Is it really a blessing that algorithms manage your money for you? Risk Perception and Regulatory Considerations after the Rise of Robo-Advisors

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Abstract

Along with the rapid development of financial technology, intelligent investment advisory system as a new mode of financial services has changed the traditional investment consulting landscape. However, intelligent investment advisory system is widely used, which brings many risks such as algorithm error, data security and market fluctuation. All these risks affect investors' interests and threaten financial market stability as well. The aim of this paper is to discuss the risk problems existing in intelligent investment advisory system, and put forward the design and application scheme of information technology. Through constructing comprehensive regulatory framework, this paper details the design concept, system architecture and main function modules so as to effectively supervise intelligent investment advisory system by means of IT. With the continuous improvement of technology and regulatory policies, Smart Investment Advisory Regulatory System will play an important role in financial regulation.

Key words

AI + Finance Intelligent Investment Advisor Financial Technology Risk Supervision IT Technology Financial Security

1. Introduction

The rapid development of fintech brings unprecedented changes to financial services in today's digital era. As an important application of Financial Technology,

Smart Investment Advisory System provides personalized investment advice and asset allocation plans for investors through AI, big data analysis, and machine learning. Such an automated investment advisory service lowers investment threshold, improves investment efficiency, and broadens the range of financial services so that ordinary investors can enjoy professional investment advisory services. However, the wide application of intelligent investment advisory systems have led to risks such as algorithmic mistakes, data security, market volatility and compliance risks[1]. These problems not only affect investors' interests but also threaten financial market stability. As a result, how to effectively supervise intelligent investment advisory system and prevent related risks becomes a key issue urgently needed to solve in fintech development. In this paper, we explore how to design and apply intelligent investment advisory system based on IT so as to provide useful reference and inspiration for financial supervisors and practitioners[2].

2. The Current Development Status of Intelligent Investment Advisory Systems and their Risk Challenges

2.1 The Rise of Intelligent Investment Advisory Systems and Its Development

Robo-Advisor is an investment advisory service model based on algorithms and automation technologies. It collects information about investors' financial condition, investment goals and risk preferences, and provides personalized investment advice and asset allocation plans with advanced data analysis and machine learning algorithms. Recently, AI, Big Data, Cloud Computing, Intelligent Investment Advisory System has been widely used all over the world. Its main advantages lie in providing low cost, high efficiency investment services, lowering investment threshold, and providing professional investment advisory services for ordinary investors. Moreover, Intelligent Investment Advisory System offers 24 hours uninterrupted service without emotional interference, so as to better satisfy investors' diversified demand[3]. However, intelligent investment advisory system is developing at high speed, bringing along a series of risks and challenges that need to be paid attention to.

2.2 Intelligent Investment Advisory Systems and Risks and Challenges Faced

2.2.1Algorithmic Error Risk of Algorithms

A smart investment advisory system relies heavily on algorithms. However, algorithm model construction and training is usually based on historical data, which may be biased or incomplete. If algorithm models do not accurately reflect market changes and investors' real demands, they may lead to bias in investment recommendations. For example, algorithms may rely too much on specific market parameters or data characteristics while ignoring other key factors[4]. Therefore, when market conditions change, investors do not adjust investment strategy promptly,

resulting in loss. Moreover, the complexity and opacity of algorithm models may make investment recommendations more difficult for investors to understand, further increasing the risk.

2.2.2Data Security Risks

Intelligent Investment Advisory System needs to collect and deal with large amounts of investor's personal information and transaction data with high sensitivity and value. As soon as the data is leaked or tampered with, not only will the privacy of the investors be harmed, but also the system financial risk may be triggered. The risk of data security comes mainly from the outside attack and the internal management flaw. It may be possible for external attackers to get sensitive information through cyber attack, such as hacker intrusion and malicious software attack. The internal management flaw may cause data leakage because of employee's operation mistake, data management is bad[5]. Therefore, it is a significant challenge for smart investment advisory systems to strengthen data security management to ensure confidentiality, completeness and availability of investors' data.

