

Digital Transformation of Corporate Compliance Mechanisms from the Perspective of Digital Financial Risk Prevention and Control

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Citation: GAO J (2023) Digital Transformation of Corporate Compliance Mechanisms from the Perspective of Digital Financial Risk Prevention and Control. American J Sci Edu Re: AJSER-137.

Received Date: 08 November 2023; **Accepted Date:** 15 November 2023; **Publication Date:** 23 November, 2023

Abstract

Digital finance is closely connected with various digital technologies and financial innovations, which has also generated new technical risks and criminal risks on the basis of traditional financial risks. With the support of regulatory technology and financial technology, the digital transformation of corporate compliance mechanisms according to the risk types of digital finance can effectively control risks, reduce compliance costs, and enhance compliance effects. Use big data, blockchain, artificial intelligence and other technologies to establish a digital information platform centered on compliance information transmission and a risk assessment platform centered on screening and assessment, and conduct online compliance training and system integrity risk assessment management, which can improve the intelligence level of digital finance's data processing, compliance risk review and prevention and control processes, and form a compliance model with a chain of "prevention--screening--response". Relying on technology to continuously monitor the business processes of various digital financial channels can minimize the probability of front-end and back-end risks, further improve the technical supervision channels of digital finance, and ensure the smooth and efficient operation of digital financial services.

Keyword: Digital Finance; Corporate Compliance; Compliance Technology; Risk Prevention and Control

Introduction

In the process of moving from Industry 3.0 to Industry 4.0, almost all industries are facing the need for digital transformation. In this process, enterprises use digital and intelligent technologies to create powerful digital business models, which can be used in the enterprise's supply chain, enterprise resource planning, operation, customer service, etc. In all aspects, realize the historic transformation from manual and analog processes to digital processes. Financial innovation activities in the digital era are also inseparable from the digital transformation of the industry. The digital transformation of the financial industry is not only reflected in the use of technological means to reshape the overall financial business, but also in the management model of financial practitioners and the intelligent transformation of the internal organizational structure of the enterprise. . As a representative achievement of this era of transformation, digital finance is not only a form of financial innovation, but also a key manifestation of the traditional financial industry's advancement into the fields of digitalization and intellectualization. In the process of the rapid development of digital finance in my country, many problems have emerged, including the limitations of the traditional regulatory framework, the insufficient effectiveness of big data risk control, insufficient protection of financial consumer rights and interests, the lack of stability of existing financial infrastructure, and platform monopoly and Data governance is an urgent problem that needs to be solved. Further improving the supervision of digital finance requires balancing the relationship between risk and innovation [1] in order to mitigate potential

threats to the financial system during the development of digital finance on the basis of comprehensive risk reduction, and at the same time support the development of China's financial industry to continue to innovate. The corporate compliance referred to in this article mainly provides support for the internal behavior monitoring of digital financial enterprises during their operation and development and the assessment and processing of relevant legal risks, so as to promote the digital financial industry to develop further in the direction of health, safety and compliance.

Double risks of digital finance: technical risks and criminal risks

The essence of digital finance is finance, but compared with traditional finance, it has the following important characteristics: Digital finance is established based on data elements, and all types of data need to be applied comprehensively in operations and maintenance procedures, while traditional finance does not will show this deep dependence on data. In addition, digital finance has a strong reliance on digital links. Different from the relatively flat structure of traditional finance, digital finance mainly presents a three-dimensional interactive financial architecture. The digital financial enterprises described in this article not only refer to a certain type of enterprise that mainly engages in digital finance (for example, Ant Technology Group Co., Ltd.), but also involve a large number of traditional financial institutions that use digital technology to promote the digital transformation of traditional financial businesses. , such as the robo-advisors of various securities companies and financial product sales

companies, as well as the big data credit analysis systems launched by major commercial banks. In addition, there are various Internet banks that operate traditional commercial banking services online and build dematerialized core systems on the financial cloud, such as my country's Zhejiang MYBank Co., Ltd., Shenzhen Qianhai WeBank, etc. Therefore, digital finance can cover all modes that use digital technology in payment methods, information processing, and resource allocation and provide financial services at the same time. In the digital finance cube model, [2] the dimensions are arranged orthogonally to each other, and all areas within the cube are represented as various sub-cubes. These sub-cubes are composed of a business function, A specific combination of technology and a specific type of institution. This multi-dimensional cube model is highly generalizable and flexible. Therefore, once financial innovation generates new business functions or technical requirements, the digital financial dimension can be expanded through new elements, and unstable risk factors can also be an increase, and secondary risks will also occur.

