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Research Article

Financial Big Data Intelligent Service System Based on Cloud Computing of Internet of Things

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The financial big data intelligent service system belongs to the technical field of financial data management. It is an innovation of the client and server of the financial service system, which promotes the electronic office of the financial system. This paper aimed to analyze the cloud computing means of the Internet of things (IoT), select a more suitable specific algorithm, and conduct an in-depth study of the financial big data intelligent service system so that it can better serve the current financial situation. This paper gave a general introduction to the cloud computing of the Internet of things, researched and analyzed the financial big data intelligent service system machine, and applied the cloud computing of the Internet of things to the research of the financial big data intelligent service system. Based on the experiments in this paper, it can be seen that among the students in the three colleges and universities in place A, 567 people thought that they can adapt to the intelligent financial system better than the already employed salesmen, and 245 people held a negative attitude. It showed that the intelligent development of financial systems is a trend, but at the same time, it is also a development trend to strengthen the business training capabilities of professionals. The experimental results of this paper showed that the process of studying the financial big data intelligent service system based on the cloud computing of the IoT is more scientific and effective than using other means to analyze the experimental data, and it has greater reference significance for the intelligent development of the financial system.

1. Introduction

The Internet of things can connect various information-sharing channels and networks, and realize the intercommunication between humans and machines in time and space. Its basic features include the overall perception of object information, the realization of information sharing through the network, and the intelligent processing of the acquired information. Cloud computing has powerful computing capabilities and can reduce the processing burden of user terminals.

The research on the financial big data intelligent service system is a direction of development in the data age. There were many scholars who analyzed services related to financial systems, and there were scholars who studied intelligent service systems, but few scholars analyzed it from the perspective of cloud computing of the IoT. Based on the cloud computing technology of the IoT, this paper analyzed the financial big data intelligent service system, discussed the development of the financial service system in the field of intelligence, and effectively improved the service system. This paper used the cloud computing technology of the IoT to study the financial big data intelligent service system, and expanded the research methods in this direction, which had certain practical significance.

The innovation of this paper is that this paper analyzed the financial big data intelligent service system based on the cloud computing of the IoT.

2. Related Work

The financial system is an operating system that is necessary for an operating organization to supervise and control the internal economic activities of the organization. At present, the demand for big data intelligence research on it is very extensive. Therefore, there are many scholars who have studied the financial big data intelligent service system. Li used the proportional analysis method to analyze and predict the operating performance of Acoustech Bhd, and put forward some suggestions for the adjustment of the company's asset structure [1]. Emmanuel and Ekpenyong made research on Nigeria's economic development through relevant financial analysis methods. Particularly after the discovery of crude oil in the local area, too much emphasis has been placed on oil resources, and economic development has been relatively simple [2]. Peng et al. believed that when pricing derivatives, it was necessary to use numerical methods to deal with high-dimensional problems. Therefore, based on the Lévy process, two sensitivity estimation methods were proposed and applied to the parameter estimation of Lévy-driven stochastic volatility models [3]. Haan and Sturm's research showed that financial variables can exacerbate income inequality [4]. Higham et al. proposed a double-implicit Milstein scheme that can be used in a family of financial models and has no strict time limit [5]. The analysis of financial status by these scholars focused on the analysis of financial models or the financial status and influencing factors of a certain region. The research on the financial intelligent service system was less involved, and it was rarely combined with big data, such as cloud computing of the IoT.

The Internet of things can connect smart devices to the network, and cloud computing can provide a perfect solution for the expansion of IT facilities. Therefore, scholars are very keen to explore the application of cloud computing for the Internet of things. Perera et al. believed that the IoT was a dynamic global information network, and aimed to stimulate the further development of the IoT by investigating the intelligent solutions of the IoT to determine the technologies, functions, etc. [6]. Stojkoska and Trivodaliev's research mainly discussed the relationship between a smart home and the Internet of things, and proposed some improvement schemes for the future challenges of the Internet of things [7]. Kshetri's research was to discuss the relationship between blockchain and IoT security performance. It was proposed that when using blockchain, in order to avoid security incidents, it was necessary to contain the vulnerabilities of IoT security in a targeted manner [8]. Xia et al. believed that the image encryption technology will make the CBIR technology in the plaintext field unusable, so they proposed a scheme that can use the CBIR technology on the basis of image encryption without revealing privacy [9]. Wei et al. believed that the existing static grid resource scheduling algorithms cannot meet the needs of cloud computing, so he proposed a cloud resource allocation model based on the hidden Markov model (HMM) to establish the incomplete information Stackelberg game (IISG) [10]. These researchers' research on the IoT and cloud computing generally focused on promoting network development or reducing network vulnerabilities.

