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A Preliminary Study on the Application Mode of Internet of Things in Precise Service of Social Work

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Abstract: *Social work has covered all aspects of our social life, which has provided a lot of convenience for our lives. However, in the face of increasingly diverse needs, it is difficult for social work to accurately intervene in specific needs areas from different perspectives. However, the Internet of Things technology can effectively solve this problem, so it is necessary to conduct a preliminary research on the application mode of the Internet of Things in precision services for social work. The purpose of this article is to study the issues related to how to achieve precision services in social work. By combining the Internet of Things technology with social service work, a detailed analysis and research on how to use the Internet of Things technology to achieve accurate social work services is conducted. The main problems existing in social work services are analyzed, the feasibility of the application of the Internet of Things technology in precision services of social work is systematically discussed, and a comprehensive social work information service system based on the Internet of Things is proposed. The research results show that it is feasible to apply the Internet of Things technology to the precise service of social work, and the integrated service system of social work informationization based on the Internet of Things proposed in this article can effectively make social work quickly and accurately intervene in specific needs Compared with traditional social work, the efficiency is increased by 35%, and the service cost is reduced by 20%.*

Keywords: *The Internet of Things, Social Work, Precision Intervention, Integrated service system*

1. Introduction

Since the 1980s, driven by reform and opening up policies, China's economy has begun to develop at a high speed [1]. The rapid economic development relies more on the development of high-tech technology, and the Internet of Things is the third technological revolution in the information industry after computers, the Internet, and mobile communication networks, and it is another leap in the development of information technology [2]. Therefore, China has always attached great importance to the development of the Internet of Things technology, and the Internet of Things also represents the development direction of the next generation of information technology, which will bring profound changes to people's production, living and working methods [3]. From the essence of the Internet of Things, the Internet of Things is a convergent application technology that emerged after the development of Internet technology to a certain stage. It integrates various information sensing technologies, radio frequency identification technologies, communication technologies, Internet technologies, and mass data. The analysis and processing technology aggregates and integrates applications to form a huge network with comprehensive perception, reliable transmission, and intelligent processing characteristics, extending the range of information interaction from person to person to person to thing and between things and things, and finally achieving any time The information interaction between anyone and anything at any place creates a smart world with complete perception and complete control [4]. The development and application of the Internet of Things is still in its infancy. All countries and regions want to seize the opportunity of the Internet of Things, introduce policies, formulate policies and carry out strategic layouts, hoping to take the lead in the new round of the information industry revolution [5]. In 2004, Japan proposed the "U-Japan" strategy, while South Korea proposed a ten-year "U-Korea" strategy [6]. In 2009, the U.S. government paid great attention to the advanced concept of "smart earth" proposed by the company, and the EU and ETSI jointly released the "Internet of Things Strategy Research Road map ", identifying 18 major application areas that need to be broken through. The core technology, the Internet of Things, has been upgraded to a key development strategy in various countries and regions in the world [7].

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And social work also gradually has its own characteristics in the process of localization in China, and it has been active in all areas of social life. Social work is the work of people, and the nature of helping people can better serve various needs. To expand the scope of services through specific service items, to meet the diverse needs of various people with professional service methods, to guide the development of social work in China with scientific theory as the guide, and to be supported by professional workers Widely serving people from different types of groups, these favorable conditions have provided a guarantee for social work to accurately intervene in various service projects and meet the diverse service needs of our people [8]. The application of the Internet of Things technology to the construction of social work information, and the construction of a comprehensive social service information-based service system based on the Internet of Things will improve and strengthen the government's management and service functions, comprehensively improve people's work level and quality of life, and accelerate modernization. The inherent needs of urban information and the construction of a harmonious socialist society have far-reaching significance [9]. At present, in some developed countries and regions abroad, the process of information of social work has begun early, and development is also rapid. Some countries and regions with information have directly applied urban administration to social work. Information has greatly promoted the intelligent management and high-level services of social work [10]. The degree of community information in these countries and regions has reached a fairly high level, and relying on the active participation of community residents, it has gradually moved towards popularization, institutionalization, specification and standardization.

