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Research Article

Practicability of Sports Goods in the Sports Field Based on Artificial Intelligence Technology

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People are in the intellectual age. The use of technologies such as smart search engines, machine translation, fingerprint analysis, facial scanning, and self-driving makes people's social and work lives happier. The intersection of artificial intelligence and other projects has also become the focus of research in the new era. This article uses comparative experimental methods and sampling methods, puts forward the evaluation method of association rules in the recommendation of sports goods, and compares the selection of sensors used by the five types of sports companies in the sports experiments. In the experiment part, according to the minimum confidence level, the two rules are met. Minimum confidence is a threshold defined by users or experts to measure confidence, which represents the lowest reliability of association rules. The conclusion is that 30% of users have bought running shoes and hiking shoes at the same time and 66.6% of users have also purchased sports suits; there are also sports suits purchased at the same time. All mountain bike users have bought sports gloves. The weight of Freescale is 0.2530, the weight of Bosch is 0.4457, the weight of ST is 0.0946, the weight of VTI is 0.0953, and the weight of Konix is 0.1114. The experimental results show that the selection result of the three-axis acceleration sensor is the SMB380 model of Bosch.

1. Introduction

Artificial intelligence technology started late in China, but it started early in foreign countries. In these years, artificial intelligence research has risen again. Artificial intelligence is being used in more and more industries [1, 2]. Automated driving has brought a shift to the transportation sector. Smart robots are expected to control the pharmaceutical industry using an identification algorithm to help police arrest suspects. In allocating technological resources, artificial intelligence has advanced in all areas and will cause a huge change for society in the future [3–5]. In addition, the United States, Japan, the United Kingdom, China, and other global scientific and technological powers have joined forces to explore artificial intelligence and present relevant strategic plans to improve artificial intelligence nationwide. Artificial intelligence is currently evolving rapidly. Scientists hope to develop an agent that can think independently to simulate human intelligence and hope to realize further research on human intelligence through the study of intelligent machines.

The development trend of modern sensor technology can be analyzed and summarized from four forces: first, the development of new materials, new processes, and new sensors. Second, realize the multifunction, high precision, integration, and intelligence of the sensor. Third, realize the miniaturization of sensing technology hardware system and components. Fourth, realize wireless networking through the cross integration of sensors and other disciplines.

From a practical point of view, it is easier to see the moral issues of people related to the rapid development of artificial intelligence technology. Artificial intelligence technology includes disciplines such as an AIS system in medicine, the application of mechanical design, the practice of war, and space travel. The real goal of artificial intelligence research at this stage is to increase the potential of computers so that

computers can mimic the human brain and perform various functions on machines, thus producing robots. But as we often say that technology is a double-edged sword, the problem of technological alienation will not be completely eliminated, but it must be covered and improved through continuous technological progress. Therefore, at the practical level, we must correctly treat humans in the development process. The ethical problems brought about by smart technology must be avoided, and appropriate corrective measures must be taken at the appropriate time. Only by combining practical and theoretical foundations can we develop better, which means we must always do well. Take preventive measures and preventive mechanisms before serious problems arising in the application of artificial intelligence and recognize the dual problems of technology and rationality, which is of great practical significance to the progress of human life, science and technology, and civilization.

Khatib and Ahmed put forward nine major factors that have caused digital disruption in the domain of the sports, including the impact of AIS on athletes, competition rules, training quality, and training results. But his research did not propose a strategy for sports media people to respond to the above changes [6]. In April 2018, Naslund et al. conducted a comprehensive analysis on the concept, design, and studies and advances in AIS; its beneficial and adverse effects on life, medical care, finance, and other fields; and how to shape the future of artificial intelligence. But his research did not compare the policy layout measures [7]. Of course, the ethical issues designed at the artificial intelligence level are also considered at the level. In their research, Cheng and Mitomo pointed out that humans need artificial intelligence and cannot be afraid of the destruction of the science fiction plot. They put forward a "Turing test" on morality and explore some questions about the ethics of robots, describing the establishment of moral robots. However, their research did not provide constructive opinions on feasible solutions [8].