3. Method of the Financial Big Data Intelligent Service System Based on Cloud Computing of the Internet of Things

3.1. Financial Big Data Intelligent Service System. The financial system is an organization or positions and personnel established around financial goals, which generally supervise and control the financial operations within the organization [11]. The financial big data intelligent service system is a system that provides intelligent services to an organization and its business activities based on the information sources obtained from big data, and belongs to the technical field of financial data management [12, 13]. Figure 1 shows the traditional accounting manual account display.

The financial big data intelligent service system is a new type of intelligent service system based on traditional financial services, using big data intelligent means to carry out technological innovation. Therefore, its basic financial system means have also been innovated accordingly [14]. Figure 2 is an intelligent financial service system.

The financial big data intelligent service system includes the financial intelligent management system [15]. Its basic functions are shown in Figure 3.

3.2. Cloud Computing for the IoT. The cloud computing of the Internet of things is a new computing model, which has high commercial value because it is generated on the basis of parallel, distributed, and grid operations [16, 17]. Cloud computing can remotely obtain the information resources of the data center through the Internet for computing, storage, and other services. Therefore, users can adjust the amount of information resources they want to obtain according to their own needs. For users, it has better adaptability [18, 19]. Cloud computing enhances its computing services in a low-cost and low-overhead way, gaining a large number of loyal users. Figure 4 is a simple demonstration of cloud computing for the Internet of things.

The cloud computing processing of the IoT includes the field of image processing. Therefore, the method of cluster analysis is more effective for data processing in this area [18]. The premise of cluster analysis is computation, which contains two types, data matrix and dissimilarity matrix [19].

Data Matrix. The q-dimensional data with r samples form an observation matrix M, that is,

$$M = \begin{pmatrix} m_{11} & m_{12} & \cdots & m_{1q} \\ m_{21} & m_{22} & \cdots & m_{2q} \\ \vdots & \vdots & \ddots & \vdots \\ m_{r1} & m_{r2} & \cdots & m_{rq} \end{pmatrix}. \quad (1)$$

Any row in this formula represents a sample, any column represents an indicator variable, and each object corresponds to a q-dimensional vector.

Figure 1: Traditional accounting manual.

Figure 2: Smart service financial system.

Dissimilarity Matrix:

$$\begin{pmatrix} 0 & \cdots & \cdots & \cdots & 0 \\ e(2,1) & 0 & \cdots & \cdots & \vdots \\ e(3,1) & e(3,2) & 0 & \cdots & \vdots \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ e(r,1) & e(r,2) & \cdots & \cdots & 0 \end{pmatrix}. \quad (2)$$

$e(a,b)$ represents the quantification of the dissimilarity between the two samples a and b, and is a non-negative number. The dissimilarity matrix has two properties. One is $e(a,b) = e(b,a)$, and the other is $e(a,a) = 0$.

The problem that the clustering criterion needs to solve is to determine the degree of similarity between two different pattern vectors and the type of attribution [20]. When a function criterion is used to define the similarities and differences between patterns, this function is usually called a clustering criterion function, and the clustering criterion is obtained by finding the extreme value.

The clustering criterion function is usually defined as follows:

$$B = \sum_{b=1}^{t} \sum_{m \in S_b} M - P_b^2. \quad (3)$$

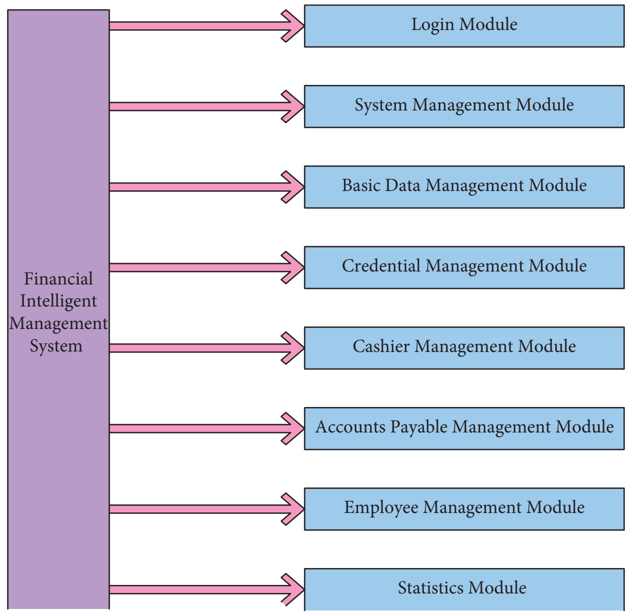

FIGURE 3: Display of the basic functions of the financial function management system.

