Retraction

Retraction: Application Research of Accounting Informationization Based on Cloud Computing (J. Phys.: Conf. Ser. 1915 032003)

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The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

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Application Research of Accounting Informationization Based on Cloud Computing

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Abstract. With the development of the network, many new computer-related technologies are constantly emerging. At present, many industries have begun to use cloud computing to continuously strengthen the development of enterprises. This paper makes some specific suggestions about the construction of enterprise accounting information. I believe it will be helpful for building a model that combines corporate accounting information system and cloud computing.

Keywords: Cloud Computing, Accounting Informatization;

1. Introduction

With the continuous development and application of cloud computing technology, more and more companies are gradually investing in the application and development of cloud computing. The enterprise informatization of cloud computing technology is gradually deepening [1]. And the development of enterprise informatization is based on cloud computing enterprise management information system, so we should apply cloud computing technology to accounting informationization, this will help the enterprise's informational construction.

2. Cloud computing service model and model publishing model

2.1. Cloud computing service model

At present, the cloud computing services that the industry has operated mainly include three service models: SAAS, PAAS, and IAAS:

(1) SAAS (Software as a Service): A software service provider or supplier publishes in a unified manner on the cloud computing infrastructure. Software products, at the same time responsible for operation and maintenance. Users can order the required application software services from software service providers or suppliers on demand, and the operator will charge customers based on the number of software services ordered or the length of use.

(2) PAAS (Platform as a Service): Cloud computing service providers only provide development languages and development environments. Users can customize business software in this environment, and they can also publish to the cloud infrastructure. PAAS is an extension or product of SAAS. In this case, "cloud" computing serves as a business development and operating environment [2].
(3) IAAS (Architecture as a Service): Cloud computing service providers provide users with infrastructure (processor resources, storage resources, network resources, and other basic computing resources) as a service. Customers can use their own business software or even the operating system runs on it. The service provider only owns the ownership of these equipment, and is responsible for the daily operation and maintenance of the computer room and the machine. The user usually pays for the use of resources and time.

2.2. Cloud computing model release mode
According to the different release scope, the cloud computing model can be divided into four different release modes. The first is a private cloud. This type of cloud computing resources are generally only released to an organization. The cloud computing resources are managed by the organization itself or managed by a third party. The second is the community cloud. Cloud computing resources are released to multiple organizations, and some resources can be shared by multiple organizations, making the resources community-based [3]. The third type is public cloud. Cloud computing resources are used by the public or serve all groups in a certain industry, and are generally managed and operated by a third-party professional organization. The fourth type is hybrid cloud. The release of cloud computing resources combines the above methods. The cloud computing resources of each method maintain a unique entity but are combined through standard or unique technologies.

3. The application model of cloud computing in accounting informatization

3.1. Enterprise Accounting Informationization Cloud Computing Deployment Mode
Enterprise accounting informatization applications usually only provide services for internal or small-scale partners of the enterprise organization. Cloud computing service methods should be comprehensively selected. Cloud computing provides a variety of flexible deployment methods to meet the differentiated needs of customers, as shown in Figure 1.

![Figure 1. Enterprise accounting informationization cloud computing deployment mode](image)

(1) Customer's internal deployment method. The customer deploys the system internally in a private cloud, and the enterprise independently operates and maintains it. Enterprises will need to transform their data centers and build their own private cloud or community cloud data centers.

(2) Single-tenant SAAS mode. Enterprises use public virtual private clouds (Virtual Private Clouds) to rent hosted data center services. Under this deployment method, enterprises can not only obtain the high scalability and flexibility brought by cloud service providers, but also obtain their professional-quality services to ensure the efficient, stable and safe operation of the system, mainly for safety, efficiency, and Companies that are very concerned about data control issues [4].

(3) Multi-tenant SAAS mode. Multi-tenant (Multi-Tenant) simply means that a single software instance can serve multiple enterprise customers. Multiple enterprise customers can share databases, servers, and storage resources, and can provide customized functions for different customers by modifying the metadata of the service. The main advantage of multi-tenancy is cost-effectiveness.
Sharing software, hardware, application development and maintenance costs and system upgrade costs among tenants can reduce the cost of each tenant, mainly for small and medium-sized enterprises, industry customers, and regional customers [5].

3.2. The difference between the traditional enterprise accounting information architecture and the enterprise accounting information architecture based on private cloud computing

There is a big difference between the traditional enterprise accounting information architecture and the enterprise accounting information architecture based on private cloud computing in specific deployment, as shown in Figures 2 and 3. The traditional enterprise accounting information architecture (Figure 2) requires multiple sets of business software to be deployed on the user client to complete different business functions. Business operations rely on the client's own computing and storage resources, and the server only provides database access. Each client software directly connects to the database for data query and entry. Unify traditional computing and storage resources in the cloud. First, enterprises build their own data centers and improve their utilization to complete the construction of infrastructure such as storage arrays and server clusters [6]. On this basis, through virtualization software, the infrastructure is abstracted into a unified resource pool for use by various businesses (IaaS; through The cloud platform middleware provides a unified data access interface for each business, and also provides a business integration channel (PaaS) between each business; each professional business service is carried on the cloud platform middleware to provide professional services Function: Through a unified service interface, the business display layer of the customer can present the business operation process and results (SaaS; finally, for each customer node, only a simple business display interface is required, usually using an ordinary web browser.