In order to enable social work to accurately intervene in specific demand areas from different perspectives, this article conducts a preliminary study of the application mode of the Internet of Things in social work precision services, and proposes a comprehensive social work information service system based on the Internet of Things . Among them, Tirziu A M introduced the Io T technology in detail, and pointed out the importance and feasibility of the Io T technology [11]. Khaleel Mershad put forward the application of the Internet of Things in the learning management system in his article, and explained the system construction based on the Internet of Things technology and the main technical problems, and made a solution to this [12]. Y. J explained in detail the feasibility of establishing an integrated service system for social work information based on the Internet of Things, and independently set up an information management system, and applied it to actual engineering, and obtained a large amount of experimental data [13]. You Z put forward some common problems in the Internet of Things technology, and proposed ideas for problems that may be encountered in building corresponding systems [14]. Spratt Trevor put forward some common problems in precision services for social work, and proposed ideas for the problems that may be encountered in achieving precision services in social work [15]. Houston proposed the importance of precision services for social work to social harmony, and it is essential to carry out related work [16]. Sattler A F proposed social work in the medical industry, and explained the significance of precision service for social work in the industry [17]. Chen Y analyzed the future development direction of social work, and especially explained the application of technologies such as the Internet of Things to this field [18]. Pengcheng Wei proposed an information sharing and acquisition system based on the Internet of Things technology, which provides a solution for the construction of a target system model [19]. Bingyu Sun proposed the establishment of a comprehensive decision-making and evaluation system based on the Internet of Things, which lays a theoretical foundation for the technical implementation of information evaluation and other parts of the social service information-based integrated service system based on the Internet of Things [20].

To put it simply, this article seeks the application model based on the Internet of Things in social work precision services, that is, the establishment of an integrated service system of social work information based on the Internet of Things as the main research content. Specifically, the main research content of this article is roughly divided into five parts: the first part is the introduction part, which aims to systematically review the main research content of this article from the research background, research purpose, research ideas and methods; the second part is The theoretical basis, a detailed and systematic summary of the current theories and methods of precision services for social work and the current research status of the Internet of Things technology, and also introduces the current application of the Internet of Things technology in social work. The third part is related research. Through the specific survey data and research results, we will start to build a comprehensive social work information service system from the general and functional aspects. The fourth part is to improve the design and test the design results. The integrated social work information service system based on the Internet of Things is actually applied to social work services. The actual test is performed, and potential problems and deficiencies are found to be improved and corrected. The fifth part is the summary and suggestion part of this article. It is a summary of the results of the article and an outlook of the application model based on the Internet of Things in precision services for social work.

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2. Proposed Method

2.1. Development and Application of Internet of Things Technology

The development of the Internet of Things technology has brought opportunities to the world's scientific and technological changes. China has been studying the Internet of Things technology for a long time. Following the computer and Internet technologies, the Internet of Things has set off the third revolutionary wave of the world's information industry, and has attracted widespread attention worldwide. Its purpose is to enable anyone to obtain any information of interest at any time and from any place. The key technologies of the Internet of Things mainly include WSN network technology and RFID technology. WSN is a wireless sensor network, which is a network system with self-organization ability formed by a large number of sensor nodes deployed in one or more monitoring areas through various wireless communication methods. The calculation formula for WSN receiving processing information is shown in formula 1 and 2:

$$CRF_{\mathrm{t}}(\mathrm{b}) = \sum_{\mathrm{t}=1}^{k} F(t_b - t_{b1}) \tag{1}$$

