology updates and upgrades.

- **Cooperate with Technology Suppliers:** Establish close cooperation with technology suppliers to obtain technical support and customized solutions.

6.2.2 Organizational Culture Transformation

To promote the transformation of organizational culture, enterprises can:

- **Cultivate Digital Leadership:** Cultivate the digital awareness of the leadership to ensure their full support and leadership in digital transformation.
- **Strengthen Internal Communication and Training:** Improve employee awareness and acceptance of digital transformation through training and communication.
- **Establish Cross-Departmental Collaboration Mechanisms:** Encourage communication and collaboration across departments to break down information silos and improve overall collaboration efficiency.

6.2.3 Legal and Regulatory Compliance

To address legal and regulatory challenges, enterprises need to:

- **Establish a Compliance Team:** Specifically responsible for tracking and interpreting changes in laws and regulations worldwide to ensure the compliance of enterprise operations.
- **Strengthen Intellectual Property Management:** Establish an intellectual property management system to protect the enterprise's technology and trade secrets.
- **Cooperate with Legal Advisors:** Cooperate with professional legal advisors to obtain legal advice and support, ensuring that the enterprise's global business complies with local laws and regulations.

Through these strategies, textile enterprises can effectively address the challenges in digital transformation, ensuring the smooth progress of digital transformation in supply chain management, thereby enhancing the competitiveness and market adaptability of the

enterprise.

6.2.4 Research Conclusion

This paper conducts an in-depth study on the innovative strategies of supply chain management for textile enterprises under digital transformation and reaches the following main findings and conclusions:

- **Necessity of Digital Transformation:** Digital transformation is necessary for textile enterprises as it can improve the transparency, response speed, and efficiency of the supply chain, reduce costs, and enhance the market competitiveness of the enterprise.
- **Key Role of Information Technology:** Information technology, including ERP, SCM, IoT, big data analysis, and AI, plays a key role in supply chain management, optimizing processes, improving decision quality, and enhancing customer satisfaction.
- **Adjustment of Organizational Culture and Structure:** To successfully implement digital transformation, textile enterprises need to adjust their organizational culture and structure to support new ways of working and processes.
- **Importance of Partnerships:** Close cooperation with suppliers, customers, and third-party logistics is crucial for achieving the digital transformation of the supply chain.
- **Continuous Improvement and Innovation:** Textile enterprises need to establish mechanisms for continuous improvement and innovation to adapt to the rapidly changing market and technological environment.

Challenges and Countermeasures: Technical challenges, organizational culture challenges, and legal and regulatory challenges are the main obstacles in the process of digital transformation. Through strategies such as technical risk management, organizational culture transformation, and legal and regulatory compliance, enterprises can effectively address these challenges.

References

- Agarwal, R., & Selen, W. (2009). Dynamic Capability Building in Service Value

- Networks. *Decision Sciences*, 40(3), 431-475.
- Bressgott, T. (2018). The Impact of Digital Transformation on Supply Chain Management. *International Journal of Operations & Production Management*, 38(1), 8-30.
- Chong, A. Y., & Perrott, B. (2008). The Seven Rs of Supply Chain Integration. *The International Journal of Logistics Management*, 19(2), 193-210.
- Deloitte. (2018). *Digital Supply Network Transformation*. Deloitte Insights.
- Gartner. (2019). The Future of Supply Chain is Digital.
- Lee, H. L., Padmanabhan, V., & Whang, S. (1997). Information Distortion in a Supply Chain: The Bullwhip Effect. *Management Science*, 50(12), 1875-1886.
- Macbeth, D. K., & Boersma, M. (2016). The Digital Transformation of Global Supply Chains. *MIT Sloan Management Review*, 58(1), 1-6.
- Pan, S. L., & Raman, N. (2006). Supply Chain Collaboration: What's Happening? *The International Journal of Logistics Management*, 17(2), 239-256.
- Reichheld, F. F., & Sasser, W. E. (1990). Zero Defections: Quality Comes to Services. *Harvard Business Review*, 68(5), 105-111.
- Tapscott, D. (2014). *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*. McGraw-Hill.