Application of Cloud Computing in Network Platform

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Abstract. With the explosive development of knowledge and the rapid development of various information technology, cloud computing technology, resource allocation and management technology, cloud computing is a business computing model that allocates computing work to a large number of resources. Under this circumstance, the marketing model has undergone tremendous changes, and the traditional profit model is difficult to continue. This has forced the major marketing platforms to change their development thinking and look for new points of profit growth. This article aims to study the application of cloud computing in the network marketing platform. This article mainly uses questionnaire survey method and practice survey method. First, it analyzes the status quo of cloud computing and online marketing platforms at home and abroad, and then conducts online marketing on the platform based on cloud computing. Marketing strategy design and analysis of information needs. Experimental research shows that, whether in terms of business processing time or customer satisfaction, online marketing under cloud computing performs better than traditional marketing, ensuring quality and achieving high efficiency.

Keywords: Cloud computing; Marketing platform; Online marketing; Marketing strategy.

1. Introduction

As our country's economy enters the "new normal", with the continuous deepening of financial market reforms, foreign banks continue to expand into the domestic market[1], and the rapid development of Internet finance has had a new impact on traditional finance[2]. As a shared information service infrastructure, cloud computing integrates various information resources and improves the effectiveness of information services [3]. The emergence of cloud computing provides convenient and effective technical means and application tools for solving the network marketing problems of major platforms [4]. The cloud computing service model can effectively reduce software and hardware costs, and flexibly adapt to the needs of network marketing platforms at different stages of development [5].

Kim B T pointed out that with the continuous progress of my country's social economy, computer network technology is also constantly developing and improving. In this process, many emerging network technologies have been continuously produced. For example, cloud computing technology is a typical representative of better development prospects at this stage. It is widely used in various industries and brings more thinking space for modern enterprise management[6]. Peng C indicated that China is accelerating the construction of its financial network infrastructure, and network conditions are gradually improving, creating favorable conditions for the development of network marketing[7].

This article combines cloud computing and network marketing platform, applies cloud computing technology to network marketing, combines the system characteristics and operating conditions of network marketing, the characteristics of low-cloud client equipment requirements, and the exchange of data and applications between different devices.

2. Application of Cloud Computing in Network Marketing Platform

2.1. Research Methods

In this paper, a questionnaire was issued in a city where cloud computing has been popularized to investigate the effect of cloud computing in online marketing platform, so as to analyze the influence of cloud computing platform in online marketing platform and its role.

2.2. Demand Analysis of Online Marketing Platform Based on Cloud Computing

2.2.1. The brand-new management concept is continuously deepened. The access standardization of urban and rural credit cooperatives has injected new vitality into the development of credit cooperatives[8]. Due to the continuous development of the e-procurement process, the recruitment of different positions has been enriched, and newly recruited workers have gradually been left in the market and management positions, just as before Mentioned, young people, new marketing concepts and management methods have promoted changes in the market[9].

2.2.2. Internet finance accelerates development. With low transaction costs, high service efficiency, and wide coverage, Internet finance provides convenient and diverse products and services to meet the needs of financial services at different levels. A city′ s online marketing must keep up with the pace of technology, enrich the functions of their outlets, improve the integration of electronic channels, and open a new era of mobile payment[10].

2.3. Collaborative Filtering Recommendation Algorithm Based on Rural Credit Cooperative Network maRketing

Hypothesis S=$\{s_i/i = 0,1,\ldots,T\}$ is a finite discrete total order term set, where s_i represents the possible evaluation value of the language variable. For example, a term set with five terms is:

$$S = \{s_0 = \text{Very bad}, s_1 = \text{Bad}, s_2 = \text{General}, s_3 = Good, s_4 = Very\ good\}$$

Set as the set of uncertain languages, T is the set of interval numbers, then the mapping φ to T is defined as:

$$\varphi(\hat{S}) = [\alpha\ ,\ \beta] \quad \forall \hat{s} \in \bar{S}\ ,\ \bar{S}=\{s_a/s_0 \le s_\alpha \le s_T, \alpha \in [0,T]\} \tag{1}$$

$$\varphi(\hat{S})=[i,i] \quad \forall \hat{s} \in S, S=\{s_i/i = 0,1,\ldots,T\} \tag{2}$$