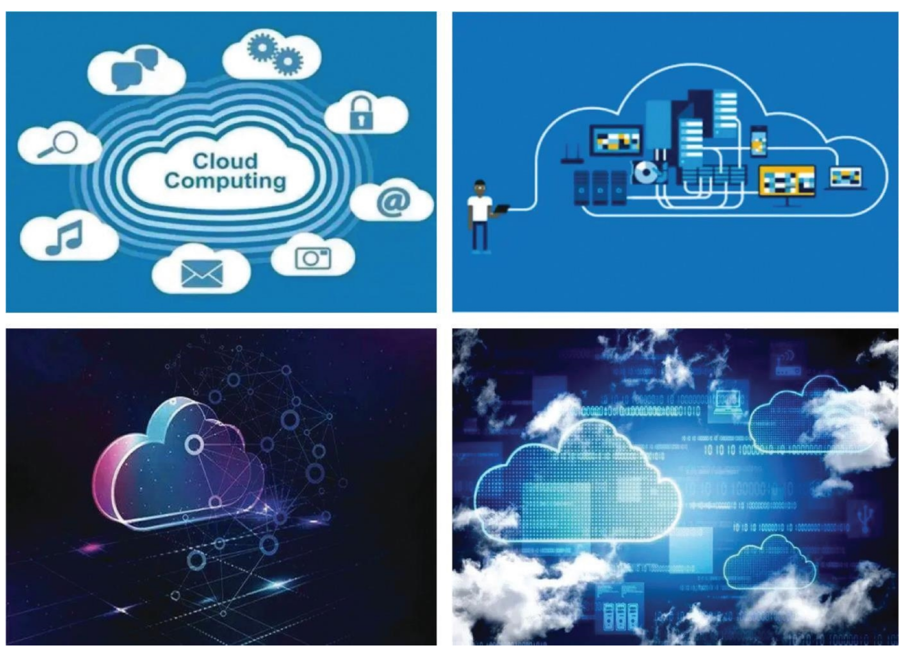

FIGURE 4: Simple demonstration of cloud computing for the IoT.

Among them, t indicates that there are t patterns. $P_b = 1/R_b \sum_{X \in S_b} M$ is the mean vector of pattern samples in S_b, R_b is the number of pattern samples in S_b, and B represents all samples belonging to t cluster categories and their corresponding error sums of squares.

Because the clustering algorithm includes a variety of specific algorithms, and this paper mainly combines the K-means clustering method, the following will focus on the algorithm. The K-means clustering algorithm randomly selects K objects as the initial value of the cluster center, and assigns it to the closest cluster center by calculating the distance between each independent object and each seed cluster center. These objects are assigned to the cluster centers that are closest to them. When all objects are assigned, each cluster center is recalculated based on the existing objects until a certain termination condition is met.

If the r individuals are divided into k categories, then the two individuals m_1, m_2 with the farthest distance among all individuals are selected as the aggregation points, that is,

$$e(m_1, m_2) = e_{a_1 a_2} = \max\{e_{ab}\}. \tag{4}$$

By determining m_{a_3}, the minimum value of the example with the first two aggregation points is equal to the maximum value of the smaller examples with m_{a_1} and m_{a_2}, that is,

$$\min\left\{e\left(m_{a_3}, m_{a_n}\right), n = 1,2\right\} = \max\left\{\min\left\{e\left(m_b, m_{a_n}\right), n = 1,2\right\} b \neq a_1, a_2\right\}. \quad (5)$$

The steps are repeated until k cluster points are determined.

