Application of Computer Software Development Technology in Accounting Audit Work

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Abstract. With the development of society, the update speed of computer software development technology is faster and faster. People can make practical software with less cost. The traditional audit of accounting information is very complicated. It is a repetitive labor task. With the help of computer software development technology, the pressure of accounting audit work has been reduced [1]. The software development of information accounting audit work speeds up the progress of enterprise audit mode. This paper explains the system structure of computer audit software. The innovative development task of audit software is also mentioned.

Keywords: Software Development, Accounting, Audit, Application

1. Introduction

The progress of computer technology has made great changes in our life. Many enterprises have developed a new mode of information management. The steps of traditional accounting audit are complex. It requires the ability of manual repetition. Enterprises need to employ a lot of accountants to complete the accounting work [2]. There is no doubt that this mode of work wastes a lot of human and financial resources. Financial experts believe that the development of computer audit software can effectively alleviate these problems. The theory was quickly responded by computer experts. At present, the number of computer audit software is gradually increasing.

The emergence of computer audit software has been valued by many enterprises. They believe that the information-based audit mode improves the efficiency of audit work. It can not only save manpower, it can also save a lot of labor costs (see Figure 1). Compared with the traditional audit method, the accuracy of computer audit is very high. The internal staff of enterprises divide the computer audit software into many categories. However, there are many deficiencies in audit software. In order to solve these problems, people have designed a computer audit software development project. This paper briefly describes the classification of audit software. On this basis, this paper designs the development content of computer audit software.

2. Theoretical content of computer audit software

2.1. Specific concepts of computer audit

The emergence of electronic arithmetic information system accelerates the speed of computer
operation. People define this kind of operation as computer audit. It includes computer auditing and computer auditing. There is little difference between computerized audit and computer audit. They are important auxiliary means for audit work to perform its duties in the information environment.

2.2. Main conditions for developing computer audit technology
The precondition is that audit staff must have rich knowledge of electronic data. Know the common sense of electronic data to be able to control the computer audit technology. The establishment of audit information database is essential. There are many audit contents in every enterprise. The necessary information of audit content of computer information should also be obtained. Finally, the security system of electronic data should also be established.

![Figure 1. Accounting audit of high speed processing computer software.](image)

2.3. Basic methods of computer audit
In the process of audit staff starting the audit, they do not need to use the data computer of the auditee directly. The auditee should first select effective audit information. Send audit information to audit center. After that, the audit staff use the audit software to complete the query and analysis function. This kind of investigation mainly avoids the potential safety hazard of the computer system of the auditee.

2.4. Main steps of computer audit
The main steps include audit information investigation, data collection, data conversion, data analysis and data validation. Staff should investigate the authenticity of audit information. After that, they should collect effective audit information. After finding some information with incorrect format, they should complete the data format conversion. Use audit software to complete data analysis. Finally, the data validation is completed.

3. Classification of computer software based on accounting and auditing work

3.1. Financial audit software
Generally speaking, the types of financial audit data of enterprises are the most. Therefore, the function of financial audit software is comprehensive. Its main object of work is the professional data of financial department. Oracle data platform is recommended [3]. SQL Server 2018 is recommended for the server. It is suggested to adopt the provincial centralized mode for data collection. The representative of audit software is idea. The database of the general budget accounting system should also be available.
3.2. Tax audit software
The main content of public finance is taxation. Tax software mainly includes tax collection and management. Tax finance, tax source management and taxpayer's basic information system. Similar to financial software, Oracle is recommended for database platform. It is suggested to adopt the provincial centralized mode for data collection. The representative of tax audit software is ACL software. The function of this software is comprehensive. It can also be applied to other audit modes.

3.3. Audit software for administrative units
In fact, the audit content of administrative units is also included in the public finance. This unit will be gradually incorporated into the Treasury's centralized payment system. Unfortunately, the provincial and municipal parts will be accounted for separately. The content of the work will be complicated. The representative of the audit software of administrative units is golddisk, UFIDA and other general software. Database should take SQL as the main standard.

3.4. Enterprise audit software
Audit data is the core part of an enterprise. It is the internal intangible property of the enterprise. The audit work of some medium-sized enterprises and small enterprises is relatively simple. They often use common auditing software. The audit work of large enterprises is very complicated. They may choose comprehensive auditing software such as idea and ACL. However, some difficult audit work content is also unable to be solved by software.

4. Analysis of the working mode of the common accounting and auditing information system

4.1. Audit business processing mode
The audit speed of the content of audit work in some small areas is very fast. The results of the audit will be reported to the municipal government. Similarly, the audit results of municipal governments will be reported to provincial governments. The results of the provincial government audit will be reported to the State Council through the National Audit Office. This mode is also known as budget tracking mode or networked verification mode. Through the verification of the State Council or the provincial government, we can find the doubtful points in the audit work.