3. Experimental Research on the Application of Cloud Computing in the Network Marketing of Rural Credit Cooperatives

3.1. Research Purpose

The emergence of cloud computing provides convenient and effective technical tools and application tools for solving network marketing problems. Take rural credit cooperatives as an example. First, cloud computing can save huge investments in the construction of information infrastructure for rural credit cooperatives. Secondly, cloud computing can enable rural credit cooperatives to realize a wealth of advanced platforms, large-scale systems and a large amount of resources. Cloud computing can provide various software application services for rural credit cooperatives to meet the needs of different users and business development.

3.2. Data Sources

When we use cloud computing to study a specific social situation, we cannot only conduct data mining on a specific issue, and other aspects that may be related to this issue also need to be explored. Benefiting from the current development of computer technology and cloud computing technology, many times, when analyzing problems, you can obtain data support from various open "cloud platforms". The

application of "Internet +" can also facilitate the collection of these data. We can obtain more real-time data and valuable information through network marketing.

4. Application Experiment Analysis of Cloud Computing in Rural Credit Cooperatives Network Marketing

Construction of outlets:

The construction of rural credit cooperatives in a certain city is shown in Table 1:

Table 1. Distribution of rural credit cooperatives.

Area	Number of outlets	Service area	Service coverage
Area A	32	24 square kilometers	1.35
Area B	48	36 square kilometers	1.75
Area C	35	31 square kilometers	1.38
Area D	37	34 square kilometers	1.40

A city's rural credit cooperatives have a total of 152 outlets, including 32 in Area A, with a service coverage rate of 1.35; 48 in Area B, with a service coverage rate of 1.75; 35 in Area C, with a coverage rate of 1.38; and 37 in Area D, with a service coverage rate. 1.40.

The service quality of the outlets is mainly reflected in the time management of handling business, customer satisfaction evaluation and complaint rate. Then the difference between the traditional rural credit cooperative's business processing time and the rural credit cooperative outlet marketing processing business time under cloud computing is shown in Figure 1:

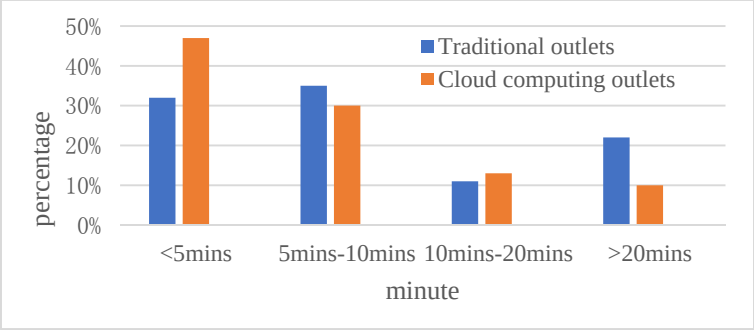

Figure 1. Business processing time.

It can be seen from Figure 1 that more than 30% of the business processing time of rural credit cooperatives under the traditional model is within five minutes, while the business processing time of outlets under cloud computing is nearly half within five minutes, as high as 47%. In addition, , The traditional model rural credit cooperative's business processing time of more than 20 minutes is 12% longer than the branch business processing time under cloud computing. It can be seen that since the introduction of cloud computing technology, the business handling efficiency of rural credit cooperatives has been greatly improved.

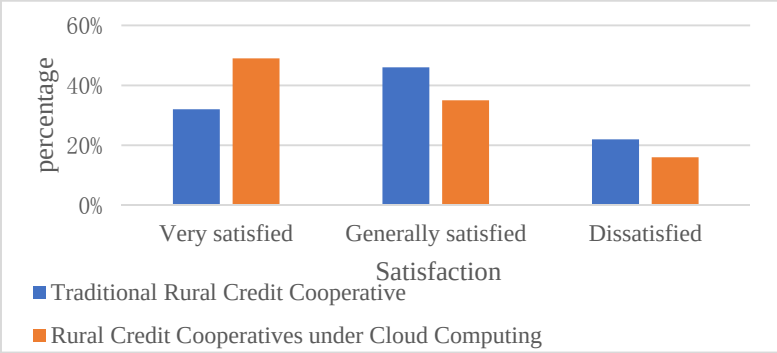

Figure 2. Customer satisfaction.

