*Research Article*

# Chinese Online Language Dissemination from the Perspective of Mobile Information System

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The emergence of new media technology will inevitably bring new changes to people's daily communication. The development and change of society supports the development and change of language. Language networks are created and developed along with Internet applications. It is a new variant of the traditional language adapted to the new media environment of the Internet Age. With the increasing popularity and importance of network media, network language has received extensive attention and research on local languages. This paper analyzes and investigates the dissemination of Chinese Internet language from the perspective of mobile information system. On the basis of researching and proposing the mobile information system model, the structure of the system is deeply analyzed, and the key characteristics and technologies of various fields are discussed. Wireless mobile terminal wireless Internet access technology, portable intelligent terminal mobile application development technology, and local database technology are very suitable for Chinese network analysis and research to reduce wireless connections, and the effective range is from 50 feet to 1000 feet. The article uses the communication theories and methods of linguistics, cultural studies, network neologism generation, and communication characteristics analysis. It uses students as examples to explore their online neologism use and dyslexia and their problem-solving strategies for obstacles. The results show that 50% of the students can accept the new words on the Internet very well, and 30% of the students do not understand it.

## 1. Introduction

The influence of the Internet on people's life is more and more extensive and farther and farther, and it has become an important platform for people to communicate. Network language communication research has become a new interdisciplinary research field of linguistics and communication. According to the 32nd "Statistical Report on China's Internet Development" released by the China Internet Network Information Center, as of the end of June 2013, the number of Chinese netizens reached 591 million, with an online rate of 44.1%. This shows that knowledge exchange with people through the Internet has become more diverse. The Internet is a new media developed after newspapers, radio, and television, which goes hand in hand with traditional mass media. It is called the "Fourth Media".

Nowadays, new words on the Internet are inextricably linked with media. It arises from new media and spreads in new media, and even traditional media. The use of new words on the Internet is not only on the Internet platform but also in traditional media such as magazines and newspapers. The vitality and dissemination power of new words on the Internet are particularly strong, which is in line with the needs of public ideological and cultural expression. It can reflect the timeliness of media information dissemination and the speed of language use. At the same time it has the characteristics of the times, novelty, and innovation. So its production and use is itself a communication problem.

With the help of wireless network technology, the database technology based on dissemination data management technology came into being. Under the conditions provided for query selection and data processing, the revenue database

system can still access the required data. By replicating databases or digital promotion, it means that data can be accessed using big data even when the network connection is down. It can learn a high level of scalability by taking advantage of the public capacity of low-cost wireless communication networks and high-privilege access servers. Therefore, it is a more effective and accurate method to use mobile information system research to conduct network communication analysis of Chinese network language communication.

Due to the opening and development of network media, a large number of new words on the Internet have been reproduced and quoted in various media. The main changes that have taken place in modern Chinese are at the lexical level. New words on the Internet can reflect all kinds of mentalities and emotions, different ways of thinking and discourse, different cultural backgrounds and sources, various styles and characteristics, and so on. Therefore, to interpret a network language is to interpret popular culture to some extent. Compared with the traditional Chinese language, the changing characteristics and dissemination characteristics of the Internet language are very different. However, in the international education and dissemination of Chinese, the teaching of Chinese vocabulary system and grammar system of foreign students does not reflect this trend. In fact, in the process of communicating in Chinese, a large number of new words appearing on the Internet in the oral and written expression and comprehension of international students will cause their comprehension obstacles. Foreign students are a special group of Chinese netizens, and they often encounter new words on the Internet. But because they do not know much about Chinese popular culture, they always struggle to understand. At present, the phenomenon of new words on the Internet has attracted the attention of many experts. However, according to the large amount of literature collected in the article, there is not much research on the network of new words when learning Chinese as a foreign language. Many studies discussing new words on the Internet are based on the theory that teaching Chinese as a foreign language requires new words. It also theorizes the state of teaching. Therefore, the article argues that the barriers to understanding and using new words on the Internet need to be studied. It also delves into the "time-sensitive" method of teaching new words at the same time as online teaching.

## 2. Related Work

In the research of Chinese Internet vocabulary, domestic and foreign experts also need research results. Daussà examines why parents transmit which language they speak and how they transmit it. This is especially interesting for mixed and immigrant families [1]. Dani sought to identify factors that threaten the intergenerational transmission of native language as a home language. The survey results show that the intergenerational transmission of mother tongue as a family language is seriously threatened [2]. The purpose of Taliancich's research was to explore the characteristics that influence the transmission of traditional languages from parents to children from a parent's perspective. The interviews were transcribed and analyzed on emerging topics related to language transmission as well as the influence of traditional languages [3]. However, there are obvious deficiencies in the use of traditional methods of Chinese Internet vocabulary dissemination, and the research results are too one-sided.

The improved method uses mobile information systems to analyze Chinese online language transmission. Preece believed that controlled natural language (CNL) has great potential to support human-machine interaction (HMI) because it provides a human-readable and machine-processable representation of mobile information [4]. Mullins aimed to describe a case study. It illustrates a systematic approach for librarians to develop prototypes of information literacy mobile information applications [5]. Zhang has made several attempts to leverage mobile communications to advance health care. The application of information technology to create an "Internet + medical" platform has subverted the traditional medical service model [6]. Wu believed that the emergence of mobile information platforms not only greatly enriches the choices of consumers and facilitates their purchasing behavior but also provides space for counterfeit products and related mobile information strategies, which damages the rights and interests of consumers [7]. However, the above data have not been recognized by the public due to insufficient data.

## 3. Mobile Information System Architecture

In today's society, the speed of informatization and networking is accelerating. A new bright spot has appeared in the progress of computer technology and network technology: the rapid development of wireless network and intelligent network. When smart handheld terminals and wireless networks are used in life and work, it brings people a new environment and way of working and living [8]. For example, as a company manager, no matter where you are, maybe in another town where the company is located, or even abroad, using a PDA, you can connect to the company's infrastructure and view the latest dynamic information and send company instructions to the company. If the police are on the scene, they can connect to the police department's infrastructure via a manual PDA. They can then check the suspect's basic information and report updates to the police in a timely manner. Field operators only need to synchronize the collected data with the portable PDA through the sending center server, and then the data can be transmitted to the server. It thus saves the storage space of the mobile device. The understanding of these functions is based on mobile information systems based on smart handheld devices and wireless networks. This paper proposes a structural model as shown in Figure 1 [9].