The close connection between digital finance and technology makes risks highly hidden and wide-ranging. While digital technology brings benefits and progress to the financial industry and digital industry, it will also have varying degrees of negative impact on industrial models and social systems, and gradually create and amplify new sources of risks. This is exactly what technological progress means the embodiment of associated "negative externalities". [3] Due to the social application of digital technology, while organizations or groups gain huge benefits, it will also cause technical risks such as information leakage, data monopoly, and expansion of digitally vulnerable groups. The digital financial model is highly dependent on digital platforms or mobile terminals, and its inclusive, flexible, and open characteristics also bring many new risks and hazards. Digital finance combines the dual risk characteristics of "technical risk" + "criminal risk" with traditional financial risks, resulting in a chain risk reaction of " $1+1>2$ ".

Technical risks of digital finance

As a representative of the current emerging financial technologies, digital financial technology still needs to be improved in maturity and completeness, and loopholes in system design and mistakes in technical operations are inevitable. Digital finance relies on big data technology to collect and organize data, while also increasing the complexity and compatibility of business. While improving the operating efficiency of financial activities, it also faces various technical risks. In actual operations, digital financial platforms are vulnerable to threats from network viruses and intrusive attacks, which may hinder and disrupt normal financial transaction processes, and even cause financial losses and credit crises. [4] At present, the identification and transmission process of information between or within digital financial institutions is still mainly completed by manual operations. In actual operations, there may be situations where misoperation by internal personnel may lead to an unstable crisis in the operation of the entire organization. Especially with the rapid development of digital finance, the business volume of the

organization and the scale of various activities that need to be processed have also increased. is constantly expanding. If manual operations are not standardized, it may lead to the loss and damage of valid information. In many cases, there is no room for withdrawal of misoperation of such information, which will cause irreparable losses to enterprises and customers. In addition, digital finance has strong risk spillover effects in areas such as mobile payments and digital credit, and there are also stability issues related to financial infrastructure. There are many service nodes in the digital financial field, and every small node problem may bring huge hidden dangers to the overall financial system. With the continuous development of digital finance, the financial fields involved are becoming more and more extensive, including banks, securities, funds and insurance. The business is becoming more and more complex, the user interface is becoming wider and wider, and it also involves various financial institutions and payments. The cooperation of institutions has further deepened the diversity and breadth of risks to a certain extent. [5]

Not only that, the technical, interactive, cross-cutting and high-speed capital operations of digital finance may cause the capital chain to break and liquidity risks to arise. Although the use of new digital technology tools has alleviated the problem of tight risk control capabilities to a certain extent, the prominent accumulation of risks in recent years has also brought huge challenges to the traditional risk control model. In response, some digital financial platforms and companies have introduced new technologies such as big data modeling, data mining, and data credit to respond. Unlike traditional risk control forms that rely on collateral and proof of income, big data risk control often relies on the business data accumulated by the platform to perform a series of credit processing services, which greatly reduces the financing costs of small, medium and micro enterprises and the difficulty of credit evaluation. However, big data analysis technology may increase the opacity of financial activities for other platform users, including consumers. Not only that, digital finance relies heavily on big data and algorithms to perform its functions, which requires strict measures to protect the security of data pipelines and algorithms to prevent intrusions, modifications, or interruptions in the data chain. [6] At present, some digital financial companies have irregular means and methods of collecting personal information and even illegal collection and use, which has brought certain hidden dangers to citizens' privacy and information security. At the same time, algorithmic discrimination and algorithmic black box (black box algorithm) phenomena are becoming more and more common. When digital finance provides users with products or services, they often have different prices at different time periods and in different regions. In addition, under the algorithmic execution mode of digital finance, consumers are more likely to fall into technical traps and become the target of online financial embezzlement or other scams intended to steal personal information.

The invisibility of digital finance will also lead to rapid changes in technical risks, including moral hazard hidden in lower business thresholds, network risks hidden in efficiency and security, and liquidity risks hidden in the design of trading systems. Not only that, today's efficient combination of finance and digital technology has made international payment activities such as cross-border e-commerce and cross-border transactions increasingly active, covering up the systemic risk boundaries of

a single industry. The uncertainty of risks will increase, and the speed of growth and spread will become more rapid. Taking the cross-border settlement of digital banks as an example, an error in the information system may lead to divergent risks on the client side, which may lead to liquidity risks in digital banks, non-financial institutions and financial institutions, and liquidity risks. It may lead to credit risks, and if credit risks continue to increase, various institutions will face more serious liquidity risks, and this cycle will repeat and grow viciously. [7]