The innovations in this article are as follows. (1) The methodological description of research policy simplifies the whole process of the genetic algorithm, explains the purpose of the operation of the genetic algorithm, and explains the whole text theoretically. (2) The technical risks of artificial intelligence are analyzed and an ethical discussion and explanation of the industry are conducted. (3) The packaging was taken into account in the selection process, and the table was explained twice. The research on the practicability of sporting goods in the field of sports based on artificial intelligence technology designed in this paper is better than the traditional research on the practicability of sporting goods in terms of algorithm accuracy and experimental methods.

2. Method of Practicability of Sports Goods in the Sports Field Based on Artificial Intelligence Technology

2.1. Definition. The emergence of artificial intelligence stems from people's demand for upgraded manufacturing and use of tools. In recent years, "artificial intelligence" applications have been springing up like rain, permeating all aspects of our lives [9] and people have more and more channels to understand it. From the conceptual description in Hollywood sci-fi movies to the production model of real manufacturing [10] to the use of products in life, its development once led the trend of electronic intelligence in this era [11], such as robots, expert intelligence, unmanned vehicles, and the integrated combination of smart home appliances and smart phones, affecting our daily behavior. The rapid evolution of science and innovation has allowed us to enter the era of synthetic engineering. So, how is artificial intelligence defined [12]?

A general reference to AI is the technical sciences that study and develop methods, techniques, and operation for the simulation of the system, expanding and improving mankind wisdom [13]. Computer science is also at the forefront of computer science and technology. Although it is a computer science subject, it also covers the sciences [14], psychology, linguistics, logic, cognitive science, behavioral and mathematical sciences, computer science, and management. Domainology [15] can be said to be a multidisciplinary subject [16]. According to many experts, they all hope for a uniform interpretation of the concept of "artificial intelligence" [17], but the meaning is not the same from the perspective of technological evolution [18]. "Father of artificial intelligence", Dr. John McCarthy, has examined artificial intelligence to determine the behavior of machines based on human behavior [19]. MIT's Professor Winston believes that AI is the study of how you can use a computer to perform logical tasks that only people from the past can perform [20]. Toyoaki Nishiten, the former president of the Japanese Society for Artificial Intelligence and a professor at Kyoto University, uses "intelligent devices" or "mind devices" to define artificial intelligence. Japan's top artificial intelligence expert, Professor Song Wei Feng of the University of Tokyo, believes that artificial intelligence is human-like computer with discovery and perception functions made by artificial methods and its manufacturing technology. The opinions of experts generally reflect the basic functions and content of artificial intelligence technology, and its emergence is of epoch-making significance.

In different ways of thinking [21], most of us have a rather vague understanding of artificial intelligence. When we talk about artificial intelligence, we are referring to representative high-tech devices similar to robots [22, 23]. However, the biggest difference between the two lies in artificial intelligence. It is equivalent to the brain of a robot and is not limited to its brain. Therefore, in essence, artificial intelligence is an artificially constructed intelligent human device that simulates human thought and consciousness. After experiencing the trough, artificial intelligence has now entered a new stage. As humans demand for intelligent applications in the future, more uses of artificial intelligence will be introduced to humans [24]. Table 1 is the policy documents and main content related to artificial intelligence.

Table 1: AI-related policy documents and their main contents.

Year	Documents	Important content
2015	The state department on the active advancement of the "Guiding Opinions of the Internet" operation	List AI as one of the point actions
2016	"National Economic and Social Development Plan of the People's Republic of China"	Focus on breakthroughs in major big data and critical cloud computing skills
2016	Internet + AI three-year action implementation plan	Speed up the growth of AI sector
2017	Technological Innovation 2030-Major Project	The term artificial intelligence first appeared in government reports
2017	New generation artificial intelligence development plan	Layout of artificial intelligence at the national level
2017	Promote the new generation of AI industry to push the development of the 3-year plan of action	Push the integrated growth of AI and the real economy