$$F(t) = (\frac{1}{\text{attenuatio n}})^{\text{step}*t} \tag{2}$$

The purpose of wireless sensor networks is to jointly sense, transmit, and process various environmental data information in the network monitoring area through the cooperation between wireless sensor nodes, and send related data information to the upper computer to complete subsequent information processing, so that any user can Get the information you need, anywhere, anytime. The network architecture of wireless sensor networks is relatively complex. Sensor networks usually include information gathering nodes, sink nodes, and routing nodes. A large number of wireless sensor nodes equipped with related protocols are randomly and uniformly distributed in the monitored environment area, and an ad hock network is formed by wireless self-organization. The environmental data information collected by the information collection node is collected by the one or more routing nodes through wireless communication to the convergence node, and finally transmitted to the remote task management node through the Internet or satellite network. The user can use the task management node to access the wireless sensor network. Manage and configure. The formula used to process user management information is shown in formula 3:

$$C_{\mathrm{j}} = \{\mathrm{t}_i \mid f(x) = C_f 1 <= i <= n, 1 <= j <= n \tag{3}$$

The topology of wireless sensor network refers to the technology of arranging and organizing various wireless sensor nodes and other network devices to form a network. The network topology has a variety of forms and network layout forms. The only influencing factor that determines the topology of a wireless sensor network is the connection configuration between nodes, which has nothing to do with the types of wireless sensor nodes and network equipment. From the perspective of the wireless sensor network networking form and method, its topology is mainly divided into three types, which are star topology, tree topology, and mesh topology. The star topology means that the wireless sensor nodes are connected in a star manner. One of the wireless sensor nodes is the central node, and the other nodes are directly connected to the central node to form a network testis. The star topology has the advantages of simple structure, simple control, and small network delay. The morphology of the tree topology can be simply viewed as the superposition of multiple star typologies. Therefore, the tree topology has the advantages of part of the star topology and has its own new advantages. All the wireless sensor nodes in the mesh topology can be directly connected, and any two wireless sensor nodes can communicate directly. Through a certain routing algorithm, the wireless sensor network can choose one or more paths for the transmission of multi-word data information.

2.2. Social Work Precision Service Intervention

Social work has a long history, and in the face of diversified needs, how to achieve accurate service intervention in social work has been a hot topic of research. "Precision" means "precise and accurate". Presumably, the word "precision" must have reminded some people of the "precision poverty alleviation" policy proposed by President Xi Jin ping. Scientific and effective procedures implement precise identification, assistance and management of poverty alleviation targets. His beneficiary is a poor farmer who implants a support management model. The "precision" mentioned here means that

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professionals who have received full-time studies at a college or higher level can use "high standards and high quality". "Professional methods of social work", and serve the elderly in the community; that is, the precise intervention of social work means that professional social workers can use professional methods with high standards and high quality when intervening in various fields of social work, ensuring that each item of intervention is Services, whether in individual cases, group, community, or administrative, are all carried out with good quality and quantity. There are also different accurate evaluation standards. Relevant evaluation formulas are shown in formula 4 and 5:

$$d_k = (y_k - c_k) * c_k * (1 - c_k) k = 1,2, \tag{4}$$

$$e_j = (\sum_{k=1}^{n} d_k v_j) * h_j * (1 - h_j)\, j = 1,2 \tag{5}$$

For social services to accurately intervene in specific demand areas from different perspectives, direct and indirect methods have been used. Taking elderly service work as an example, the main reason why social work can accurately intervene in the diversified service needs of the elderly depends on its professional intervention methods. First of all, there are individual work for the elderberry's personality problems; group work and community work for the common problems of the elderly; special problems for the elderly, and administrative social work, etc. These special work methods make social work It is easier for professionals to carry out specialized elderly social work. Secondly, social work institutions and social workers are also the connection targets of social resources. Some of the needs of elderly people can often be met through indirect means of social work institutions and social workers, which precisely involves social workers in community elderly. Services provide personality. Finally, the combination of the direct and indirect intervention methods of social work can obtain the diverse service demand resources of the elderly in the community through multiple channels and channels, and then use the professional method in specific operations to precisely intervene in the elderly in the community. Diversified service needs provide the necessary basis. Social work precision service will use many statistical methods to process information, as shown in formula 6 and 7:

$$\begin{aligned} xbest &= \min[\sum_{yeD_1} (y - y_L)^2 + \sum_{yeD_2} (y - y_R)^2] \\ &= \min[\sum_{i=1}^{nl} (y_i{}^2 - 2y_i y_l + y_l{}^2) + \sum_{im+1}^{n_l + n_R} (y_i{}^2 - 2y_i y_R + y_R{}^2)] \end{aligned} \tag{6}$$

$$V_{jk}(N+1) = V_{jk}(N) + a_1 d_k(N) h_j \tag{7}$$

As far as the precision of China's social work intervention is concerned, it can be said that it is generally low. In the course of reform, although social work professional organizations have sprung up in large numbers, due to the special historical reasons for the development of social work, the localization process is relatively slow. Both professional theories and professional methods involved in various fields are relatively insufficient. Precise, the working organization is still in the stage of continuous exploration and practice, and the front-line experience of social workers is still in the development stage. Therefore, although China's social work institutions and professionals are increasing, the country is also vigorously developing professional social worker teams, but this is a process of quantitative change to qualitative change, and it takes a long time to change the overall social work Low level of development. Of course, we do not deny that the current development in Hangzhou, Shanghai, Beijing, Tianjin and other places has reached the leading level in China's social work community, but the accuracy still needs to be improved. Not flexible and precise enough.

3. Experiments

3.1. Related Processing of Experimental Data

The object of this experiment is to use the Io T-based social work information integrated service system for social work in a certain province and municipality, to test the feasibility of the Io T-based social work information integrated service system. During the experiment, there is a large amount of experimental data to be processed, and there must be errors in these data. It is also very important to handle the errors appropriately. Therefore, before using these experimental data for forward and reverse analysis, the error should be processed and analyzed on the original data. Generally, the errors of the

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experimental data can be divided into three types: system error, random error and gross error. Among them, random errors are often caused by random factors, and their signs and absolute values are irregular. However, as the number of experiments increases, random errors are generally considered to be normally distributed. The gross error mainly refers to the fact that in the statistical data, due to the observer's carelessness, or sudden changes in environmental conditions, unstable instrumentation and other factors, the observation error does not conform to a certain statistical distribution rule, which is usually a measurement error. System error is the error caused by the measurement instrument, the change of the measurement reference and the influence of external conditions. At present, the systematic error of observations is generally composed of corresponding statistics based on the statistical characteristics of observations, and then test hypotheses are made based on the characteristics of their probability distributions, and judgments are made by comparing actual calculated values with quantifier values. Common test methods are: U test, variance test, t test and so on. In the measurement process, the gross error should be eliminated, and the system error should be eliminated or weakened, so that the observation value contains only the random error I, 0.

At present, when resolving this kind of problem at home and abroad, the least square method is usually used to process the experimental data twice. The basic idea of the least square method is to first assume that the observations only contain accidental errors, but this is basically not practical Possibly, for this reason, a new theory has been developed to study systematic errors and gross errors. At present, the more effective method for processing systematic errors is the additional parameter method; there are two methods for processing gross errors. One is the data detection method that still belongs to the category of least squares, and the other is the method of robustness estimation that is different from the least squares method. Or robust estimation. In addition, in the actual situation, various social work-related links are constantly changing, and the information collection system is also in a moving state, which means that the entire collection process is dynamically changing, so there will be relative errors in experimental management. It is inevitable. Modern error theory generally believes that the measured true value cannot be determined, and the existence of the quantum effect excludes the existence of the unique true value, so the error cannot be accurately obtained. The error used in the experiment in the past is actually a kind of deviation; the experimental error evaluated is actually unavoidable and uncertain.