Criminal risk: the main form of digital financial legal risk

Due to the unique technical characteristics of digital finance, the criminal risks faced by enterprises are much more serious than the criminal risks of traditional finance. Criminal risks have therefore become the most important and serious form of legal risk in digital finance. The dematerialized form of digital finance determines that most of its operating venues rely on various networks and mobile terminals, and usually do not use offline transactions. Therefore, in the process of digital financial operations, the transmission of information and the circulation of funds mainly rely on the communication mode of online platforms. This also means that when conducting financial activities on the digital terminal, users' various transactions, identity and other information may be exchanged, transmitted and stored between terminals without being desensitized and unencrypted, and the information accumulated in the terminal will also be. The number and scale of transactions increased rapidly. Therefore, digital financial terminals and databases will contain a large amount of user personal information and transaction data, which is a veritable "reservoir" of information and data. [8] Due to the huge amount of data and information storage, and the interactive use of communication systems and digital technology is not mature enough, there are still certain deficiencies in information management. Information not only faces the risk of being leaked, but may also be stolen and tampered with due to improper storage. Due to the high dependence of digital finance on information, information security has become the most important part of the construction of digital financial fund security and credit system. Once an information security incident occurs, all social groups will lose confidence in digital financial information systems and digital financial security. The lack of trust is fatal to the financial industry. In severe cases, it will endanger the overall economic order and the healthy development of the national economy. Digital finance is different from ordinary finance in that its functions are mainly realized in a non-physical form. In the actual transaction process, the transactions of digital financial enterprises are based on the backend support of the big data platform. The trading system selects and matches the information of the big data platform and selects high-quality users to make financial innovative products closer to users, while large databases need to be constantly updated to ensure the security of system data. Once the database is stolen, the security of users' property will be seriously endangered. Therefore, the primary risk associated with digital financial technology is information and data security risks and the resulting criminal risks of infringement of citizens' personal information. [9]

Fund-raising behaviors in the process of raising funds and providing services for digital financial companies may involve illegally absorbing public deposits and fund-raising fraud, infringing on the country's normal financial management order.

[10] Both traditional financial institutions and new digital financial platforms are undergoing digital and intelligent transformation of their wealth management products. Try to achieve more targeted financial services while reducing labor costs. Under this model, institutions can provide users with free accounting and combine the characteristics of various financial products. Based on the user's specific financial preferences, financial situation and other information they have, they can intelligently evaluate the user's behavioral choices, and have Recommend corresponding products in a targeted manner, greatly increasing the probability of selecting financial products. This model is also known as "robot financial planner" and is also known as "intelligent financial management" or "robo-advisor" abroad). This kind of "robo-advisor" uses algorithms and other technical tools to provide users with financial advice in an online environment. It is a virtual financial advisor driven by artificial intelligence of algorithms, big data analysis and other related technologies. [11] Therefore, it is basically not human intervention. However, the providers of these financial products are not necessarily the institutions that carry out digital financial services. Once there are criminal risks such as the initial provider being suspected of illegal fund-raising, digital finance will also implicate business organizations will and may be found to be accomplices.

In addition, digital financial companies may indirectly contribute to money laundering crimes. New money laundering crimes mainly rely on virtual platforms such as digital finance to legalize illegal funds that require high profits, operability, and low risk. At present, digital financial companies at home and abroad do not have much scrutiny on investors, and they do not fully know the sources of funds of investors. As long as the company does not collude with investors out of the temptation of huge funds, it will provide certain If the proceeds of special crimes are disguised and concealed through the platform, then the digital financial company itself does not have the subjective intention to commit money laundering crimes.

However, this does not mean that criminals will not use censorship loopholes in digital financial platforms to carry out money laundering activities. Especially with the rapid development of digital financial financing activities in my country and the liberalization of the legal environment for equity crowdfunding, investors can obtain funds through digital financial platforms. For more forms of income, the source and destination of funds are difficult to monitor accurately and in real time, and it is difficult for the platform to verify the authenticity and orderliness of transaction information at all times. Due to objective factors such as technical cost control, the platform also lacks the internal motivation for verification. Therefore, the digital financial environment is easily flooded with anonymous and pseudonymous accounts, becoming a hotbed for money laundering crimes. [12]

The functional value of digital financial enterprise compliance mechanisms in realizing digital transformation

While digital finance brings convenience to society, it also increases the frequency of financial risks and technological risks. Information sharing and digital technology channels make the risk diffusion path of digital finance open and rapid, and the risk contagion process has cross-cutting effects. Therefore, risk prevention and control in digital finance require multi-disciplinary governance, and regulatory entities and market

entities should collaborate. For enterprises, on the basis of relevant risk analysis, they must not only adopt certain technical methods to prevent the occurrence of risks or avoid risks, but also need to take preventive measures at the normative level and pay attention to the establishment of corporate compliance mechanisms. As a representative form of digitalization and intelligence in financial services, digital finance has promoted the cross-border integration of "digital technology + scenarios" in the financial field and has also brought new digital transformation directions to corporate compliance governance. Traditional compliance management methods are difficult to adapt to the degree of commercial development of digital finance. Penetrating all-round technical support is needed to improve financial technology supervision, strengthen data penetration of financial activities and security protection of the entire digital technology process. Therefore, in response to digital financial risks, the combination of various technologies with digital technology as the core and traditional compliance mechanisms has greatly promoted the self-improvement of corporate compliance effectiveness, and the corporate compliance management system has also demonstrated the perfect combination of standards and technology characteristics.