2.2. Physical Training in Sports Scientific Surveillance. At present, the way of surveillance athletes' body function can be broadly classified into three types: one is through the observation of coaches or participants' own voluntary assessments, e.g., conscious exercise vigor meter. The second is to evaluate the functional status according to the changes in athletes' physical functions through exercise load experiments. The third is to quantitatively assess the physical condition of athletes through the analysis and detection of physiological and biochemical indicators such as blood, urine, and sweat and determine exercise intensity according to changes in blood lactic acid, urine protein, and other markers [25]. According to blood sugar, changes in blood fatty acids, blood ammonia, and other markers are used to understand energy usage, and changes in some factors are used to judge the body's adaptability. Training load assesses an athlete's ability to function with immune-measuring devices such as lymphocytes, proteins, serum, and saliva. The third approach is accurate, objective, and quantitative and reflects the athlete's physical activity. Nevertheless, the outcomes of these metrics are not the same across movements [26]. Traditional and standardized control methods such as haemoglobin, glycaemia, breast acid, and immunoassays are complex and expensive and are only available in the laboratory or with little detail. Of particular importance for the science of sports training is the development of control methods with high sensitivity, high performance, and ease of use. Life sensor is highly flexible, very professional, and easy to use. It is capable of controling various characters properly during sports training. You can also constantly monitor the direct movement of the sensor. Thus, the use of life sensors in motion tracking is widely viewed [27, 28]. The clustering hypothesis usually means that the samples in the same cluster are more likely to have the same sample category label. According to the definition of the clustering hypothesis, the decision boundary of the sample category should be passed in the area with relatively sparse data as much as possible; otherwise, the sample points in the dense area of the cluster may be divided into both sides of the category decision boundary. This is the mark for distinguishing the sample category. Under the setting of the clustering hypothesis, the function of a large number of unlabeled samples in the training sample set is to divide the boundary between the dense and sparse regions of the data distribution in the sample space. Cases with a higher chance of ranking than this level were considered positive with double classification as well as those with a chance of being classified as negative below this level. Similarly, if different threshold values are selected, different pairs (FPR, TPR) are generated to obtain the operating curve (0.0), (1.1), which is the binary ROC curve classification [29].

2.3. Strategy and Methodological Description. The first is the general approach and background and after that data mining technology and algorithm research. Explain in detail the basic concepts and algorithms of data mining in data mining technology, association rules, and cluster analysis. Enter the web data mining and suggestion system, for example, the basic concepts and classifications of network mining, as well as a detailed description of each category, and link analysis and link library link analysis algorithms in network mining technology. An online recommendation system is designed for sports products. For example, the network uses a mining architecture to collect network data and preprocess the data. The knowledge discovery department uses cluster analysis and network analysis. SOLAP analyzes and visualizes the results, which is convenient for users to understand. Online proposal combines clustering algorithm and association rules and analyzes and proposes based on URL process. The functional structure and mining process of the online bidding system are proposed, cluster analysis and correlation analysis on the market behavior and browsing behavior of online shop users are adopted, and corresponding suggestions are given. Finally, a summary is made. The analysis block diagram is shown in Figure 1.

Next, the genetic algorithm is explained and simplified.

In a transaction database, an item set is a collection of items that appear together in certain transactions. A data set containing i elements is defined as a set of i series objects. In this data set, by adding the frequency of certain elements to the rule, the frequency of other transactions can be derived.

Assumption $I = \{i_1, i_2, \ldots, i_m\}$: DB is a collection of transactions, and transaction T represents a single transaction in DB. Suppose X is an item set, and the association rules are as follows:

$$X \Rightarrow Y. \tag{1}$$

Sometimes recommendations based on association rules are not as good as randomly generated recommendations.

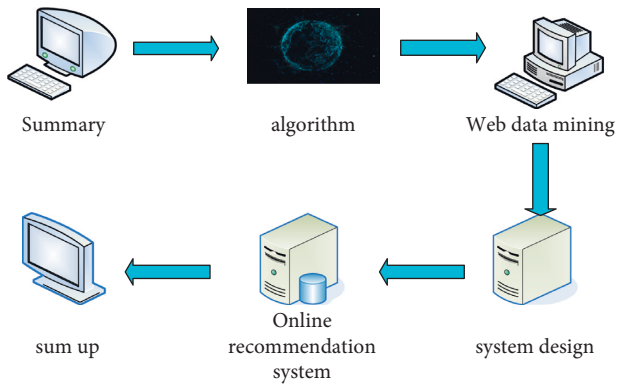

Figure 1: System flow chart.

