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# The Reconstruction Path of the Financial, Accounting, and Legal System of Transportation in the Digital Economy Era

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**Abstract:** The arrival of the digital economy era has brought unprecedented opportunities and challenges to the transportation industry. The traditional financial, accounting, and legal system has exposed several shortcomings during the digital transformation process, such as lagging digital compliance management, weak data protection laws, and an imperfect financial risk prevention mechanism. This paper aims to explore how to reconstruct the financial, accounting, and legal system of the transportation industry to meet the development needs of the digital economy. By strengthening data governance and privacy protection, and introducing blockchain technology, it seeks to enhance financial transparency and compliance, thereby promoting the sustainable development of the transportation industry.

**Keywords:** digital economy; transportation; financial and accounting legal system; data governance; blockchain technology

## 1. Introduction

Since the beginning of the 21st century, the digital economy has gradually become a key driving force behind global economic development. It is characterized by the widespread application of cutting-edge technologies such as big data, artificial intelligence, the Internet of Things, and blockchain. These technologies have reshaped the forms of economic activities through digitalization and informatization, enabling industries to achieve higher efficiency, more precise operations, and real-time responsiveness. Notably, in the era of the digital economy, data, as a new type of production factor, plays a crucial role. It not only promotes the innovation of traditional industrial models but also gives rise to a series of emerging industries and business models.

The digital economy era has brought profound and extensive impacts to the transportation sector, particularly in the following key areas:

### 1.1. Information Technology

Transportation enterprises leverage the advantages of information technology to achieve unified management of customers, goods, fleets, and upstream and downstream supply chain information. This not only enhances operational efficiency but also enables real-time tracking of logistics, optimizing transportation routes and resource allocation.

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### *1.2. Intelligent Applications*

By integrating artificial intelligence and big data technologies, the transportation industry can effectively predict passenger and cargo flow demands, scientifically plan routes, and partially replace manual operations with advanced technologies such as autonomous driving. For example, intelligent scheduling platforms utilize big data analysis to analyze historical data and predict peak periods, enabling more efficient and rational allocation of transportation resources.

### *1.3. Cost Efficiency Improvement*

Through the application of the digital economy, the transportation industry can significantly reduce operational costs, optimize management processes, and improve resource utilization efficiency. Enterprises can achieve cost control objectives while simultaneously enhancing service quality, thereby strengthening their market competitiveness.

These technological transformations have created unprecedented opportunities for the transportation industry while also presenting new challenges to the field of financial management. For instance, real-time data processing capabilities and transparent financial information are critical demands for upstream and downstream enterprises. Professionals in the field must acquire advanced technical skills to adapt to the introduction of digital financial management systems.

## **2. Deficiencies in the Current Financial and Accounting Legal System for Transportation**

With the rapid development of the digital economy, financial management in the transportation sector faces increasingly complex challenges. Although the existing financial and accounting legal system provides a basic framework for financial activities, it still exhibits significant shortcomings in areas such as digital compliance, information security, and financial risk control. Additionally, the development of digital skills and technical expertise among professionals in this field lags behind the pace of digital transformation in the industry, leading to a series of management and operational issues. To better adapt the transportation industry to the demands of the current digital economy, these problems urgently need to be addressed [1].

### *2.1. Limitations of Current Legal Systems in Digital Compliance Management, Personal Information Security, and Financial Risk Control*

#### *2.1.1. Lag in Digital Compliance Management*

The current financial management legal system is primarily based on traditional legal frameworks and auditing mechanisms, which struggle to address the new challenges brought about by digital transformation. For example, the transportation industry increasingly relies on digital platforms for functions such as transportation scheduling, cargo tracking, and smart payments. The data generated from these activities requires precise recording and auditing [2]. Unfortunately, existing laws and regulations fail to provide sufficient guidance on how to properly handle these emerging digital assets and their flows, resulting in gaps in rules regarding data compliance and audit transparency.