First of all, the digitization of compliance will help enhance enterprises' prevention capabilities against digital financial crimes and unit crimes. Utilizing machine learning, natural language processing, interactive visualization platform, etc., compliance digitization can help digital financial companies quickly identify and investigate non-compliance incidents and improve the effectiveness of compliance mechanisms effectiveness and accuracy. The use of digital technology and compliance technology can not only effectively identify and prevent the occurrence of crime, but also serve as a control mechanism to promote the investigation and disposal of criminal activities. The application of intelligent regulatory technology at the compliance level can not only identify and detect internal risks more quickly, but also add technical barriers to external crimes, greatly reducing the probability of internal and external criminal risks. For example, through automated gap analysis and technology-supported disclosure of shareholder structures, preparations for insider trading or market abuse can be fully and penetratingly monitored, helping companies identify non-compliance during the crime preparation stage; in digital finance Money laundering activities are relatively hidden, and manual screening is more expensive and less accurate. Therefore, the use of artificial intelligence detection models on the compliance side can achieve round-the-clock monitoring, and can even achieve automatic detection and real-time warning during the illegal pooling stage of funds. Technology applications on the compliance side can use data summary reporting to provide real-time feedback on abnormal flows and collections of capital, and block fund-raising crimes in the preparatory stage as much as possible; because digital financial data is not easy to fix, improper storage can easily lead to loss and Damage will affect subsequent prevention and control effects. The use of information encryption and block chain technology can ensure the integrity of data to the greatest extent, and ensure its authenticity and security, so that evidence is not stolen or destroyed. [13]

Secondly, compliant digital transformation can better help digital financial companies assess and control technical risks. As a preventive response to internal management and external

response, corporate compliance needs to include supervision and control measures to prevent or significantly reduce risks. Therefore, risk analysis and risk prediction are the starting point of corporate compliance mechanisms. Digital compliance technology can measure specific digital financial risks in a targeted manner and quantify them as an assessment standard for risk factors. This method can provide direction guidance for enterprises when formulating specific compliance plans and also provide legal guidance for compliance. Provide strong technical support and guarantee for the implementation of regulations to ensure the achievement of best practice compliance results. Not only that, smart technology also plays an important role in digital financial compliance. With the support of machine learning and various big data technologies, various compliance supervision procedures and compliance processes will be more refined and intelligent, able to reduce regulatory risks caused by large-scale human intervention, reduce the cost of human intervention, and greatly improve the efficiency and accuracy of compliance. [14]

Finally, compliant digital transformation in the field of digital finance is conducive to realizing the requirement of "equal tools" in digital financial risk prevention and control. Technologies such as algorithmic decision-making, software agents, and smart contracts not only bring convenience to the financial industry, but also create certain technical barriers. The inequality between the behavioral tools and control tools of digital finance will bring about gaps between institutions and even technological monopolies, which is not conducive to the overall development of the digital finance industry. Therefore, the goal of digital transformation of corporate compliance in the digital finance industry is to build a systematic technical path model, remove barriers to technological monopoly at the regulatory level, and achieve cooperation and interoperability between teams and technical personnel, so that enterprises The regulatory tools and relevant technical personnel can be balanced across time to achieve "tool equality" from the perspective of risk prevention and control.

Compliance digital path construction: enterprise response to digital financial risks

Digital finance has higher risks and a higher degree of professionalism, which places higher requirements on the construction of its compliance mechanism. Relying on big data technology, digital financial products and services can be quickly compared. In this process, it can not only enrich products and services, but also help enterprises grasp the frequency of abnormal financial activities in a timely manner and monitor transaction activities and various operational behaviors in real time. On this basis, using various digital technologies to complete the construction of anti-fraud, anti-money laundering and other online financial crime prevention and control models, and applying them to the compliance field of digital finance will help improve the ability to prevent digital financial risks. In addition, the improvement of enterprises' ability to combat digital financial risks at the technical level and the application of big data thinking to comprehensively control digital financial risks can effectively upgrade risk management capabilities and further realize the in-depth integration of digital financial compliance and digital technology. . The innovative technology uses an intelligent and dematerialized model as the basis to connect the digital financial enterprise side and the financial supervision side, thereby realizing the exchange of

internal and external supervision situations and real-time information, which not only improves the efficiency of regulatory agencies but also implements corporate criminal investigations. Compliance plan to reduce moral hazard and hidden compliance costs. [15]

