Web-based Financial Accounting Information Intelligent Management Platform Construction

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Abstract: Conventional financial accounting information management platform mainly uses AJAX, DWR technology to deal with the server side as a carrier, vulnerable to the server deployment location, resulting in some of the functional modules run abnormally, therefore, the need to design a new Web-based financial accounting information management platform. The test results show that each functional module of the designed Web-based financial accounting information intelligent management platform can run in an orderly manner and has reliability, which is a new exploration for optimising the intelligent management of financial accounting information and promoting the transformation of enterprise digital intelligence.

Keywords: Financial Accounting Information; Intelligent Management; Platform Construction.

1. Introduction

With the development of science and technology, the financial management of enterprises is also undergoing transformation. Many enterprises with strong comprehensive strength have begun to use information technology financial management platform for management, and the content of financial management is also being upgraded to digital intelligence. Carrying out informationised financial management can not only improve the financial management efficiency of the enterprise, but also effectively screen the enterprise's high-quality resources and promote the overall development of the enterprise, therefore, it is necessary to study the effective financial accounting information intelligent management platform. In order to complete the complex and changeable financial information accounting management, improve the efficiency of financial information accounting management, financial information intelligent management platform can be automated according to the preset formula for processing, bookkeeping classification, greatly reducing the enterprise's financial management costs, and finally, the financial accounting information intelligent management platform can generate a variety of analytical reports, effectively digging into the history of financial information for the subsequent decision-making to provide support for the enterprise. To sum up, this paper designs a new financial accounting information intelligent management platform based on Web technology, and makes certain path exploration for improving the competitiveness of enterprise's financial processing.


2.1. Hardware Design

Different financial information processing categories need to set up different financial information processing formulas, therefore, in the processing of large amounts of data financial information is prone to lagging problems, affecting the comprehensive performance of the platform, therefore, the financial accounting information intelligent management platform designed in this paper selects the Cyclone II series of EP2C8Q208C8N information processor as the core processor of the platform. It is known that the EP2C8Q208C8N information processor uses FPGA programmable gate array, which solves the problem of programming road number limitation existing in the conventional information processor, and improves the comprehensive performance of the information processor. The EP2C8Q208C8N information processor uses LCA logic unit array, and is configured with three information processing logic modules, which are the basic logic module, the internal connection logic module, and the input/output logic module. module, and input/output logic module, in the process of information processing, the information processor can drive the processing module to carry out combined processing, so that it meets the management logic requirements of the information intelligent management platform. In addition, in order to solve the problem of information processing loss, the EP2C8Q208C8N information processor uses SRAM process to import the information management file, improve the integration of the information processor, and realise diversified information processing.

In order to improve the operational stability of the platform, so that it can always output financial accounting information, the platform designed in this paper selects the EMH power supply circuit as the power supply circuit of the platform. EMH power supply circuit is configured with a number of standby batteries, with a standard voltage of 3.7V and a capacity of 2,700Ah, in the process of power supply, the EMH power supply circuit can real-time conversion of the voltage capacity to deal with DC-DC circuits, so as to meet the platform's demand for boost conversion, platform's boost conversion needs. In addition, the conversion efficiency of EMH power supply circuit is high, and the maximum output current is up to 500mA. Once the overheating problem occurs during the operation of the platform [1], this power supply circuit can immediately stimulate the overheating protection, avoiding the abnormal operation of the platform, so as to improve the stability of the platform operation. EMH power supply circuit cost and power consumption are low, in order to maintain its use of quiescent current
advantage, the power supply circuit is set up inside the LM317 chip, the chip can be based on the relationship between the current inflow control output potential difference [1], to ensure that the potential difference is at a minimum value to the maximum extent. In addition, in order to meet the constant voltage relationship during platform operation, the current circuit is set up with a three-terminal adjustable reference source to ensure that the output voltage meets the operational requirements of the platform.

Conventional financial accounting information memory mainly uses DMA (direct memory access) to obtain the storage array and complete the information storage processing, but the above steps are prone to access operation problems in the storage process, and the overall requirements for data bandwidth are too high and the power consumption is high, therefore, in order to solve the problems of conventional information memory [2], this paper, from the CGRA perspective, carries out the information optimisation configuration, a new Soc information memory is set up. In order to support the interconnection operation mode, the storage units set up in Soc information memory are all point-to-point storage and processing units, and the overall number of bits operated is less, which can reasonably carry out the integrated configuration of storage and improve the integrated capacity of information memory. When there is an error in the processing of operational configuration information, the information memory can immediately carry out spatial configuration processing, try to call up accurate storage configuration information, carry out reasonable storage matching, and maximise the comprehensive operational performance of the platform.