3.2. Experimental Model Establishment

After obtaining the information of social work services, the important work is to analyze the areas that currently require the most intervention of social work from the information, so as to ensure the high efficiency of social work and serve the most needed people in a timely manner. In actual work, some work information is often not updated in time, and some messages are not transparent enough. Therefore, it is a very complicated problem to collect the correct service information in a timely manner and evaluate the most needed areas. The relationship between social work information and the required masses is a comprehensive information evaluation model. Comprehensive evaluation is the key to the precise intervention of social work. Therefore, in the research of integrated service system model, the comprehensive evaluation model is mainly established. The purpose of establishing a comprehensive evaluation model is to establish the functional relationship between social work and the required group, that is, to use the information obtained from various channels to determine the impact of various factors on the required field, and to establish a functional model that reflects the need for social work intervention. After obtaining various service information, we can reasonably allocate and intervene in the most needed groups according to the current working resources.

Commonly used methods for establishing statistical models include stepwise regression, multiple regression, weighted regression, and so on. There are many factors that influence the group or direction of service that is most needed. In addition, the built GM model was used to predict the information in the future. The Internet of Things is an emerging industry. Statistics on the quantitative data of the size of the Internet of Things market at home and abroad have only begun in recent years, so it can be used to analyze the Internet of Things. The data for the application of the future market is also very small. The article uses the gray prediction model to predict the development of precision services for the social work in the Internet of Things, predicts the intelligent social work services from the side, and prerequisites for the qualitative research of intelligent social work services Next, further enrich the quantitative research theory.

In addition, when establishing an information collection model, it is necessary to determine the relevant collection indicators. After establishing a statistical model, the collection indicators can be determined. From the knowledge of mathematical statistics, it can be known that when the statistical

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model established based on the least square method satisfies the conditions of Gaussian assumption and the normal distribution of residuals, the obtained statistical model is the best unbiased estimation. This model can be used for overall estimation and prediction. Under normal circumstances, there is no abnormality in the residual sequence obtained after the observations are fitted; if there are abnormal values, it may indicate a precursor of instability. The upper and lower limits for judging whether the collected information value is abnormal are called collection indexes. There are two common methods for establishing collection indicators based on statistical models: confidence interval method and small probability method.

3.3. Experimental Conditions and Equipment

The monitoring system established in this article mainly uses the Internet of Things sensing and identification technology, Internet of Things communication and application layer technology. These technologies and the equipment needed are the main experimental conditions and equipment for this experiment. The so-called Internet of Things perception and identification technology refers to the Internet of Thing's collection of information through perception and identification, and is the main data source of the Internet of Things. Commonly used technologies are: two-dimensional code technology, radio frequency identification RFID technology, infrared sensing technology, GPS satellite positioning technology, audio and visual identification technology, biometric identification technology, etc. Sensing technology mainly embeds sensors around or on an object, collects data of the object or the surrounding environment, and senses various physical or chemical changes. Commonly used technologies include sensor technology, radio frequency identification technology, and so on. The sensor is the main source of information for the application of the Internet of Things. It senses the status information of the measured object, converts the perceived information into electrical signals or other forms of information, and then outputs it, which satisfies information transmission, storage, processing, and recording. , Display and control requirements, and finally achieve automatic detection and automatic control functions. The national standard GB7665-87 defines the sensor as: "A device or device that can sense a specified measured object and convert it into a usable signal according to a certain rule, usually consisting of sensitive elements and conversion elements." The node information table structure of the sensors used in this paper, as shown in Table 1:

Table 1: Sensor node information table structure

The field names	Field type	Field meaning
INDEX_ID	int (4)	Record the serial number
NODE-TYPE	Small int (5)	Node types
SENSOR-TYPE	Small int (5)	The sensor type of the node
NWK ADDR	Small int (5)	The network address of the node
EXT ADDR	Small int (5)	The MAC address of the node20-27mm
TIME	Time stamp	Data information update time

The so-called Internet of Things communication and application layer technology refers to the fact that the information technology can be divided into two categories according to the transmission medium: wired communication technology and wireless communication technology. In recent years, with the widespread use of mobile communication equipment (such as: mobile phones, tablets, etc.), wireless communication has become the fastest-growing and most widely used communication method. It transmits information from one place in the atmospheric space through electromagnetic wave signals. To another place, so as to realize the wireless transmission of data, the main technologies include radio communication, infrared communication, microwave communication and optical communication. A wireless communication network is a communication network composed of wireless communication devices connected to each other based on communication standards and protocols. In the network, the communication terminal communicates by accessing the network and relying on the network. According to the way of accessing the network, it can be divided into two types: self-organizing network and centralized network with a central control point.

