Hindawi

Retraction

Retracted: Analysis of the Influence of Multimedia Information Fusion on the Psychological Emotion of Financial Investment Customers under the Background of e-Commerce

Advances in Multimedia

This article has been retracted by Hindawi, as publisher, following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of systematic manipulation of the publication and peer-review process. We cannot, therefore, vouch for the reliability or integrity of this article.

Please note that this notice is intended solely to alert readers that the peer-review process of this article has been compromised.

Wiley and Hindawi regret that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

[1] T. Zhu, "Analysis of the Influence of Multimedia Information Fusion on the Psychological Emotion of Financial Investment Customers under the Background of e-Commerce," *Advances in Multimedia*, vol. 2022, Article ID 2651580, 13 pages, 2022.

Research Article

Analysis of the Influence of Multimedia Information Fusion on the Psychological Emotion of Financial Investment Customers under the Background of e-Commerce

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With the gradual deepening of the research on financial investment, some data show that investors' limited rationality and self-psychological emotions do not always seek to maximize their own interests when making investment decisions, but lead to investment failure due to the influence of their bad psychological emotions. With the rise of e-commerce and the development of multimedia, multimedia information fusion and presentation are realized, and multiple terminals interact with each other in real time and effectively. It is in this context that this paper analyzes the impact of multimedia information fusion on the psychological emotions of financial investment customers in the context of e-commerce and formulates a correct and effective investment plan in line with financial investment customers. The results of the experiment are as follows: (1) the background of the current e-commerce development, the principle of multimedia information fusion, and the problems existing in the emotional impact of financial investment customers are analyzed, the research direction of the experiment is determined, and the target problem is analyzed according to the information fusion technology, which provides technical support for the research of this paper. (2) Among the existing multimedia information fusion design algorithms, Mgr fusion algorithm, advanced MCR fusion algorithm, multimodal fusion reordering algorithm, and trust function algorithm are introduced to compress and analyze the complex multimedia data information in different fields, which not only shortens the time required for a large amount of data information fusion. And The emotional data information of financial investment customers is efficiently counted and classified.

1. Introduction

Based on the concept of active document advertisement on the Internet, a new multimedia information fusion method is described, in which the metadata of the document is propagated in the network to find the document interested in the parent document, during which the original notification is transmitted to other documents. We call this technology XML language technology, and it is the focus of the use method. The diversified characteristics enable this technology to be applied to data information fusion, data mining exploration, and application in various industries. Any document information can be converted into dynamic documents and operated through this technology. If it is not any fulcrum in the dynamic network, it can be enhanced

through this technology, and the enhanced fulcrum can coexist with other nonenhanced fulcrums in the field [1]. A device apparatus for determining video content and sound information using media video and sound information is disclosed. The system includes an input unit that calculates an audio signal from data from at least two sound sensors. And an output unit that combines the audio signal obtained by the input unit with the video stream to generate a text message. The result analysis in the process of media video data information fusion is a part of system identification based on the speech mode of the voice system and the content in the video, and the speaker is determined by the speech mode. This integration operation exists in all aspects, including the analysis of a single sound signal and the combination of the sound data signal and the target document.

Based on the sequence generated by combining the audio information and the media content, the individual is then compared with one or more other individuals to generate data representing the linear change of the language used by the individual in a specific time, wherein the data includes a sorted list about the audio information and the media video content information [2]. The main objective of this work is to demonstrate the improvement of the combination of text prefiltering and image reordering in multimedia information retrieval tasks. The combination of the defined three-step retrieval process and the carefully selected visual and text technologies can help the developed multimedia information retrieval system overcome the semantic gap in each query. Five different late semantic fusion methods are discussed and tested in a real multimedia retrieval scenario, which is like the scenario provided by the public collection [3]. With the popularization of Internet technology and the wide use of digital cameras, many digital media 1 images are published and shared on various Internet platforms every minute. Internet images are often classified according to the subject of image content, and each subject content is described separately. In the face of a variety of media images and content, a challenging task is proposed to filter these images and content through an efficient data information filtering system, such as the classification or fusion of media images. This paper proposes a model based on multimedia information fusion and classifies images based on this model [4]. The construction module of the fusion monitoring system is established, and then, the actual process of the fusion monitoring is described by taking the tram running the red light as an example. That is, the system performs time-domain fusion on the image sensor and the trajectory sensor, respectively. Finally, the multimedia workstation performs spatial domain fusion on some results of time-domain fusion to determine the final decision result [5]. The development of behavioral finance provides an extension of the traditional model; that is, the irrational behaviors of venture entrepreneurs and venture capitalists have an important impact on the investment decisions of companies. Entrepreneurs' overconfidence may lead to the reduction of the company's value, but it may also make venture enterprises with negative net present value obtain investment, while entrepreneurs' positive and optimistic psychology can make enterprises obtain higher income in the future. The negative and conservative psychology of venture capitalists will lead to inadequate response in decision-making. The research helps people to analyze the decisions of venture capitalists and entrepreneurs in different emotional and psychological environments [6]. The research examines the mode of combining moral concepts with financial investment management market proposed by caixinwen today. Ethical investment models may be very effective in identifying popular models because they clearly contain ethical standards in addition to being more familiar with risk and return issues. However, there are two main contradictions when this model is put forward. The first is whether moral idealization can be fully integrated into the financial investment management market. The second is under what specific circumstances can we prove that the moral investment model is

successful and effective. These new investment models are different from the traditional economic models. The main characteristics of these new investment models are that the individual investment behavior will have corresponding economic consequences, and only through the judgment of the outside world can we obtain a trace of economic returns [7]. Consumers make important investment decisions throughout their lives. Although these decisions were once considered to be the exclusive domain of finance and economy, they also deserve the high attention of consumer researchers. First, consumption is closely related to wealth: consumption needs money, and money is used for consumption. No consumption theory can be complete without understanding how consumers manage their wealth. Second, investment decisions usually involve many financial interests and may have an important impact on the welfare of consumers. Finally, the investment decision itself is theoretically interesting. Although people may tend to regard it as a special consumption decision of financial products rather than traditional consumer goods, it is not clear whether investment decisions follow the same principles as those managing more traditional product decisions [8]. It is proposed that consumers' investment decisions involve promotion and prevention regulatory processes, which are managed in different psychological accounts, and different financial products are regarded as representatives of promotion and prevention. These phenomena occur because of the strong relationship between financial products and promotion and prevention. Therefore, the objectives of investors may be determined by the investment opportunities being evaluated, rather than being independent of these opportunities as assumed in the standard financial theory [9]. The scope of knowledge about the impact of the initial experience of fund management may be limited to a single choice. In addition, the experimental results are in good agreement with the proposed conclusions. For example, some studies show that successful experiences make people more inclined to action; some are the opposite. The findings of these two experiments corroborate the hypothesis that success or failure experience has an impact on people's financial choices, and the impact of success or failure depends on the type of tasks before financial decisions. The experimental results show that before the financial decision, the success or failure experience has an important impact on the participants' investment decisions. On the one hand, successful experience reduces the investment tendency of participants when completing financial tasks and improves their risk investment choice and savings tendency. This is because successful experience improves the possibility of participants to decide to invest, thus improving their investment decisions. The experience of failure reduces the willingness of participants to invest. The larger the amount of savings, the greater the investment tendency, and the higher the choice of venture capital. However, if it is not about the success of the fund management tasks, the experience will not have a positive effect [10]. In the context of e-commerce, for effectively expanding new customer channels and maintaining the attraction to old customers, it is precisely under this background that e-commerce appears. Compared with the old