2.2.3 Risks of Market Fluctuation Risk

Financial markets are full of uncertainty and volatility, and smart investment advisory systems are not able to avoid market risks completely. Although intelligent investment advisory systems may be able to predict and analyze market trends through algorithmic models, they may lead to significant fluctuations in investment portfolios in practice. In addition, an intelligent investment advisory system may not be able to adjust its investment strategy in time under extreme market conditions, thereby exacerbating investor losses. In 2020, for example, during the COVID-19 pandemic, there was a sharp fluctuation in the global financial market. A lot of smart investment advisory systems fail to adjust their investment portfolio timely, resulting in significant losses to investors. Therefore, how to control investment risk effectively during market fluctuation is an important problem for smart investment advisory system.

2.2.4 Compliance with Compliance Risks

As a new mode of financial services, intelligent investment advisory system develops faster than related laws and regulations. In practice, the intelligent investment advisory system may encounter a lot of compliance risks, such as failing to fully meet investor suitability obligations, failing to comply with anti-money laundering rules, failing to deal properly with investors' complaints. Such compliance risks may result in penalties being imposed by regulatory authorities on robo-advisory agencies as well as harming investors' interests and confidence[6]. Therefore, it is important to strengthen compliance management in order to ensure compliance with relevant laws and regulations in order to protect investors' rights and safeguard financial market stability.

2.3 The Necessity of Intelligent Investment Advisory Systems and Its Urgency for Intelligent Supervision

In view of all kinds of risks and challenges that intelligent investment advisory systems are facing, it is necessary and urgent to strengthen them. The effective

supervision not only protects investors' legal rights, maintains financial market stability, and promotes fintech's healthy development. First of all, regulators can make relevant laws, regulations and regulations to clarify their operating rules and responsibilities so as to provide clear legal basis and norms of behavior for market participants[7]. Secondly, regulatory authorities could set up risk monitoring and early warning mechanisms to identify and mitigate potential risks in smart investment advisory systems so as to prevent risks from accumulating and spreading. Moreover, regulatory authorities can enhance the operational transparency of smart investment advisory agencies through enhancing market access management and disclosure requirements. Therefore, it is very important to establish a scientific and effective regulatory system for intelligent investment advisors to ensure the healthy development of fintech[8].

3. Intelligent Investment Advisory Supervision System Based on the Information Technology Design

3.1 Regulatory System: Overall Design

To construct intelligent investment advisory supervision system based on IT is aimed at realizing comprehensive, real-time and dynamic supervision by means of advanced technology. The system adopts the Integrated Development Environment (IDE), and integrates Java, Python and other programming languages. A relational database is MySQL and a non-relational MongoDB database. The regulatory system extensively employs information technologies such as artificial intelligence (AI), big data, and cloud computing to assist in regulatory decision-making. For example, it analyzes transaction data and risk indicators from Smart Investment Advisory Systems to generate personalised regulatory recommendations and risk warnings[9]. By means of deep learning models, this system can identify risk patterns and preferences in smart investment advisory systems to provide more precise advice. The massive amount of data generated by this system was processed and analyzed by big data technology, including investors' transaction records, operational data of smart investment advisory institutions and so on. The system is able to extract valuable information through data mining and analysis in order to provide decision support for regulatory authorities and optimize regulatory strategy generation algorithm. Moreover, the regulatory system provides an interaction platform between supervisors and smart regulators. On this platform, regulators will be able to plan and implement regulatory activities using smart tools[10]. At the same time, it provides real-time regulatory advice and assistance based on regulatory goals and market feedback. This model takes full advantage of supervisor's professional advantage and makes full use of its high efficiency and accuracy to improve supervision efficiency.

3.2 Design of Regulatory System Main Levels

3.2.1 Design of Data Layer Design

The data layer is the base of the whole system in intelligent investment advisory supervision system. Whether its design is reasonable or not relates directly to system running stability and data processing efficiency. Data layer is mainly responsible for storing and managing investors' transaction data, operational data of smart investment advisory agencies as well as all kinds of information produced during the operation of regulatory system. In order to guarantee data integrity and security, data layer adopts distributed database structure, which combines the merits of relational database and non-relational database[11]. A relational database is used for storing structured data such as basic information of investors, transaction records and investment portfolio. These data are clearly structured and related. Through relational database, it is convenient to carry out data query and transaction processing. A non-relational database is used for storing unstructured data such as investor's transaction behavior log or intelligent investment advisory system algorithm model. These data are flexible and scalable, so they are more suitable for processing large amount of complicated data. Data encryption technology is adopted during data storage in order to ensure investors' privacy as well as smart investment advisory agencies. At the same time, in order to deal with data loss or damage risk, a comprehensive backup and recovery mechanism was designed. Regularly backing up data, it can be restored quickly if necessary to ensure that system functions normally[12].