The current legal and auditing systems are mainly designed for traditional paper-based accounts and physically stored data, lacking sufficient adaptability to emerging digital tools such as cloud services and distributed ledger technology. This has led to insufficient transparency in financial information and increased difficulty in tracking, thereby raising the likelihood of financial fraud and introducing additional risks to auditing processes.

### 2.1.2. Weaknesses in Data Protection Legal Systems

In the digital era, data protection is an indispensable part of the financial and accounting legal system, especially concerning the handling of personal data, financial information, and sensitive corporate information. However, many current financial and accounting legal frameworks lack specific and detailed provisions on data protection rules. Although internationally applicable data protection laws (e.g., the EU's *GDPR* and China's *Personal Information Protection Law*) have been introduced, their implementation still faces numerous challenges. In the transportation sector, due to the complexity and variety of transportation records, logistics details, and customer privacy information, existing laws and regulations struggle to comprehensively cover all specific scenarios and new issues arising from technological advancements [3].

Moreover, given the cross-regional and even cross-border operational nature of the transportation industry, current laws and regulations are inadequate in addressing international data transfers and compliance with global standards. The lack of unified global data protection guidelines poses significant compliance challenges for the industry during its digital transformation, while also increasing the risks of data breaches and personal privacy violations.

### 2.1.3. Inadequate Financial Risk Prevention and Control Mechanisms

Against the backdrop of rapid digital economic development, the types and sources of financial risks have become more diverse and complex. Traditional financial risk management strategies are ill-equipped to address these emerging issues. For instance, financial technology has given rise to new payment methods, capital flow models, and financial products, but the current accounting legal framework fails to adequately cover these areas, resulting in insufficient mechanisms for early warning, monitoring, and prevention of potential financial risks. Specifically, in the transportation industry, enterprises may encounter entirely new types of financial challenges, such as virtual currency transactions, cross-border payments, and digital asset handling. However, current relevant laws, regulations, and auditing standards often lack specific guidelines and preventive measures for such emerging threats [4].

As the digital economy evolves, the financial environment faced by enterprises has become more complex and unpredictable. Traditional auditing and financial reporting mechanisms struggle to provide timely and accurate insights into the actual financial risk status of enterprises. Consequently, financial professionals increasingly rely on more advanced and intelligent risk management tools, such as real-time risk assessment platforms built using big data technology. However, the existing legal framework and accounting auditing systems are still in the process of adapting to meet these emerging needs.

## 2.2. Issues Such as Low Digital Literacy Among Financial Professionals and Poor System Compatibility

In the context of the digital economy, the digital skills and technical capabilities of financial and accounting professionals are crucial for ensuring the effective operation of the financial and accounting legal system. However, professionals in this field face a series of challenges in adapting to this transformation:

### 2.2.1. Generally Low Digital Literacy

Currently, many professionals in the financial and accounting fields still prefer to use traditional software tools and manual processing methods. Their understanding and practical abilities regarding cutting-edge technologies such as big data, artificial intelligence, and blockchain remain at a preliminary stage. This reflects an overall lack of digital skills in the financial and accounting industry, limiting their effectiveness in utilizing the latest technological tools. For example, in financial auditing, a lack of necessary data mining and

analysis skills directly impacts the accuracy of identifying potential financial risks and the efficiency of resolving issues.

As the application standards for digital technologies in financial management continue to rise, traditional financial professionals face challenges in updating their skills, making it difficult to effectively use digital tools for tasks such as financial analysis, decision support, and risk management. This not only reduces the efficiency and accuracy of financial and accounting work but also leaves enterprises ill-prepared to respond promptly to complex financial compliance challenges [5].

### 2.2.2. Poor Compatibility of Financial Management Systems

In many transportation enterprises, the construction of financial management systems still relies on outdated technological frameworks or isolated systems. Such systems often face compatibility issues with modern digital solutions such as cloud computing, big data platforms, and ERP systems, hindering the effective integration and sharing of financial and business data. This makes real-time information updates and automated processing particularly challenging.