According to Figure 2, 32% of users are particularly satisfied with the services of rural credit cooperatives under the traditional model, 46% are generally satisfied, and 22% are dissatisfied; while users are particularly satisfied with the services of rural credit cooperatives under cloud computing. 49% were satisfied, 35% were generally satisfied, and 16% were dissatisfied. Therefore, cloud computing has not only improved the efficiency of business handling for rural credit cooperatives, but also greatly improved user satisfaction.

In addition to improving business processing efficiency and user satisfaction, the advantages of cloud computing can also be reflected in the ease of use and maintenance of the client. Rural credit cooperatives need more energy to focus on core business and innovation, and they are not good at business parts. It can be solved by a professional service provider. Rural credit cooperatives need "simple" online marketing, a practical system, and easy-to-use software. These are precisely the characteristics of cloud computing technology that can meet the actual needs of rural credit cooperatives as small and medium-sized financial institutions. Customers can edit the documents stored on the other end of the "cloud" directly in the browser, and can share with friends at any time, and no longer have to worry about whether the software is the latest version of the software, and no longer worry that the document is infected with a virus. For the "cloud" at the other end, professional IT personnel are available to maintain hardware installations and software upgrades to prevent viruses and various network attacks, and can do all the work on the computer.

5. Conclusions

In the past two years, governments, scientific research institutions and enterprises have adopted cloud computing as a new method of providing information, and its development has been rapid. This article studies and summarizes the current problems faced by online marketing platforms, and provides solutions based on cloud computing for these problems. This article first analyzes the basic structure of cloud computing, combined with the analysis of the system business, and proposes a cloud computing service platform model for rural credit cooperatives network marketing, and illustrates the feasibility of using cloud computing through specific examples.

References

[1] Sun W, Wu L, Lu Y, et al. Research on the application of big data in the management and service of College Students[J]. IOP Conference Series: *Materials Science and Engineering*, 2020, 806(1):012056 (5pp).

[2] Hikaru, Tanaka. The Survival Strategy of Cooperatives during Long Recessions[J]. Keiei Shigaku (Japan Business History Review), 2017, 52(2):3-28.

[3] Xin S, Li L, Lei X. Review of Research on Credit Risk Management for Rural Credit Cooperatives[J]. *The Journal of Risk Analysis and Crisis Response*, 2017, 7(1):21.

[4] Akdemir S, Miassi Y, Aksar Y A, et al. Producers' access to agricultural credit in Turkey: the case of Adana province[J]. *Ciência Rural*, 2021, 51(5):9.

[5] Binuomoyo O K. The Role of Micro-Credit in Economic Empowerment of the Rural Poor: A Case Study of Iwo Town, Osun State[J]. *International Journal of Entrepreneurship*, 2018, 3(1):1-23.

[6] Kim B T, Jun P B, Lee K. A Research on the Impact of the Diversity of Networks on the Organizational Economic Performance of Cooperatives: Focusing on Cooperatives in the Metropolitan Area[J]. *The Korean Governance Review*, 2018, 25(1):183-209.

[7] Peng C. Research on the Application of Echo State Network in Data Prediction[J]. *International Journal of Grid and Distributed Computing*, 2017, 10(1):1-8.

[8] He H. 93.Research on the Application of Network Resources in College Mathematics Classroom[J]. *Boletin Tecnico/Technical Bulletin*, 2017, 55(11):646-651.

[9] Lindgren H. 'Over-indebtedness' – or not? Household debt accumulation and risk exposure in nineteenth century Sweden[J]. *Scandinavian Economic History Review*, 2021(1):1-24.

[10] Zeng H, Liu Z, Cai H. Research on the Application of Deep Learning in Computer Network Information Security[J]. *Journal of Physics: Conference Series*, 2020, 1650(3):032117 (7pp).