![Figure 2. Enterprise traditional accounting information application system](image1)

![Figure 3. Enterprise accounting information application system based on enterprise private cloud cloud computing](image2)
For the corporate accounting information architecture based on public cloud computing (see Figure 4), business services are hosted on the public network, and enterprises can access the public cloud system through Internet, and can choose to share (single-tenant SAAS) or with other corporate customers Sharing (multi-tenant SAAS) service resources. The question between enterprises and service providers is the leasing relationship. There is no need to invest in infrastructure construction, and you can pay according to business usage or software authorization. Public cloud service providers can provide unified operation and maintenance of software and hardware, reducing enterprise operation and maintenance costs. For SMEs [7]. In the case of ensuring data security, the cost of using public cloud services is relatively lower, and it is easier to expand business.

Figure 4. Application system of enterprise accounting informationization based on public cloud computing

4. Cloud computing is the objective requirement of the development of enterprise accounting informatization

4.1. The limitations of the traditional accounting information of enterprises and the information structure

The basic mode of the current enterprise information construction is that the enterprise purchases software authorization and implementation services, and purchases related basic facilities, builds an industry-wide operating environment, and forms a system maintenance team on the Internet to ensure that the system responds to business needs. This kind of enterprise information construction model has great limitations.

(1) Inefficient use of resources. Traditional accounting informatization data centers of enterprises usually adopt a professional mode of construction and deployment, that is 1:1 configuration of infrastructure and application systems. With the gradual deepening of informatization construction, the complexity of the system and the amount of information increase rapidly, and enterprises need to preset a lot in advance. Resources, in addition, in order to avoid insufficient data center performance, infrastructure must be purchased and deployed according to the peak application standards, and resource utilization efficiency is low.

(2) The problem of energy consumption is outstanding. According to Cartmer's data. At present, the annual energy and power costs of global data centers are as high as 7 billion US dollars. Basically, every dollar invested in hardware will bring about 0.5 yuan of energy costs [8]. In the current growing energy shortage, the ever-increasing cost of energy consumption makes the traditional accounting information data center operation and management of enterprises increasingly overwhelmed.

(3) High management and maintenance costs. With the expansion of enterprise business, the traditional enterprise accounting information application system is difficult to increase in scale service capabilities and professional service capabilities, service improvement and innovation capabilities are poor, and it cannot respond effectively to major services or crises. The tedious maintenance work
seriously occupies the overall IT funds and IT staff time. It hinders the process of technological innovation and affects the sound development of enterprise accounting information.

4.2. Application advantages of cloud computing in enterprise accounting informationization

Cloud computing has five distinctive features: resource sharing, extensive network access, regular self-service, rapid scalability, and payment according to usage. These characteristics make cloud computing the best platform for enterprise accounting information construction.

(1) Resource allocation. The computing resources of the traditional architecture are deployed locally on the client. Regardless of the size of the customer’s Swiss business, the computing resources are the same; the computing resources of the cloud computing enterprise accounting information operation platform are deployed in the cloud, and the server resources are deployed on a large scale according to the customer’s Swiss Demand allocation of resources, saving infrastructure investment costs, and improving utilization.

(2) In-depth data mining. With the increasing integration of enterprise informatization and industrialization, accounting informatization has penetrated into all levels of enterprise operations, from product development and design, production equipment control, supply chain operations, human resources, knowledge management to corporate decision-making, and information technology is increasingly playing its foundation. The role of helping companies improve productivity.

(3) Service deployment. The traditional architecture uses client software to complete computing tasks, and each user node needs to install deployment software. The enterprise cloud architecture accesses cloud services through a unified portal. The lightweight client is easy to deploy, even requiring only a browser. The flexible deployment of cloud computing platforms can support companies to quickly change accounting information systems, adjust business processes, and adapt to the rapidly changing business environment to respond to changes in new business needs and improve corporate competitiveness [9].

(4) Expansion and upgrade. Based on the cloud computing platform, enterprise-level web2.0 will be deeply applied, such as enterprise-level search, instant messaging, forum blogs, knowledge management, etc., and be effectively integrated with accounting information systems. Most employees become knowledge workers and cross-department Or the virtual power team at the organizational boundary plays an important role in the operation of the organization. Bring huge innovations in management and processes. To add or upgrade services in the traditional architecture, the software on each client needs to be modified; the enterprise cloud architecture directly updates the cloud services, and customers can upgrade and expand without perception.

(5) Business model innovation. Today, with the increasingly sophisticated development of information technology, corporate business models have shifted from products to services, from providing simple services to providing large-scale personalized services. This has brought huge challenges to the construction of enterprise accounting information. The cloud computing platform can effectively support the transformation of enterprises from product operation to service operation through extensive interconnection and flexible deployment, and support enterprises to provide large-scale personalized services to consumers [10].

5. Conclusion

Now, cloud computing technology has become the mainstream of unstoppable development. It can not only meet the development needs of enterprises, but also reduce costs and improve feasibility. The financial route of the enterprise has been improved better, and it also provides strong development support for the development of the enterprise. Enterprises have fundamentally changed the traditional office methods. We use cloud computing systems to understand financial processes and realize information sharing. At the same time, users can extract data information through mobile terminals anytime and anywhere. It is convenient for users to control information, and they can make the best decisions.
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