management mode, the business mode in the e-commerce era is in line with the characteristics of the new generation and meets the needs of consumers. By using big data technology to collect consumers' information data, direct service, and planning strategies closer to consumers' lives, enterprises can obtain more advantages for enterprises in the e-commerce era [11]. Under the background of "Internet +", the development environment of agriculture on the Internet was analyzed, and two e-commerce models were studied, including the whole industry chain model of e-commerce for agricultural products of organic farms and the hierarchical model of county-level e-commerce service centers, and the two-way flow of agricultural products in Renshou County [12]. E-logistics is an open socialized logistics system. Each major participant in the system can make the best decision by obtaining relevant information by himself. The practice of e-logistics shows that under the background of e-commerce, the integration of informatization and traditional logistics will inevitably lead to the transformation of traditional logistics operation to e-logistics. Electronic logistics will be the development trend of the logistics industry, especially the express industry. It will have a profound impact on the development of China's circulation mode [13]. With the continuous development of information technology, the two-way communication between customers and enterprises has expanded from offline to online. In order to improve the customer relationship management under the background of e-commerce, this paper summarizes the history and current situation of railway freight customer relationship management (CRM), and analyzes the existing problems, namely, service concept, talent team, system mechanism, and information technology application level. Finally, from the aspects of cultivating professional customer service teams, establishing, and improving management mechanisms, and strengthening information system construction, the development suggestions of railway freight CRM are put forward to improve the railway freight CRM and freight marketing ability [14]. According to the actual demand, the logistics distribution routing algorithm is optimized. By establishing three-dimensional constraint model, the low energy of the old model is successfully optimized. Compared with the propagation algorithm, it can be found that the time consumption of the propagation algorithm is reduced by one quarter, and the comprehensive performance of the model is improved [15].

2. The Influence of Multimedia Information Fusion on the Psychological Emotion of Financial Investment Customers under the Background of e-Commerce

2.1. E-Commerce Overview.
The concept of e-commerce is relatively broad. In a narrow sense, it means that with the help of various software and hardware devices and powerful databases, a specific protocol facility is installed for network transmission, and then, the integrated commodity transaction behavior established and completed is realized through the network. It is also called network transaction.

In a broad sense, it mainly refers to all business-related activities completed by electronic means. It covers not only the past methods such as telephone and fax, but also the current computer network, communication network, and other tools. The contents covered are further expanded, including information disclosure, online payment, opinion expression, and data sharing, so the contents covered are very wide, It even includes medicine and health, various training and education, national defense, and military industry.

Overall, e-commerce is to complete online transaction and management with the help of network communication platform, improve the efficiency of commodity distribution, give the processing results after collecting customer opinions, and realize the whole process of service. E-commerce enables trade exchanges to quickly realize business communication, market promotion, product selection, and payment for goods without meeting each other in advance, thus greatly reducing transaction costs and effectively improving the efficiency of trade circulation. This is an advantage that cannot be compared with the past commercial activities.

2.2. Principle of Multimedia Information Fusion Technology.
The understanding of complex media semantics is very complex. There are many types of media semantics that need to be processed in media content analysis. Even if a variety of media features that can accurately describe media semantics can be obtained, it is still difficult to correctly understand media semantics. First, because there may be great differences between the specific cases contained in each type of media semantics and the typical media semantics in this category, many cases cannot be fully and accurately described. For example, the conversation scenes in movies and television may be two people talking, three people talking, or more people talking. Even the two people's conversations, film and television performances are very different. Second, for a particular type of media, it has a certain degree of commonality or complementarity. However, in practical application, the characteristics of different types of media are often different and even contradictory. This makes the analysis more difficult. In this case, it is particularly important to extract the fixed form semantics of media through media content analysis. Semantic understanding requires flexible matching of massive features and handling of exceptions and exceptions.

As shown in Figure 1, the template introduced here is a logical concept. In fact, it is to package various knowledge and processing required for media content analysis. Media analysis is usually realized in a specific formal way. If we study it, we can call this technology "general model framework (GMM).". It is flexible, easy to expand, and easy to combine with other related fields. In practical application, adopting a specific template will involve many complex problems, such as template expression and template management.

The multimedia information fusion thread is responsible for integrating the collected original video data with the customer's psychological and emotional information, so that the multimedia information can be saved as video data. In order to achieve this goal, after analyzing the characteristics of different types of multimedia information, a fusion
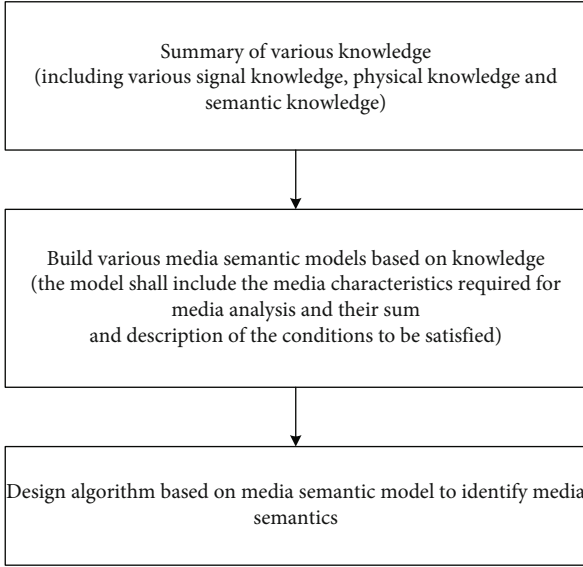
FIGURE 1: Steps of multimedia fusion analysis.

method based on fuzzy logic control and neural network model is proposed. The method can select appropriate fusion parameters according to user requirements. Because the temperature and humidity information are scalar data and can be expressed in pure numbers, only the integration process of customer psychological and emotional information is detailed, and the information processing methods are completely consistent.