*3.1. VPN-Based Wireless Access Technology.* It connects the local area network of the dispatching and monitoring center to the public network (Internet), so that the mobile terminal after wirelessly connecting to the Internet can establish a
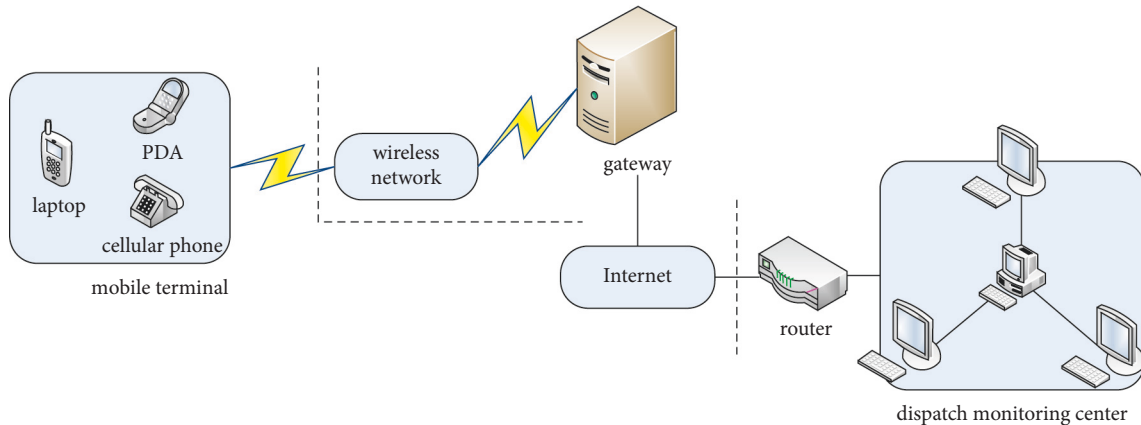
FIGURE 1: Schematic diagram of mobile information system structure.

channel with the enterprise server to realize two-way data transmission or voice transmission. It is the key to realize mobile office and mobile work. Therefore, in order to meet this demand, it is necessary to realize the security sharing technology of computer network resources. A virtual private network (VPN) transmits private data by establishing a virtual connection to a public network and uses a network tunneling protocol to keep data secure. VPNs are an effective way to achieve secure remote connections. VPNs have high security. Security is very important in networking [10]. New services such as online banking and online transactions require comprehensive protection. VPNs increase the intelligence and security of the Web in many ways. First, it provides distributed authentication to distributed users at the beginning of a channel on an existing business authentication server [11]. Additionally, VPNs support security and encryption protocols such as SecureIP and Microsoft peer-to-peer encryption [12]. The network structure of GPRS includes packet control unit (PCU), GPRS service support node (SGSN), and GPRS gateway support node (GGSN), as shown in Figure 2 [13].

The access point name (APN) is a very important concept in the GPRS network and refers to the access point selected by the user when activating the PDP. In fact, the APN is used to select a GGSN as the gateway to access the Internet, which is similar to dialing 163 and other numbers when a fixed user accesses ChinaNet [14]. There are two types of APNs: dedicated and general. The general APN refers to the APN that all subscribers of the GPRS operator have. The private APN refers to the APN negotiated by the enterprise and the operator. It is used for enterprises to set up their own VPN through GPRS; other users do not have this function [15]. According to different types of APNs, GPRS-based VPNs have different implementations, including general-purpose APNs, dedicated APNs, and MPLS-based VPNs. The current mobile communication network is the second generation, and its new improvement is called 2.5 G technology. It further developed into a 3G network, which is widely used in the current network, and all new technology networks take the 3G network as a reference. The technology mainly includes GSM, 15-136, CDMA, and so on. The VPN implementation mode of general APN, the

VPN implementation mode of dedicated APN, and the VPN implementation mode based on MPLS have their own characteristics. They are suitable for different application environments. Table 1 compares these implementations in terms of APN type, security, forwarding speed, whether to apply to the operator, and fees [16].

The realization mode of VPN based on MPLS is the key point of the development of GPRS core network in the future. It has the advantages of high security, fast forwarding speed, easy expansion, and guaranteed QoS. Therefore, it is suitable for VPN services with high security and real-time requirements, as shown in Table 2 [17].

*3.2. Related Technologies of Mobile Information Center.* The mobile information center is the core of the entire mobile information system. It accepts the request for establishing a connection from the mobile terminal and performs authentication. It provides data services for mobile terminals and realizes resource allocation and flow of the entire system to dynamically monitor the mobile terminal and maintain and manage the data of the entire system. It consists of VPN server, dispatch center server, database server, dispatch monitoring console, etc. [18]. Its structure is shown in Figure 3.

Physically dispersed branch offices can be connected together by establishing a VPN. It thus effectively realizes office integration, e-commerce, and so on. Deploying VPN on GPRS network can realize mobile virtual private network. In this way, users can access their VPN anytime and anywhere through mobile terminals. Therefore, the mobile terminal and the dispatch center server are located in the same local area network, thereby enjoying the internal data service and resource sharing. It dispatches the monitoring station to complete the graphical display of real-time monitoring of the mobile terminal status and provides a human-computer interaction interface for user management and system maintenance [19]. The dispatch monitoring center often needs to monitor a large number of mobile terminals at the same time. Therefore, it is necessary to use multiple stations. For example, in the monitoring of aircraft operations, there may be thousands of mobile
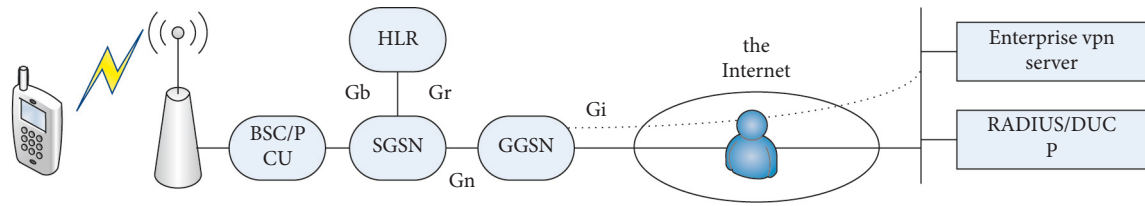
FIGURE 2: GPRS network structure.

TABLE 1: Overview of mobile data services.

| Core technologies | Server | Data capacity | Value |
|---|---|---|---|
| GSM | Data exchange based on standard GSM 07.07 technology | Rate 9.6 Kbps or 14.4 Kbps | 1.2562 |
| | High speed data exchange (HscSD) | Possible rate 28.8 Kbps or 56 Kbps | 0.5415 |
| | Generic packet radio service (GPRS) IP and x.25 communications at rates over 144 Kbps enhanced data rate (EDGE) to GSM | | 1.3652 |
| IS-136 | Based on standard IS-136 technical data exchange | Rates up to 9 Kbps | 0.9523 |
| | EDGE | 38 Kbps I communication and GSM network roaming possible | 0.2548 |
| | WCDMA or wideband TDMA (WTDMA) | Similar to EDGE indoor communication rate up to 2 Mbps capacity | 1.3652 |
| CDMA | IS-95B | Rates up to 9.6 Kbps or 14.4 Kbps | 2.3254 |
| | CDMA2001-1XRTT | IP communication up to 64 Kbps | 0.3652 |
| | CDMA2000-3XRTT | IP communication up to 144 Kbps | 2.3651 |

TABLE 2: Comparison of several implementations of VPN.