Based on the technical combination of regulatory technology and financial technology

The close connection between regulatory technology and financial technology is the system foundation for the digital path construction of the compliance mechanism of digital financial enterprises. Regulatory technology mainly supervises the regulatory process in the financial industry through technical management, focusing on using automated and intelligent models to solve the regulatory challenges brought by the technology-driven economy. Its main functions include Regulatory monitoring, reporting and compliance. RegTech can quickly separate chaotic and intertwined data sets through extraction and transfer payload technology, and can also be used to quickly generate management reports and results. Therefore, for the financial industry, especially for companies carrying out digital financial activities, regulatory technology can help realize the digital and automated transformation of compliance, and achieve employee monitoring, compliance data management, fraud prevention and audit supervision on the basis of cost control versatile functionality. Financial technology (FinTech) refers to the form of technology that uses various technological means to innovate traditional financial products and services, improve efficiency and effectively reduce operating costs. [16] It covers any type of technology related to digitalization or optimization of financial services. The modern financial industry is a high degree of integration of technology and knowledge. Fintech uses technology to update financial activities and provides an innovative way of financial management that is user-friendly and easy to operate. [17] Also a technical person, financial technology and regulatory technology have different focuses. Fintech places greater emphasis on the use of technology to serve finance, aiming to reflect the technological innovation of traditional finance in providing financial services. Therefore, with the support of financial technology, various financial services can improve efficiency and reduce operating costs through crowdfunding, mobile payments, fund transfers, loans, financing, asset management and payment/billing, and enhance the efficiency of various departments in the financial industry competitiveness in the global economy.

Traditional compliance theory believes that a compliance plan should only solve one problem, because the risks involved in each industry are different, and it is difficult to implement a large and comprehensive package of compliance systems. Ran However, for digital finance, which is mainly represented by mixed operations, if different compliance system plans are set up for different risks, it will easily lead to problems such as too many compliance plans, complicated systems, duplication of responsibilities, and redundant personnel. This objective reality also forces companies to choose to address as many risks as possible within a compliance system, and they need to be equipped with a higher-level risk identification system and compliance personnel with considerable technical capabilities. For digital finance, the compliance plan developer or team must have a deep understanding of the underlying business model, corporate organizational structure and internal operating

processes of a business or product, and must have a deep understanding of digital finance.

Only with a full understanding of the relevant legal risks in all areas involved in the product can it be possible to solve as many problems as possible with the help of as few compliance system processes as possible. Therefore, a digital compliance system based on regulatory technology and fintech can better adapt to the unique compliance requirements of digital finance. In the compliance side of digital finance, ordinary regulatory technology and financial technology can be transformed into the form of compliance technology (CompTech). Compliance technology provides these companies with the ability to optimize their regulatory environment by implementing reporting automation tools, visual analytics, robotic process automation (RPA) and other technologies, and improve next-generation data architecture and business process management (business process management) ultimately achieving further digitization of compliance, improving the efficiency of compliance plan implementation and improving the transparency of compliance operations. At present, developed countries represented by the United States, the United Kingdom, Australia, Singapore, etc. have begun to gradually increase the application of compliance technology in the fields of digital finance and financial supervision. This new technology is used to reduce corporate compliance pressure and improve the efficiency of digital financial supervision. The model has become an important development strategy for digital financial supervision and compliance in most developed countries. [18]

By adopting a compliance strategy that combines financial technology and regulatory technology, it will not only help digital financial companies more effectively carry out the digital transformation of corporate compliance mechanisms, but also encourage regulatory agencies to be more effective.

Learn more about these new technologies related to digital finance [19], this technical means can also supervise online transactions and identify problematic operations or irregularities in digital financial activities. Any outliers and abnormal activities will be reported to the enterprise to analyze and determine whether they are ongoing. Identify potential threats early to minimize the risks and costs associated with financial losses and data breaches. From a long-term perspective, this technology-integrated compliance mechanism is a necessary condition for the further development of digital finance itself. It uses technical means to reduce the risk of high-frequency online financial crimes such as anti-money laundering and counter-financing of the monitoring and prevention costs of behaviors such as terrorism, AML/CFT) will comprehensively enhance the digital financial industry's ability to resist criminal risks and reduce the probability of digital financial companies being criminally sanctioned.

Specific paths for digital transformation of compliance mechanisms of digital financial enterprises

For digital financial companies, the four perspectives of development and design, management mechanisms and processes, application mechanisms, and system construction are the basic contents for building digital compliance that is intensive, automated, and online with efficient operation and continuous optimization. the main purpose is to embed regulatory technology, financial technology and other digital

technologies into the current compliance process of enterprises to achieve a comprehensive digital transformation of financial compliance.