The steps are as follows:

If the set of the k initial cluster is

$$G^{(0)} = \left\{m_1^{(0)}, m_2^{(0)}, \ldots, m_k^{(0)}\right\}. \quad (6)$$

That is,

$$L_a^{(0)} = \left\{m\colon e\left(m, m_a^{(0)}\right) \leq e\left(m, m_b^{(0)}\right) b = 1,2,\ldots,k, b \neq a\right\} \quad (a = 1,2,\ldots,k). \quad (7)$$

Thus, an initial classification $L_a^{(0)} = \left\{L_1^{(0)}, L_2^{(0)}, \ldots, L_k^{(0)}\right\}$ is obtained.

From the initial class $L_a^{(0)}$, a new cluster $G_a^{(0)}$ is computed, that is,

$$m_a^{(1)} = \frac{1}{r_a} \sum_{m_g \in L_a^{(0)}} m_g \, (a = 1,2,\ldots,k). \quad (8)$$

Among them, r_a is the number of samples in the initial class $L_a^{(0)}$, resulting in a new set $G^{(1)} = \left\{m_1^{(1)}, m_2^{(1)}, \ldots, m_k^{(1)}\right\}$. From $G^{(0)}$, the reclassification is performed, that is,

$$\% \quad L_a^{(1)} = \left\{m\colon e\left(m, m_a^{(1)}\right) \leq e\left(m, m_b^{(1)}\right) b = 1,2\ldots k, b \neq a\right\} \quad (a = 1,2,\ldots,k). \quad (9)$$

The steps are repeated z times to get the following:

$$L_a^{(z)} = \left\{L_1^{(z)}, L_2^{(z)}, \ldots, L_k^{(z)}\right\}. \quad (10)$$

Among them, $m_a^{(z)}$ is the center of gravity of $L_a^{(z-1)}$, $m_a^{(z)}$ is not necessarily the sample, and the classification tends to stabilize as z increases gradually. During the calculation, if a certain z, $L_a^{(z+1)} = \left\{L_1^{(z+1)}, L_2^{(z+1)}, \ldots, L_k^{(z+1)}\right\}$, and $L_a^{(z)} = \left\{L_1^{(z)}, L_2^{(z)}, \ldots, L_k^{(z)}\right\}$ are the same, the calculation is terminated.

Similarly, clustering patterns need to be tested for dissimilarity, that is, to measure the similarity between the same patterns and the dissimilarity between different classes of patterns [21]. The q-dimensional data with r samples are given by

$$m_a = \left(m_{a1}, m_{a2}, \ldots, m_{aq}\right)^T (a = 1,2,\ldots,r). \quad (11)$$

m_a is the a row of the matrix M. At this time, each sample can be regarded as a point in the q-dimensional space, that is, a q-dimensional vector. The distance between any two vectors is marked as $e(m_a, m_b)$.

The distance between any two vectors is not negative, that is, $e(m_a, m_b) \geq 0$, and when $m_a = m_b$,

$$e(m_a, m_b) = 0. \quad (12)$$

When the distance between vectors is symmetric,

$$e(m_a, m_b) = e(m_b, m_a). \quad (13)$$

When it is a triangle inequality,

$$e(m_a, m_b) = e(m_a, m_k) + e(m_k, m_b). \quad (14)$$

Since in general, the distance used is generally Euclidean distance. Assuming that M_a, M_b is two r-dimensional modes, $M_a = (m_{a1}, m_{a2}, \ldots, m_{ar})^T$, and $M_b = (m_{b1}, m_{b2}, \ldots, m_{br})^T$, the Euclidean distance is defined as follows:

$$E(M_a, M_b) = M_a - M_b = (M_a - M_b)^T (M_a - M_b) = (m_{a1} - m_{b2})^2 + \ldots + (m_{ar} - m_{br})^2. \quad (15)$$

Figure 5 is a simple diagram of the Euclidean distance.

In addition to the Euclidean distance, there is also Ming's distance:

Assuming that M_a, M_b is an r-dimensional pattern vector, the distance between M_a and $M_b$is given by

$$E_p = \left[\sum_{k=1}^{r} m_{ak} - m_{bk}^p\right]^{1_p}. \quad (16)$$

Assuming that M_{ak}, M_{bk} represents the k component of M_a and M_b, respectively. Among them, when $p = 2$, Ming's distance is equal to the Euclidean distance, and when $p = 1$, it becomes the "neighborhood" distance, which is expressed as follows:

$$E_1(M_a, M_b) \sum_{k=1}^{r} m_{ak} - m_{bk}. \quad (17)$$

If all the values of the pattern vector take ± 1, it is a binary pattern, and the Hamming distance can be used to measure the dissimilarity between patterns. Assuming that M_a, M_b is an r-dimensional pattern vector, the Hamming distance between M_a and M_b is given by

$$E_h(M_a, M_b) = \frac{1}{2}\left(r - \sum_{k=1}^{r} m_{ak} \cdot m_{bk}\right). \quad (18)$$

Among them, when the values of each component of the two mode components are different, the Hamming component is r, and when they are the same, the Hamming component is 0.