For instance, in cross-regional or cross-departmental operations within the transportation industry, compatibility issues between different systems can create obstacles to the integration of information and funds, leading to delays in financial reporting, broken information chains, and reduced data accuracy. This technical mismatch not only lowers the efficiency of accounting work but also makes it difficult for financial professionals to respond quickly to emerging risks and compliance requirements [6].

### 2.2.3. Lack of Cross-Disciplinary Collaboration and Technical Support

Digital financial management is not limited to the technical level; it also requires collaboration across multiple fields, including law, management, and data security.

In the current financial management system, there is often a lack of effective communication and collaboration between professional fields such as law, information technology, risk control, and compliance management. Many enterprises lack the capacity to provide systematic technical training, resulting in a disconnect between financial professionals' understanding of the new challenges brought by the digital economy and their ability to apply emerging technologies. This makes it difficult for them to acquire the necessary knowledge and technical tools.

## 3. Reconstruction Path of the Financial and Legal System in the Transportation Sector in the Digital Economy Era

With the increasing prevalence of digital technologies, the financial management in the transportation sector has entered a new phase. In the context of the digital economy, the industry needs to place greater emphasis on data management and personal privacy protection when constructing the financial legal system, in order to address the challenges brought by advancing technologies and increasingly stringent compliance standards. In this context, the key to re-planning the financial legal framework in the transportation sector lies in strengthening legal support for data governance and privacy security, ensuring that the industry not only enhances management efficiency during the digital transition but also effectively controls potential data risks.

### 3.1. Strengthening Legal Safeguards for Data Governance and Privacy Protection

In the process of reconstructing the financial and legal system in the transportation sector, data governance and personal privacy protection have become critical issues. Given that this sector handles a large amount of sensitive information, including financial records, customer details, and employee personal information, ensuring the security, legality, compliance, and confidentiality of this data has become a top priority. To this end,

it is necessary to develop a set of financial management rules applicable to the transportation sector based on existing laws and regulations, such as the *New Accounting Law* and the *Data Security Law*, and to establish a more stringent data management and privacy protection system.

### 3.1.1. Formulating Financial Data Management Regulations for the Transportation Industry Based on the New Accounting Law and the Data Security Law

#### 1) Clarifying Financial Data Management Standards in Accordance with the New Accounting Law

In the process of constructing and improving the financial legal system, it is essential to strictly adhere to the basic principles of "compliance and transparency of corporate financial information" as outlined in the *New Accounting Law*. Given the unique nature of the transportation industry, it is necessary to develop more specific data management standards.

**Optimization Path:** By updating and refining industry-related management regulations, the requirements for transportation enterprises in terms of obtaining, processing, recording, and reporting financial accounting information can be clearly defined, thereby standardizing financial data management. Additionally, regulations on financial audits and information disclosure should be strengthened to ensure transparency and traceability of information.

#### 2) Integrating the Data Security Law with Financial Management

The *Data Security Law* provides detailed guidelines on how enterprises should handle and utilize information resources, with a particular focus on the security and compliance of sensitive data. In the transportation sector, in addition to financial reports, there is a large amount of personal information, employee details, and cargo transportation records. In accordance with the *Data Security Law*, the industry should establish a comprehensive information security system, including but not limited to data classification, hierarchical management, transmission protection, and storage security.

**Adjustment Strategy:** Based on the provisions of the *Data Security Law* and considering the unique needs of the transportation sector, a specialized data management framework should be established. This framework aims to comprehensively protect financial data and related information, ensuring that every step of the data processing lifecycle, from collection to destruction, complies with strict legal standards, thereby effectively preventing data leaks and misuse.

#### 3) Developing Industry-Specific Financial Data Management Regulations

Given the characteristics of the transportation industry, it is necessary to establish a set of industry-specific data management regulations for various types of data, such as financial information, personal data, and business records. For example, in the data storage and backup process, long-term storage needs and convenient access conditions should be balanced; during data analysis, the authenticity and timeliness of data must be ensured. Therefore, it is recommended to introduce a financial information management regulation specifically for the transportation sector, detailing the operational procedures for various types of data to ensure compliance with legal requirements.

