Study on the E-Commerce Marketing Strategy and Enterprise Performance Dynamic Analysis based on Cloud Service Intelligent Platform

Yuanyuan Cao

College of Economics and Management, Xi'an University of Posts and Telecommunications, Xi'an, 710121, China

Abstract

With its intelligent, open, low-cost, high-efficiency and innovative features, e-commerce maintains its rapid growth momentum and strong momentum of development. E-commerce is the hottest industry in the world with the most growth potential. The most direct manifestation of the development of the network economy is the innovation. The cloud service is based on the Internet, and has a virtual and dynamic expansion of the cloud platform. It is distributed according to demand and is charged according to the features. The network marketing system takes cloud computing as a platform to integrate information technology support system, network marketing application system, support system and technology standard system, and form a network marketing system based on cloud service platform. The system can reduce the overall cost of the system. The cloud service platform has realized the maximum application of information resources and built a long - term and effective system.

Key words: Cloud services, e-commerce platform, marketing, business performance

1. INTRODUCTION

Along with the development of information technology and the penetration of industries, IT giants such as Google, Amazon and Ali have launched their own "cloud" plan, promoting the revolution and development of information technology. For users, users can enjoy "cloud services" anytime and anywhere as long as they have a mobile portable device connected to the Internet. Along with the rapid development of e-commerce and the social security system gradually perfect, in the face of more and more complex user information structure, the amount of information is more and more large, so the user will obtain the information of the massive businesses how to get the same at a loss, effective customer relationship in the massive user information has become the focus of. Based on the network marketing system of cloud computing is that the entire e-commerce trading platform and external database connected to the database connection terminal users can master data and timely update, build a collaboration between the seller and the buyer, and master the rapid transfer of relevant information and products to speed up the electronic commerce and circulation system. Maximize the whole e-commerce links fluency and benefits.

E-commerce is the use of the Internet and related technologies to conduct the comprehensive business activities that is the traditional commercial electronic and digital, is a global economic development of new industries. With the modern information technology as the core of the network economy, communication technology and computer services technology has greatly affected and changed the social and economic fields, industry integration and new business models continue to emerge in the tide of network economy driven by the electronic Business has shown many new formats, such as O2O, C2B, travel e-commerce, foreign trade e-commerce, e-commerce and other new formats of agriculture. Behind these new formats are e-commerce in the operation mode, technology, value chain, division of labor in the industrial chain and cross-border integration of revolutionary innovation while showing a new model of E-commerce. E-commerce marketing is a kind of marketing on the Internet, which is a process of completing a series of marketing links with the help of the Internet to achieve marketing goals. E-commerce marketing campaigns on the Internet include marketing and after-sales service activities such as online shopping, ordering, payment, logistics, customer service, etc., as well as a number of the commercial activities utilizing Internet development such as the market research and analysis, financial accounting and production scheduling. Advantages and characteristics of network marketing can be generally summarized as the following aspects.