The angular similarity function is expressed as follows:

$$S(M_a, M_b) = \frac{M^{T_a} M_b}{M_a \cdot M_b}. \quad (19)$$

Formula (19) refers to the cosine of the angle between the mode vectors M_a, M_b, which can reflect the feature of geometric similarity. When the value of the feature is 0, 1, $M_a^T M_b$ is the number of features shared between the two vectors.

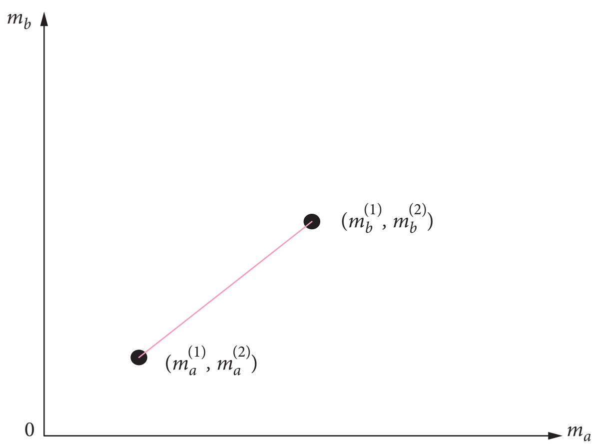

FIGURE 5: Schematic diagram of the Euclidean distance.

$$M_a \cdot M_b = \left(M_a^T M_a\right)\left(M_b^T M_b\right). \quad (20)$$

4. Experiment of the Financial Big Data Intelligent Service System

4.1. Scheme Design of the Financial Intelligent Service System. The financial service system is generally a system for supervising and coordinating the business activities of an organization or group. The intelligent financial service system based on big data involves many modules of Internet information, including expanded user access, login information identification, employee salary distribution, financial inquiry, online billing, online banking charges, central processing system, and database and execution operation modules. It involves all aspects of users' financial use.

In order to better understand the relevant achievement data of the financial big data intelligent service system, and to further reveal the practical development significance of the intelligent financial service system to enterprises and the public, this paper distributed questionnaires to students majoring in financial management in three universities in place A. Among them, the students in University X were the research objects of the experiment, and the students majoring in University Y and University Z were the experimental control group. A questionnaire survey was conducted. A total of 900 copies of the "Financial Big Data Intelligent Service System Questionnaire" were distributed, 300 copies were distributed to each college, and a total of 812 copies were recovered, of which 275 copies were collected by X college, 264 copies were collected by Y college, and 273 copies were collected by Z college. The effective recovery rate was about 90.2%.

The setting and analysis process of this questionnaire fully combine the Internet of things and computing methods for cluster analysis. In this questionnaire, 7 questions are set, and the sample data are analyzed in detail.

4.2. Discussion Results of the Financial Big Data Intelligent Service System. This questionnaire survey on the financial big data intelligent service system has set a total of 7 questions, including the respondents' own professional-level grasp, whether the financial service system needs to be intelligent, the practicability of the financial service system after big data intelligence evaluation, what is the prospect of the financial big data intelligent service system, whether the students can accept the intelligent financial service system, whether the students can adapt to the intelligent financial system better than the already employed salesmen, and whether the intelligent financial system can be better for customer maintenance.

4.2.1. Respondent's Mastery of Relevant Professional Level. According to the analysis process of the experiment, it can be seen that the respondents' own level of mastery of financial management-related majors is closely related to whether they can better understand the intelligence of the financial service system. Table 1 shows the professional level of the respondents.

It can be seen from Table 1 that among the students majoring in financial management in the three colleges and universities, most of the students' appraisal of their professional level is in the general or better range. There are 701 students, accounting for 86.3% of the valid questionnaires. Only some students think their professional level is poor. There are 111 students, accounting for 13.7% of the valid questionnaires. According to the data in the table, the professional level of the students in the X college is the best among the three colleges, and there are 252 students at the average and better level, accounting for 31% of the valid questionnaires. The professional level of students in University Z is in the middle of the three universities. There are 234 students at the average and better level, accounting for 28.8% of the valid questionnaires. The overall level of students in University Y is also good, but the students with poorer level are the most among the three universities, with 49 students, accounting for 0.06% of the valid questionnaires.

