

The Design of Petition Letter Monitoring and Warning System Based on B/S Structure

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Abstract: According to the theoretical model of petition letter early warning with comprehensive and systematic analysis, which constructed an index system of crisis condition and established mature early warning mechanism, in order to provide theory basis for implementation early-warning system. In this paper, the problem of petition letter monitoring and warning system was designed on the basis of B/S structure method.

Keywords: B/S Structure; Problem of petition letter; Monitoring and Warning System

1. Introduction

In this paper, the problem of petition letter monitoring and warning not mainly reflected specific problems in the process of masses letters, but the problem caused by the activity of petition letter. The problem of petition letter monitoring and warning was defined as: application the modern empirical social warning methods and on the basis of the survey, evaluation and examination to find out and forecast a series of problems in the process of petition letter^[1].

On account of the number of experts and mass of data was very difficult to handle in the process of finishing early warning works by manual work At the same time, the core of early warning management depended on real-time tracking and monitoring and feedback for crisis and relevant index. Consequently, it was necessary to implement the software system of the evaluation model, and to realize computer software, namely petition letter monitoring and warning system^{[2].}

The petition letter monitoring and warning system was based on monitoring- evaluation- warning- control theory, and utilized the computer management platform system of national letters and visits work and internet information technology. The software system was established which was basis on the principles of unification of legal system, data standard, data exchange format, relevant regulations and administrative measures, in order to realize information sharing at all levels of management department. The software system can make timely, accurately early warning and activation emergency response mechanism.^[3]

2.The Implementation of petition letter monitoring and warning system

2.1 .The trait of browser/server (B/S structure)

On account of web applications provided dynamic information, which arithmetic was divided into more than three layers of browser/Server structure, namely,

Browse/Server structure. The model of arithmetic was shown in Figure 1. It works mainly through the client browser will transform HTML code into the corresponding webpage, and also allows users to submit data to the second web server by means of interactive function of webpage. Second web server will respond and processing, and return to the client browser. If the application was needed to access database, the web server and database server interaction with each other to accomplish this treatment. The third database server will operate data access, and will return the result set to web server, and further to return the results back to the client browser.



Figure 1. B/S Structure

When the system did upgrade or change, it was only needed to change the server without needed to change the client on account of application of B/S structure installed in the second web server. It was good to design and management of open information, also reduced system development and maintenance costs, and the client without special software installation and Setting, only needed to support the browser of HTML documents. All users can access relevant information by the browser, without development different hardware and software environment, realized the different versions of the cross-platform operation.

2.2. The Theoretical Mode of petition letter monitoring and warning system

The problem of petition letter model which was the core target module of model; the rest modules (social



environment, conflicts of interest, reigning ability, social psychology) were source modules, namely factors module. The generating reasons, interdependence, mutual restrict and influence was revealed and reflected from different point of view. Not only induced the problem of petition letter, but also bred it under mutual influence. The causal relationship was established between factors module and targets module.



Figure 2. Theoretical model: problems of petition letter early warning^[4]

2.3.The design objective of petition letter monitoring and warning system

The letters and visits monitoring and warning system was based on informationization of management, and real-time monitoring potential crisis under management activities, the system penetrated the whole process of petition letter warning activities. The petition letter warning system involved data of warning index which adopted data processing model, forecasting crisis and warning the manager. Consequently, the general goal of software design was listed as follows:

1) According to the demand of customer, not only comprehensive early- warning index were analyzed, but also specific index were established. At the same time, early- warning index weight was set-up and determined the early- warning index critical, offered different mathematical model for each specific index.

2) Combined mathematical model with computer software in order to provide system structure of practical and feasible software.



3)The relevant information of administrative staff and experts should be timely and comprehensively obtained after establishment a uniform database.

4)In this system which provided the corresponding account number, authority management to different user. Meantime, offered unified management, identity authentication, security services.

The system was established which under the principle of independent, high safety and reliability of the identity authentication and user permissions management.

5)According to the different period and demand of early-warning index, the system configuration index and weight can be modified in order to ensure rationality and timeliness of early-warning and forecasting results.

6)The system has the ability to handle data collection, analysis, calculation of original data and storage.

7)The system has the full management functions based on the browses for administrator.