3.2.2 Design of Logic Layer Design and Its Application

Logic layer is a key component of supervision system that handles data processing, business logic implementation, and regulatory strategy generation. In logic layer design, OOP is used to divide system functions into multiple independent modules, each responsible for specific business logic. For example, Risk Monitoring Module analyses transaction data and risk indicators of Smart Investment Advisory System, using machine learning algorithm and data mining technology to monitor potential risks. In this module, multiple risk factors need to be taken into account in a comprehensive way such as market volatility, algorithmic bias, and data security. The Compliance Oversight Module conducts compliance checks on Smart Investment Advisory Institutions to ensure compliance with relevant laws and regulations[13]. The module helps regulators to better perform compliance checks and deal with violations by providing smart compliance testing tools and ancillary functions. Take compliance monitoring for example[14]. Using Python programming, a compliance data set of a smart investment advisory agency was established, including operational data and compliance indicators. [Trading volume, compliance rate, complaint rate, anti-money laundering indicators], using large data analysis techniques to assess compliance risks of robo-advisory institutions and provide regulatory advice to regulators:

```
features = ['transaction_amount', 'transaction_frequency', 'account_balance', 'risk_level']
        X = data[features]

        # Data standardization
        X_scaled = self.scaler.fit_transform(X)
        Print
```

```
            return X_scaled
        except Exception as e:
            Print
            return None

    def predict_risk(self, X_scaled):
        """
        Predict risks
        :param X_scaled: preprocessed data
        :return: The preprocessed data
        """
```

At the same time, the logic layer is designed to optimize algorithm and improve performance. Through efficient algorithm design and code optimization, the system is able to handle large data and complicated business logic quickly and stably. Furthermore, a high efficient data interaction interface between data layer and application layer has been established in logic layer to ensure smooth data flow among different layers in order to realize overall cooperative operation[15].

3.2.3 The Application Layer Design of Applications

Application layer is an interface for direct interaction between regulatory systems and users. Its user experience and promotion effect are directly affected by its friendly and user-friendly design. Application layer provides different user interfaces for regulators, investors and smart investment advisory agencies. Each interface is customized according to user's role and needs. For regulators, application layer provides intuitive regulatory interface including risk monitoring, compliance monitoring, and regulatory decision-making support. These functions provide guidance for regulatory staff to perform regulatory tasks easily and provide real-time feedback on regulatory outcomes through simple and clear interfaces. The investor interface places greater emphasis on information transparency and provides features like portfolio inquiry, risk warning and complaint channels. Through these functions, investors will be able to understand the status of investment and risk in a timely manner, and report any problems to supervisors. It provides operational data reporting, compliance self-inspection and risk early warning functions to help smart investment advisors manage operational risks and improve compliance levels. Application layer design also emphasizes to optimize user experience. Through user interface friendly design, simplified operation process, variety of interaction methods to improve user satisfaction. At the same time, the application layer supports access from a variety of terminal devices including computers, tablets, and mobile phones so that users can monitor and query activities at any time.

3.3 Regulatory System Database Design

The storage layer plays an important role in intelligent investment advisory management system. Its rationality and efficiency have a direct impact on performance, reliability and scalability. The storage layer is in charge of managing a lot of data generated during system operation, including investors' transaction records,

transaction data of intelligent investment advisory agencies, regulatory system configuration information, and all kinds of temporary data. Considering the variety of data types and usage requirements, it adopts hierarchical storage strategy that integrates multiple storage technologies in order to ensure efficient data storage, fast access, and secure protection.

3.3.1. Storage Technology of Data Classification

According to structure degree, access frequency and importance of data, different storage media and technology are used respectively. For structured data such as basic information of investors, transaction records, investment portfolio etc., it adopts relational database management system (RDBMS) to organize and store these data in form. A relational database has powerful data integrity constraints, transaction processing capabilities, and a mature Query Language (SQL) to efficiently support complex data operations and query requirements. For example, it is easy to perform statistical analysis of investors' transaction records through relational databases, calculate portfolio returns, and perform multi-condition query operations to provide accurate data support for regulatory decisions.