### 3.1.2. Establishing Guidelines for Data Usage and Storage to Prevent Information Leaks and Enhance Data Governance Capabilities

In the current digital era, the application and storage of data are not only crucial for improving financial processing efficiency but also directly impact an enterprise's ability to comply with laws and regulations and its information security level. To effectively prevent information leaks, the transportation sector should formulate and implement a set of strict data management and protection guidelines to safeguard all sensitive data and further enhance the sector's data governance capabilities.

### 1) Establishing Data Usage Guidelines and Access Control

Enterprises must strictly adhere to established guidelines when using data to ensure proper and secure data usage. These guidelines should cover key aspects such as data access control, approval processes, and the scope of data application. Furthermore, it is recommended to establish a detailed role-based access control (RBAC) mechanism, which ensures that departments and individuals can only access the data necessary for their duties. For example, finance department staff can view financial data related to their work but cannot access customer personal information; IT support teams are responsible for maintaining database systems but should not have access to financial documents.

In the process of reconstructing the financial and legal system, a role-based data access control (RBAC) mechanism should be established, combined with the specific management needs of the transportation industry, to clearly define data access permissions and responsibilities, thereby preventing data misuse, leaks, or malicious modifications.

### 2) Setting Security Guidelines for Data Storage and Backup

In the context of the widespread adoption of big data and cloud computing technologies, ensuring the security of data storage has become a critical aspect of enterprise data management. This is especially true for sensitive data such as financial records and customer personal information. Industry-specific protection measures, such as encryption technologies and regular backup updates, should be implemented to ensure data integrity can be quickly restored in the event of system failures or accidental data loss.

**Adjustment Strategy:** Enterprises in the transportation sector should define technical standards for data storage, adopt high-security encryption algorithms, and implement cross-regional data backup solutions to ensure the security and durability of financial information. Additionally, an effective emergency data recovery mechanism should be established, and regular disaster recovery tests should be conducted to ensure rapid and effective business recovery in the event of data breaches or attacks.

### 3) Preventing Information Leaks and Data Misuse

Information leaks pose a significant security risk for enterprises, especially regarding customer data, employee personal information, and financial records. Therefore, a series of preventive measures should be taken to mitigate this risk. For example, enhancing data access supervision mechanisms, closely monitoring data processing activities to quickly identify and stop abnormal behavior; improving internal staff awareness of information security through regular training; and adopting advanced technical measures such as firewalls, intrusion detection systems, and anti-virus programs to defend against external attacks and prevent internal information leaks.

In the process of reconstructing the financial and legal system, enterprises should strengthen data security risk management, establish specialized risk assessment mechanisms and emergency response plans, and ensure that actions are taken quickly in the event of data leaks, with effective accountability. From a legislative perspective, the responsibility for data leaks and corresponding penalties should be clearly defined to increase enterprises' focus on information security protection.

### 4) Enhancing Data Governance Capabilities and Compliance Checks

Enhancing data governance capabilities is crucial for building a comprehensive legal safeguard system. To ensure that enterprises have efficient data management capabilities during the digital transformation, regular compliance reviews and risk assessments are necessary to evaluate the effectiveness and adaptability of existing data protection mechanisms. Independent third-party audits and supervision can effectively promote enterprise compliance with relevant laws and regulations and ensure the fulfillment of data security and personal privacy protection responsibilities in daily operations.

To ensure the effective operation of the data governance system, enterprises can take a series of measures, such as establishing internal compliance audit processes and regularly inviting external professional audit teams to review data security. Additionally, adopting advanced data governance tools, such as data lifecycle management software

and data quality monitoring platforms, can significantly enhance enterprise efficiency and accuracy in data processing.