4. Discussion

4.1. Feasibility Analysis of Integrated Social Work Information Service System

The integrated social work information service system based on the Internet of Things technology,

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as the top-level system of the integrated social work information service platform, is an information platform for the connection and interaction between users and the community Internet of Things. It uses a host computer to aggregate information such as image information, text information, and numerical information collected by the front-end information sensing system to achieve the interaction between the information sensing system and MySQL database information and Socket commands. At the same time, it uses the WAMP architecture to build a system development environment. Working in B / S working mode, users can log in to the integrated information service system to view the collected data information in real time through the browser, and put forward their specific needs. The system will analyze the demand information of each group and reasonably allocate the society. Work on existing resources. The efficiency of this social work information integrated service system in statistics of various existing materials and needs, As shown in Table 2:

Table 2: The work efficiency under the integrated service system of social work information

Task load	Traditional way of social work	Social work time under the system
Work for 4 nursing home	7.5h	6h
Register and distribute 3 tons of materials	2.3h	0.5h
Poverty alleviation work	126h	76h
100 Volunteer recruitment	28h	1h

The data in Table 2 reflect the goodness of the general social work handled by the social work information service system. It can be seen that using this kind of Internet-based social work information service system, various personnel registration time, volunteer collection time, and material distribution Time has been greatly improved compared to the traditional method, and work efficiency has increased by about 35%.

The front-end information sensing system of the social work information integrated service system is responsible for monitoring and collecting social work information. It is composed of a network of wireless sensor nodes distributed in various regions. The information transmission subsystem, as a bridge for the integrated social work information service system based on the Internet of Things technology, plays an important role in the upload of data information and the release of control information for electrical equipment.It is a front-end information perception in the integrated information service platform. An essential part of the system and integrated information service system. The information transmission subsystem adopted by this system can update the relevant information of social work in real time, so that it can be updated and implemented in real time. The impact of this information transmission system on improving the precision service efficiency and accuracy of social work is shown in Figure 1 below:

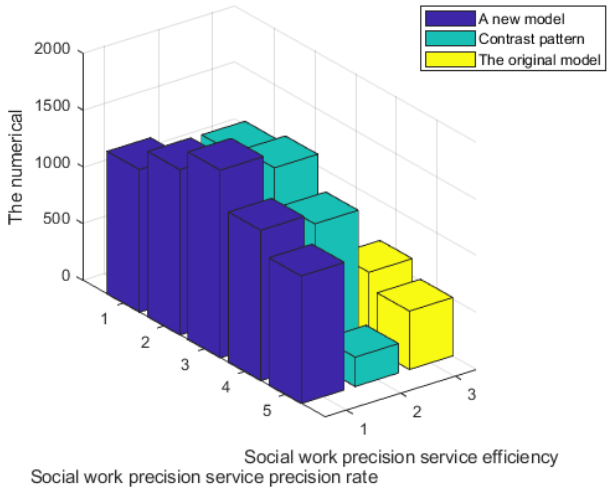

Figure 1: Impact analysis of information transmission subsystem

From the data in Figure 1, it can be seen that the information transmission subsystem of the social work information integrated service system based on the Internet of Things technology is excellent. Its information transmission efficiency is very high, and it can basically realize real-time information update and transmission. Under the influence of this kind of information transmission efficiency, the efficiency and accuracy of precision services for social work have been improved, and the probability

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of precision involvement of social work in specific demand areas has increased by 15%.

