Research on the Application of Accounting Information System Intelligence on Business Enterprises

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Abstract: With the continuous development of the era of big data, artificial intelligence technology has also achieved rapid development. Computers have also been widely used in all walks of life, greatly improving the level of intelligence in various industries, including accounting industry, and accounting intelligence has become the trend of accounting industry. Based on the introduction of the intelligent accounting information system architecture, this paper analyzes the application of the intelligent accounting information system in the business enterprise in order to provide some suggestions for realizing the intelligent development of the accounting work of the commercial enterprises.

1. Introduction

With the continuous development of society, the pressure of market competition has also increased. The development goal of commercial enterprises is to seek economic benefits. If they want to remain invincible in the fierce market competition environment, they must find out the opponents in time. The potential law of discovery is to find out the problems existing in the operation of the company within the first time and make a correct and prompt decision. Only in this way can we seize the opportunity for development and ensure its long-term development. As a result, the intelligent accounting information system has gradually attracted the attention of more and more companies. How to better apply the intelligent accounting information system to commercial enterprises is also a subject worthy of in-depth study by all relevant practitioners.

2. Structure of Intelligent Accounting Information System

The input system is the only channel for recording data. At this stage, the keyboard and mouse are the main tools for the intelligent accounting information system to complete data entry. Those tools must be manually operated. Although inputting the original document is a relatively simple matter, it also takes some effort and time. With its unique voice recognition and graphic recognition technology, the intelligent accounting information system has significantly improved the intelligence of the input system.

The data warehouse system consists of a knowledge database, a rules database, and a business database. The rule database refers to the rule set of a certain industry or enterprise, and is a rule that an intelligent accounting information system should perform to perform output, input, and processing operations. For example, accounting business rules, enterprise business rules, enterprise special requirements rules, and business process rules all belong to the rules database; business databases mainly include accounting information business data to be processed and accounting information business data to be preserved; knowledge database is mainly used for enterprises. General rules and business definition [1].

The processing system involves the enterprise's original documents until the entire process of making financial reports. Its operation is based on the rules provided by the rules database. It can realize the intelligent processing of accounting data and use the output system to display the processing results. It interacts with the data warehouse to establish accounting information and data consistent with the company's development needs [2]. During the operation of the processing system, it can be controlled by means of a control system.

The accounting information provided by the output system is based on the requirements of internal and external accounting information users. At this stage, the use of electronic document output, print output, and monitor output is mainly used to achieve the output of accounting information.

The control system is a relatively sound system developed based on the knowledge base and rule base. During the operation of the intelligent accounting information system, some unexpected situations or new business will inevitably occur. At this time, manual intervention must be used to ensure The normal operation of the system. With the continuous development of science and technology, the system will also be more and more perfect, and the knowledge base and rule base will gradually become perfect. However, the control system will always exist, which is a supplement to the automatic operation of the system, for the knowledge base and the rule base. It is of great significance to ensure the stability and reliability of the entire system.

3. The Application of Accounting Information System Intelligence in Commercial Enterprises

Image recognition technology is an important means of ensuring the natural interaction between people and accounting information systems. As some scholars have mentioned, intelligent machines should be able to understand our words and see everything we can see, that is, people and The natural interaction of the machine. Optical character recognition technology OCR is the key to achieve human-computer interaction. It mainly uses optical devices such as cameras or scanners to import pictures into computers, and then adopts binarization processing, image noise reduction, text feature extraction, and character format separation. Improve the sharpness of the picture, and then combine the characteristics of characters, use the relevant calculation formulas to identify the text, and then check the data in the database and the recognition result. On the basis of a comprehensive analysis of the context, the most reasonable text will be found and completed. After text verification, use the editable text format to re-enter text. Jietong Huasheng's Yun Ling OCR, domestic Hanwang OCR and foreign Tesseract OCR are all representative of the successful application of current image recognition technology [3]. At present, the latest generation of Lingyun OCR technology developed by China has been widely used in Xiamen Cloud Accounting and China CITIC Bank, greatly improving the success rate of image recognition. Using Lingyun's OCR technology, accounting personnel can quickly and efficiently process the original bills, accurately identify the accounting data required for billing such as the receiving and paying party information and invoice codes, and at the same time, realize the intelligence of bill form types. Identification and archiving play an important role in improving the input efficiency and accuracy of accounting information.

Accounting cloud computing is an intelligent and specialized system that completes accounting information integration services based on cloud computing vendor data analysis, data tapping, data storage, and network server services. Accounting cloud computing mainly includes five levels: platform level, hardware virtualization level, data level, application level, and infrastructure level.

Accounting cloud computing mainly includes three modes, namely hybrid cloud, public cloud and private cloud. Among them, the public cloud model means that public cloud computing providers are responsible for certain financial accounting work of enterprises. Small and medium-sized enterprises can use this model; private cloud models mean that enterprises use their own private cloud servers to handle all of the enterprise's Financial accounting data suggest that large enterprises with stronger economic strength can adopt this model; hybrid cloud mode refers to the fact that the computing capacity of private cloud servers has been used to the fullest extent, and at this time, unexpected business emerges. The model will automatically switch to the public cloud model to maintain the stable operation of the peak business.

The accounting cloud provider will build an operating platform for the enterprise. The accounting staff can use the network to handle the business at any time and get cloud computing support. In addition, cloud computing data storage analysis capabilities and computing power are very powerful and can provide a reliable basis for business decisions. The advantages of accounting cloud computing are mainly reflected in the following aspects: First, the efficiency of accounting information transmission and sharing can be effectively improved; secondly, the intelligence and

automation of accounting work can be improved; again, the cost of accounting informationization can be greatly reduced; It will help enhance the internal and external information exchange capabilities of the company. The application of accounting cloud computing is of great significance for improving the internal information transmission efficiency and internal control capabilities of an enterprise. Currently, companies such as Chanjet, UF, and Inspur have all developed relevant accounting cloud computing services and achieved satisfactory results.

XBRL language technology is a computer report markup language developed based on XML language. It forms a set of relatively standard format specifications by disassembling the report data into data elements and then mapping them one by one with the mark. Financial reports made using this language have some extensibility. The XBRL format can improve the normativeness of the business. According to a unified standard, each label and the financial item correspond one-to-one. An element can be extracted separately, or it can be re-integrated. Such a financial report can meet the requirements of various forms of formats. . XBRL also clearly points out the hierarchical relationships among information elements and the hooking relationships, which can provide a reliable basis for the analysis of financial reporting data. The XBRL format can be used in financial statements to achieve lossless conversion of various financial statement data formats [4].

At this stage, XBRL language technology has been widely used in domestic and foreign financial reports, such as the Irish Taxation Bureau requires all companies must use XBRL format to develop financial reports; the Netherlands also requires income tax returns must use XBRL format; since 2010, China It also clearly states that the annual financial report formulated by the Ministry of Finance must adopt the XBRL format. The application of XBRL language technology has become an inevitable trend in the business enterprise accounting work.

4. Conclusion

In summary, the intelligent accounting information system makes use of its own image recognition technology, accounting cloud technology and XBRL language technology to realize the natural interaction between man and machine, improve the intelligence and automation level of accounting cloud computing, and formulate a general scalable The financial report realizes the lossless conversion of various financial statement data formats. The application of intelligent accounting information system is of great significance for ensuring the sustainable development of commercial enterprises. It is worth in-depth exploration.

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Project: Accounting Skills Training Based on Work Process Micro-Teaching Research

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