4.2.2. Whether the Financial Service System Needs to Be Intelligent. Students majoring in financial management's views on the intelligentization of financial service systems can illustrate the development trend of intelligentization of financial service systems. Figure 6 is a reference to the demand for the intelligent financial service system.

From Figure 6, it can be seen that students majoring in financial management generally believe that the financial service system needs to be developed intelligently. Particularly, the students from University Z, 223 people, agree with the intelligent development of the financial service system, accounting for 27.4% of the valid questionnaires. Of course, there are 212 people from X university in the experimental group who agree with the intelligent development of the financial service system, accounting for 26.1% of the valid questionnaires. Among them, there are also many students with negative attitudes, 188 people, accounting for 23.2% of the valid questionnaires. Analysis of the reasons shows that these students generally believe that the

Table 1: Respondents' professional level.

	Poor	Normal	Better
X	23	156	96
Y	49	173	42
Z	39	132	102

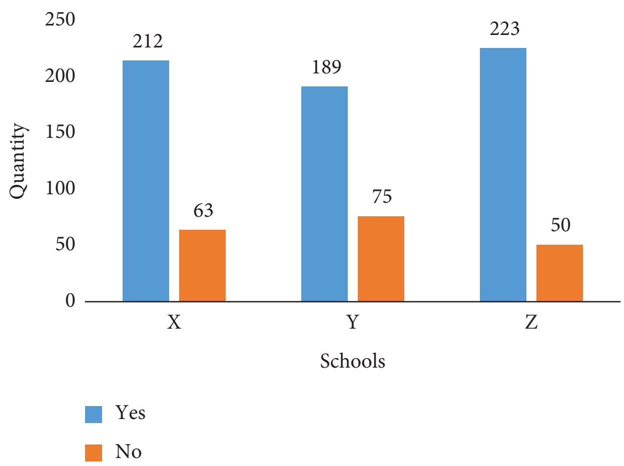

Figure 6: Financial service system intelligent demand reference table.

traditional financial service system has a clearer division of labor and a higher employment rate than the intelligent system.

4.2.3. Practicality Evaluation of the Financial Service System after Intelligentization. The most important evaluation factor for the intelligent development of the financial service system is its practical evaluation. Table 2 is the statistics of the evaluation data of the financial big data intelligent service system by the students.

It can be seen from Table 2 that most of the students have a neutral or good attitude towards the financial intelligent service system. There are 675 people, accounting for 83.1% of the valid questionnaires, and 137 people hold a disapproval attitude, accounting for 16.9% of the valid questionnaires. Analysis of the reasons shows that students who agree with the intelligent financial system have learned a lot about intelligent financial systems in the classroom. It is generally believed that intelligent service can bring a good service environment to customers, and can provide customers with more detailed personalized services. Most of the students who do not agree with it have had a short internship experience. They do not deny the intelligent development of the financial service system, but believe that the intelligent development is not perfect, and the development of the too intelligent system is difficult for customers who do not know much about the system. Therefore, it believes that the convenience of the intelligent financial service system needs to be further improved.

Table 2: Evaluation reference of the current students on the financial big data intelligent service system.

	Poor	Neutral	Better
X	42	125	108
Y	61	151	52
Z	34	116	123

Table 3: College students' views on the prospect of the financial big data intelligent service system.

	Decline	Neutral	Bright Prospects
X	36	125	114
Y	42	133	89
Z	25	97	151

4.2.4. Prospect of the Financial Big Data Intelligent Service System. Students majoring in financial management should have a keen attitude towards the development status and prospects of the financial system. Table 3 is the outlook of the students on the financial big data intelligent service system.

It can be seen from Table 3 that most of the students have a neutral or bright outlook on the development of the financial big data intelligent service system. There are 709 students, accounting for 87.3 of the valid questionnaires. There are 103 students who think that the development of system intelligence has no prospects, accounting for 12.7% of the valid questionnaires. An in-depth study of the reason is related to the intelligent evaluation of the financial service system. Most students believe that the intelligent system is convenient for life, so they are optimistic and supportive of its development prospects. A small number of students believe that the development of intelligence may only facilitate the efficiency of staff. For customers without relevant professional knowledge, it will undoubtedly increase the difficulty of understanding, which will easily cause the service system to struggle.