As shown in Figure 2, after the initialization is completed, the customer's emotional information is first generated into dot matrix data. The data information from the customer is hexadecimal. If it is merged with the image, it needs to be converted into a dot matrix consistent with the video image first to complete the replacement of the image data at the expected position.

3. The Influence of Multimedia Information Fusion on the Psychological Emotion of Financial Investment Customers in the Context of e-Commerce

3.1. Mgr Fusion Algorithm. If the selection of training samples is not enough to cover all occasions, or the distribution and test samples differ greatly, the accuracy of weight setting will be greatly affected, and then, the fusion effect will be affected; LR and other methods have the same effect on fusion results regardless of the number value. Therefore, this paper proposes a method to determine the weight coefficient in the hybrid video retrieval system based on the improved particle swarm optimization (PSO) algorithm and the combination of LR and BP neural network.

In the score function representing the confidence, the score acting on a ranking is monotonically decreasing, and $f(x)$ is monotonically decreasing. The mathematical expression is as follows:

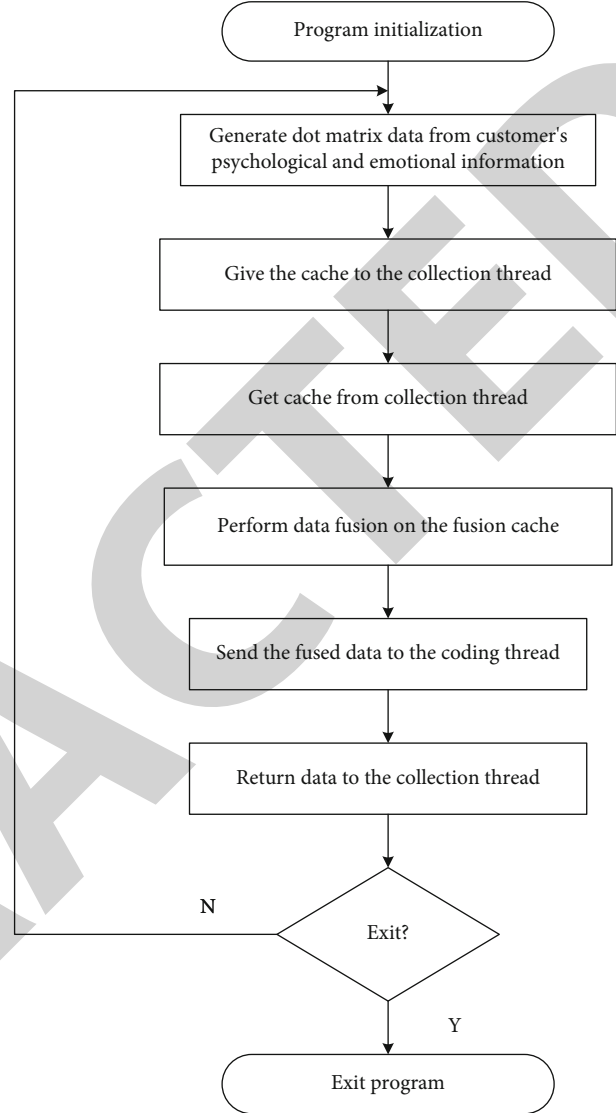$$x_i \leq x_j (1 \leq i \leq j \leq J) \Rightarrow f(x_i) \geq f(x_j). \tag{1}$$

FIGURE 2: Flow chart of information fusion thread.

Let $f(x)$ be a function defined in the interval I. If for any two points x_i and x_j in I, the convex function conforms to the following mathematical expression:

$$f(\lambda x_i + (1 - \lambda)x_j) \leq \lambda f(x_i) + (1 - \lambda)f(x_j), \tag{2}$$

Namely

$$f(x_i) \geq f(x_j) \Leftrightarrow f(x_i) \geq f(\lambda x_i + (1 - \lambda)x_j), \tag{3}$$

where λ means a rational number between (0,1). A rational number is a general term of integers and fractions and is a collection of integers and fractions. In the analysis of Mgr fusion algorithm, if there is a rational number that makes the inequality of formula (3) hold, then it can be changed to any real number in the interval (0,1).
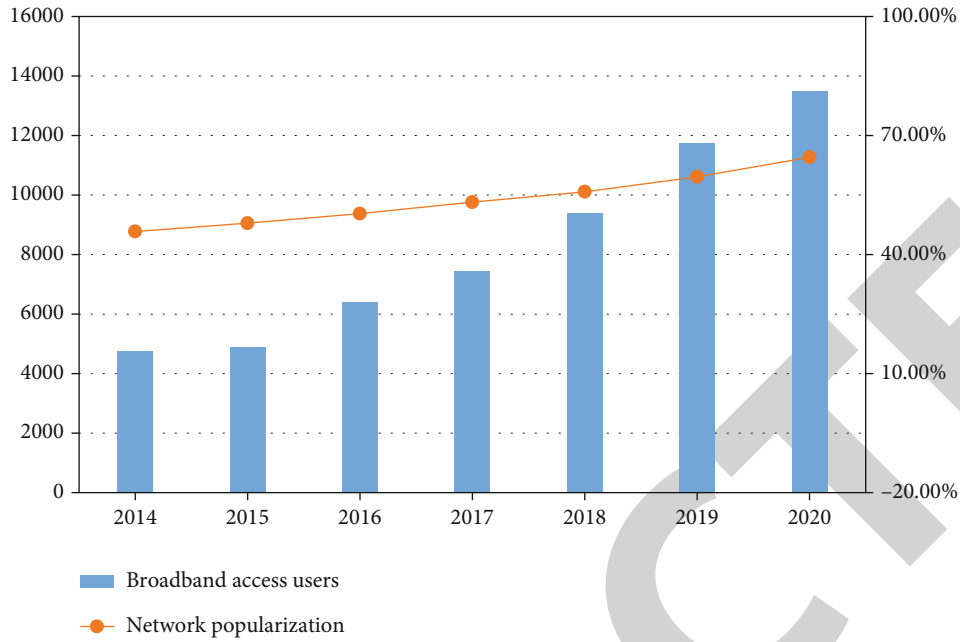
Figure 3: Number of the Internet penetration and broadband access users from 2014 to 2020.
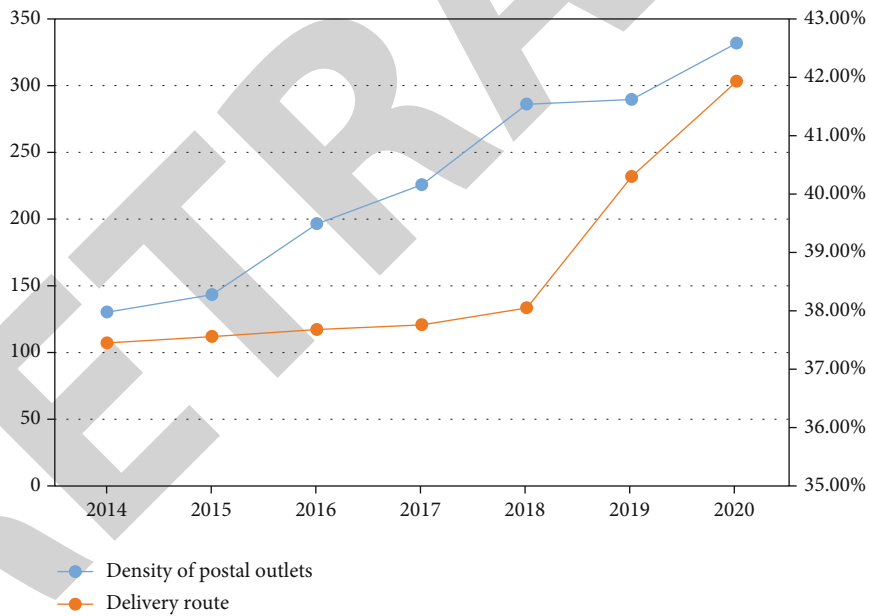