As for unstructured data, such as algorithms model for Smart Investment Advisory System, Transaction Behavior Log of Investors, Regulatory Report, etc., this system adopts NoSQL and Distributed File System (DFS). Unstructured data is typically characterized by large volumes and various formats, which makes it difficult for efficient storage in conventional relational databases. With its flexible data model, high scalability and high performance, NoSQL database is suitable for such data storage. As a popular NoSQL database, for example, MongoDB supports document storage mode. It is easy to store and retrieve algorithm models from intelligent investment advisory system, as well as investor behavior records. At the same time, with respect to large-capacity multimedia files, such as regulatory reports attachments and promotional materials for smart investment advisory system, we use distributed file system storage. A distributed file system can enhance storage capacity scalability, improve data reliability and access speed by distributing files between nodes. The Hadoop Distributed File System (HDFS), for example, ensures high data availability through multiple replica storage mechanisms for data blocks in unexpected situations like hardware failures. At the same time, its highly efficient parallel I/O capability can satisfy the requirement of fast accessing multimedia resources.

3.3.2 Backup Strategies and Data Security

From the data security point of view, we design multi-layer protection mechanism to ensure data confidentiality, completeness and availability. First of all, the system uses encryption technology to encrypt sensitive information during data storage. For the sensitive data such as investors' personal information and transaction records, the encryption algorithm is used to encrypt the data, which can only be decrypted and accessed by authorized users. Moreover, the system strictly restricts access rights of data through access control mechanism so as to make sure that only authorized users and applications have access to data resources. At the same time, in order to prevent data loss and damage, the system implemented regular data backup policy. The backup strategy includes both full backup and incremental backup. Full

backup performs full backup on a regular basis throughout the database and file system, ensuring full recovery of all data during a disaster recovery. Incremental backup will backup newly added or modified data between two full backups in order to increase backup efficiency and reduce storage space usage. Backup data is stored on remote backup servers to avoid losing data if local data centers go down. Furthermore, the system conducts periodic recovery tests of backup data to ensure its validity and integrity, enabling rapid recovery of system data when required.

3.3.3 A Study of Storage Performance Optimization

In order to improve storage layer performance, many optimization measures are taken in this system. With regard to relational database, through reasonable database design, such as table normalization, index creation and query statement optimization, data storage efficiency and query speed are improved. For example, creating an index for a frequently queried field can significantly speed up a query's response time. At the same time, database caching technology is adopted to cache frequently accessed data into memory, which further improves the speed of data reading. For distributed file system, through optimizing data block size, copy number, storage node layout, etc., the storage performance is improved greatly. For example, adjusting block size according to actual application requirements can strike a balance between storage space utilization and access speed. The reasonable number of replica can ensure data reliability and avoid unnecessary waste of memory space. Furthermore, load balancing technology is used to allocate data access requests rationally among different storage nodes in order to avoid overload of individual nodes and enhance concurrent processing capability and stability.

3.3.4Data Scalability

Along with the advancement of fintech and increasing number of users of regulatory systems, data volume will continue to increase. Therefore, it is essential to design scalable storage layer. Distributed storage technology is used in the system's storage structure. The architecture could easily expand the storage capacity and improve the performance of the system through the addition of storage nodes. Both Relational Databases and Distributed File System support horizontal scaling, i. e., adding more servers to increase storage capacity and computing power. For example, in a relational database, data can be distributed across multiple database instances using database sharding technology so that each instance runs on different servers, thus achieving linear expansion of storage and computing capabilities. In distributed file system, adding storage nodes and allocating data blocks reasonably can easily deal with increasing data volume. Additionally, the system reserves interface for cloud storage services. Some data can be transferred to cloud storage platform when local storage resource is not enough, which makes storage resources more flexible and scalable. Such a scalable design makes it possible for the storage layer to adapt to the rapid growth of fintech data in the future and ensure long-term stability.

3.4 The Regulatory System Security Design of the Environment

Data security and privacy protection are indispensable to the design of system in today's digital era. Security layer design aims at providing comprehensive security

protection for investors and smart investment advisory agencies so as not to leak, manipulate or abuse. Security layer adopts multiple layers of security protection measures including network firewall, intrusion detection system, data encryption technique and user identity authentication. A network firewall and an intrusion detection system have been set up on network boundary for real-time monitoring of network traffic so as to guard against malicious attacks and illegal intrusion. Data encryption technology is used in data storage and transfer process. It is used to encrypt sensitive information during storage and transfer. In order to prevent unauthorized access, User Identity Authentication Mechanism strictly verifies user identity by user username, password, SMS authentication code. Additionally, Security Layer conducts regular security audits and security scans to promptly identify and correct security vulnerabilities in the system, ensuring its security and stability. Through these multi-level security protection measures, security layer provides safe and reliable investment supervision environment for smart investment advisory supervision system.