4.2.5. Whether the Students Can Accept the Intelligent Financial Service System. Students are likely to work in related industries after graduation, so they will become the main force in the financial system industry. Whether students accept the intelligent financial service system has a profound impact on the intelligent development of the system. Figure 7 shows the statistics of whether students can accept the intelligent financial service system.

It can be seen from Figure 7 that the students majoring in financial management in the three colleges and universities think that they can better adapt to the intelligent financial service system, and only a small number of students think that they cannot adapt. Analysis of the reasons shows that, on the one hand, it is related to the textbooks and lesson plans that colleges and universities are in touch with when teaching students of this major, and on the other hand, it is related to the students' own learning ability. The development of intelligent systems affects not only the objects, customers, and practitioners, but also students who are preparing to enter the industry. When the level of students

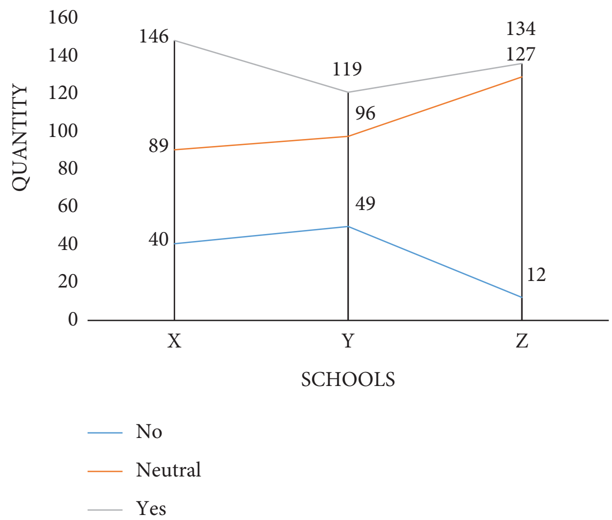

Figure 7: Statistics on whether students can accept the intelligent financial service system.

cannot keep up with the development of intelligent technology, it will greatly affect the further development of the financial system. Therefore, it is very important to provide students with professional knowledge training and professional skills training.

4.2.6. Whether the Current Students Can Better Adapt to the Intelligent Financial System than the Already Employed Salesmen. The knowledge learned by the students in school will be more intelligent than the knowledge and technology learned by the practitioners during the school, but the students in the school lack practical operation experience than the practitioners. Therefore, it is necessary to count whether the students in the school can better adapt to the situation of the intelligent financial system than the practitioners, as shown in Figure 8.

As can be seen from Figure 8, the overall situation shows that 567 students of financial management majors in the three colleges and universities think that they can adapt to the intelligent financial system better than those who have already practiced, accounting for 69.8% of the valid questionnaires. There are 245 people who hold a negative attitude, accounting for 30.2% of the valid questionnaires. Analysis of the reasons shows that students who think that they can better adapt to the intelligent development of the financial system are because the professional knowledge and skills training they have received in schools have been combined with the current social development status and because they think they can better adapt to the information age. Students who think that they cannot better adapt to the intelligent development of the financial system mainly think that their professional knowledge is not solid enough, and they have less practical training experience and are not clear about their future development goals.

4.2.7. Whether the Intelligent Financial System Is Better for Customer Maintenance. The main point of the financial system is to provide customers with convenient financial assistance functions, and whether the intelligent financial system can better maintain customers is one of the values of its intelligent development. Figure 9 is the evaluation of the students on whether the intelligent financial system can better maintain customers.

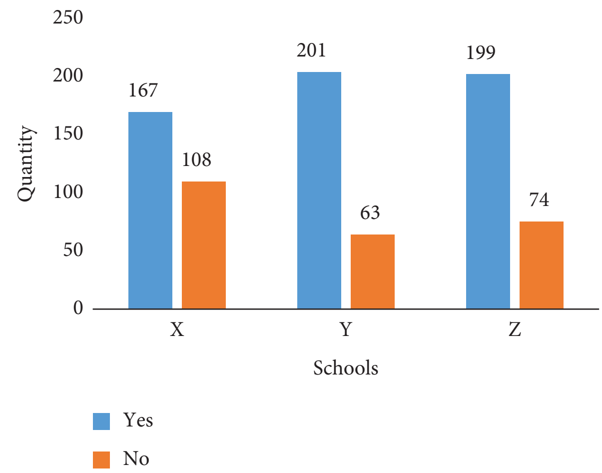

Figure 8: Whether the current students can better adapt to the intelligent financial system than the already employed salesmen.

