Research on E-commerce Enterprise Management Model in Big Data Era

Yan Zhang

School of Business, Northwest University of Politics and Law, Xi'an, 710063, China

Abstract: With the arrival of the big data era, all aspects of people's lives have been affected by big data, the e-commerce business management model has also been affected by the arrival of the big data era. This paper mainly elaborates the big data era and e-commerce enterprises as well as the innovation and advantages of the e-commerce enterprise management model in the big data era, in which the big data era and e-commerce enterprises mainly explain the current situation and existing problems of e-commerce enterprise management model. The innovation and advantages of the e-commerce enterprise management model in the big data era are mainly discussed in terms of achieving low-cost management, better marketing and creating better services, as well as refined management, which can be used as a reference for future exploration of e-commerce business management model in the big data era.

Keywords: big data era; e-commerce; enterprise management; management model

1. Introduction

Big Data refers to data sets that have exceeded the data collection, processing and management ability of commonly used software tools during runtime. Big data is a relative concept to current data storage, computing, and processing models [1]. Big data includes two levels: one is the technical level and the other is the commercial level. Usually, through the screening of technical level, it can find out the effective data from the huge data, and then combine the data with the commercial level, finally feedback the customer with valid data. The arrival of the big data era has led to the rapid development of e-commerce industry, such as Taobao, Jingdong and other e-commerces. This paper mainly analyzes the current situation, existing problems, and their innovations and advantages of the management model of e-commerce enterprises in the big data era. The details are described below.

2. Big Data Era and E-Commerce Business Management Model

With the development of the big data era, numerous e-commerce enterprises have been established one after another, and in the context of the big data era, the current environment is used to make profits. The arrival of the big data era is mainly due to the popularity of the Internet and the rapid development of Internet technology. The e-commerce enterprise most familiar to people today is Ma Yun's Alibaba. Taobao will be used by almost every mobile phone and computer user, becoming an indispensable software for daily shopping. The current Taobao will use your data to come up with results which show your preferences and interests based on your search or the products you click on, and will recommend related products for you to choose. In the context of big data, there is no doubt that it is an effective and facilitate way to both customers and enterprise own management to service customers in the form of big data era.

2.1. The Current Situation of E-Commerce Enterprise Management Model In The Big Data Era

The main point of the management model of e-commerce enterprises differing from the management model of traditional enterprises is that the e-commerce enterprises' management model is to manage enterprise activities through networks in the virtual space, which can be said to be a change in enterprise management model. Compared with traditional enterprises, the share of e-commerce enterprises in the economic market in the context of big data has been increasing year by year, and at the same time, its profitability is even higher than the traditional enterprise economy. With the help of big data, the enterprises' development and survival can all be estimated, which maximizes the interests of e-commerce enterprises. Its fundamental difference from the traditional enterprises' management model includes the model of serving its customers. The traditional enterprises can't do a detailed grasp of the customers' preferences and interests, and can't make correct judgment for the personal preferences from the selection of products. But with the help of big data, e-commerce enterprises can do this, it can understand each customer's interests and needs, and give recommendations based on customer needs. To a large extent, this not only reduces the effect that cannot be achieved by manpower in traditional enterprises'

H K . N C C P

International Journal of Intelligent Information and Management Science
ISSN: 2307-0692, Volume 7, Issue 1, February 2018

management, but also customers are satisfied with the current e-commerce enterprises.

2.2. The Existing Problems of E-Commerce Enterprise Model In The Big Data Era

Although the arrival of the big data era has brought an increase for the economic benefits and development space of enterprises, the current e-commerce enterprise model still has certain problems, as shown in Table 1:

Table.1. The Existing Problems of E-Commerce Enterprise Model in The Big Data Era.

Source of the problems	Meaning of problems
Data	Security and confidentiality management
Industry	Control of industry data
Data conversion	How to convert big data to large data processing and analysis

The first is the confidentiality management of data. The most important issue that comes with the arrival of the big data era is the confidentiality and security of personal information. When users mentioned above browse electronic products, e-commerce enterprises can grasp the preferences of customers through the analysis of data. This provides customers with convenience while also exposing its harm. If someone in the e-commerce enterprise leaks the customers' privacy information to criminals, the criminals will not only resell the users' personal information, but also the users personal safety problems will be involved. Because some e-commerce enterprises not only need uses to provide their mobile phone number, it is also necessary to provide the delivery address and real name, and even provide real-name authentication and fill in the ID number, etc., which makes the users real name, mobile phone number and home address as well as other personal privacy information store in the e-commerce enterprises. The confidentiality of these data is not only a concern of users, but also one of the problems that should be paid attention to by the e-commerce industry. Secondly, the control of industry data is also one of the existing problems. The control of industry data mainly refers to the control to big data users. The last is the data conversion, which is how to convert big data into large-scale data processing and analysis.

3. The Innovation of E-Commerce Enterprise Management Model in Big Data Era

Although there are some problems in the current situation of the big data era, the e-commerce management model in the big data era still has its own advantages and innovations. This section is mainly divided into three aspects to achieve the implement of low-cost management, better marketing to create better services and refined management were. The difference between the advantages of the e-commerce enterprise management model in the big data era and the manaement model of traditional enterprise is shown in Table 2:

Table.2. Advantages of E-Commerce Enterprise Management Model In The Big Data Era.