First of all, we can consider building a targeted special system based on the specific criminal risks and technical risks of digital finance. By referring to the reporting data model of the EAST system (Examination and Analysis System Technology), while comprehensively covering all major business lines, we can focus on exploring high-incidence technical risks and criminal risks to establish a comprehensive and focused digital compliance monitoring system. Secondly, establishing a digital financial risk screening system with clear responsibilities and efficient operation is the basis for the operation of the mechanism. For this, the internal structure and division of responsibilities of digital financial enterprises must be clarified. Finally, it is necessary to equip a risk response system with sound functions and agile expansion to realize the dynamic and real-time risk response system of digital financial enterprises. [20]

The main function of system construction is to prevent technical risks and criminal risks among digital financial risks, and to realize an enterprise compliance model with a complete chain of "prevention--screening--response". For risk prevention in digital finance, the first step is to obtain relevant information based on past financial compliance experience and current specific risk types, using desk research, online surveys, virtual focus group meetings, video interviews and information to establish benchmarking. After setting the evaluation benchmark, enterprises can independently collect and organize data, realize the full range collection of enterprise-related data, and analyze and convert the underlying data of financial activities, including unstructured data, in a multi-dimensional form. Use awareness application programming interface (application programming interface), take advantage of text extraction, keyword extraction, sentiment analysis and other technologies perform natural language processing on the data. In this process, enterprises can not only identify the risks of illegal financial activities, but also promptly detect technical risks caused by system vulnerabilities and irregular manual operations. In addition, in order to strengthen the exchange of information inside and outside the enterprise and the communication between institutions, you can consider building a compliance-related digital information platform (digital information platform).

The information platform is equipped with software with dynamic update functions, which can promote timely updates of knowledge, news and information links, and also provide channels for all kinds of feedback and violation feedback. In the digital information platform, specific search software and information technology measures can be used to keep relevant digital financial laws and regulations updated in a timely manner, reflect in real time the types of risks that enterprises are currently facing and predict that they may face in the future, and form intelligent intelligence through artificial intelligence technology model, providing guidance to compliance personnel based on past risk handling experience and industry practices. Not only that, this digital information platform can also open certain feedback permissions, so that individuals and organizations trusted by the compliance platform can anonymously feedback potential misconduct through the platform. The information platform will also provide guidance and reports on the processing results. This intelligent

information platform adopts a friendly structure and easy-to-access form to provide information and policy procedural support to enterprises, institutions and personnel in need, thereby enhancing the overall compliance awareness of the digital financial industry. In addition, both digital compliance mechanisms and digital financial activities themselves are extremely dependent on knowledge accumulation and technical support on the technology side. Therefore, on the basis of intelligent interconnection, an online compliance training system (online compliance training) with agile and intelligent characteristics can provide a key "skills upgrade" role for enterprises in the process of digital transformation of compliance, assisting enterprises are gradually realizing "digital upgrade" in terms of compliance talents. For compliance entities in different digital financial businesses, the online compliance training system can accurately provide specialized digital training modules and online learning courses, and use assessment methods to test the compliance awareness, professional knowledge and skills of compliance officers and employees. [21] After the risk prevention function is complete, compliance digital transformation also requires enterprises to screen and evaluate digital financial risks. It needs to start from the source of the risk, look for risk inducements inside and outside the enterprise, and investigate these inducements. On this basis, it is necessary to sort based on the degree of urgency and degree of harm to evaluate the order of risk treatment. In this regard, a digital risk assessment platform can be established based on cloud computing technology. This platform is a risk management service provided by a third-party organization. It uses Software-as-a-Service (SaaS) in cloud computing to achieve remote network delivery without the need for local delivery. Technology providers and developers are responsible for ensuring the operability and security of all hardware and traditional software, and regularly submit risk traceability to enterprises in the form of reports and lists, which greatly reduces the technology development costs and maintenance expenses of digital financial enterprises, and this third-party approach also reflects the objectivity and equality of risk screening activities. However, this third-party risk assessment platform still has certain limitations. Some confidential activities within the enterprise or activities with major interests are not suitable for use of this external platform for assessment. Therefore, the enterprise can be equipped with system integrity risk assessment management. The system is responsible for risk identification and assessment of confidential activities. The main function of this system is to gain an in-depth understanding of the company's current compliance risks, the effectiveness of compliance controls, and risk preferences. First, the system must check the nature (appearance or scenario) of credit risks and technical risks within the enterprise, and issue early warnings to corporate compliance personnel. Relevant personnel can promptly adjust their management framework and draft internal corporate charters and measures based on specific circumstances. Of course, this internal system is closely related to corporate culture, and the risk sources identified in Company A may not necessarily apply to Company B. At the same time, the risks within the enterprise are not static, but will change over time. Therefore, this system needs to be updated and maintained as necessary, and the database should be updated according to the form of financial innovation to form a complete cycle process.