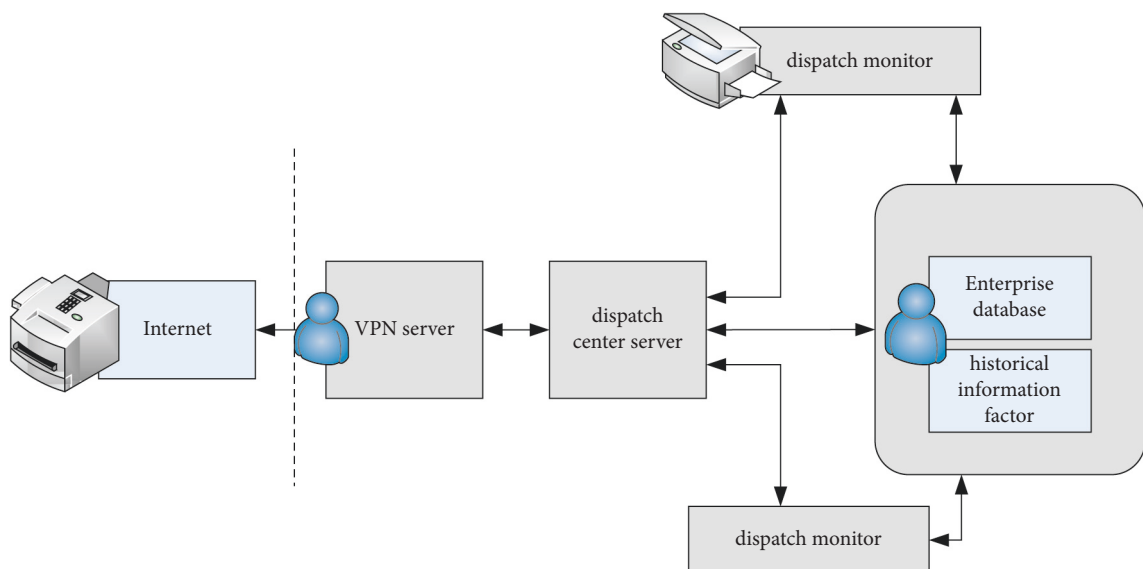| How VPNs are implemented | APN type | Safety | Forward | Do you want to apply | Cost | Coefficient |
|---|---|---|---|---|---|---|
| Universal APN VPN | Universal | Low | Quick | No | Low | 52.365 |
| Private APN (GRE) VPN | Dedicated | Middle | Quick | Yes | High | 42.651 |
| Private APN (IPSec) VPN | Dedicated | High | Slow | Yes | High | 63.214 |
| MLPS-based VPN | Universal/dedicated | High | Quick | Yes | High | 68.354 |



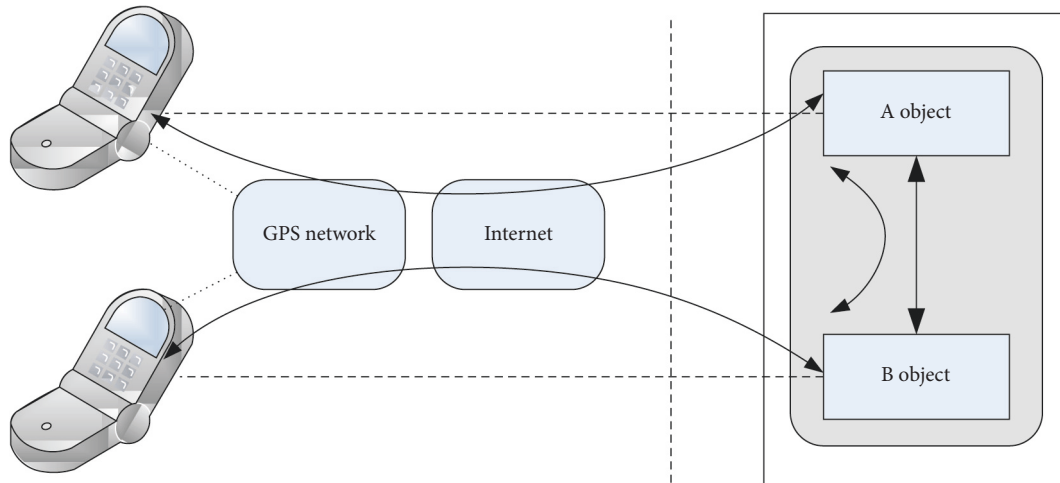FIGURE 3: Structure of dispatch monitoring center.

Figure 4: Schematic diagram of communication between mobile terminals.

terminals that need to be monitored at the same time. In this way, the dispatching center server is required to adopt a certain dispatching and distribution strategy to efficiently distribute and forward the incoming data from the mobile terminal [20].

After the mobile terminal enters the GPRS network by dialing, the terminal obtains a dynamically allocated IP address. After the mobile terminal is connected to the internal server of the enterprise, if the mobile terminals need to communicate with each other, how to find each other and how to transmit internal data between them is a difficult problem [21]. This paper proposes a message-based internal server forwarding mechanism, and the model construction is shown in Figure 4.

The two mobile terminals first register an object on the server respectively. At this time, the corresponding objects created by the terminal and the server can be transparently transmitted through the Internet. Therefore, the communication between the two networked mobile terminals can be transformed into the communication between the corresponding two objects inside the server. The two communication objects in the same server can communicate easily. Then the data communication process between A and B is actually shown by the curve in Figure 4. If a mobile terminal wishes to communicate with a client (such as a monitoring station) in the intranet, the mechanism is completely similar to the data transmission between mobile terminals.

### 3.3. Remote Data Access.
RDA is a method of remote data access, which is divided into two methods: PUSH (push) and PULL (pull). PUSH is to upload local data to the server, while PULL is to download server data to the local. In addition, SSCE's RDA can also submit T-SQL commands remotely. Remote applications can use T-SQL commands to change the data in the database on the server. It should be pointed out that the PUSH method must ensure that the structure of the local table and the remote data are consistent, and the PULL method must be a table that does not have the same name locally. The main difference between full SQLServer2000 merge replication and SQLCE merge

replication is that IIS is located between the client and other databases. It thus enables replicated data and communications to be sent over HTTP, as shown in Figure 5.