Figure 4: China's delivery routes and postal business network density from 2014 to 2020.

For any sort vector x_i and x_j, the equivalent mathematical formula combining monotonicity and convexity is as follows:

$$f(x_i) \geq f(x_j) = \max \left\{ f(z): z \in \Omega_{x_i, x_j} \right\}. \quad (4)$$

The Mgr score function is based on the lowest ranking and performs linear fusion on all subsets constituting the classifier. It is a very effective method because only one classifier needs to be selected in each subset to achieve high performance.

But at the same time, there are some disadvantages such as large amount of calculation and not suitable for multiclass problems. Therefore, f is a single sort fractional function, and the mathematical expression is

$$f\left(r(\theta) = x_1, \cdots, r(\theta) = x_j\right) = \sum_A -w_A \min \left\{ x_j : j \in A \right\}. \quad (5)$$

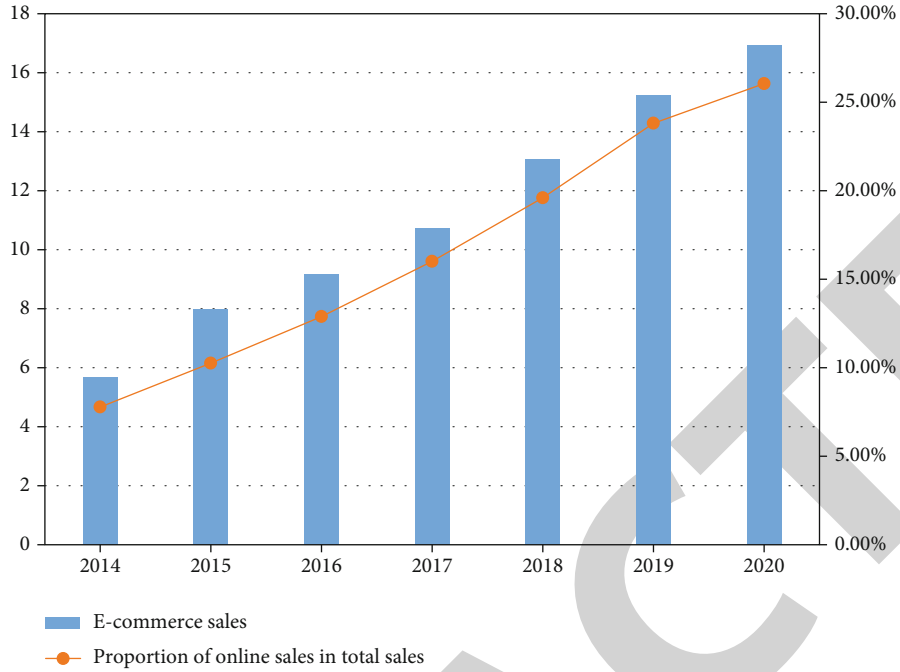For example, considering the case of two classifiers, the

FIGURE 5: Statistics of the proportion of e-commerce online sales in total sales from 2014 to 2020.
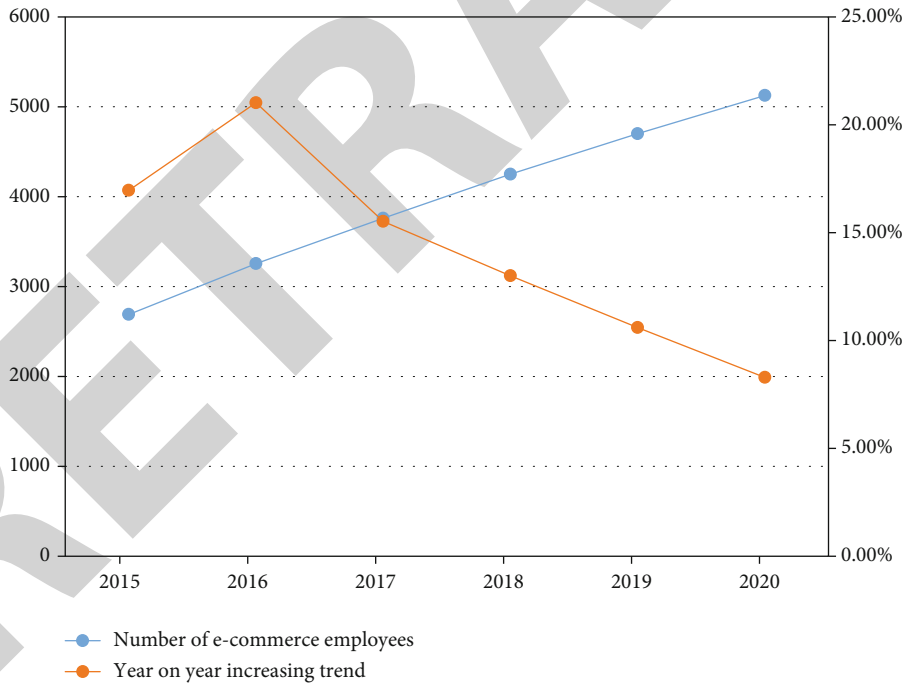
FIGURE 6: Statistical chart of increasing trend of e-commerce employees.

score function is expressed as

$$f(x_1, x_2) = -w_1 x_1 - w_2 x_2 - w_{12} \min (x_1, x_2). \qquad (6)$$

The relation between negative weighted concave function and F is similar to convex function. It is proved that any two fractional functions can be described by this conclusion when $p \longrightarrow \infty$. If $x = 0$, the coefficients of all nth order nonlinear terms are positive or negative. The sublayer set of convex function is always convex function. The fractional function in the cone is equivalent to

$$f_{x_{q_1} \leq x_{q_2} \leq \cdots \leq x_{q_j}} = - \sum_{q_1 \in A}^{n} w_A x_{q_1} - \sum_{q_2 \in A, q_1 \notin A}^{n} w_A x_{q_2} - \cdots - w_{q_j} x_{q_j}. \qquad (7)$$