The digital transformation of corporate compliance by digital financial companies has multiple values, such as improving operational efficiency, improving data quality, reducing the risk of manual intervention, and allowing companies to integrate more time and energy are spent on activities that improve service quality and add value to products. Digital and intelligent compliance models are also more adaptable to the technical characteristics of digital finance itself, allowing compliance and technology to fully connect. Regulatory technology applies the latest advances in artificial intelligence and robotic process automation technology to the risk compliance management process, which can help enterprises understand the changing financial risk compliance obligations to ensure the implementation of appropriate risk control measures. Fintech can help refine financial risk calculations to a new granularity, optimize capital use to improve operational efficiency, assist in identifying financial crimes and operational risks, and strengthen risk control management to enhance the security of digital finance [22]

Conclusion

Digital financial companies represent the development direction of finance and technology. The emergence of new technologies and compliance requirements have greatly changed the key functions of modern finance, and the risks they control are more varied and it is complicated and involves a wider range of interests. The digital compliance model relies on technology to continuously monitor the business processes of digital financial channels, minimize front-end and back-end cyber risk attacks, and use technical means to maintain the bottom line of financial security and ensure the smooth and efficient operation of digital financial services. In this regard, the construction of digital compliance mechanisms for digital financial enterprises should carefully consider the balance between financial innovation and risk prevention, and establish a systematic, comprehensive, and digital compliance system with the support of compliance technology. Regulatory technology and financial technology can be used to conduct real-time monitoring and penetrating supervision of misconduct within the enterprise and external criminal risks, and integrate compliance technology into an important part of the enterprise's risk control system. Not only that, the digital corporate compliance mechanism also reflects the openness and transparency of digital financial companies. In compliance plans supported by compliance technology, No one in the plan can go beyond the limits of the rules, and the company can thus practice and promote the equality and diversity it desires. Technology itself is a promoter and helper, and the construction of digital compliance mechanisms is also the product of the cooperation between humans and technology. With the support of technology, it can make the compliance tasks of digital finance easier to complete, and in terms of cost control, On the basis of achieving a more impressive overall effect. This combination of manpower and technology can help digital financial companies achieve the perfect connection between optimal trust and control, and achieve an open and dynamic balance between compliance culture and risk control systems

Conflict of interest

The author declares that there are no conflicts of interest regarding the publication of this article titled "Digital Transformation of Corporate Compliance Mechanisms from the Perspective of Digital Financial Risk Prevention and Control". The author has no financial, personal, or other relationships with

other people or organizations that could inappropriately influence (bias) their work and conclusions. The research conducted is independent and the views expressed in this article are purely those of the author and do not represent the views of any institution or organization. All sources of funding for the research reported should be declared. The authors also affirm that there has been no significant financial support for this work that could have influenced its outcome.

Declaration of role played by each co-author

Author: Jun Gao

As the sole author of this paper titled "Digital Transformation of Corporate Compliance Mechanisms from the Perspective of Digital Financial Risk Prevention and Control," I Jun Gao declare that I am responsible for all aspects of this research work. This includes conceptualization, formulation of the underlying research questions, extensive literature review, application of the relevant methodologies, data collection, analysis and interpretation, writing and revising the manuscript, and final approval of the version to be published.

The research and writing were conducted under my supervision and direction, and I can confirm that all ethical guidelines related to the integrity of the research have been adhered to. I further confirm that there are no other individuals who qualify as co-authors of this paper.

I affirm that there are no conflicts of interest to declare. Any errors or omissions are my own.

Declaration of source of funding for the project

I, Jun Gao, the sole author of the article titled "Digital Transformation of Corporate Compliance Mechanisms from the Perspective of Digital Financial Risk Prevention and Control," hereby declare that this research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors. This project was conducted as part of my personal research initiatives and was self-funded.

All activities related to this research, including but not limited to data collection, analysis, and the writing of this paper, were carried out by myself, without any external financial support. Any potential perceived conflict of interest related to the research, authorship, and/or publication of this article has been disclosed.

This declaration of funding ensures the transparency, integrity, and ethical standard of the research. I am accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Acknowledgement

I, Jun Gao, am extremely grateful for the opportunity to delve into the captivating realm of digital finance and for the chance to explore its intricate connection with digital technologies and financial innovations. The journey of writing this article titled "Digital Transformation of Corporate Compliance Mechanisms from the Perspective of Digital Financial Risk Prevention and Control" has been both challenging and enlightening.