For this reason, this article introduces a measure called lift, which compares the lift value of different rules to measure whether the rule is meaningful and judge the meaning of the rule and its magnitude. It is calculated as follows:

$$\begin{aligned} \text{Lift}(X \Rightarrow Y) &= c(X \Rightarrow Y)/s(Y), \\ &= (s(X \Rightarrow Y))/(s(X) * s(Y)). \end{aligned} \tag{2}$$

Frequent item sets refer to the sets whose support is greater than or equal to the minimum support (min_sup). Support refers to the frequency of a set in all transactions. Based on the frequent item sets generated in the first step, then studying the association rules between each item, at this stage, if the rules are

$$\{x_1, x_2, x_3\} \longrightarrow x_4. \tag{3}$$

Then, the rule confidence is in the following formula:

$$c = s(x_1, x_2, x_3, x_4)/s(x_1, x_2, x_3). \tag{4}$$

Therefore, it can be defined that a strong association rule is a rule with a confidence c greater than a given threshold.

We can get

$$S_j' \in A_k^b. \tag{5}$$

Therefore, it can be considered that the best point is likely to fall into the string, which is used as the optimization space for the next generation, and the corresponding variables are

$$\begin{cases} x_i \in \begin{cases} \left[x_i^L, x_i^U\right] & i \neq k \\ \left[x_i^{'L}, x_i^{'U}\right] & i = k \end{cases}, \\ \left[x_i^{'L}, x_i^{'U}\right] = \begin{cases} \left[x_i^L, x_i^U\right] & b = 0 \\ \left[x_i^{'L}, x_i^{'U}\right] & b = 1 \end{cases}. \end{cases} \tag{6}$$

Supplement

$$x_k^m = \frac{1}{2}\left(x_k^l + x_k^u\right). \tag{7}$$

Move the optimization space: in order to avoid losing the optimal solution in the process of reducing the optimal space, the driving distance can be taken as $2d_k$, where d_k is the distance between two adjacent different points in the x_k direction:

$$d_k = \frac{x_k^u - x_k^l}{2^{n_k} - 1}. \tag{8}$$

The moving method is to adjust the boundary:

$$\left[x_i^L, x_i^u\right] = \begin{cases} x_k^L - 2d_k, x_k^U - 2d_k & b = 0 \\ x_k^L + 2d_k, x_k^U - 2d_k & b = 1 \end{cases}. \tag{9}$$

The fitness function is directly converted from the objective formula:

$$F[f(x)] = \begin{cases} f(x) \\ -f(x) \end{cases}. \tag{10}$$

In the boundary construction method, the following transformations are made for the problem of finding the minimum value:

$$F[f(x)] = \begin{cases} C_{\max} - f(x) & f(x) < C_{\max} \\ 0 & f(x) \geq C_{\max} \end{cases}. \tag{11}$$

Change to the maximum value algorithm:

$$F[f(x)] = \begin{cases} C_{\max} + f(x) & f(x) > C_{\min} \\ 0 & f(x) \leq C_{\min} \end{cases}. \tag{12}$$

Thus, this essay uses a hereditary method to generate different k values through genetic selection, crossover, and mutation algorithms. The ultimate goal is to obtain meaningful frequent sets of order $n+1$ that can form relevant rules. This article aims to eliminate weaknesses. Large association rules can be supported to a certain extent. Here the objective function of genetic algorithm is

$$s(A, B) - s(A *) > D. \tag{13}$$

3. Experiment and Analysis

3.1. Realization of Association Rules in Sports Goods Recommendation. YAAHP is an auxiliary software of analytic hierarchy process and fuzzy comprehensive evaluation method. It provides help in model construction, calculation, and analysis for the decision-making process using analytic hierarchy process and fuzzy comprehensive evaluation method.