	Traditional enterprise	E-commerce enterprise
Propagation subject	News agency	Internet
Propagation model	Linear propagation	Point to point, point to surface
Propagation content	Lengthy inconvenient spread	Short and easy to spread
Propagation effect	Small spread, small impact	Wide range and instant formation of powerful public opinion

In addition to the above advantages, this section is mainly divided into three aspects: to achieve low-cost management, better marketing to create better services and fine-grained management. The main innovations and advantages of the e-commerce enterprise management model in the big data era are detailed below.

3.1. Achieve Low-Cost Management

In the big data era, enterprise management is relatively simple and concise compared to traditional enterprise management. In the past, the traditional management was cumbersome, and the management of data was not as precise and accurate as the computer Internet. After expending a lot of manpower and financial resources, the economic interests of traditional enterprises have not been maximized. At the same time, the work efficiency has not reached the efficiency of e-commerce manage-

ment under the background of the era of big data. E-commerce enterprise management has realized low-cost management while saving manpower, and can save a large amount of corporate expenses on the employment costs of personnel. Therefore, e-commerce enterprise management under the background of big data has realized low-cost management.

3.2. Good Marketing to Create Better Services

Precise marketing to customer groups requires a lot of customer information. Only with accurate customer information, e-commerce can better develop specific marketing methods for users. In the big data environment, the amount of customer information accumulate continuously every day, and it is accessed and processed by computer Internet. It can accurately understand the needs and tendencies of customers through the big data, so as to

H K .N C C P

International Journal of Intelligent Information and Management Science
ISSN: 2307-0692, Volume 7, Issue 1, February 2018

marketing. This also creates a good service precondition for e-commerce enterprises to conduct marketing. Instead of harassing customers or asking them to meet in the same way as traditional marketing, they can grasp the customers consumption dynamics and browse the list of purchase intentions. So the e-coomerce enterprises can easily master the needs of customers, thus recommending related products. Marketing under this model is very easy to succeed, and creates better services for e-commerce enterprises in the context of the big data era.

3.3. Refined Management Was Implemented

As we all know, the traditional business model is difficult to deal with all kinds of data in large quantities, which also led to many enterprises in the traditional management model only by extracting a small number of samples to analyze and store the data, and then by analyzing the extracted samples to get the sample analysis results, so as to further infer the overall characteristics. This traditional technology method not only wastes a lot of manpower and material resources, but also can only record customers' simple consumption information. Other details and related consumers' consumption habits, trends and other information cannot be obtained at all, and it is impossible to analyze and process customers' personal information. As a result of such management, it is not enough to achieve refined management. Under the background of big data era, e-commerce enterprises have a very powerful ability to process data. They can accurately extract information from each consumer customer, and then carry out efficient collection and organization for each customer's consumption records, habits and trends through certain analysis and processing. Then they use data mining technology to carry out effective processing and system analysis, and ultimately form an effective management. This method is not only convenient and quick, but also cost-saving. The most important thing is that it can greatly increase the utilization rate and utilization value of data, and allow enterprises to implement fine management to some extent.

4. Conclusion

Under the background of big data era, as mentioned above, the management model of e-commerce, such as Taobao and JD.com, not only brings advantages in innovation and development, but also brings new challenges in the management mode. It is an inevitable trend to make corresponding adjustments for the management model of e-commerce enterprises of the new big data era. Therefore, the e-commerce enterprise management model innovation in the big data era is particularly important. This is the focus of this article. It not only elaborates the challenges and problems faced by e-commerce enterprises in the big data era, but also illustrates the innovation and advantages of the management model of e-commerce enterprises under this background and studies the e-commerce enterprise management model.

References

[1] Qiu Hui. Research on the Innovation of Enterprise Management Mode in Big Data Era [J]. Chinese & Foreign Entrepreneurs, 2017, 11(3):112-120.

[2] Yang Zhenyu. The Innovation of E-commerce enterprise Management in the Big Data Era [J]. Huaxia Geography, 2016, 43(5):28-31.

[3] Li Yinyun. Analysis of E-commerce Service Model Innovation in the Background of Big Data Era [J]. Science & Technology Information, 2016, 2(12):141-142.

[4] Liu Xinhua. Analysis on the Influencing Factors of Cross-border E-Commerce Development under the Background of Big Data [J]. Commerce, 2016, 17(5):1-5.

[5] Wang Luping. Financial Management Mode in Electronic Commerce Enterprises under the Background of Big Data [J]. University of International Business and Economics, 2015, 32(12):141-142.

[6] Dai Minghua, Ma Zelu, Fan Xiaonan. Research on Cross-border E-commerce Development Model under the Background of Big Data [J]. E-commerce, 2017, 4(16):87-89.

[7] Cui Lin. Innovation of E-business Service Model in Big Data Era [J]. New Business Weekly, 2017, 49(6):77-89.