### 3.4. Implementation of Information Customization and Dynamic Monitoring.
In a PDA-based mobile information system, customization and status monitoring are the core of the entire system. Users with PDAs can customize the information of interest within the enterprise according to their own interests. Persons with specific permissions (such as scheduling administrators) can customize the job dynamic information of certain mobile processes. Mobile operators connect to the dispatch center through mobile terminals. They can then receive scheduling instructions and feed back information to the service center. This information is characterized by high real-time requirements, if the information is transmitted through a common mobile communication channel (such as a short message platform), it may cause a large time delay. Especially in the holidays, the situation is more prominent and cannot meet the needs of users. The traditional surveillance technology employs the installation of video cameras at the location of the surveillance object. The internal local area network is used to transmit the data to the command and monitoring center, and the data is extracted and processed through the monitoring center and then displayed through a graphical interface. The disadvantage of this method is that when the operators need to move frequently, it is difficult to collect their data, and the amount of data is large and the information is redundant. The dispatch monitoring center needs to do a lot of data extraction and processing. In practical applications, people may only be interested in some information about the monitored object, such as the start and end time of the operation procedure. In this way, the mobile client is used to actively send the information that needs to be monitored to the dispatch center. Using the same communication protocol can greatly simplify the process of data extraction and processing and can reduce the complexity of the realization of the dispatch monitoring station. Therefore, research has developed a new customization and
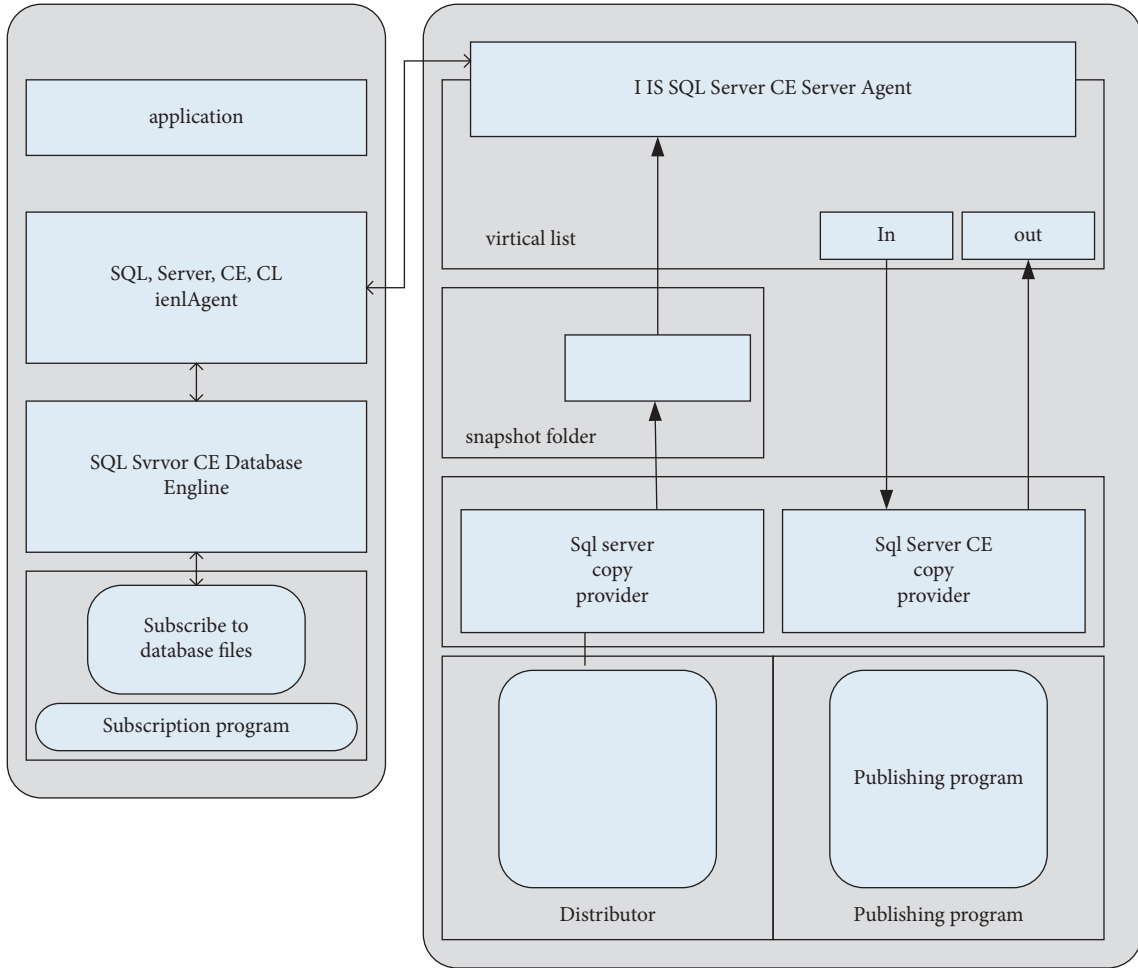
FIGURE 5: Architecture of SQL Server CE merge replication.

monitoring technique, which is described in detail below. It is a customization and monitoring implementation method developed based on the wireless data transmission technology researched by the author in the first section of this chapter. The model construction is shown in Figure 6.

In order to meet the cooling requirements of data network equipment, the total power consumption of the equipment installed in a single pallet shall not exceed 5 kilowatts. According to the results of the analysis of the current situation of the network, it is necessary to focus on the intercommunication of the three networks, the optimization of Internet access, and the improvement of network security in the future. The district company's IT department uniformly conducts network architecture, network security planning, design and network construction supervision, as well as network operations to eliminate the duplication of IP addresses and lay the foundation for interconnection. Network interconnection can be achieved by deploying firewalls between different networks. To meet individual security requirements, functions such as identity authentication, access control, data encryption, and data integrity assurance can be implemented by deploying a dynamic identity authentication server and VPN, as shown in Table 3 and Figure 7.

3.5. Concepts Related to Text Classification. To adequately represent a text, it first needs to find the most representative part of the text. It can not only show the distribution of the text but also make the mapped text have a relatively simple space. In practical applications, the choice of text representation model must comprehensively consider the requirements of accuracy, storage space, and processing speed. The most commonly used text representation models include vector models, Boolean models, and probabilistic models, as shown in the following formula:

$$d_i| = (W_{i1}, W_{i2}, \ldots, W_{in}),$$

$$x^2(t,c) = \frac{N(AD - BC)^2}{(A+C)(A+B)(B+D)(C+D)},$$

$$x^2(t,c) = \frac{(AD - BC)^2}{(A+B)(C+D)}, \tag{1}$$

$$H(C) = -\sum_i^n P(C_i)\log_2 P(C_i).$$

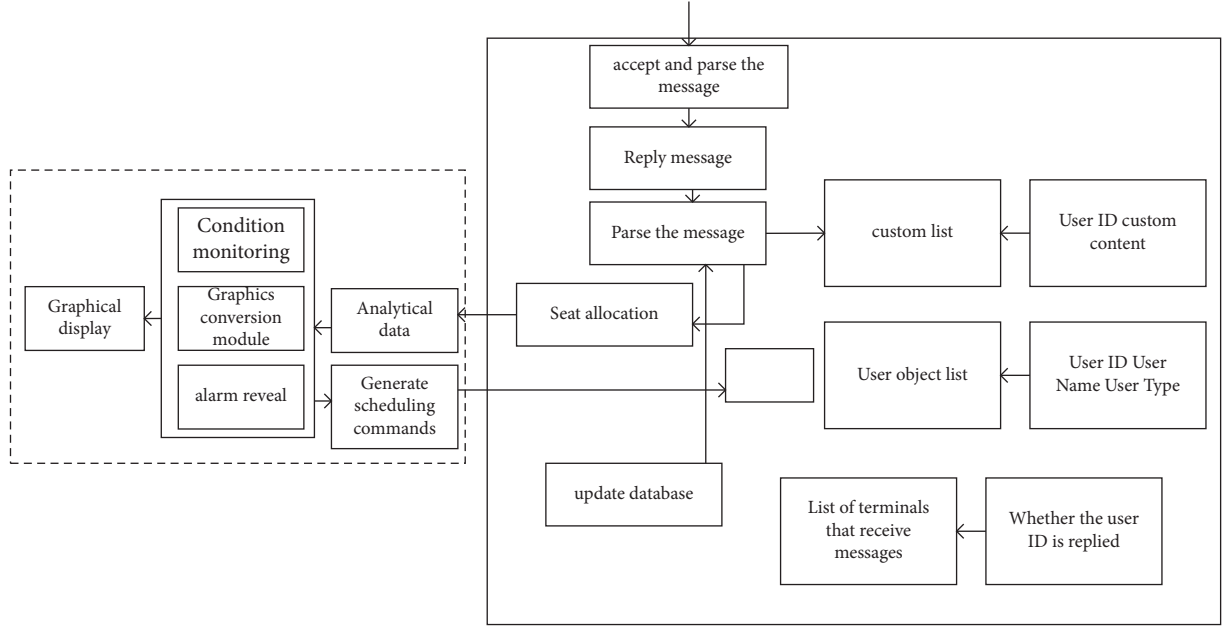Because in the classification system, under the condition that $t$ has been solidified, including feature $t$ and not

Figure 6: Schematic diagram of system scheduling monitoring.

Table 3: Configuration requirements.

| Temperature | Summer 23 ± 2°C | Winter 20 ± 2°C |
|---|---|---|
| Temperature change rate | <3°C/hour | |
| Humidity | 45%–65% | |
| Air update | 40m³ fresh air/person * hour | |
| | 5–15% air flow | |

including feature $t$ are equivalent. Therefore, when the characteristic $t$ is not included, it can be replaced by the inclusion of $t$ under the curing condition of $t$. The amount of information obtained in this case is the conditional entropy. The relationship between the two can be expressed by the following formula:

$$(C|X) = \sum_{i=1}^{n} P_i H (C|X = x_i),$$

$$H (C|T) = P(t) H (C|t) + P(\bar{t}) H (C|t),$$

$$IG (T) = H (C) - H (C|T),$$

$$P(t) \sum_{i=1}^{n} P(C_i|t) \log_2 P(C_i|t)$$

$$+ P(t) \sum_{i=1}^{n} p(C_i|t) \log_2 P(C_i|t).$$

(2)

At present, the most commonly used text feature weight calculation method is the $*$ tfidf method. The algorithm also takes into account the ability to classify text features while considering word frequency. The calculation method is represented by the following formula:

$$it f = \log\left(\frac{N}{n_k} + \varepsilon\right),$$

$$t f \times \log\left(\frac{N}{n_k} + \varepsilon\right),$$

$$W = \frac{t f \times \log (N/n_k + \varepsilon)}{\sqrt{\sum t f_2 \times \log_2 (N/n_k + \varepsilon)}},$$

(3)

$$P(H|X) = \frac{P(H|XP(H))}{P(X)}.$$

The support vector machine obtains the linear classification after the nonlinear change by introducing the kernel function K. The more common kernel functions include RBF kernel function, polynomial kernel function, and sigmoid kernel function. The polynomial kernel function expression is shown in the following formula:

$$K(d, d_i) = \left(d^T d_i + 1\right)^k, k \in N,$$

$$y = \text{sign}\left(\sum_i a_i y_i K(d, c_i) + b\right),$$

(4)

$$\text{Sim}(W_1, W_2) = \frac{\alpha}{\text{Dis}(W_1, W_2) + \alpha},$$

$$\text{Sim}(P_1, P_2) = \frac{\alpha}{d + \alpha}.$$

In the sememe hierarchy tree, the higher the position, the more obvious the attenuation of word meaning. And the lower the level, the slower the word sense decays. The difference of word meaning between sememes shows a
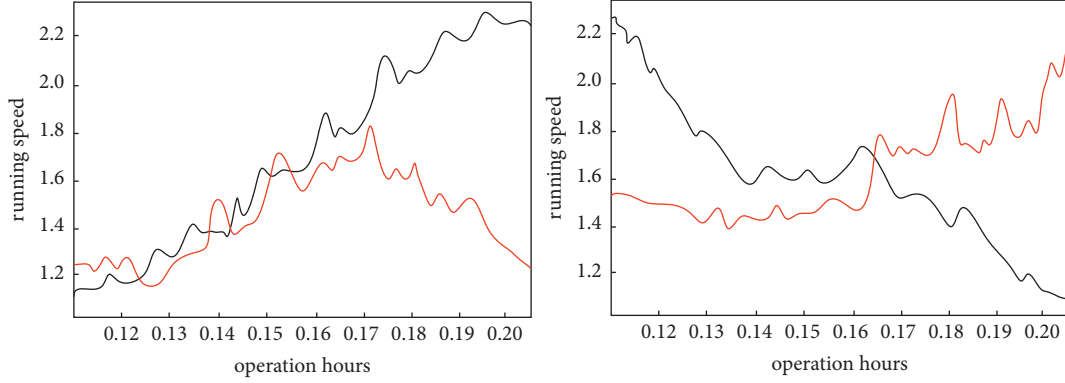
FIGURE 7: Data integrity assurance comparison.

TABLE 4: Student situation survey.

| Basic information of respondents | Gender | | Age | |
| --- | --- | --- | --- | --- |
| | Male | Female | 18–25 years old | 26–30 years old |
| Number of people | 21 | 39 | 47 | 13 |
| Percentage | 35% | 65% | 78.3% | 21.7% |

nonlinear trend with the change of hierarchical distance. According to the hierarchical relationship, the calculation formula of sememe similarity is obtained as shown in the following formula:

$$\sim_1(p_1, p_2) = \frac{a \times f_1(x)}{\mathrm{dis}(p_1, p_2) + \alpha},$$

$$f_1(x) = 2^{-\log|I(p_1-)I(p_2)|},$$

$$\sim_2(p_1, p_2) = \frac{\alpha \times f_1(x) \times N(p_2)/\sum_{i=1}^{N(\mathrm{Set})} N(p_i)}{\mathrm{dis}(p_1, p_2) + \alpha}, \quad (5)$$

$$w_t = tf(t, T) \times \log\left(\frac{N}{n_t} + 0.01\right).$$

## 4. Dissemination of New Chinese Words on the Internet

All the questions included in this questionnaire are relatively common Internet words and fully consider the stability in terms of application and meaning. At the same time, the most popular online new words on the Internet are selected, and the "New New Human Internet Language Dictionary" collected and organized by the Internet is referred to. There are two types of questions designed in this questionnaire: the first one is to fill in basic information and contact with the Internet. The second category is the multiple-choice knowledge question, which examines the knowledge and reading comprehension of new words on the Internet. This survey mainly investigates students of a certain university, and the total number of valid surveys is 60. The basic information of the respondents is shown in Table 4.