I would like to extend my sincere gratitude to my mentors and colleagues for their invaluable insights and constructive

critiques that have greatly enhanced the quality of this paper. Their vast knowledge and experience in the field have indeed been instrumental in shaping this article.

I am also thankful to all the researchers and authors whose studies have provided the necessary groundwork for this research. Their significant contributions in the field of digital finance have served as a solid foundation upon which this paper is built.

Furthermore, I wish to express my gratitude to the editorial team for their relentless efforts and dedication that have ensured the refinement and publication of this article.

Lastly, I am grateful to my family and friends for their unwavering support and encouragement throughout the course of writing this article. Their faith in my abilities has been a constant source of strength and motivation.

However, any errors or oversights in this paper are solely my responsibility. I hope that this article contributes to the ongoing discourse on digital finance and aids in the prevention and control of digital financial risks.

References

1. Zhang Chenghu, Liu Jie. The dynamic evolution game between Internet financial innovation and financial supervision [J]. Guizhou Social Sciences, 2020(1): 151-159
2. [Gomber P, Koch JA, Siering M. Digital Finance and FinTech: Current Research and Future Research Directions [J]. Journal of Business Economics, 2017(87): 537–580
3. Sun Zhihong, Ju Wangjing. Structural effects of digital finance: risk suppression or push? [J]. Industrial Economic Research, 2022(2): 128-142.
4. Yang Dong. Internet financial risk regulation path [J]. Chinese Law, 2015(3): 80-97.
5. Jiang Yehong. The relationship between financial opening, financial innovation and financial risks in my country. Research on the mechanism of mutual conduction influence [J]. Xinjiang Social Sciences, 2020(5): 30-38+170-171.
6. Yang Dong. Legal regulation of Internet finance—from the perspective of information tools [J]. Chinese Social Sciences, 2015(4): 107-126+206.
7. Liu H-X, Yu Y-Y. Research on Crowd-funding Financing Risk and Evasion Strategy of Small and Micro Enterprises [C]. Proceedings of the Third International Conference on Economic and Business Management (FEBM 2018), 2018: 426–429.
8. Cao L-X, Huang G-Q, Chai W-W. A Knowledge Discovery Model for Third - Party Payment Networks Based on Rough Set Theory [J]. Journal of Intelligent and Fuzzy Systems, 2017(33): 413–414.
9. Zhang Hui. Re-differentiation of information privacy and personal information function positioning [J]. Beijing Social Sciences, 2022(1): 98-108.
10. Peng Bing. Research on the regulation of illegal fund-raising activities [J]. Chinese Law, 2008(4): 43-55.
11. Suhaili N A, Palil M R. Crowdfunding: A Collaborative Waqf Based Internet Platform [J]. International Journal of Business, Economics and Law, 2016(11): 41-42.
12. Wang Wenhua, Wei Yiyuan. Anti-corruption and anti-money laundering cooperation for Internet platform companies. A preliminary study on the construction of regulation mechanism—from the perspective of G20 [J]. Chinese Applied Law, 2022 (1): 167-181.
13. Zhang L, Xie Y-P, Zheng Y, Xue W, Zheng X-R, Xu X-B, The Challenges and Countermeasures of Blockchain in Finance and Economics [J]. Systems Research and Behavioral Science, 2020(37): 691–698.
14. Treleaven P C, Brown R G, Yang D. Blockchain Technology in Finance[J]. Computer, 2017(50): 14-17.
15. Liu Lei. Application and compliance supervision of blockchain technology in the financial field [J]. Management Modernization, 2020(3): 10-12.
16. Song Mei. Evolution, development and future trends of financial technology [J]. Guizhou Social Sciences, 2019(10): 138-148.
17. Dubey V. FinTech Innovations in Digital Banking [J]. International Journal of Engineering and Technical Research, 2019(8): 597–601.
18. Li Youxing, Wang Lin. Cooperative governance path for financial technology supervision [J]. Journal of Zhejiang University (Humanities and Social Sciences Edition), 2019(1): 214-226.
19. Petersen C. Through Patients' Eyes: Regulation, Technology, Privacy, and the Future [J]. Yearbook of Medical Informatics, 2018 (27): 10–15.
20. Beckett P. GDPR Compliance: Your Tech Department's Next Big Opportunity [J]. Computer Fraud and Security, 2017(5):9-13.
21. Baxter R, Holderness D K, Wood D. Applying Basic Gamification Techniques to IT Compliance Training: Evidence from the Lab and Field [J]. Journal of Information Systems, 2015(3):119–133.
22. Wu Yanni. Legal challenges and supervision of cutting-edge applications of financial technology - the perspective of blockchain and regulatory technology [J]. Journal of Dalian University of Technology (Social Science Edition), 2018(3): 78-86.