4. Applications of regulatory system key functions

4.1. Early Warning and Intelligent Risk Monitoring

As an important innovation in intelligent investment advisory system, intelligence monitoring and early warning function aims at monitoring intelligent investment advisory system by integrating AI technology with professional supervision capabilities of supervisors. As such, intelligent systems provide regulators with rich regulatory tools and support functions such as risk monitoring dashboards, real-time risk alerts, and risk assessment reports. Risk Monitoring Dashboard can display all kinds of risk indicators including market risk, credit risk and operational risk in real time so that supervisors can understand system's risk status quickly. Real time risk early warning functions set thresholds and early warning rules to alert regulators to potential risks beyond normal limits. Through in-depth data analysis, Risk Assessment Reports provide detailed risk assessment results that help regulators to better understand risk sources and impacts. For instance, the system may use machine learning algorithms to analyze transaction data in an intelligent investment advisory system, identify unusual trading behaviors and potential market manipulation risks, and produce detailed analysis reports for regulators：

```
inappropriate_investors = data[(data['risk_tolerance'] == 'low') & (data['investment_amount'] > 10000)]
print(f"find {len(inappropriate_investors)} investor who does not meet the suitability requirements")
return inappropriate_investors
except Exception as e:
print(f"Failed to check investor suitability: {e}")
return None
```

Moreover, this intelligent system provides individual regulatory advice based on

risk monitoring data to help regulators better deal with different risk scenarios. This model not only makes full use of the professional advantages of supervisors, but also enhances the quality and efficiency of supervision by making use of its efficiency and accuracy, providing a safer and safer investment environment for investors.

4.2 Intelligent Inspection and Compliance Supervision

As a core function of intelligent investment advisory system, compliance supervision and intelligence inspection functions aim at ensuring compliance with related laws and regulations. It helps regulators to conduct compliance checks and deal with violations effectively through smart compliance testing tools and ancillary functions. For example, this system will automatically check the operating data of smart investment advisors to ensure their compliance with investor suitability requirements, anti-money laundering rules and disclosure requirements. Intelligent compliance testing tools are able to identify and identify potential compliance issues, such as inadequate disclosure of risks and improper handling of investors' complaints, and produce detailed inspection reports for supervisors to review. Additionally, it provides a smart compliance advisory function that provides specific suggestions for improving compliance based on inspection results and helps smart investment advisors improve compliance levels. It may, for example, recommend institutions to improve internal training, improve compliance procedures, enhance disclosure, etc. The intelligent compliance check and recommendation function not only enhances the efficiency of supervision, but also promotes the healthy development of Smart Investment Advisory Industry, which enhances investors' trust in Smart Investment Advisory Services.

4.3 Training and Investor Protection

Investors' protection and educational functions are important components in intelligent investment advisors' regulatory system, which aims at enhancing investors' awareness of risk and their ability to invest through transparent information and education resources. This feature enables investors to easily understand their investment status and risk status by providing features such as portfolio inquiry, risk warning, and complaint channels. For example, it provides investors with information about their investment portfolios, returns, level of risk and other information, as well as risk warnings and investment recommendations. Moreover, there are plenty of education resources such as lectures on investment knowledge, risk education videos, and frequently asked questions. For example, it could regularly promote lectures on investment knowledge and risk education in order to help investors better understand the risks and returns associated with smart investment advice. At the same time, the system establishes convenient complaint channel. The investors can report problems to regulatory authorities by means of online complaints, telephone complaints, etc., ensuring timely protection of their rights.

4.4 Data Analysis and Regulatory Decision Support

Regulatory decision-making support and data analysis function play an important role in Intelligent Investment Advisory Supervision System. In this function, massive data mining and machine learning algorithms are used to extract valuable information to support regulatory decision-making. For example, it is possible to analyse data such as market performance, investor behaviour and risk distribution in an intelligent investment advisory system to generate detailed analysis reports and policy recommendations. Additionally, it provides real-time data visualization capabilities. Through intuitive charts and reports, it helps regulators to quickly understand what is going on in a smart investment advisory system. For example, the system could display dynamic changes in data such as trading volumes, returns and risk indicators so that regulators could quickly identify potential problems and take appropriate action. It not only enhances the scientificity and accuracy of regulatory decision-making, but also enhances the forward-looking effectiveness and effectiveness of regulation.