### 3.2. *Introducing Blockchain Technology to Enhance Financial Transparency*

In the context of the digital economy, blockchain, with its unique characteristics of decentralization, high transparency, and immutability, has gradually become a key tool for promoting financial transparency, enhancing information traceability, and preventing illegal data modifications. Especially in the transportation and logistics sector, this technology not only improves the recording and processing of financial information but also strengthens the industry's legal system and compliance levels by enhancing information openness and traceability. Therefore, applying blockchain technology in transportation enterprises can effectively establish a more secure, transparent, and trustworthy accounting management system.

#### 3.2.1. Exploring Blockchain Applications in Financial Data Recording and Information Traceability to Ensure Traceability and Immutability of Financial Information

As a technology based on distributed ledger principles, blockchain provides a decentralized solution for information storage and management. By using a specific chain structure to store data, each record is verified and encrypted by multiple nodes in the network, ensuring that all participants have access to consistent data copies. This unique technological feature opens up new application prospects for financial recording and information traceability. The following will explore these application scenarios and their advantages.

##### 1) Transparent Recording and Sharing of Financial Data

Blockchain technology, through its decentralized nature, enables every transaction in financial activities to be recorded and verified by multiple nodes in the network, ensuring the authenticity and reliability of information. Whenever a new transaction occurs or data is recorded, a new "block" is created on the blockchain, and these blocks are linked in chronological order to form an immutable "chain." This means that the entire process of financial data, from generation to processing, transmission, and final storage, is preserved in a transparent and traceable manner on the blockchain, enhancing data transparency and promoting information sharing.

In the transportation sector, blockchain technology can be used to record transportation costs, cargo transportation documents, and the generation, payment, and settlement of bills. All parties involved, including cargo owners, multimodal transport carriers, information dispatch centers, and payment institutions, can access and verify financial information in a timely manner, effectively addressing the issues of information delays and inaccuracies common in traditional accounting management.

##### 2) Immutable Financial Information Records

In traditional financial management practices, financial information is often subject to tampering and forgery due to human factors or external attacks. In contrast, one of the significant advantages of blockchain technology is the immutability of data. Once information is recorded on the blockchain, it is almost impossible to modify or delete. Each block has a unique hash value (i.e., data digest), meaning that even the slightest change will cause the entire chain structure to change, allowing all participants to quickly detect any attempts to alter historical records.

**Case Application:** In the financial management system of the transportation sector, once any transportation cost or payment information is recorded on the blockchain, neither internal managers nor external parties can modify or delete it without authorization. This feature ensures the security and accuracy of financial data, effectively reducing the possibility of accounting fraud.

### 3) Real-Time Traceability and Auditing of Financial Information

Blockchain technology, with its distributed ledger architecture and transparency features, greatly simplifies the process of tracing financial data. Every financial transaction can be traced back to its original source, with all modifications clearly marked and accessible to all participants. This means that during financial audits, auditors can quickly trace all financial activities by reviewing the transaction history on the blockchain, accurately understanding the specifics of each transaction, the responsible parties, and the processing details. For example, in the transportation sector, when a cargo transportation task involves multiple bills and payment operations, recording these bills, payment proofs, and update records on the blockchain allows auditors to easily trace the occurrence and payment status of each expense, ensuring no omissions or non-compliant behaviors in the entire financial chain.

#### 3.2.2. Enhancing Financial Management Compliance and Anti-Corruption Efforts

Blockchain technology, with its traceability and transparency, has become an effective tool for preventing financial fraud and enhancing compliance. The technology ensures that all financial activity records are accessible to relevant parties in real-time and are immutable once recorded, making any attempts to falsify transactions or conceal financial information easily detectable. For transportation enterprises, adopting blockchain can significantly reduce the occurrence of violations such as false accounting and hidden transportation costs, thereby promoting the standardization of financial management processes and exerting a strong anti-corruption deterrent on internal personnel.