Take, for example, ten products in an online sporting goods store. Each purchase of the user is regarded as a transaction, and a specific time period is set. By using YAAHP software, the calculation results are output in PDF format. Take ten goods in online sporting goods stores as an example. Each purchase by the user is regarded as a transaction and a specific time period is set. If the market behavior is marked as 1, then if there is no market in this time period, it is marked as 0. Table 2 lists ten selected products and their respective codes.

Table 2: Sporting goods list.

Number	Kinds	Code
1	Sneakers	A1
2	Hiking shoes	A2
3	Sports suits	A3
4	Treadmill	A4
5	Mountain bike	A5
6	Ridding gloves	A6
7	Fishing rod	A7
8	Camping tent	A8
9	Rowing machine	A9
10	Dumbbells	A10

The transaction data set is established for the purchase behavior of the above-mentioned commodities, and the association rules are mined according to the association rule algorithm a priori. In order to dig out valuable information, the minimum support is set to 30%, and the minimum confidence is 60%. If the minimum support is set too high, there will be fewer effective association rules; if the minimum support is set too low, there will be too many effective association rules. Frequent counting can record the maximum number of objects contained in an object group in a rule. The first mining: the frequent count of any product purchase is greater than 3, and the obtained frequent item set 1 is shown in Table 3.

Second mining: the frequent counts of two item sets are greater than 3, and the obtained frequent item sets 2 are shown in Table 4.

The third mining: the frequent counts of the three item sets are greater than 3, and the frequent item sets 3 obtained are shown in Table 5.

According to the minimum trust level, these two rules are consistent. The conclusion is that 30% of users bought running shoes and hiking shoes at the same time, 66.6% of users also bought sportswear, sports uniforms, and mountain bikes. Simultaneously, they bought sports gloves from users. According to similar calculation results, if a user purchases or browses a sports suit, the user can be provided with sports shoes, running shoes, hiking boots, mountain bikes, and sports gloves. In recent years, sporting goods market has developed rapidly. In particular, the sales of famous foreign sporting goods companies in China have maintained double-digit growth every year. The Chinese market has become the second largest market for these large companies outside the United States. Generally, the higher the market share, the stronger the competitiveness. The representative ones are Nike and Adidas. Table 6 shows the market share of China's sporting goods.

In the comparison of different models of the same brand, in the selection of BMA020, BMA150, and SMB380, the indicators for comparing BMA020 and SMB380 are shown in Table 7.

SMB380 is better by comparison of the products of five manufacturers as shown in Table 8.

3.2. Artificial Intelligence and Application Examples. Table 9 shows the current types of AI.

Table 3: Frequent set item 1.

Number	Code	Frequent count
1	A1	9
2	A2	11
3	A3	8
4	A5	4
5	A6	15
6	A7	6
7	A8	5
8	A10	16

Table 4: Frequent set item 2.

Number	Code A	Code B	Frequent count
1	A1	A3	6
2	A5	A6	4
3	A7	A8	4
4	A1	A2	7
5	A2	A3	6
6	A3	A10	6
...	...	...	...

Table 5: Frequent set item 2.

Number	Code A	Code B	Code C	Frequent count
1	A1	A2	A3	2
2	A3	A5	A6	3

Table 6: China sports products market share list.

Company	Market share (%)	Rank
Nike	22	1
Adidas	21	2
Lining	16	3
Anta	12	4
Puma	7	5
Kappa	6	6
Converse	4	7
Reebok	2	8

3.3. Comparison of Decision Consistency. The target layer-criterion layer judgment matrix constructed based on expert information is input into the YAAHP software. Figure 2 is a comparison of the importance of the decision-making target acceleration sensor. It is the result of the operation in PDF format after inputting the complete judgment matrix between each layer. Because $CR = 0.0800 < 0.10$, the judgment matrix has acceptable consistency. In the acceleration process, the sensor obtains the acceleration value by measuring the inertial force on the mass and using Newton's second law.

Next, the sensitivity of Freescale, Bosch, St, VTT, and Konix is tested. The relative size of the displacement rate of the detection sensitivity indicator relative to the measured change. The detection sensitivity is a sign to measure the physical instrument. The sensitivity is shown in Figure 3.