The dissemination process of network popular language is the process of people's symbolic behavior. Symbolic features are the use of tangible objects to represent abstract concepts. The behavior of people expressing and communicating through popular language on the Internet is a process of exchanging meaning through symbols. This notation is a network style derived from network events with the same sentence structure. Symbols have two meanings. The first layer of symbolism is literal meaning, established through long-term use. The second layer of meaning is the analogy or associative meaning of the symbol, which is actively created by the communicative subject. Symbolic action promotes the transformation from the first meaning of the symbol to the second. The first layer of meaning of Internet popular style is its imitative mother, that is, the expression mode extracted and refined from Internet events or popular phenomena. The second level of meaning is that the communicator associates and extends other social phenomena or personal emotions from network events. Relying on the close connection with various events and phenomena in the network communication, the network popular style gradually realizes the transformation of the symbolic meaning of communication from the surface to the association in the process of communication. It thus gives a certain symbolic meaning to the form of expression. After constant variation in the process of dissemination, it enters the network dissemination language system.

A total of 60 questionnaires were distributed in the study, of which 57 were valid. In order to ensure the "validity" of the questionnaire, this questionnaire is selected as far as possible when students have sufficient time to answer the questionnaire. The first is the age of the students: from the survey results of this paper, most of the students who learn Chinese are under the age of 25. Students under

TABLE 5: Internet word understanding and acceptance statistics.

| Words | Local students | | | Out-of-town students | | |
|---|---|---|---|---|---|---|
| | Never seen it | Seen, don't understand | Never seen it | Understand | Seen, don't understand | Never seen it |
| What | 7 | 10 | 11 | 0 | 5 | 24 |
| Awesome | 20 | 8 | 0 | 10 | 13 | 6 |
| Do not have | 23 | 2 | 3 | 17 | 5 | 7 |
| Soy sauce | 5 | 11 | 12 | 0 | 5 | 24 |
| Diaosi | 9 | 17 | 2 | 6 | 15 | 8 |
| Pit father | 16 | 10 | 2 | 11 | 16 | 2 |
| Can't hold | 13 | 15 | 0 | 8 | 12 | 9 |
| Children's shoes | 19 | 7 | 2 | 17 | 3 | 9 |
| Thunder | 12 | 11 | 5 | 7 | 6 | 16 |
| Make complaints | 6 | 12 | 10 | 2 | 7 | 20 |
| Stuff | 18 | 9 | 1 | 10 | 12 | 7 |
| Tall, rich, and handsome | 14 | 9 | 5 | 11 | 6 | 12 |
| Out | 20 | 8 | 0 | 14 | 6 | 9 |
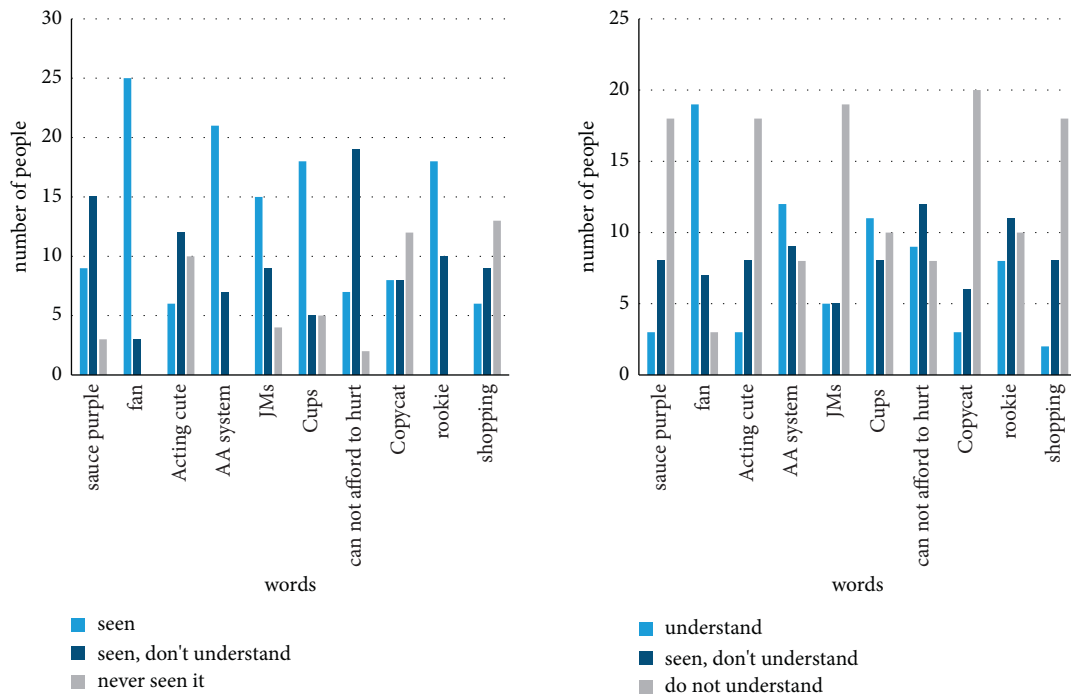


FIGURE 8: Popular acceptance of different Internet words.

the age of 25 are significantly more aware than learners over the age of 25, as shown in Table 5 and Figure 8.

It can be seen from Figure 9 that students whose native language is not Chinese have a significantly higher understanding of Internet words than the new Internet words they have seen but do not understand and have not seen before. The proportion of students whose native language is Chinese is similar to that of knowing words, having seen them but not knowing them, and having never seen new words on the Internet. But there are slightly more new words that have not been seen. Students whose native language is not Chinese have a certain degree of understanding of Internet words, but there are indeed very few Internet words that they can master. The awareness of old words, new meanings, and new coined words is obviously low in homophony, abbreviations, and foreign words. In addition, the awareness of students whose native language is not Chinese is significantly higher than that of students in foreign schools.

