Design and development of the architecture market management information system

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Abstract—The architecture market management information is the basis of improving the administration efficiency and the supervision ability, and reduce the manage cost. In the design of the inspection module, zml xmlhttp is limited to the environmental and cost, so it is necessary to use the remoted access database synchronization. This article discusses various advantages and disadvantages of the access database synchronization method, and propose using the XMLHttp + XML to give the flow chart and key code.

Keywords—database synchronization, the architecture market management information system, zml xmlhttp, access database

I. THE PROJECT BACKGROUND OF THE ARCHITECTURE MARKET MANAGEMENT INFORMATION SYSTEM

Due to the construction engineering related to many things, the construction process is a complicated synthetically process. Adding to the fixed place, the ambulatory production, the different structures, the quality requests, the different construction methods, the large figure, the holistic, the long periods, and it is decided by natural conditions, it is more difficult to control the quality of the construction than other industry productions. [1]

The architecture market management information can make the management standardization and the decision scientific. It also can improve the administration efficiency and the supervision ability, and reduce the manage cost. According to the policy research, it has reached agreements below:

A. It should be improve the integration of the supervision, aiming to the every department of the architecture market management closed and independence, it also should deepin the architecture market management reform, transform the government function, consummate the supervision system, enhance the harmonize management between different department, improve the supervision integration.

B. Breeding architecture market credibility system, establishing the self-restricting mechanism through building credit rewarding and punishing system.

C. Improve supervision efficiency, reduce the manage cost, implement difference supervision system, in architecture market management, according to different situations, different intensions difference supervisions are implemented. [2] [3]

There into, the architecture market management information is the basis of improving the administration efficiency and the supervision ability, and reduce the manage cost.

II. THE BASIC OVERVIEW OF THE ARCHITECTURE MARKET MANAGEMENT INFORMATION SYSTEM

Due to the the architecture market management information system related to numerous companies and projects, the C / S structure software can not meet the management standardization and scientific decision-making needs, so the overall information system use the advanced B / S architecture, through the Internet all construction units and the Management are linked to achieve information integration and sharing. [4] Limited to financial reasons, the current development tools selecte net + access. net is the Microsoft's main pushed development platform in recent years, it has a good development performance which inherite the advantages of ease use before, therefore, it has provided strong support and assistance to Software development and systems for future expansion[5].

Due to the current background of The architecture market management information, the architecture market management information system should have the following features:

A. To be fair, the main architecture market management information system is the construction management department, that is to say, the whole system should be established and maintained by construction and management institutions.

B. The management object of the architecture market management information system is the architecture market, which is belong to market economy scope, it need to be open, fair and just.

C. The architecture market management information system cover the whole process, from project bidding to project completion.

D. The architecture market management information system need pay special attention to Some of the hot issues, such as, "affiliated "problem, "credit rating" problem, and so on.

After repeated consultations with construction administration department, for the above features, Task Force believes that the architecture market management information system, in addition to a general information management system structure, should have the following functions:

A. When the project require bidding, system will notice all enterprises, they can see the basic conditions of
the project through the certification, and enter the "enterprise project application" screen, then select the staff which meet the project requirements needs into project bidding process automatically.

B. After the tender office’s qualification reviewing, the Ministry of market’s qualification reviewing, tender office’s bidding, tender office’s registering, market office’s registering, all enterprises will get the notice of project status, and it is public to every department.

C. After a project tendering pre-registration, in accordance with the provisions, parts of members involved in the project can’t participate in the tender of the other project, so this part of members will no longer appear in the project bidding interface until the project complete, they can re-participate in the bidding.

D. System should be able to finish the intelligent discovery of the "affiliated" workers and the automatic rating of the "credit rating".

III. THE FLOW DIAGRAM OF THE ARCHITECTURE MARKET MANAGEMENT INFORMATION SYSTEM

IV. THE ARCHITECTURE MARKET MANAGEMENT INFORMATION SYSTEM ABOUT THE SECURITY ISSUES AND SOLUTION

The users of the management object of the architecture market management information system consist of the Managements and enterprise, now, all enterprises have paid great importance and have taken appropriate management measures to the data security. However, today, to encourage the rational flow of human resources, after applying the information system, when the employee transfer or leave because of various reasons, the majority of enterprises, for negligence or lack of awareness, pay not enough attention to security risks caused by the flow of human resources, and there is no proper mechanism to eliminate the workers access, so, the residual authority may be used by the staff themselves or the other hackers, that, to impact information system security and to bring a great deal of risk [12]. In order to guard against security risks caused by employee flowing, in addition to strengthening the management to improve awareness of security, the system is no longer using the traditional public account management and password management, instead of using the safety lock means for each enterprise which is provided for a safety lock, it can be better protect the enterprise's trade secrets.

V. THE ARCHITECTURE MARKET MANAGEMENT INFORMATION SYSTEM ABOUT THE MATHEMATICAL MODEL OF INSPECTION ABSENCE

The affiliated constructors are more and more common, this phenomenon developed from the coastal city to the northwestern, and to the whole country. For the windfall, some headhunters are appeared to help the constructors. As the www.nxgkw.com, it is a professional construction headhunter [3]. So it is indispensable to make the architecture market management information.

the architecture market management information system uses a regulatory strategy 【Bayesian】 based on bayes inference, Bayesian inference measure the truth of the uncertainty based on the probability or the population distribution. [16]. Bayesian inference mainly obtain the prior probability, then to the inspection data, we use the Bayes formula

$$P(\omega | B) = \frac{P(B | \omega)P(\omega)}{\sum_{i=1}^{4} P(B | \omega_i)P(\omega_i)}$$

to calculate the posterior probability, last, we can estimate whether it is an affiliated worker.

According inspection data, the prior probability is obtained, and based on Bayesian inference the posterior probability is calculated, so the estimation of whether an affiliated worker can be received. Consequently, the mathematical theoretical basis of the difference supervision is supplied. The scientific supervision method is provided for different intensity difference supervision.

VI. THE INSPECTION ISSUES AND SOLUTIONS OF THE ARCHITECTURE MARKET MANAGEMENT INFORMATION SYSTEM IN NO SIGNAL AREAS

Since the architecture market management information system about the Mathematical model of inspection absence as the judgment basis, and the inspection data needs
inspectors to identify the engineering register and calendar their absence. However, due to some construction sites are remote, it is difficult to guarantee the transmission of network communications, inspectors need to establish a local information management system to get the information of engineering registration workers at once and register the Inspection records immediately. So it is necessary to return the Office and then to finish the access database simultaneously.

through xml + xmlhttp, the architecture market management information system complete database synchronzation, so as to use the xml format xmldocument to store data,

and by XMLHttp complete transmission of the xml format object to realize the database synchronization successfully.

through the XMLHttpRequest+ XML pass the access database bilaterally. it is neither calling romoted asp Statement cycle to waste more system resources, nor need requiring users to have the restriction of uploading files and downloading files, and you can customize the content of two-way data transmission , it is an effective method for the completion of the two-way data synchronization .

VII. SUMMARY
During the more than one year, the architecture market management information system solve the problem of Supervision is not strong, decentralized regulatory power, the working efficiency is not high, which is cause by the every department of the architecture market management closed and independence, so to improve the supervision integration. difference supervision breed architecture market credibility system, establish the self-restricting mechanism, improve supervision efficiency, conserve regulatory resources reduce the manage cost, so to achieve good results in architecture market .

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REFERENCES

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