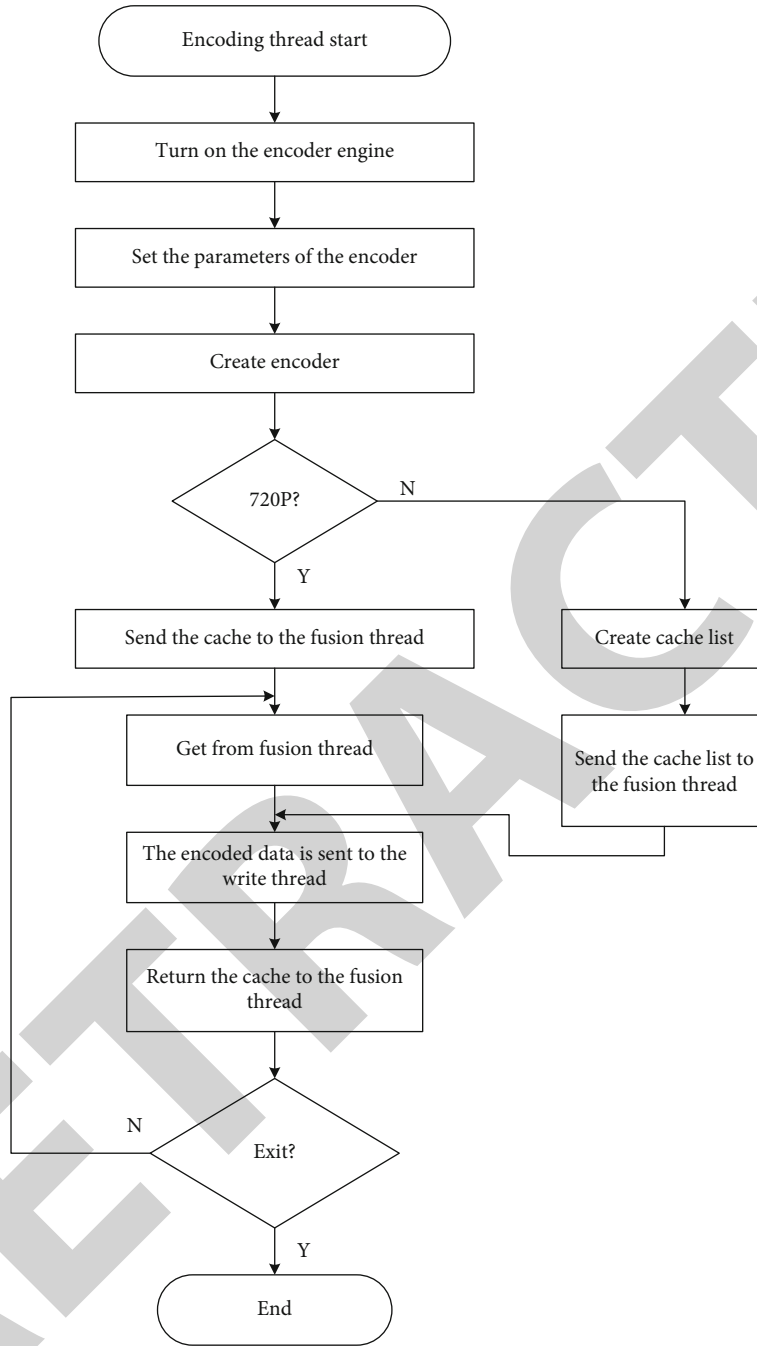FIGURE 7: Brief flow chart of compression coding thread.

Therefore, it is linear on each vertebral body and is a piecewise linear function. We found that for each vertebral body, its boundary can be divided into two parts for training and classifier sorting. When each parameter of the trained neural network model has a certain value, they will get a good classification result. Finally, this paper summarizes and prospects. Equation (7) determines the position of each vertebral body in space by using the boundary score value.

Therefore, this ordinary fractional function has continuity, and can be considered as a linear partition curve gauge, all of which can be ranked.

The fusion rules are

$$f_l\left(r_l^{\ 1}(x), r^2_{\ l}(x), \cdots, r_l^{\ M}(x)\right) = \sum_{m=1}^{M} w_m\left(r^m_{\ l}(x)^{-b_m}\right). \quad (8)$$

3.2. Advanced MCR Fusion Algorithm. The advantage of MCR algorithm over other fusion algorithms is that when the classifier is fused, the influence of arranging small

TABLE 1: Syntax of Nal unit identification code.

Identification code	Nal unit type
0, 24-31	Undefined
5	Supplementary information
7	Sequence parameter set
8	Image parameter set
9	Separator
10	Sequence terminator
11	Stream terminator
12	Fill data
13-23	Reserved code

sequence numbers on confidence is strengthened.

$$f_l\left(l_k^1(x), l_k^2(x), \cdots, l_k^J(x)\right) = \sum_{j=1}^J \lambda_j p_j\left(l_k^j(x)\right), \lambda_j \geq 0. \quad (9)$$

For the common elementary continuous differentiable functions, some researchers have selected the negative exponential power function and the exponential function with base <1 as the trial calculation object. Among them, the logarithmic function of the elementary function has many characteristics that other functions do not have, and it has many advantages in calculation. This paper will make some comparative analysis of exponential function and negative definite series. Definition and operation when a variable is positive (or negative), its corresponding positive term is zero. This is the exponential function. This function is

$$p_j(\alpha) = \log_{cj}\alpha. \quad (10)$$

The specific fusion function is

$$f_l\left(l_k^1(x), l_k^2(x), \cdots, l_k^j(x)\right) = \sum_{j=1}^J \lambda_j \left[\log_{cj} l_k^j(x)\right]. \quad (11)$$

3.3. Multimodal Fusion Reordering Algorithm

3.3.1. Hierarchical Clustering Results. Specifically, if a's text-based search system returns 30 initial searches in a query, the 30 shots are rearranged in ascending order according to the following distance metrics:

$$md(a_i, A \setminus a_i) = \min\left\{d\left(a_i, a_j\right)\right\}. \quad (12)$$

The meaning of $d(\cdot, \cdot)$ is called Oder distance in mathematics. It is the most common measurement method in calculating distance. The essence of its calculation is about the absolute distance between two points in different dimensions. It can also be determined that the actual target distance to be calculated in the n-dimensional space or the length between vectors.