2.4 The analysis of petition letter monitoring and warning system function

The function design of the system was divided into index maintenance, data processing and information announcement. The detailed function structure was shown as Figure 3.



Figure 3. Functional structure and distribution of petition letter early warning M IS

2.4.1 .The Entry Functions of Index

The entry function module was used to collect work basic information and the description of index. Only the administrator was allowed to use the system in order to ensure the stability of the system.

2.4.2 .The Maintenance Function of Index

The maintenance function of index was mainly used in modifying indexes and permissions based on relevant

suggestions of experts and staff.

2.4.3 .The Processing Function of Data

The processing function of data was used to collect to relevant data on the basis of early-warning index system, after a series of processing, excluding false or useless information, retaining useful information and improve quality. In the meantime, the information bank was established for the sake of ensuring accuracy and timeliness information. It also provided scientific decision-making for command departments and contributed to lay the foundation for further judging.

2.4.4. The Function of Judging Alarm

This function module was used for judging index and factors whether exceeded the warning level on account of analysis of data results. The state of warning level can be drawn from the warning threshold in a certain region.

Police level	Threshold	Specific conditions
Green threshold	0.8-1	The complaint management very stable, are without police state
Blue threshold	0.79-0.6	Potentially unstable factors, but not yet influence belong to light p state
Yellow threshold	0.59-0.4	Unstable factors more, some contradictions in emergencies, belong to the police state
Orange threshold	0.39-0.2	Contradiction spiked have serious warning, belong to heavy police state
Red threshold	0.19-0.0	Contradiction outbreak, there are serious warning, belongs to the giant police state

2.4.5 .Forecasting Function Alarm

This function module was used to decide whether to issue an alert and the means of alert. At the same time, according to the historical data and time series forecasting methods to determine the trend of questions. The reports can be divided into two types: first, the current results of judging can be described by graph and additional plans or proposals; second, the reports played in a timely role to deal with emergency on the basis of evaluation and recommendation from relevant staff and experts.

2.4.6. Pre-Control Function

The function module was used to detect signs of crisis. The effective measures were timely taken to control the development of crisis so as to avoid the crisis to expand and upgrade, resulting in massive casualties and property losses. On the one hand, implementation of the pre-control can take the behaviors of feedback and recover, such as information sources and the warning signs; on the other hand, the function of inspection and evaluation was applied to the test degree of accuracy, pre-case database and case database was established in



the mean time.

The pre-case database was a model set which services for a certain purposes and particular structure of storage. The pre-case database can be divided on the basis of the objective of system, including information identification, events and consequences, people evacuated and warning level, personnel evacuation disposal.^[5]

The case database was applied to put forward suggestion, which collecting and accumulation the successful experience of expert knowledge and the reality of crisis management, through application of crisis management can be avoided errors by Non-programmed decision.

2.4.7 .Announcement Management

This function module was used to publish warning information in time, such as: the change information of index, specific requirements collection of index, the variation of software instructions.

2.4.8. Help and Exit Function

The system provided real-time help, exit function, convenience of customers.

3. Conclusion

In this paper, the system was applied into practical and offered accurate, timely and reliable warning for the authorities and leaders. The system also enhanced the management ability of government, and effective prevent, respond, resolve and eliminate all kinds of questions, in order to safeguard social stability and social work. As the system uses the B / S architecture, design, thereby increasing the flexibility of system operation and reliability, greatly facilitate the operation of its various functions and implementation. On account of the system adopted the B/S architecture design ideas, so as to enhance the reliability and flexibility of system operation, greatly facilitate the function of operation and the realization. Since the system adopts the B/S architecture design ideas, so as to enhance the reliability and flexibility and flexibility and flexibility and flexibility of operation, greatly facilitate the operation of the system reliability and flexibility of operation, greatly facilitate the operation of the function of the system reliability and flexibility of operation, greatly facilitate the operation of the system reliability and flexibility of operation, greatly facilitate the operation of the system reliability and flexibility of operation, greatly facilitate the operation of the system reliability and flexibility of operation, greatly facilitate the operation of the function of the system reliability and flexibility of operation, greatly facilitate the operation of the function of the system reliability and flexibility of operation, greatly facilitate the operation of the function of the function

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