However, after the front-end information sensing subsystem collects relevant environmental data information, it needs to transmit the information to the gateway node through the information transmission subsystem, and then write it to the MySQL database. The information processing and display subsystem interacts with the MySQL database to read, modify, and delete And update the information in the MySQL database. The database design of this project mainly involves three types of tables: sensor node information table, sensor node data table, and sensor node image information table. The database of this system is stable, reliable and has a large capacity, which can basically meet the storage and processing of social work information in a city. The establishment of such a database compares the improvement of work efficiency and time saving of manual processing of social work information before, as shown in Figure 2:

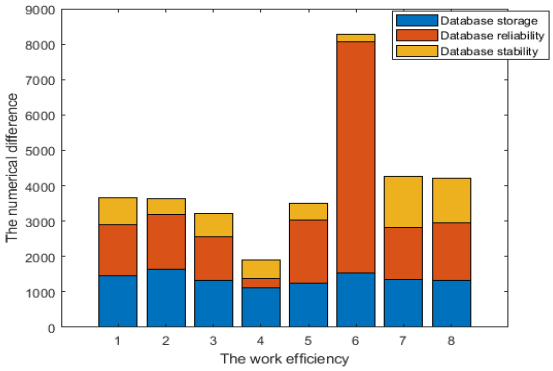

Figure 2: Impact of system database on accurate service of social work

From the data in Figure 2, it can be seen that the database of the social work information integrated service system based on the Internet of Things technology is excellent, its stored information is high, and its reliability is high. It can basically meet the social work storage information of a city for decades, and the establishment of a database uses classification and systematic storage for information storage. This is very convenient for the extraction, sorting and calling of social work information, and can effectively reduce the relevant working time %, Increase work efficiency by 34%.

4.2. Application of Internet of Things in Social Work Precision Services and Analysis of Development Prospects

The application of the Internet of Things has involved many fields in people's lives, and has made this contribution to human development in various industries around people. The application of the Internet of Things in five of these areas is the most extensive including: security, transportation, medical, power, and logistics. These several fields are closely related to people's lives, and they bring the greatest convenience to people. Through statistics on the market scale of the application of the Internet of Things in these fields, we can get the market size of each field. This can also be used to understand the feasibility of the Internet of Things technology using social work precision services. The specific survey results are shown in Table 3:

Table 3: The scale of the iot market in all sectors in 2017

Domain name	Accounted for	A total of
Intelligent security	52.6	100
Smart power	13.7	
Intelligent transportation	7.80	
Intelligent logistics	3.40	
Intelligent medical	2.60	
Smart social work service	1.8	
other	18.1	

As can be seen from Table 3, at present, the Internet of Things technology is mainly applied to intelligent security, and only 1.8% of the market is used for social work. The occupation market is relatively small, but it shows that it has a market. It can be seen that it is completely feasible to apply the Internet of Things technology to social work precision services, but the application mode is worth exploring. In addition, according to data statistics, 97% of first- and second-tier cities, 87% of

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municipal jurisdictions and some county-level cities in China have launched urban community services at this stage. There are already tens of thousands of community service centers in the country. Construction has also reached tens of thousands. From the statistics of these data, we can see that social work services in our country are gradually developing and have penetrated into all aspects of our people's lives, whether in community services, elderly services or poverty alleviation. Therefore, the prediction of the scale of precision services for social work applied to the social work is closely related to the prediction of community services, so this article predicts the scale of development of precision services for smart social work from the side based on statistics of the scale of development of the Internet of Things in the social service work industry, Survey and forecast results, as shown in Figure 3:

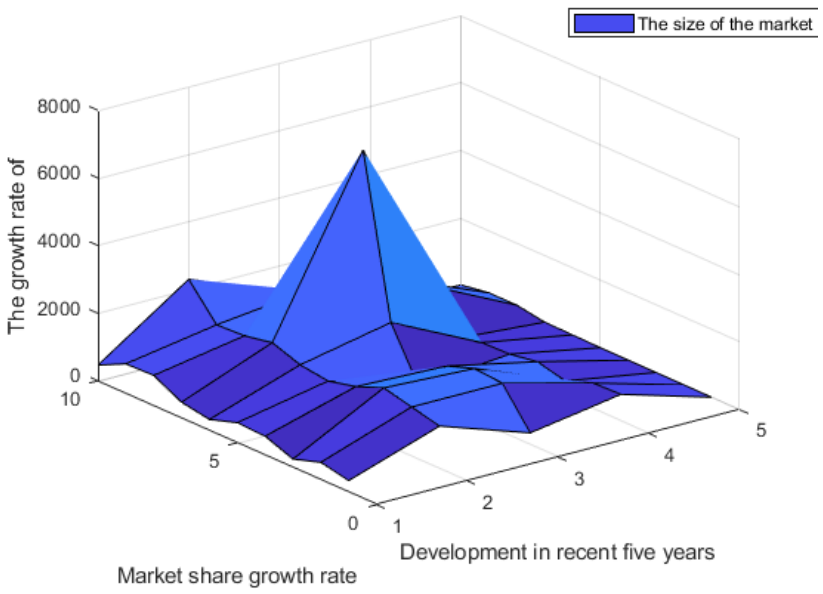

Figure 3: Smart social work precision service development scale

As can be seen from Figure 3, according to statistical results and gray models, the investment in IoT technology in various industries has been increasing in recent years, and the market share and investment in social work industries have continued to increase. From a quantitative perspective, the future Investment in social work will reach tens of billions, and the relevant growth rate will maintain a 12% annual growth rate. With the input of large funds, the precision services of future social work will definitely adopt the Internet of Things technology. At that time, in the face of increasingly diversified needs, social work will easily be able to accurately intervene in specific demand areas from different perspectives.

The application of the integrated social work information service system based on the Internet of Things technology in this article to actual work items can further test the reliability and accuracy of the system and the feasibility of the application of the Internet of Things technology in the accurate service of social work. We applied this system to social work in a certain area of Zhen Jiang. We collected a large amount of experimental data and experimental results. After statistical analysis, the results are shown in Figure 4:

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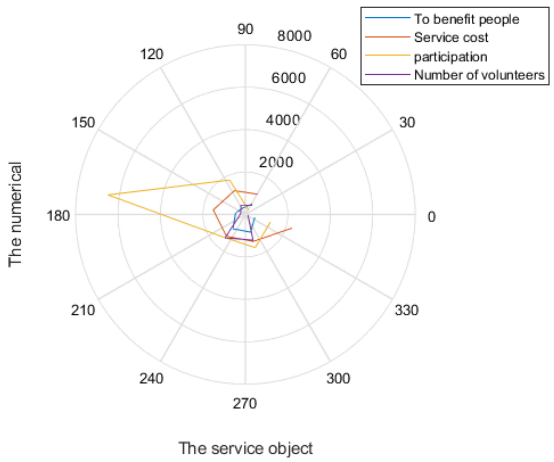

Figure 4: Analysis of experimental project results

It can be known from FIG. 4 that after the experimental test, the expected effect of the integrated social service information service system based on the Internet of Things technology has basically reached the standard. Among them, the work efficiency has been improved by 35%, and the number of direct beneficiaries has exceeded 2,200 in a short period of time. The service cost of a single object has been greatly reduced (because of reducing labor costs). The service cost of a single object has been reduced from 140 yuan to 112 yuan, a decrease of about 20%. This shows that it is completely feasible and necessary to apply the Internet of Things technology to social work precision services.

5. Conclusions

(1) This article analyzes the common problems existing in precision services for social work, discusses these problems without solving them, and proposes corresponding solutions.

(2) Introduced the Internet of Things technology, and combined the Internet of Things technology with precision services for social work, and established a comprehensive social work information service system including front-end information perception system, information transmission subsystem, MySQL database, etc.

(3) Research on the application and development prospects of the Internet of Things in precision services for social work, and put forward corresponding technical and theoretical guidance, confirming the feasibility of the application of Internet of Things in precision services in social work.

(4) Explored and verified the feasibility of the integrated social work information service system based on the Internet of Things technology. Experiments have shown that the precision work of social work using this system improves the efficiency of traditional social work by 35% and reduces service costs. 20%.

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