Language is not only an important symbol of the development of human civilization but also the main tool for people to communicate with each other. Language can now also be regarded as the main tool for information dissemination. From the perspective of the communication environment, new words on the Internet are generated at any time, and they also satisfy the information and meaning that the traditional old words cannot satisfy. It is well adapted to the functions of mass media to transmit information quickly, to reflect external changes in time, and to meet the needs of
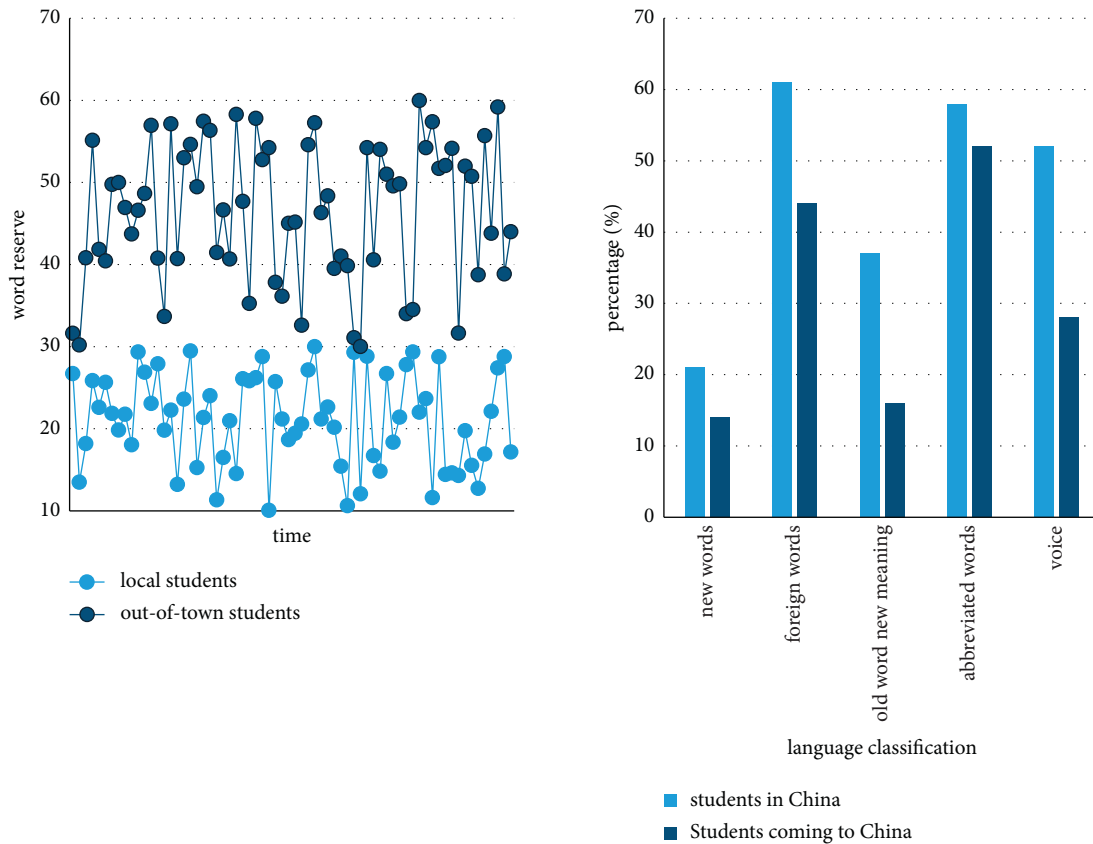
FIGURE 9: Awareness of five types of new words on the Internet and learning to understand new words on the Internet.

the public. The way of generating new words on the Internet is not fixed. The source of the absorption components of the alphabetic words, digital words, homophonic words, professional term words, and dialect words in English mixed expressions is very complicated. Especially when students face new words and old words with new ideas on the Internet, they will be confused. These words have lost their original meaning. Therefore, it is difficult for students to correctly understand new words on the Internet in the process of learning Chinese. For borrowed words and consonant words, students' awareness of them is significantly higher than other types. This is because most of the homophones of new Chinese online words are formed by borrowing the sounds of English. Borrowing foreign words is also borrowing more words from English. Middle school teaching regulations stipulate that, except for some private middle schools that offer Chinese courses, students in other middle schools must choose English from grade 5, and they also need to learn English when they go to university. Therefore, the second language of most students is English. Although the number of new words on the Internet is not as many as other parts of speech, each new word on the Internet has its own personality characteristics. So now their usage is very flexible and complex. To sum up, the complexity of network neologism itself is one of the reasons. Figure 10 shows the Lasswell propagation model.

According to CNNIC's 2012 Internet Survey Report, the three most important age groups for Chinese netizens are 10–19 years old, 20–29 years old, and 30–39 years old. They account for more than 70%. And from the analysis of their work structure, students are the absolute main force in the use of online language. These data show that young people are the first prominent segment of netizens. The younger generation of netizens is also making the development of the Internet younger. The Internet is bringing about interesting, fast, and adaptable changes. Younger groups have an advantage in Internet communication. They are capable of accepting new things. They are sensitive to the rapidly developing society, active thinking and broad-minded, and brave to innovate and break through stereotypes. Therefore, such groups can easily create new language variants. The core of the system studied in this thesis, the central server, is created in the form of a server. During system operation, users should generally avoid arbitrary changes to system parameters and operating environment. An interface that reduces user interaction can also improve the stability and security of program operation. Therefore, it is appropriate to make the central server in the form of a service.

## 5. Discussion

Internet popular language style is the most dynamic fission part in the Chinese language system. Its production and dissemination are in line with the development of modern society and the needs of people's psychological demands. With the popularization and wide application of popular
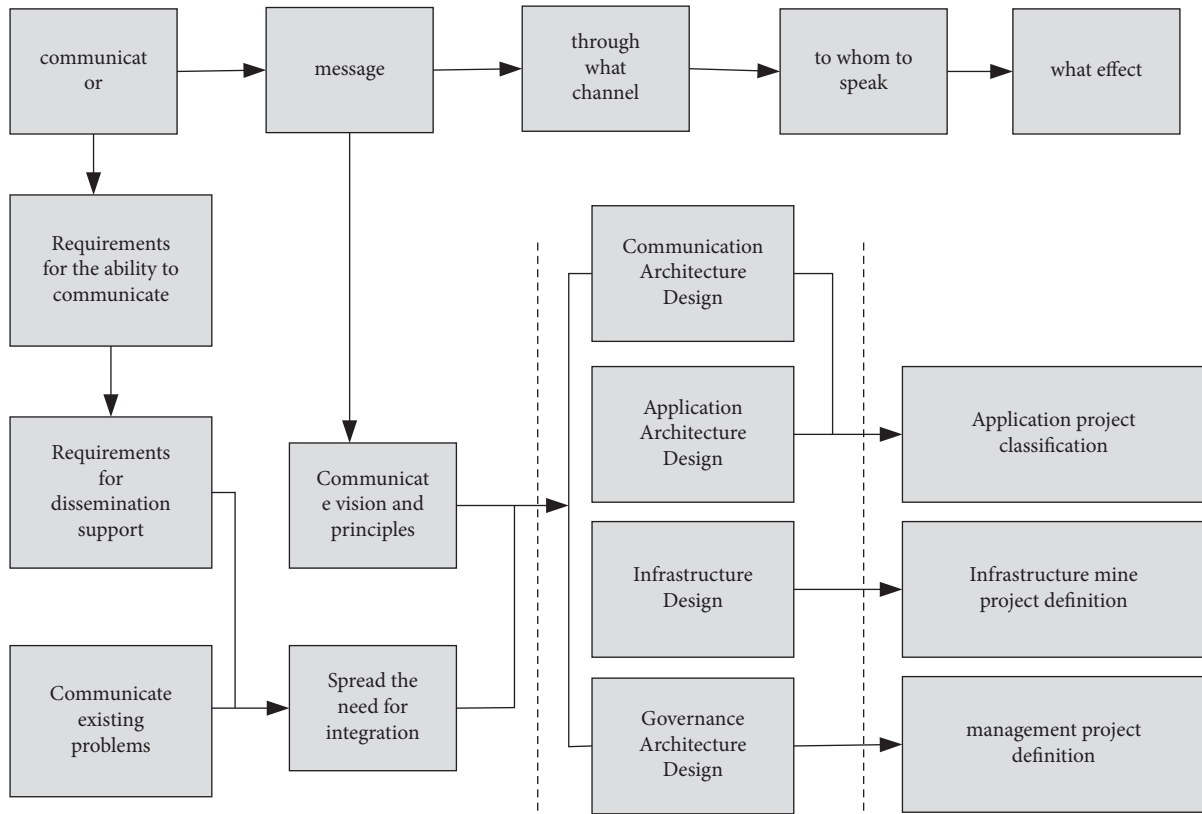
Figure 10: Lasswell 5w propagation mode.