For various reasons, it is often necessary to match multiple samples, and each group of samples has its own different characteristics. If there is no effective way to combine the two, obviously, how to calculate the similarity between sample sets is a problem we have to face. The mathematical expression of the distance is defined as

$$hd(E, C) = mean_{e \in E}\{\min\{d(e, c)\}\}, \quad (13)$$

where $hd(E, C)$ is a directed Hausdorff distance from e to C. Hausdorff distance refers to the longest distance that an opponent must reach the other group from a point selected in one of the two groups. In other words, it is the largest of all distances from a point in one set to the nearest point in another set.

3.3.2. Multimodal Cooperative Inference Strategy. It is assumed that if a shot exists in multiple high-level classes of modal space at the same time, the shot is highly related to the query requirements and located in front of the new result list. In addition, since each category has its own corresponding attribute value, there is also correlation between them. Therefore, when we want to retrieve these data sets from different dimensions, we need to consider this correlation and then merge the two hierarchical class sets into a unique list through the following rules:

$$Rank(A_i) > Rank(A_m), \text{ if } i < m, i, m = 1, .., N, \quad (14)$$

$$Rank(B_j) > Rank(B_m), \text{ if } j < n, j, n = 1, .., N. \quad (15)$$

Therefore, the classification method is adopted to distinguish, and the accuracy is as follows:

$$Rank(A_i \cap B_j) > Rank(A_m \cap B_m), \quad (16)$$

$$f(i + j) = (m + n) \text{ and } hd(E, A_i \cap B_j) < hd(E, A_m \cap B_m)). \quad (17)$$

Finally, based on the proposed improved algorithm, the multiview video sequence retrieval is realized. Experiments show that this method has better performance than the traditional multiview video indexing method.

3.4. Trust Function Algorithm. The degree of trust of the user can be determined by calculating the degree of correlation between the user and other users. At present, there is no algorithm for this field. In order to solve this problem, we propose a new method. First, the set of frame elements concerned by the user is defined, and then, the corresponding index tree is established based on the set. According to the user's query intention, we group each frame and divide it into different blocks. Each block corresponds to a frame element. This paper proposes a new method to determine the user's trust in frame elements and defines the corresponding number of levels.

$$m(A_i) = \frac{Rank(A_i)}{\sum_{A_k} Rank(A_k)}, \quad (18)$$

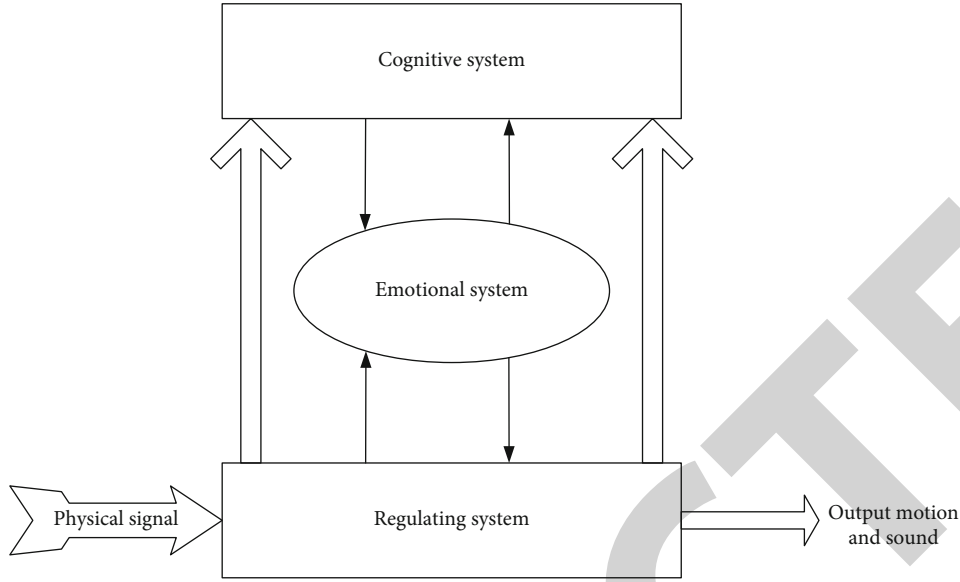where $Rank(A_i)$ represents the trust level of the system on

FIGURE 8: Information processing system.

frame element a, which is selected from {1,2,3}. The larger the number, the higher the level. The smaller the distance, the greater the trust level, and the larger the number of assignments. Therefore, after the ranking is confirmed, three ranking numbers can be assigned to three frame elements.

By defining the basic trust probability distribution function, the mathematical expression is

$$\sum_{A_k} m(A_k) = 1. \tag{19}$$

If we further assume that

$$m(\phi) = 0. \tag{20}$$

DS theory holds that the trust value of the system for a frame element is determined by the trust function, which is defined as

$$\text{Bel}(C) = \sum_{B \setminus B \subseteq C}^{n} m(B). \tag{21}$$

That is, for a set C, the trust degree is obtained by adding the initial trust probabilities of all the subsets it contains. To verify this result, we extend it to N nodes. This paper mainly studies the network intrusion detection system based on random forest algorithm and gives the corresponding implementation method. The mathematical expression is

$$\text{Bel}(C) = m(C). \tag{22}$$

The data results show that the algorithm has good performance. On this basis, we can also generate a list of results for quality improvement. Therefore, the key issue is how to effectively integrate the multiple evidences, so that those shots that are most likely to be related are in the leading position.

$$m_{1,2}(C) = \frac{\sum_{A \cap B}^{n} \{m_1(A) \cdot m_2(B)\}}{1 - K}, \tag{23}$$

$$K = \sum_{A \cap B = \phi}^{n} \{m_1(A) \cdot m_2(B)\}. \tag{24}$$

The meaning of parameter K is the degree of conflict between the evidences of both sides of the measurement target and the data set C, and $1 - K$ reflects that the conflicting sets caused by the evidences are completely eliminated. Therefore, in essence, it indicates that the shots in C must be considered relevant by both parties, and thus, the most relevant shots can be guaranteed to be in the front.

4. Experimental Investigation and Analysis on the Influence of Multimedia Information Fusion on the Psychological Emotion of Financial Investment Customers in the Context of e-Commerce

4.1. Background Analysis of the Development of e-Commerce. The development of e-commerce originates from the Internet. Therefore, its subsequent development also depends on the popularity and application of the Internet and also needs supporting infrastructure such as warehousing and logistics and e-payment.

The depth and breadth of e-commerce development are also related to the perfection of relevant supporting facilities. The coverage rate of express postal outlets, the popularization of electronic payment technology, and the reconstruction of rural roads all provide software and hardware infrastructure guarantee for the development of e-commerce. Among them, the coverage rate of express outlets and the length of postal delivery lines are particularly basic.