4.5 Regulatory System's Scalability and Compatibility Design

As fintech develops rapidly, its scalability and compatibility is key to ensure its long-term stability and continuous optimization. This system takes full account of future technology developments and changes in regulatory requirements during design. Its modular architecture and open standards guarantee easy expansion and upgrade of functions of the system. Modular structure makes each function module relatively independent. When it is necessary to add a new function or optimize an existing function, it is possible to develop and test these modules independently without affecting others in the system. The design not only improves the system development efficiency, but also reduces maintenance cost. Furthermore, the system follows internationally accepted open standards and protocols such as HTML5, CSS3, JavaScript, etc., ensuring stable operation on various operating systems and browsers, and supporting multiple terminal devices such as PC, tablet, mobile phone etc. The excellent compatibility makes the system adapt to different users' usage habits and equipment conditions. It provides powerful guarantee for wide application. At the same time, it reserved interfaces for integration with external systems such as Financial Regulatory Authorities Information Management System (MIS) and Smart Investment Advisory System (CII), facilitating its integration with other fintech systems in order to share and work together in order to provide comprehensive support to fintech's healthy development.

5. Regulatory System's Application Case Analysis

5.1 Case Summary

In order to verify the effectiveness of the Information Technology Intelligent Investment Advisory Supervision System (hereinafter referred to as "Supervision System"), an intelligent investment advisory service is selected for research. The company is a highly reputable fintech company. There are many investors in its intelligent investment advisory system and abundant transaction data. It aims at

evaluating the effectiveness of a regulatory system through comparison of its effects before and after its application.

5.2Application Methods

Prior to its application, our company relies on traditional supervision methods, i. e., supervision through manual inspection and periodic audit. There are problems such as low efficiency of supervision, untimely monitoring of risk and limited data handling capability. After application of regulatory system, the company fully adopted this regulatory system to supervise its smart investment advisory business. Early in the system launch, regulators created detailed regulatory files to record basic data, operating data and compliance records. Based on these data, the system generated personalized regulatory strategies for the company and recommended appropriate regulatory tools. Regulators make use of the system's intelligent risk monitoring, compliance checking and data analysis function to monitor company operations and risk conditions promptly, based on feedback from the system. For example, as regards possible problems identified during compliance checks, regulators may require companies to make corrections and track progress through smart compliance proposals made through the system. At the same time, through systematic investor protection and education functions, we provide transparent information and education resources for investors, enhancing their risk awareness and investment ability.

5.3 Results

Through six months' regulatory practice, the results show that this system improves regulatory efficiency and quality significantly. In particular, application of regulatory systems enables regulators to identify and deal with potential risks more quickly, thereby significantly improving the timeliness and accuracy of risk monitoring. For example, during its implementation, the system successfully detected and alerted a large number of unusual trading behaviors as well as potential market manipulation risks, enabling regulators to take timely action in order to avoid losses for investors. Moreover, application of the regulatory system enhances company compliance level and reduces the number of violations. During application period, the compliance rate increased from 85 per cent to 95 per cent while complaint rate declined from 5 per cent to 2 per cent. These data show that it can effectively promote the operation quality and compliance level of intelligent investment advisory agencies, and promote the healthy development of fintech industry.

Table1. Company Compliance and Complaint Situation of the company

Indicators of assessment	**Before application**	**After application**	**Difference (after application - before application)**
Compliance rate（%）	85	95	10
Complaint rate（%）	5	2	-3

6. Conclusion

The construction and application of Information Technology Intelligent Investment Advisory Regulatory System provide a new idea and method for fintech's healthy development. Through systematic framework design and functional implementation, this system can effectively deal with risk and challenge, protect investors' rights and promote financial technology development. However, we should clearly realize that research and application in this area is still being developed and perfected. As Artificial Intelligence, Big Data Technology, Cloud Computing Technology and Regulatory Policies are constantly updated, Smart Investment Advisory Regulatory System will play an important role in Fintech Regulatory Area. We expect to continuously improve system functions and optimize regulatory models through continuous research and practice so as to make greater contributions to fintech's healthy development and financial market stability.

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