- Customers can interact with merchants through the Internet, and the two-way exchange of the core information between merchants and customers enables the two sides to better understand each other.
- Modern Internet covers a wide range of areas, without borders and regional restrictions, is a wide range of marketing.
- The Internet has the characteristics of fast information transmission. It can easily convey information to customers at any time and place, and let customers know the information they need in time.
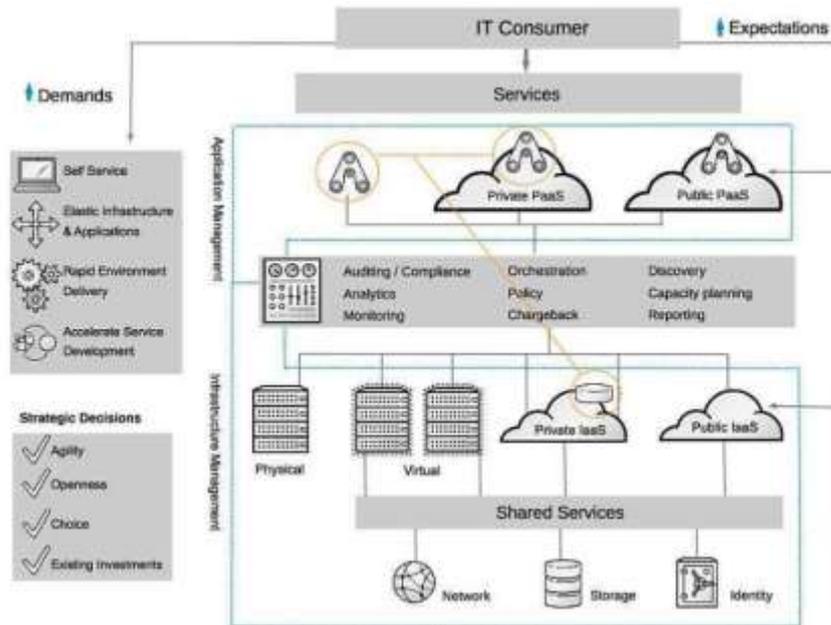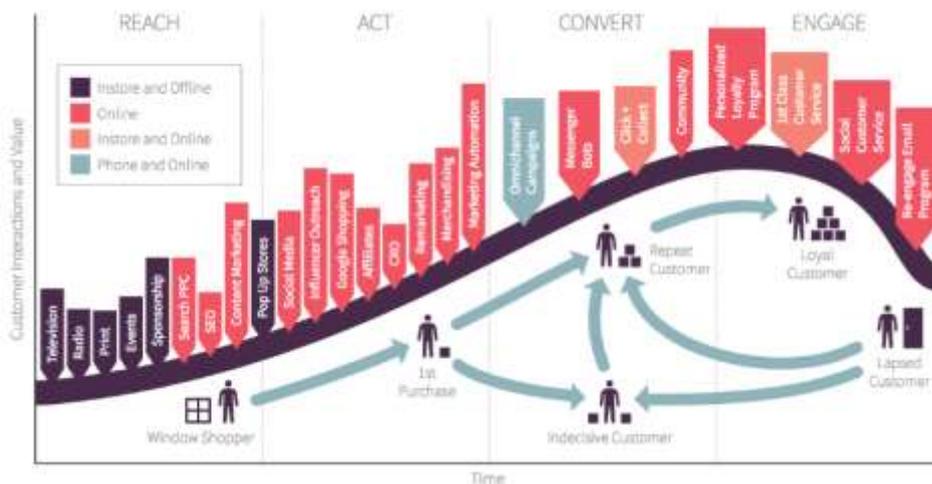
Fig. 1 Cloud service platform

Fig. 2 The Organizations of the Marketing Models

2.Cloud Service Platform

2.1.Cloud service platform and cloud computing

With the development and improvement of distributed processing, parallel processing and grid computing in the information age, cloud concepts and cloud computing are more and more valued and applied. At present, all walks of life are actively exploring the application of cloud computing and development trends. The core idea of cloud computing is to integrate resources, share, and access as needed.

The essence of cloud computing is allocated on demand, according to billing. The use of Internet technology, distributed in the computer network in the information infrastructure (mainly hardware, software and service platform provided) unified integration, rational distribution, unified scheduling, providing a unified interface, in order to achieve a large number of users to provide services.
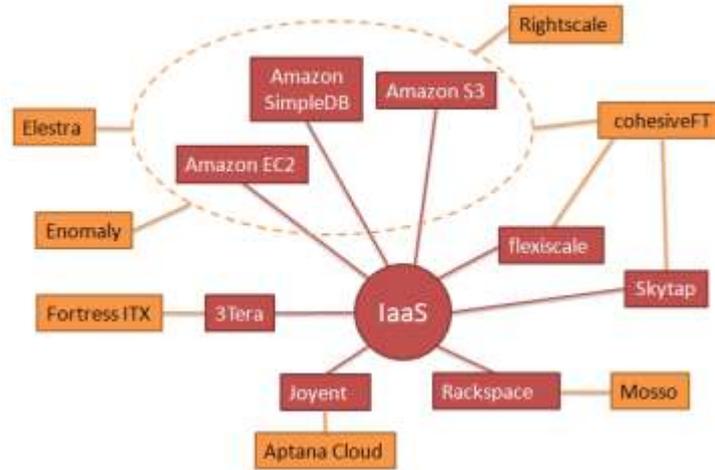
Fig. 3 The Cloud Platforms

The main features of cloud service platform include the following aspects.

Internet-centric. The terminal gradually weakens the processing capacity. A large number of storage and computing capabilities are unified by all nodes connected to the network. The computing architecture of the Internet is converted from "server + client" to "cloud service platform + client".

Virtualization. The underlying resource pool consists of the underlying hardware, including servers, storage and networking equipment, and is fully virtualized to create a resource that can be shared and allocated on demand.

Dynamic expansion. The basic resource pool can be allocated on demand and grow automatically. However, the data and applications in the upper layer can be dynamically allocated according to business needs to form various applications of cloud computing, so that cloud computing services gradually lead to the IT architecture.

Support system can handle business. Cloud computing services platform for business operations support system that can complete the network capacity planning, billing, monitoring, security, scalability, upgrades and other functions.