In the transportation industry, recording every transportation agreement, cargo transportation cost, insurance contract, and payment settlement information on the blockchain enables management and regulatory agencies to verify the authenticity of financial information in real-time, effectively reducing the risk of fraud and corruption caused by internal and external collusion and opaque operations.

#### 3.2.3. Improving Cross-Border Payment and Financial Settlement Efficiency

In the transportation sector, cross-border multimodal transport and payment activities are frequent. In international logistics, smart contracts on the blockchain can automatically execute payment settlements. Once the goods safely arrive at the designated location and meet the preset contract conditions, the payment process is immediately triggered. This not only greatly simplifies financial transactions between transportation enterprises and cargo owners but also significantly reduces transaction costs and processing time.

#### 3.2.4. Enhancing Supply Chain and Logistics Management Transparency

In the transportation sector, a key application scenario of blockchain technology is supply chain management. By providing immutable data records, blockchain technology ensures the accuracy of information at every stage of the supply chain, which is particularly important for enterprises that need precise control over transportation costs, cargo tracking, and inventory management. Every transportation activity and the entire process of goods from dispatch to delivery can be recorded in detail using blockchain technology, thereby enhancing the transparency and operational efficiency of the entire supply chain system.

For example, in the logistics industry, blockchain technology can be used to monitor transportation tasks and cargo status in real-time. This ensures that all transportation-related data is updated in real-time and cannot be tampered with, not only improving the transparency of financial activities but also helping enterprises manage transportation costs more effectively.

### 3.3. Promoting the Intelligent Upgrade of Financial and Accounting Systems

In the context of the digital economy, the intelligent transformation of the financial sector can significantly improve work efficiency, reduce human errors, and further strengthen the transparency and compliance of financial activities. The effective integration of artificial intelligence (AI) and big data technologies has become a key driver for the modernization of accounting information systems. By leveraging intelligent accounting information platforms, enterprises can automate key processes such as financial data collection, processing, and analysis, while also ensuring compliance through real-time monitoring and compliance reviews. This helps enterprises better meet the industry's urgent needs for enhanced compliance management, increased transparency, and effective risk control.

#### 3.3.1. Leveraging AI and Big Data Technologies to Establish Intelligent Financial Systems for Automated Data Analysis and Compliance Monitoring

##### 1) Automated Data Processing and Analysis

In traditional financial management practices, financial professionals often need to manually input large amounts of financial information and analyze, report, and forecast it. This process is not only time-consuming and labor-intensive but also prone to human errors. However, by applying AI and big data technologies, financial data processing can be automated. Using advanced technologies such as machine learning (ML) and natural language processing (NLP), AI can automatically extract relevant financial data from various sources, including bank transaction records, invoices, and contract documents, and structure it. Additionally, based on historical data analysis, AI can identify potential financial trends, generate forward-looking reports, and assist enterprises in making data-driven decisions.

Example Application: AI technology can automatically identify and categorize various expenses of transportation companies (such as fuel costs, vehicle repair costs, and driver salaries) and generate detailed financial reports through data analysis. Furthermore, the technology can use big data analysis to detect anomalies in fund flows (such as budget overruns or frequent small transactions), issue timely warnings, and initiate corresponding compliance review procedures.

##### 2) Intelligent Compliance Monitoring

Given the continuous evolution of the legal and regulatory environment, traditional financial management methods face challenges in keeping up with and applying the latest policies and regulations. Intelligent financial systems, leveraging big data technology, can achieve real-time compliance monitoring of enterprise financial activities, ensuring that enterprises handle financial information in compliance with all current legal standards. These systems, combined with machine learning and rule engines, can automatically review financial transactions and related data to ensure compliance with tax, audit, and other regulatory requirements, and quickly issue alerts when potential violations are detected.

In the transportation sector, the system can automatically compare transportation and storage costs with payment records and conduct compliance checks based on relevant laws and regulations such as the *Accounting Law*, *Value-Added Tax Law*, and *Data Security Law*. Once a transaction with potential tax compliance risks is detected, the system will flag it and notify financial personnel for review, preventing potential tax violations.