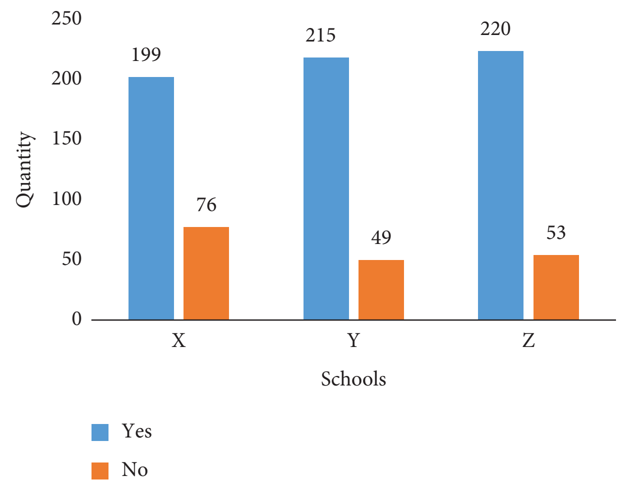

Figure 9: Students' evaluation of whether the intelligent financial system can better maintain customers.

According to Figure 9, students generally believe that only the financial service system can better maintain customers. Of course, there are also a small number of students who are against it. Students who think that the intelligent financial service system can better maintain customers think that the intelligent financial service system is more refined than manpower, and can better provide personalized services. Students with dissenting opinions believe that the systematic implementation of intelligent financial services must be carried out under the guidance of professionals with rich experience or the clients themselves have relevant financial knowledge. Otherwise, customers cannot adapt to the use of the intelligent financial service system.

4.3. Application of Cloud Computing of the Internet of Things to the Financial Big Data Intelligent Service System. Based on the analysis, it can be seen that the cloud computing for the IoT can be well combined with the financial big data intelligent service system. Development in the age of intelligence has enabled the financial big data intelligent service system to be analyzed from multiple perspectives, which can show the good development prospects of the financial big data intelligent service system in many aspects. However, due to the lack of in-depth learning of IoT cloud computing, this experiment only conducted questionnaire analysis on a total of 900 students majoring in financial management from three colleges and universities in place A, and did not analyze the specific groups of a school and the financial intelligence service system.

5. Discussion

This paper is devoted to the research of cloud computing-related algorithms of the IoT, and applied to the research of the financial big data intelligent service system. This is not only the expansion of the cloud computing of the IoT in the research field of the financial big data intelligent service system, but also the further exploration of the research on the financial big data intelligent service system, and a new attempt for the intelligent development of the financial service system. By conducting a questionnaire survey on 900 students majoring in financial management in place A, on the basis of the existing IoT cloud computing, the algorithm is improved and combined with the intelligent financial service system, and practical conclusions are obtained.

Through the exploration of this case, it can be seen that the method of analyzing the financial big data intelligent service system based on the cloud computing of the IoT is more scientific than the traditional method. The measurer further discussed the development of the financial big data intelligent service system by means of the IoT cloud computing, optimized the algorithm in the process of specific experimental exploration, and finally obtained the best solution for this experiment.

6. Conclusion

Through the analysis of the questionnaire survey, the following conclusions are drawn. The development of the IoT can promote the diversification of intelligent analysis methods. The related algorithms of the IoT cloud computing can be better combined with the research on the financial big data intelligent service system, and play a great role in the further detailed intelligent development of the financial service system. Through the questionnaire analysis of the students majoring in financial management, this paper drew the conclusion that the intelligent development of the financial system was an inevitable trend in the current society. However, how the financial service system can be developed more humanely and how can it better meet the needs of customers are a question worthy of constant exploration. Therefore, the innovation of the financial service system must improve the service concept, enhance the user satisfaction, and proceed from the actual needs of users.

Data Availability

Data sharing is not applicable to this article as no datasets were generated or analyzed during the current study.

Conflicts of Interest

The authors declare that they have no conflicts of interest with any financial organizations regarding the material reported in this manuscript.

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