2.2.Safety indicators

At present, the cloud computing system provides real-time monitoring functions. The system maintainer can obtain the system running status in real time. The reasonable safety indicators formally describe the measurement requirements that need to support the average and immediate values, but also cover different angles, different granularities, and multi-dimensional Analysis needs and you can facilitate system maintenance personnel to optimize system security strategy.

The state of the system in the model can be divided into two major categories: Operational and Failed. The Operational state can be further refined into Recovering and Ready states. While the system is in the Accessible state, integrity intact, but may be DOS and other security attacks and transferred to the Inaccessible state. In addition, security recovery mechanisms such as attack removal are required to relocate the system to the Accessible state, so the two system states can be connected by an event such as AttackRemoval or DOS attack. The system state transition diagram describes the relevant states and events of the system security. Different security indicators correspond to different states of the system, so the formal description of the system security indicators can be obtained.

The probability of the system being in a safe state is:

$$A_I(t) = P\{X(t) \in S_A\}$$

(1)

For the system, the steady-state availability of the system is more important, that is, the probability that the system is in a safe state under steady state is as follows:

$$A_S = \lim_{t \to \infty} A_I(t) = \lim_{t \to \infty} \frac{\int_0^t A_I(u)du}{t}$$

(2)

In addition, it can also be obtained by solving the steady-state probability vector of the state in the state transition diagram. Then the steady-state availability can be expressed as follows:

$$A_S = \sum_{t \in S_A} \pi_i$$

(3)

2.3.Internet technology

Through the Internet technology users from the cloud center efficient and quick access to cloud services. According to the service types obtained by users in the cloud computing center, the types of services provided by the cloud computing are classified into the following types.

Infrastructure as a Service (IaaS). Cloud computing encapsulates the hardware infrastructure resource pool and provides it to users in the form of virtualization. For example, Amazon's EC2 and S3 provide infrastructure services.

Platform as a Service (PaaS). Third-party developers are provided in the form of a development environment that includes an application development and deployment platform that provides the service platform with databases, middleware, and development tools through the Internet primarily through the Internet. For example, Microsoft's Windows Azure provides this type.

Software as a Service (SaaS). By providing the software service mode required by the user through the Internet, the user can obtain the web-based software in the form of renting or the like without purchasing the software, which can save the software development cost and reduce the cost.

Data as a service (DaaS). Information sharing is the biggest advantage of the Internet, the user for the mass data storage, computing can be achieved through the cloud computing platform.

3.Construction of Electronic Marketing System Based on Cloud Service Platform

3.1. Electronic Marketing System

The essence of network marketing is mainly based on the Internet as a new marketing tool, which plays an important role in the realization of the goal of business strategy. It is also the basis and practice guarantee for the realization of network marketing value. At present, enterprise network marketing mainly uses its own portal website to publish information on enterprise products, market demand information and services and guarantees provided by enterprises. Consumers mainly use the Internet to obtain relevant product information and services provided by businesses, including detailed specification of products, technology Indicators, specifications, the latest market demand information, products, services provided, you can also use the Internet to provide online customer service, online consulting, and other related product information and Internet marketing on the one hand to provide convenience for businesses, on the other hand to bring convenience to consumers, thus achieving the network marketing functions, reflecting the value of goods, but also reduce costs.

The function of network marketing is based on the traditional marketing mix 4P theory (including products, prices, sales channels and promotions) based on the development. Main functions include network branding, website promotion, information dissemination, sales promotion, sales channel, customer relationship and online research, and the various functions are interrelated, mutually influential and mutually reinforcing, and network marketing is realized through the interaction among various functions The overall effect. Web site promotion, customer relationship, information dissemination, online research and customer service belong to the basic functions of the network marketing resources input and performance, and sales promotion, online sales and brand image is the embodiment of network marketing.

3.2.Information Technology Support System

Information technology support system mainly includes computer network technology and database technology. Computer network technology is the network marketing system infrastructure, the general investment by the government to complete. At present, China's network infrastructure invested a lot of money to establish a backbone network, but also the establishment of a variety of professional websites, such as product trading network, the Chinese agricultural product sales network, the Chinese clothing network, etc. However, these professional sites than the people on Taobao, Alibaba and other third-party platform, familiar with the government departments to guide or integrate product network marketing strategy, you can use search engine marketing strategy, online advertising affiliate, website links and other online marketing tools to promote products and create services or product-related networks Community, guide customers to actively participate, so as to attract potential customers to participate, to achieve zero distance communication with customers, zero point, the formation of a new network marketing system. At the same time, the construction of database technology occupies a very important position in the network marketing system. It uses various information resources to set up database resources such as product, customer and market supply and demand. Mainly take market database as the main line, establish customer relationship management database and product database respectively. Promote the rapid development of customer relationship management system.