2.2. Software Design to Build Financial Accounting Information Management Architecture

In order to solve the problem of AJAX, DWR technology in dealing with server-side load, by the server deployment location, resulting in some of the functional modules run abnormally, this paper with the help of Web technology to build an effective financial accounting information management system structure. web technology can use hypertext technology to generate the HTTP transmission protocol, effectively generating the financial accounting information management language, to ensure that the platform's comprehensive operational performance. In addition, Web technology can also create dynamic interactive procedures to improve the flexibility of the platform. Therefore, this paper combines the needs of financial accounting information intelligent management platform to build the financial accounting information management system structure. First of all, it is clear that the financial accounting information management platform is based on the core concept of "enterprise value orientation", to meet the diversified needs of enterprises in the field of finance, pay attention to the strategic needs of the enterprise and the industry development trend, and adjust the service strategy and product planning in a timely manner, in order to better serve the long-term development of the enterprise. Finally, the platform will be committed to creating a service platform that comprehensively covers the financial ecosystem of enterprises. It is necessary to analyse the technical feasibility of the intelligent management of financial accounting information, that is, from the software and hardware and other functional requirements, with the help of Web technology for centralized development [3], the creation of the JDK1.6 development environment, so that the platform constructed to meet the needs of intelligent management of financial accounting information. Secondly, analyse the economic feasibility of the financial information management system, according to the requirements of the database and server to write Java programming language, to ensure the openness of the Java platform. Finally, the operational feasibility, that is, on the basis of Window to build the financial accounting information intelligent management interface and management window, analyse the security risks that exist in the management process, to fundamentally reduce the risk of financial accounting information management, according to the above analysis of the platform's intelligent management needs, you can design a reasonable BPNN financial intelligent management model, in the conventional management conditions, the selection of the standard value of financial processing. Setting financial accounting management samples.

The financial accounting information management architecture designed in this paper mainly consists of a user interface layer, data access layer, business logic layer, in order to improve the security of the accounting information intelligent management platform and reduce its operational difficulties, this paper takes into account the comprehensive use of the objectives when designing the management system architecture. In the financial accounting information management system structure, the user interface layer mainly carries out data flow exchange, through the business logic layer to complete the data information verification, the business logic layer contains various management functions, the user can add, delete and modify the data in the business logic layer, the data access layer is mainly to store the data in the intelligent management platform, to carry out effective communication, to reduce the amount of access to the platform, and to improve the reliability of the platform's response.

Financial accounting information management is different from ordinary information management, there is a certain degree of specificity, which often needs to be based on the type and quantity of financial accounting information, accounting for the overall size of the intelligent management, therefore, in the design of the financial accounting information intelligent management platform, this paper divides a number of modules and function points, set up a separate responsibility board, try to improve the connectivity of the various modules of the platform.


3.1. Platform Construction Needs Policy, Resources and Technical Support

The construction of the Web-based financial accounting information intelligent management platform is a complex systematic project that requires comprehensive support of policies, funds and technologies, as well as the attention and decision-making support of the leadership. In terms of policy, the government should introduce relevant policies and regulations to encourage and support enterprises to build Web-based financial accounting information intelligent
management platform, and provide enterprises with the necessary policy protection and convenient conditions. In terms of financial support, the government can provide enterprises with necessary financial support through investment, subsidies and credit. In terms of technical support, the government can provide enterprises with necessary technical support through scientific and technological innovation, introduction of talents and technical training. At the same time, the platform construction is also a handful of projects, which is an important part of the implementation of enterprise strategy, providing decision-making and resource guarantee for the platform construction.

3.2. Multi-departmental Full Participation in the Whole Process of Management to Guarantee the Smooth Progress of Platform Construction

Optimize business processes and job settings, strengthen project management and coordination, and enhance supervision and evaluation. In response to the business process and job setting problems that arise in the platform construction, it is necessary to improve work efficiency and service quality by optimizing the business process and job setting. Encrypt sensitive data, such as bank card numbers and passwords, and use SSL/TLS protocol for data transmission encryption to ensure the security of data during transmission, and encrypt storage and risk assessment of the database to prevent unauthorized access and tampering.

4. Platform Testing and Discussion of Results

In order to verify the management effect of the designed Web-based financial accounting information intelligent management platform, this paper configures an effective experimental environment, verifies the comprehensive use performance of the designed system based on the needs of the enterprise, and carries out the platform test as follows. Combined with the financial accounting information intelligent management platform test requirements, this paper selects Chrome as the test browser, assisted by IE11 performance testing, in order to improve the reliability of the test, this paper selects MySQL database as the test storage database, the entire test environment using 32-bit Windows to adjust. Test software database selection MySQL5.6 and above; operating system for Windows 7 32-bit, the server for Tomcat7.0; browser for IE11, Chrome; runtime environment for JDK1.7. To test the software environment configuration is complete, you can set up the selection of test hardware, according to the requirements of the financial accounting information processing, this paper selects the 8-core 2.4GHz CPU as the platform test processor, memory, memory, and so on. CPU as the platform test processor, memory for 8GB, hard drive for 500GB (SATA); network card for 10/100M.

5. Test Results and Discussion

Under the platform test environment configured above, the user login interface can be adjusted to run the Web-based financial accounting information intelligent management platform designed in this paper, and the test results of each functional module It can be seen that running the Web-based financial accounting information intelligent management platform designed in this paper in line with the test requirements, each functional module can run in an orderly manner, and the above test results prove that the Web-based financial accounting information intelligent management platform designed in this paper has good overall performance, reliability, and a certain degree of application value.

References