TABLE 2: Types of cognitive customers' emotional deviation.

| Classification	Meaning	Primary coverage
Heuristic simplification	Customer investment often simplifies the empirical thinking rules of the information processed	Attention, memory, and simple processing
Lie to oneself	Overestimate the accuracy of knowledge	Overconfidence is a typical cognitive bias
Emotion management	Vulnerable to external influences	Fear of the unknown
Mutual communication	Paying too much attention to the behavior of others	Conversation between people
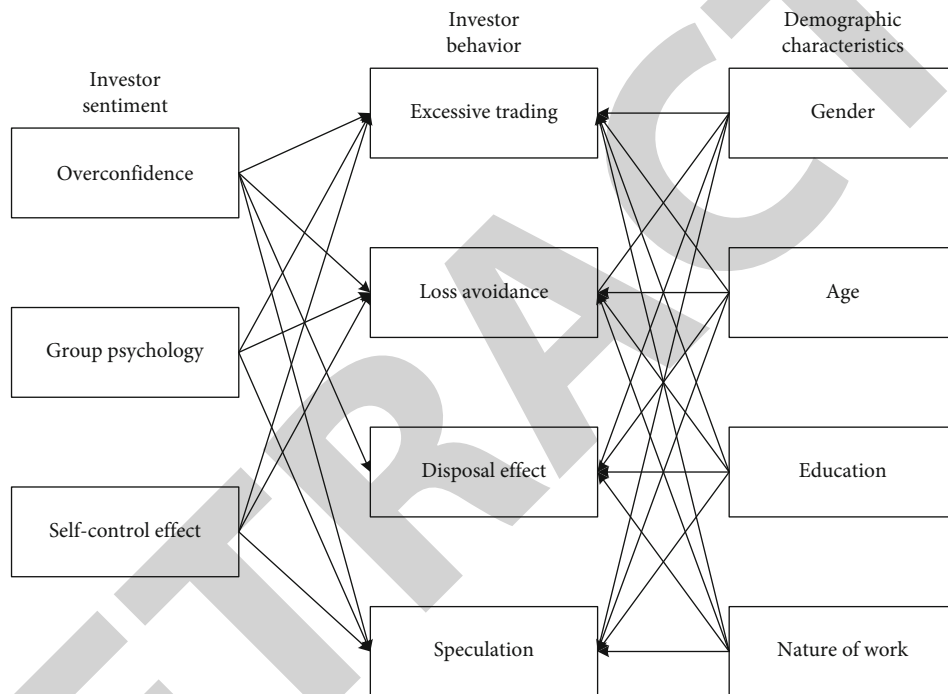
FIGURE 9: Structure of questionnaire evaluation model.

The key link for e-commerce to be able to carry out offline circulation is the popularity of express outlets. The coverage rate of postal business outlets in China shows an upward trend year by year.

As shown in Figure 3, the development trend of the number of broadband access users and the Internet penetration rate between 2014 and 2020 is analyzed. The visual graph shows that the two are showing an increasing trend of development within six years, indicating that the Internet is gradually running through people's lives.

As shown in Figure 4, the density of China's delivery routes and postal service outlets from 2014 to 2020 can be seen from the overall development trend that the density of postal service outlets and delivery routes is increasing year by year, especially the delivery routes have a leap increase in 2019.

More and more residents choose online shopping as an important channel for consumption activities. China's e-commerce sales keep growing rapidly. In 2020, the number of enterprises with e-commerce transactions was 109,400, twice that of 2014. Traditional retail enterprises also conform to the trend of digital economy and gradually carry out digital transformation. These growing trends show that the scale of e-commerce in China is expanding and the development momentum is strong.

As shown in Figure 5, from 5.67 trillion yuan in 2014 to 16.93 trillion yuan in 2020, the proportion of China's online retail sales in the total retail sales of consumer goods has been rising in recent years, from 7.78% in 2014 to 26.05% in 2020, with a rapid growth rate.

Figure 6 shows the growth rate of e-commerce employees from 2015 to 2020. The development trend in recent years is analyzed from the number of e-commerce employees and the year-on-year growth rate. The number of e-commerce employees is increasing year by year, and the year-on-year growth rate is increasing first and then decreasing.

TABLE 3: Pearson analysis of investor sentiment and investment behavior.

	AR1	AR2	AR3	AR4	AR5
Additional transactions					
Relevance	-.094	.088	.174	.134	.209
Significance	.071	.090	.001	.010	.000
Profit seeking					
Relevance	.110	.161	.262	.102	.110
Significance	.035	.002	.000	.051	.034
Processing results					
Relevance	.165	.028	.012	.145	.288
Significance	.001	.587	.826	.005	.000
Reduce losses					
Relevance	.065	.066	.164	.011	.032
Significance	.211	.203	.002	.839	.540

TABLE 4: Data of investor regression model.

Model	R value	R square	F value	Sig value	DW value
1	0.372	0.138	9.655	0.00	1.816

The cache is accessed by the write thread. The disk storing the encoded data is placed in the execution queue. When receiving a write instruction, start to read the contents of the read thread cache, if not, stop reading data and return to step.

As shown in Table 1, this coding format and the corresponding decoder structure and hardware implementation method are given, and their performance is analyzed and compared. It can also be applied to other occasions where redundant data storage is required. The last 5 bits identify the nal unit type.

The data in the cache handle is read by the collection thread for next use. Based on open CV image processing library, the research and implementation of real-time video coding method based on multiresolution technology are completed. Based on motion detection, a new moving target extraction algorithm is designed.

The visual information in the figure shows that in 2020, and the number of people engaged in e-commerce in China has reached 60.16 million, an increase of 19% compared with that in 2019, highlighting that e-commerce industry has become the main direction for people to choose work. The prominent sign of the development of e-commerce level is various e-commerce platforms, the number of which increases year by year and deeply affects people's consumption patterns.

4.3. Experimental Analysis of the Influence of Multimedia Information Fusion on the Psychological Emotion of Financial Investment Customers

4.3.1. Analysis on the Psychological Emotion of Financial Investment Customers. Authentication system is the most important mechanism in the securities market. It is composed of cognitive system and regulatory system and has two functions: one is to control the market, and the other is to guide the market. Therefore, from the perspective of cognitive psychology, combined with the theory of securities investment, this paper makes a preliminary discussion on the relationship between cognitive psychology and securities market. Firstly, the related literatures at home and abroad are reviewed. Then, the main points are put forward.

As shown in Figure 8, the information processing system in Figure 8 is mainly composed of a cognitive system and a regulating system, which perform conversion and regulation. The regulating system senses physical signals and then outputs them as motion and sound.

With the application and development of cognitive psychology in the field of investment, people increasingly realize that cognitive bias is not an absolute objective existence, but conditional and can be overcome. Some people also advocate eliminating cognitive bias through training. However, psychologists have found that investors' cognitive bias is common and will be relatively reduced rather than disappear.