Table 7: Index comparison of BMA020 and SMB380.

Type	Application field	Precision	Offset (mg)	Free fall detection	Support application expansion
BMA020	Pedometer	Poor	220	Negative	Negative
SMB380	Navigation	Better	60	Positive	Positive

Table 8: Comparison of five manufacturers' products.

Brand	Bosch	Freescale	Konix	ST	VTI
Sensitive	64LSB/g	64LSB/g	125 mg/count	1024LSB/g 360LSB/g	1000count/g 1333count/g
Range	2/4/8 g	2/4/8 g	2 g	2/6 g	2 g
Encapsulation	3.0 ∗ 3.0 ∗ 0.9	3.0 ∗ 5.0 ∗ 1.0	5.0 ∗ 5.0 ∗ 1.2	4.4 ∗ 7.5 ∗ 1.0	7.0 ∗ 7.0 ∗ 1.8
VDD (V)	3.3	2.8	2.8	3.3	2.5
IDD (mA)	0.20	0.40	0.75	0.65	0.20

Table 9: Typical cases.

Company name	Products	Skills	Application
Automated Insights	Wordsmith	Natural language processing, deep knowledge, and content identification	Used by AP to assemble and disburse business reports
Give Me Sports	Give me sports	Deep knowledge, content identification	Spider mail and sports news writing
Washington Post	Heliograf	Deep knowledge, content identification	Coverage of digital-focused news in the field of sports
Narrative Science	Quill	Natural language processing, deep knowledge, content identification	Machine automatic narrative
The New York Times	Visual API tool	Graphic identity recognition	Detect picture features and compare text messages
The Guardian	#Open001	Deep knowledge, content identification	Gather, organize and publish messages within technical support networks

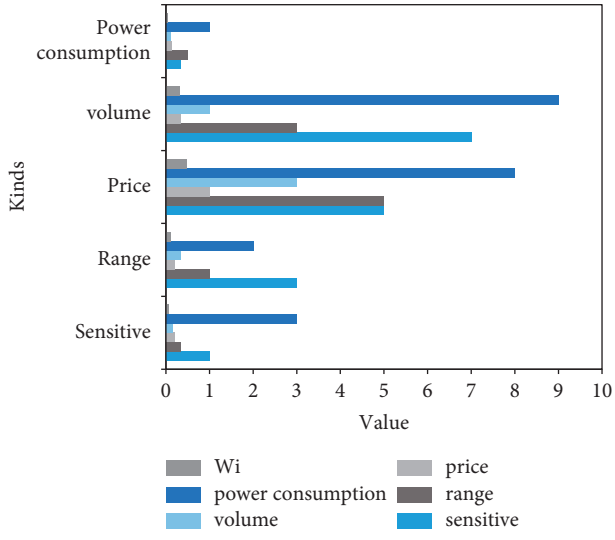

Figure 2: G-C judgment matrix for the selection of acceleration sensor.

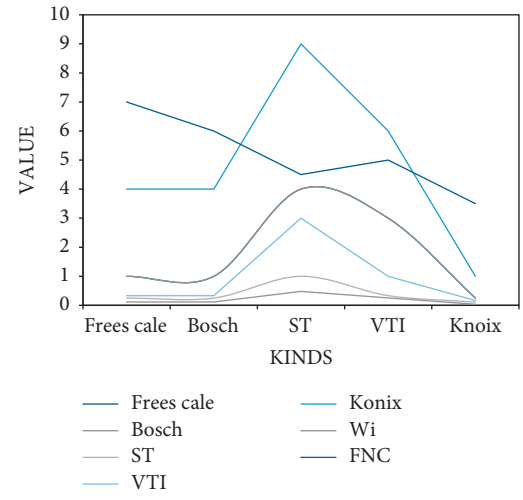

Figure 3: Judgement matrix for the relative importance of the sensitivity of the criterion level at the scheme level.

Decision goal refers to the goal that the decision-maker wants to achieve. The decision-making objectives must be clear, specific, and realistic. If the goal is not clear, marketing activities will lose the direction of efforts, resulting in ineffective operation. Combining the comparison of the index system and according to the comparison results of the product manufacturers of the five manufacturers in the table, analyze the relative advantages of each brand product in the design level relative to the sensitivity of the decision-making target, and determine a sensitivity level crisis table. The range and price in the table are shown in Figure 4.