styles on the Internet, some popular styles on the Internet have extended from the network environment to various traditional media and the real society. They are gradually integrated into the large system of social language and become the fresh blood of traditional language norms. Sociolinguistic norms are an important application system to ensure social cooperation and the normal operation of society and have certain authority and stability. In the previous era of traditional media, language norms rarely undergo drastic changes and major adjustments. In the network environment, the popular language style spreads through imitation and symbolic behavior under the entertainment and casual mentality of netizens, forming a wide range of high-frequency use. Therefore, traditional language norms are forced to adopt a tolerant attitude toward these network styles that have formed the scale of use and usage habits and let them develop naturally. In addition, popular language styles on the Internet make people subvert the language usage norms that symbolize elite culture and dominance. In the virtual and free network environment, people are more willing to follow the instinct of instant entertainment and do not have to worry about grammar, wording, grade, and aesthetics as much as in reality. Instead, it is often through the most direct and exaggerated form of expression to publicize individuality and seek recognition.

Linguistic semiotics once said: "Culture is a language no matter from which perspective." Language is the existence and manifestation of a culture, which affects the formation and development of culture. Therefore, maintaining the unique norm and purity of language is related to the continuation and development of culture itself and should be attached great importance to. While affirming its creativity and transformativeness, it should also be alert to the invasion of the whole social culture by the negative factors of network language, including popular language styles. Therefore, some linguists are concerned about the changes in people's habits and attitudes toward language norms caused by Internet buzzwords. Some scholars believe that it is similar to "Internet slang," with a vulgar style that ignores language norms, and even worry that the Internet language will impact the traditional language order and affect the normal operation of the sociolinguistic system.

The Internet media literacy of netizens mostly grows up with the Chinese Internet, and they are often self-taught with years of Internet contact, without the guidance and assistance of educational institutions and management agencies. Schools and other social educational institutions should cultivate students' ability to use the Internet correctly from an early age. In this way, it can form good media literacy and form immunity to bad information on the Internet. In fact, in developed countries such as the United States and Japan, primary and secondary schools have already set up network literacy courses to teach students how to use network resources and how to deal with various ideologies of network walking, so as to use network media with a more peaceful mind. As a developing country, China should not relax its grasp of culture and ideology while steadily grasping economic development. Under the environment of reform and

opening up, China is rapidly absorbing various ideas and ideologies from the West. However, in the process of this high-speed absorption, it must establish the method of how to digest these things in time, so as to avoid "indigestion" and prevent the long-term negative impact on the society. Starting from dolls is not only in the education of cultural knowledge but also in the use of media. The new generation grows completely in the network environment and has an earlier exposure to the spread of network culture. Early media literacy education is imminent. Establishing firm values, correct media concepts, and independent and correct judgments on information are the root causes to ensure the healthy development of network popular language and even the entire network culture. The popularity and dissemination of Internet language is reflected in the rise of discourse disadvantaged groups in the struggle for the right to speak. In the traditional media, it is difficult for the discourse vulnerable groups to intervene in the media and enter the public domain. The agenda setting of traditional media is top-down, and it is spread to the audience after it is set by the authoritative class. The status of the audience is fixed, and they passively receive information. The network media, especially the emergence of network language, enables network agenda setting to influence traditional agenda setting. Thus, Internet language can break the dominance of elites in the medium.

## 6. Conclusion

This paper analyzes the spread of Chinese Internet language through the construction of mobile information system. The emergence of new media has brought new ways of communication, and at the same time, it has inevitably had an impact on social and cultural life. The emergence and development of the Internet, especially the emergence and popularization of the Internet language, has brought new blood to Chinese and created new development. In the study of Internet language, this paper adds the theoretical knowledge of communication on the basis of traditional sociolinguistics. It concludes that Internet language is a form of language change, a form of sociolinguistic use. In the Internet space and dialects, it studies a realization method of PDA-based remote monitoring and customization. It makes full use of the advantages of C/S structure to realize dynamic monitoring of mobile information and provide customized value-added services. Combined with the requirements of mobile informatization, a solution based on PDA mobile operation information system is researched, the prototype of the whole system is designed, and the results of communication realization are given. This paper emphasizes the advantages of Internet language transmission when analyzing the methods of Internet language transmission. It believes that online language is not an isolated mass communication, but the most comprehensive means of communication, including interpersonal communication and group communication, organizational communication, and mass communication. Therefore, the process of language dissemination and dissemination effect on the Internet is a very complex and comprehensive process. The complex

process of network communication emphasizes the complex influence of network language communication. It has a great influence on the development of social culture, people's way of thinking, values, and other characteristics. These effects can be summarized as positive and negative communication effects. On the one hand, the relaxed language environment of the Internet has given new vitality to Chinese, which has become an important change in contemporary Chinese social culture and life. On the other hand, due to the anonymity and decentralization of the network medium, the network has become a place for mass carnivals. As a result, many impractical and inconsistent problems arose. For example, the infringement of Internet language, the violent behavior of Internet language, and the spread of Internet rumors and gossip threaten the normal order of society and some adverse events in the use of Internet language. This is the direction and goal that needs to be worked together in the future, so that the Internet can better serve people's lives, standardize Internet terminology, clean up cyberspace, and improve the Internet culture of netizens. However, the integration of GLS and GPS modules in the mobile terminal is not considered in the construction of the mobile information system. Users have great demand for these functions. In the mobile information system, the integrated navigation and positioning module is a new bright spot in the future development of the mobile information system. The research on the scheduling strategy of the scheduling monitoring center is not enough. How to improve the intelligence of system scheduling is a place worthy of in-depth study. This article does not cover this aspect.

## Data Availability

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

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## Conflicts of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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