As shown in Table 2, the types of cognitive customers' psychological and emotional biases are explained in terms of heuristic simplification; self-deception; personal, psychological, and emotional management; and mutual communication.

Figure 9 shows the structure chart of the questionnaire evaluation model, which analyzes the relationship between

4.2. Figure 6 Statistical Chart of Growth Rate of e-Commerce Employees. Multimedia information processing is mainly composed of two parts: compression coding processing and network packaging transmission. Because there are a lot of redundant data in the network, they must be compressed in the network transport layer.

When the compression coding thread starts executing, it is initialized first. There are two kinds of initialization: one is initialization before the program runs, and the other is initialization during program execution. The former needs to be realized by programming, while the latter does not. A lot of work is usually done during initialization. In addition to the initialization of some handles, there are also codec engine startup, codec parameter settings, and codec parameter settings.

As shown in Figure 7, we can know from the flow chart that it is divided into three parts: thread initialization processing, compression coding main loop processing, and thread end processing, which are described separately.

The main parameters of the codec are image size, coding speed, color space used for input data, coding bit rate, and number of B frames between reference frames. After determining the appropriate codec parameters, you can start to write the video coding algorithm examples. The collection thread is started by scanning the 720p cache list. When it is detected that the 720p meets the video standard, the collection thread will be triggered, and then, the collection thread will start working. This completes the real-time decoding process of a complete video stream without taking up the processor time to perform any task.

Table 5: Investor sentiment and over trading regression model indicators.

| Model | Nonstandard coefficient | | Standard number | t value | Sig | Multicollinearity data | |
	B	Standard error	Beta			Tolerance	VIF
Constant	1.303	.292		4.466	.000		
Overconfidence	-1.31	.075	-.096	-1.746	.082	.795	1.257
Group psychology	-.029	.066	-.024	-.422	.659	.783	1.277
Self-control effect	.131	.051	.133	2.550	.011	.881	1.136
Stock overconfidence	.173	.060	.145	2.872	.004	.931	1.074
Investment overconfidence	.194	.049	.200	3.978	.000	.942	1.061

Table 6: Results of gender difference t-test.

Variable	R value	P value	Check	T value	Sig	Mean value
Excessive trading	.005	.943	Yes	-.192	.848	No
Speculation	.005	.941	Yes	-.760	.448	No
Disposal effect	.094	.760	Yes	.096	.923	No
Loss avoidance	.170	.681	Yes	-.134	.894	No

the three main contents of investor sentiment, investor behavior, and demographic characteristics.

4.3.2. Analysis on the Psychological Emotion and Decision-Making Behavior of Financial Investment Customers. The purpose of correlation analysis is mainly to investigate whether there is mutual influence between variables, but not to indicate whether there is causal relationship between variables. Based on the establishment of panel data simultaneous equations econometric model, this paper makes an empirical study on industrial economic growth and energy consumption in China by using cointegration analysis method. The results show that there is a long-term equilibrium relationship between them. The short-term fluctuation is small and there is no causal relationship. First, the rationality of the model hypothesis is judged by correlation analysis, and then, the collinearity test is determined according to the correlation degree of the variables.

The data show that among the five investor sentiment variables, overconfidence of stock purchasing power is closely related to speculative behavior and disposal effect, and their respective close relationship indexes are 0.12 and 0.175, respectively. The correlation between herd mentality and speculative behavior is significant, and the correlation coefficient is 0.171. The self-control effect is related to excessive trading, speculation, and loss avoidance, and their corresponding close relationship indexes are 0.183, 0.274, and 0.175.

As shown in Table 3, AR1, ar2, Ar3, AR4, and AR5, respectively, represent overconfidence in stock resale ability, blind following, personal psychological emotion management, overconfidence in stock sales, and overconfidence in investment profits.

Using the data of China's securities market, a multivariable multiple regression analysis model based on two-stage estimation method was established, and the results were tested. The empirical results show that the model has a good fitting effect. We select the investors' excessive trading, speculative behavior, disposal effect, and loss aversion behavior as dependent variables, and the investor sentiment as independent variable to conduct multiple linear regression. We find that the three factor regression models of excessive trading, speculation behavior, and disposal effect are significant.

As shown in Table 4, the data table of the regression model of investor sentiment and excessive trading is collected, and the corresponding *r* value, *R* square, *F* value, SIG value, and DW value in model 1 are collected.

The data in the table shows that the sig value of the model is 0 and less than 0.05, which shows that the results of the model are significantly correlated, and the RS value is 14.8%, indicating that the psychological emotional variables of financial investment customers selected in the experimental study only explain a small part of the excessive trading variables. If it is necessary to clearly analyze the decisive factors affecting the excessive trading behavior, it is necessary to conduct deep-seated research.

As shown in Table 5, the regression model indicators of investor sentiment and excessive trading are listed. According to six kinds of investor's psychological emotion models, the nonstandard coefficient, standard number and *t* value, SIG value, and the corresponding coefficient of multicollinearity data and their differences are statistically analyzed.

It is widely used in statistical inference and research because of its simple, intuitive, and easy to implement. The basic idea and application of independent sample *t*-test are introduced. An example is given to illustrate how to apply the model to practical problems. According to the requirements of hypothesis test, the independent sample *t*-test method was used for gender difference test.

As shown in Table 6, the results of *t*-test for gender difference are statistically analyzed from four different variables: *R* value, *P* value, whether to test, *t* value, SIG value, and whether to mean value. Considering the target value of *R* value statistical factor and event occurrence probability *P*, if the event occurrence probability *P* value is greater than 0.05, it can be judged that there is no significant difference in the methods between the two parties.

5. Conclusion

First, this paper introduces the e-commerce overview of the impact of multimedia information fusion on the psychological emotion of financial investment customers in the

context of e-commerce, the principle of multimedia information fusion technology, and the implementation of multimedia information fusion technology. Then, it introduces the theme and research background of this article and mainly analyzes the impact of multimedia information fusion on the psychological emotion of financial investment customers in the context of e-commerce. Then, it introduces the algorithm formula of the influence of multimedia information fusion on the psychological emotion of financial investment customers in the context of e-commerce, mainly including Mgr fusion algorithm, advanced MCR fusion algorithm, multimodal fusion reordering algorithm, and trust function algorithm. Finally, the influence of multimedia information fusion on the psychological emotion of financial investment customers under the background of e-commerce is investigated and analyzed experimentally. Based on the analysis of the combination of the new e-commerce background, the use of multimedia information fusion technology can more efficiently, quickly, and intelligently analyze the psychological emotional reaction changes of financial investment customers. Therefore, the correct investment management method can be formulated for each financial investment customer.

Data Availability

The experimental data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declared that they have no conflicts of interest regarding this work.

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