The power consumption is shown in Figure 5.

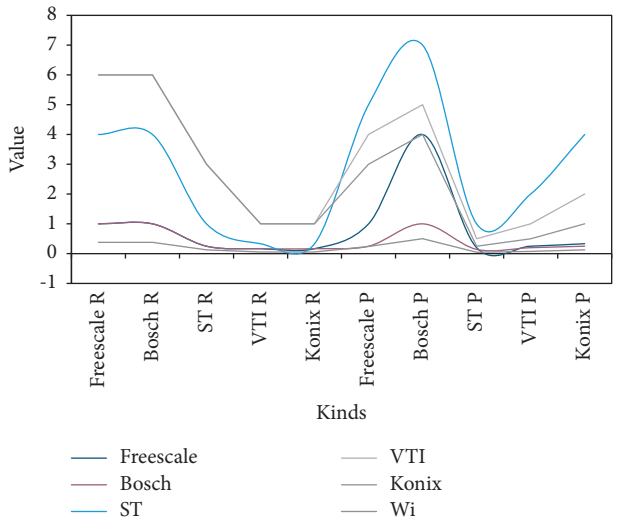

Figure 4: Judgment matrix for the relative importance of price and range at the criterion level at the scheme level.

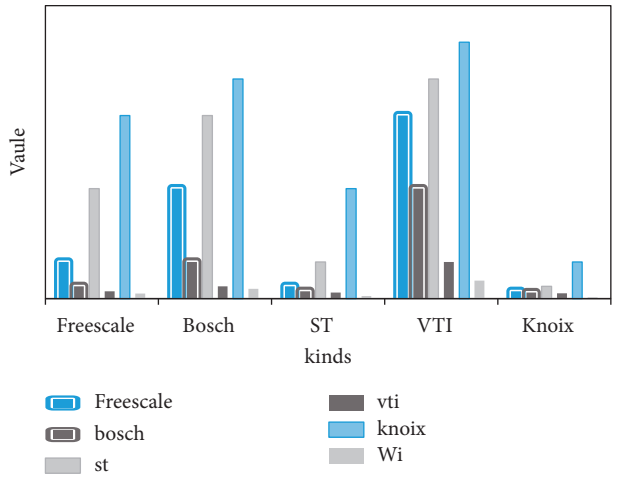

Figure 5: Judgement matrix for the relative importance of the power consumption of the criterion layer.

4. Discussion of Practicability of Sports Goods in the Sports Field Based on Artificial Intelligence Technology

4.1. Relationship between Artificial Intelligence and Technological Paradigm. It must start with a technical example. Since this concept comes from an "example," then we have to start with an example. Technological paradigm refers to a mode to solve the selected technological and economic problems, and these solutions are based on the principles of natural science. When Kuhn proposed the concept of "example," the definition of the concept itself was not clear. Kuhn has tried to correct this defect many times, but they have not gotten good results. Therefore, let us temporarily regard this example as "the research tradition that dominates or dominates a particular discipline." That is, the example is the core content of the community to supervise researchers in a certain field, and it is also a theoretical method to maintain the discipline as an independent scientific field. In fact, it is the inherent quality specification of a discipline. The technology example is a reference for the development of example technology. Therefore, technical examples can be regarded as the guiding existence of specific technologies in the development process. It not only retains the experience content accumulated in the development process, but also applies to the latter. Growth provides direction. In short, the technical example is the basic technical theory for the technical community to maintain the content of technical production in the process of technological development.

From the point of view of characteristics, the characteristics of examples are universal, scientific, historical, regional, and subjective. Because the technical paradigm is the development of paradigms in the field of economics and technology, the characteristics of paradigms also apply to technical paradigms, but the conditions for this formation still require the following points: independent subject areas and foundation of a technical community. The introduction of disciplines is also a subject introduction of basic theory.