##### 3) Real-Time Financial Reporting and Dynamic Monitoring

By integrating financial sharing and big data analysis technologies, enterprise ERP systems can promote the intelligent upgrade of financial systems, enabling real-time financial reporting and continuous monitoring of key indicators. This allows real-time tracking of the enterprise's financial status, operational performance, and cash flow. Com-

pared to traditional periodic financial reporting, such intelligent systems enable management to access the latest financial data at any time, supporting more flexible and rapid business decision-making.

For example, transportation enterprises can use intelligent financial management platforms to track the economic benefits, operational costs, and cash flow of their logistics activities in real-time. Through this intelligent financial analysis interface, decision-makers can access real-time data on income and expenses, helping them make more accurate fund allocation decisions during business fluctuations.

#### 4) Risk Prediction and Prevention

Using big data technology and machine learning algorithms, intelligent financial management systems can predict various financial risks that enterprises may face, such as cash flow interruptions or increased losses, based on historical data and current economic conditions. The system can automatically identify abnormal financial information and establish risk assessment models, providing early warnings and corresponding response strategies before potential issues become actual threats. This approach not only helps companies identify potential risks in a timely manner but also allows them to take preventive measures before difficulties arise to mitigate negative impacts.

**Application Case:** By using AI technology to analyze various factors in the transportation industry, such as cost structures, freight volumes, and fuel price fluctuations, the financial management system can predict the likelihood of transportation costs exceeding the budget within a specific period. The system will highlight potential cost risks in financial reports and provide improvement suggestions, such as adjusting logistics routes or optimizing vehicle dispatch strategies, to alleviate potential financial pressures.

### 3.3.2. Integrating Financial Systems with Regulatory Platforms to Meet Real-Time Supervision and Compliance Inspection Needs

#### 1) Real-Time Data Integration Between Financial Systems and Regulatory Platforms

With the continuous advancement of the digital economy, financial management is no longer solely reliant on traditional annual audit reports. An increasing number of countries and regions are requiring enterprises to provide real-time financial information and compliance reports. This necessitates enterprises to establish real-time connections with external systems such as tax authorities and financial regulators. Through such data interfaces, intelligent financial management systems can automatically transmit necessary financial data and ensure the authenticity and compliance of the provided information. In the logistics and transportation sector, enterprises can integrate intelligent financial management systems with tax service platforms and national transportation regulatory agencies. This system can automatically submit compliance data such as transportation costs, fuel expenses, toll fees, depreciation costs, and driver salaries, helping enterprises avoid penalties due to delayed financial reporting.

#### 2) Intelligent Compliance Checks and Early Warning Mechanisms

After integrating financial systems with regulatory platforms, regulatory agencies can directly access and review enterprise financial information, achieving real-time monitoring and auditing. This linkage not only improves regulatory efficiency but also encourages enterprises to strictly comply with tax laws, financial regulations, and other requirements. For example, financial systems can integrate with tax authorities' data platforms to automatically calculate tax liabilities, ensuring all transactions comply with the latest tax policies. Once compliance risks are detected, the system will quickly issue warnings, prompting relevant personnel to take corrective actions.

In practical applications, when transportation enterprises are involved in large fund flows or tax declarations, the financial management system can automatically synchronize

#### 4. Conclusion

With the advent of the digital economy, the financial management and legal system in the transportation sector is facing unprecedented opportunities and challenges. By promoting digital transformation, adopting cutting-edge technologies, strengthening data management and optimizing risk control mechanisms, transportation companies can achieve greater efficiency, transparency and compliance in their financial activities. At the same time, regulators need to improve corresponding laws and regulations and provide the industry with the necessary technical support and compliance advice to ensure that the financial and accounting legal system in this sector can make steady progress in the context of the digital era. Close cooperation between the government and enterprises will lay a solid foundation for the rule of law to promote the sustainable and healthy development of the transportation industry.

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