4.2. Specific process of audit
Generally speaking, the data project is the smallest unit of the audit department's operations. The operation procedure of audit can be divided into preparation, implementation, report and feedback. Preparatory work refers to the formulation of the plan. Implementation refers to the audit analysis of data. After completing the audit report, the auditor will check the audit items again. The feedback of the final result is the final conclusion of the audit.

4.3. Application structure of information system
The application platform should be based on advanced integration technology. This information processing platform mainly includes basic platform, basic database, core services and project development [4]. The core services include identity authentication, data sharing, multimedia services and system management services. Project development is not static. It mainly completes the development process of the designated project according to the lack of information system function.

4.4. Source of information system
Generally speaking, the source of audit information mainly consists of three parts. They are financial data, business data and other audit data. Financial data mainly includes business data of various banks and financial institutions. Enterprise data mainly includes the main business data of financial department and tax statistics department. Industry standards and technical specifications as well as relevant literature are listed as other audit data.
5. The goal of software development based on accounting audit work

5.1. Main objectives of developing the system
The functional modules of the system should be completed according to different levels. The software must ensure the smooth implementation of the functions of each module. Software development should also ensure a clear partnership with other software. The connection between the nodes of the module should also be guaranteed. Set up information sharing channels for different modules. The function of the module is established. Determine the appropriate design approach for the goal. Finally, the database design is completed (see Table 1).

| Development objectives       | Primary objective                        | Feature                        |
|------------------------------|------------------------------------------|--------------------------------|
| Functional structure         | Layered completion                       | Stability                      |
| Operating environment        | WIN 7                                    | More stable than win10         |
| Function                     | Collection, transformation and security   | Beware of network virus        |
| Performance index            | Memory settings and required space        | 64MHz and 1G                   |

5.2. Design of software running environment
In fact, the environment of hardware equipment of audit system in our country is very poor. Therefore, the content of audit software design should not be very complex [5]. Since the system of windows is relatively stable, it is recommended to set the running environment of the software as win 7 system. The reason why the win 10 system cannot be selected is that its update is too complicated. The type of database should be selected as sql-2018 version.

5.3. Main function analysis of software system
The function of data collection should be guaranteed first. It should ensure the authenticity and reliability of data. The function of data conversion should also be guaranteed. A lot of data is not in the correct format. To format the data to standard mode. Security functions should also be set. A lot of network virus is very terrible. The content of audit data is the core of every enterprise. It is our responsibility to ensure their safety.

5.4. Analysis of performance index of software system
The response time of the system should be set within 15 seconds. The response time of simple business should be set within five seconds. Try to ensure that the software will not be jammed. Memory configuration is generally set at 64 MHz or above. Disk space should be saved to at least 1g. The maximum processing speed should be set to 100 transactions per second.

6. Problems in the use of accounting and auditing software

6.1. The practicability of audit software is poor
Although the number of audit software is increasing gradually, their internal structure is simple. In order to save manpower and financial resources, many enterprises have developed some audit software. However, the inside of these software is very rough. They distribute the software to the Internet for free. These software has become non professional audit software. They are not practical. This leads to a lot of inefficiency of audit work.

6.2. Lack of information audit talents
Most of the traditional audit work is done manually. The number of auditors is large. Audit major is also very unpopular [6]. However, with the emergence of information audit, enterprises no longer attach importance to audit talents. This has led to many schools to reduce the number of audit personnel training. The number of talents with high-quality information audit is very small. This leads to the lack of talents.
6.3. Audit software does not like innovation
The internal structure of today's audit software is similar. They are just copies of the same software. Plagiarism related technology and function is the current situation of audit software. Designers don't seem to want to innovate audit software. This leads to many domestic enterprises do not like the software. A lot of foreign software has been introduced into China. This leads to the economic depression of audit software in China.

7. Summary
We can not be limited in the traditional accounting audit work content. We need to complete the process of innovation. The development of audit software can effectively innovate the function of old software. Although it may waste some costs, new technical standards must be set.

References
[1] Potempa J, Pavloff N, Travis J. Porphyromonas gingivalis: a proteinase/gene accounting audit[J]. Trends in Microbiology, 1995, 3(11):430-4.
[2] Dewing I P, Russell P O. Regulation of UK Corporate Governance: lessons from accounting, audit and financial services[J]. Corporate Governance: An International Review, 2004, 12(1).
[3] Ivan L. Role and importance of accounting and audit in corporate governance[J]. Škola Biznisa, 2014.
[4] Ye N, Li X, Chen Q, et al. Probabilistic techniques for intrusion detection based on computer audit data[J]. IEEE Trans Systems Man & Cybernetics Part A, 2001, 31(4):266-274.
[5] Eisenberg J M, Williams S V, Garner L, et al. Computer-based audit to detect and correct overutilization of laboratory tests[J]. Medical Care, 1977, 15(11):915-921.
[6] Braun R L, Davis H E. Computer-assisted audit tools and techniques: Analysis and perspectives[J]. Managerial Auditing Journal, 1986, 18(9):725-731.