4.2. Thinking Changes under the Evolution of Technological Paradigm. The so-called rational thinking is the way people use logic and judgment in the process of observing the inner essence and objective laws of things. It is based on human's perceptual knowledge of objective things, and through certain methods, it can be processed reasonably. It is an abstract process of searching for internal causes. This way of thinking not only exists for a long time, but also includes all aspects of human life.

With the widespread use of machines, the release of human resources has been realized, and the next step in development is the release of human thought. The study of human thought can be traced back to the seventeenth century. Starting from the British philosopher Hobbes, he proposed that "thoughts are calculable." In the 19th century, the German philosopher Leibniz introduced "universal language" and "thought calculation" under the influence of industrial society and culture, indicating that the way of thinking can be expressed through symbolic behavior. Their use of symbols for calculation has become a form of thought expression that can solve one or more problems. By establishing specific rules, through logical rigor, they can avoid semantic misunderstandings and make this rule more rigorous. From the internal domination of logical thinking to the wide application of external, this process led not only to the birth of computers, but also to a process that made people more rational.

4.3. Thinking about the Risks of Artificial Intelligence Technology. Threats to social order include unemployment, threats to public security, and threats to militarization. Threats to social morality include inequality in life, threats to the future survival and development of mankind, and threats to the condition of human subjects. The rupture of technical rationality and social rationality in external causes and the influence of social groups on risk perception both are technical dangers of artificial intelligence. Due to the rupture

of technology and culture, the development of modern technology has always lacked humanitarian reflection. Therefore, when developing technology, we must also consider the human factor and regard people as the bottom line of technological development. An example of new cars based on artificial intelligence are driverless cars that need to be able to adapt to unusual light conditions, unusual weather conditions, unusual road debris, unusual traffic patterns, unusual actions, and gestures made by humans.

Enhancing the exchanges between humanities and science and technology can be carried out in the following ways: First, when formulating science and technology policies, we must combine the suggestions of people in different fields, such as those in the humanities field. Technicians may expect to use technology more to bring about social changes or gain some power through technology, while ignoring the dangers that technology may bring to society. Humanities practitioners can analyze technology in advance before researching and developing it. For example, philosophers discussed the philosophical aspects of the dangers of artificial intelligence technology, providing a reference for the research. Secondly, by enhancing the humanitarian influence of technical personnel, artificial intelligence personnel can impart humanitarian knowledge in the research, enhance humanitarian thinking, and help reduce technical personnel's development of products that pose a huge risk to humans. Although the power of these proposals to change this reality may be limited, the role of humans in artificial intelligence technology will guide the development of artificial intelligence technology.

5. Conclusions

Experimental results show that the study of the suitability of sports equipment in sports based on artificial intelligence technology proposed in this article has a better statistical effect and more comprehensive statistical indicators than traditional technology. New information on artificial intelligence has been added. It is a relevant content of thinking about technological risks. In terms of interpretation and simplification of genetic algorithm, the simplified algorithm makes the integration rate of artificial intelligence technology and sporting goods good, and the objective function of the genetic algorithm is obtained. This document uses a collaborative laboratory approach and the sample collection method to make a comparative explanation of the consistency of decision-making. Compare the five manufacturers' products such as sensitivity, packaging, span and other indicators. The experimental results show that: according to the minimum confidence level, the two rules are in line, and the conclusion is that 30% of users have bought running shoes and hiking shoes at the same time, and 66.6% of users have also purchased sports suits; and also purchased sports at the same time. Users of suits and mountain bikes have bought sports gloves. The weight of Freescale is 0.2530, the weight of Bosch is 0.4457, the weight of ST is 0.0946, the weight of VTI is 0.0953, and the weight of Konix is 0.1114. Therefore, the selection result of the three-axis acceleration sensor is Bosch's SMB380 model product. The shortcomings of this article are: (1) The sample company only selects five product varieties, and the sample volume is not enough. In future studies, more sample sizes can be added for better selection and comparison. (2) The genetic algorithms designed in this article do not have separate control variables in the algorithm adaptation process. Although the actual experimental results have no effect, the reliability of the algorithm should be further investigated in future studies.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflicts of Interest

The authors declare no conflicts of interest.

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