3. 3.Value Chain Management

As technology advances, the dependence of enterprises on production personnel will gradually decrease, but enterprises will never survive and develop without relying on consumers. Customer satisfaction is the initial motivation and final destination of enterprise production. Therefore, putting consumers at the core and enabling

consumers and enterprises to understand each other and fully integrate them is the new direction for the development of enterprise e-commerce. Traditional enterprises to enter the Internet to start sales overall carried out is not good, but with the popularity of computer technology and the Internet, gradually, most companies are more or less involved come in and start their own business network marketing from the following aspects.

- The search engine promotion, is based on the use of search engine users, users retrieve information using the opportunity possible marketing information to the target user. In simple terms, search engine marketing is the search engine platform based on network marketing and the people rely on and use habits of search engines, when people retrieve information as much as possible marketing information to the target customers. Search engine marketing is the main promotion according to the keywords related products.
- Licensed email marketing refers to the delivery of valuable information to the user through E-mail in the context of user permission. There are three basic factors in licensed email marketing: user license, E-mail delivery information, and the information value to users. None of the three factors can be called effective Email marketing.
- Community marketing is an online virtual community that is also unique to the Internet. Communities mainly aim to communicate with each other by concentrating visitors with common interests in a virtual space. The online community is one of the services commonly used by users. Due to the participation of a large number of users, the online community has not only provided the function of communication but also has become an online marketing place in fact.

Sub-commerce provides an efficient platform for general network marketing, which enables enterprises to carry out marketing extensively and can face more consumers. At the same time, e-commerce under the network marketing environment is bound to affect the marketing of enterprises.
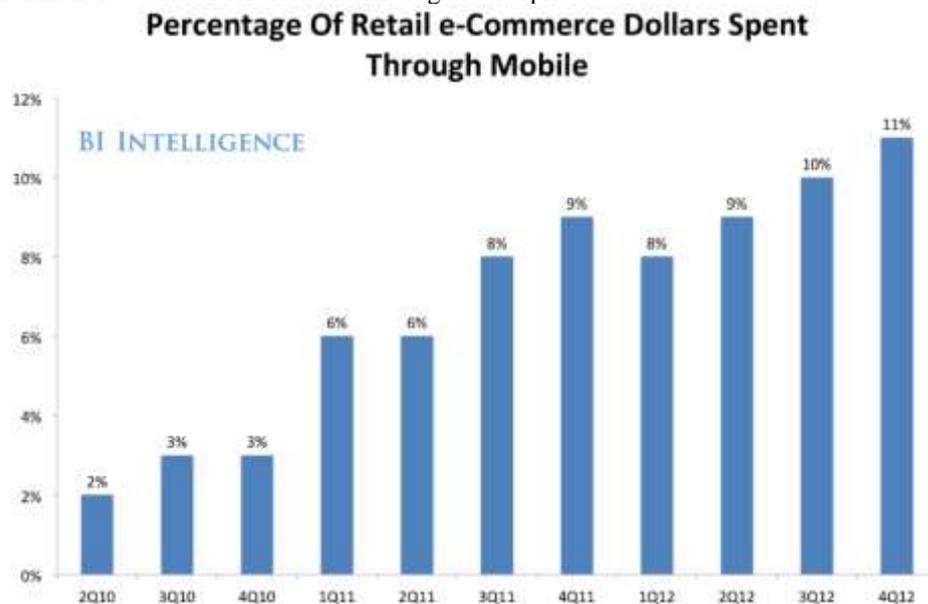

Fig. 4 The Finalized Data for Further Analysis

The so-called CRM refers to a customer-centric business strategy, which uses information technology as a means, from 7P analysis (customer profiles, loyalty, profit, performance, future products, promotions), from three levels of products Tangible, additional products) starting to fully meet customer needs.

4.Conclusion

With the gradual popularization and application of information technology, grid computing, cloud computing and big data gradually penetrate and popularize and the innovation of Internet technology and the update and application of business mode. E-commerce marketing system based on cloud service platform integrates the cloud computing information technology, economic and the business fields and management mode. Network marketing system uses the characteristics of cloud service platform technology to achieve cloud-based services on demand. At the same time, enterprises can set up their own network marketing application system without independent investment, and can utilize various services provided by cloud computing manufacturers and build application systems and databases with their own enterprise characteristics.

Acknowledgement

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