Using Information Resources to Innovate Service Business Model

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Abstract. With large data, cloud computing, the Internet + these new information technology concepts, many companies or scholars have begun to pay attention to information technology business model innovation. They spend a lot of manpower, material and financial resources to build a new information technology, but most people have ignored the information resources themselves. This paper introduces the concept of information resource and service business model, and illustrates the specific flow of information resources promote business model innovation. Finally, the case of Wechat Business and Didi Taxi is used to illustrate how information resources promote business model innovation. Enterprises or the masses can learn the value of information resources through these cases.

Background

Drucker said: “The competition between enterprises today is not the competition between products, but the competition between the business models.” The more suitable for enterprise operating mechanism, the more to bring profits to the enterprise, the more in line with today's social development trend, the more diversified business model to meet customers more competitive, So business model innovation has become one of the focuses of enterprises and scholars.

In the mid-1970s, when discussing the modeling of data and processes, Kontcher and Dautore first used the term Business Models, and in the field of information management thereafter, the business model was applied to the overall planning of the information system \[1\]. Foreign scholars Tucker (2001) considers that the business model innovation is standing on the customer's position, through a variety of imagination to play to make things more perfect a process \[2\]. Magretta (2002) defines business model innovation from the perspective of the value chain. He believes that the adjustment of the original value chain of enterprises, or the innovation of the elements contained in the value chain are all business model innovation \[3\]. The domestic scholar Qiao Weiguo considers that the business model innovation introduces new business models into the original system, so as to create the most value for the enterprise itself and the customer process. The definition of business model innovation is not uniform, but its essence has been generally recognized, that is, to help businesses and consumers to better communicate to consumers, promote consumption while helping enterprises to create the greatest value.

Domestic and foreign scholars have also carried out a lot of research on the business model innovation process. For example, Timmers et al. (1998) argue that the most important driving force for the early development of business model innovation is the new technology...
represented by Internet technology [4]. Amit and Zott (2000) argue that in the virtual market created by IT technology, due to the boundaries of enterprises and industrial boundaries become blurred and easy to cross, exploring the network “interaction” and “connectivity” to create new market space and causing changes in business models [5]. It can be seen from these studies that most scholars focus on the value of information technology to business model innovation, but they ignore the value of information resources. Therefore, this paper focuses on the impact of information resources on business model innovation.

Information Resources are the Driving Force of Service Business Model Innovation

Information Resources

Many factors can lead to business model innovation, such as target customers, business partners, cost and revenue model, etc. [6], and information resources can also be used as business model innovation one of the power source. However, many people will be confused with information technology and information technology that they are interoperable, but it is not the case. As early as 1989, foreign scholars King and others gave a detailed description on the information resources and information technology [7]. Information resources are a collection of data organized in a specific way and when excavated in some way, they have additional value beyond the data itself.[8] Also information resources can continue to be used, depending on the purpose of its value will continue to increase. However information technology is not the case. Information technology is more focused on the information processing used in the “equipment”, including hardware and software. Information technology will gradually depreciate over time, when the new technology or customers’ demand changes, the original information technology and new technology compared to the possibility of value-added users is relatively low.

It can be seen that information resources are different from information technology, and sometimes good use of information resources can save the enterprise, just like Chrysler (US auto companies) use the location database of suppliers and dealers to convince Congress to support corporate loans, finally saved Chrysler. So the value of information resources should not be overlooked.

Service Business Model

In this paper, the definition of service business model refers to the service industry such as food and beverage industry, rental industry, tourism and other industries, the transactions relationship and link mode of business and customer called business model. In other words is how businesses get profit. Service business model can be broadly divided into three categories, one is the traditional line payment business model, that customers shop in the store or see existing products and make cash payments, such as the restaurant industry, traditional tourism; The second, C2C (Customer to Customer) business model, that is, a business model of individuals to individuals, such as Wechat Business; The third O2O (Online To Offline) business model, which customers offline experience service products, online payment , Such as Didi Taxi, Ctrip etc., which is the most popular business model in service industry in recent years. All of these three models can make good use of information resources for business model innovation, especially O2O, which shows the great value of information resources. In the third chapter, the paper will explain the characteristics of information resources (Large amount of information, fast delivery, sharing) in the service business model innovation.
The Specific Processes of Information Resources Promoting Service Business Model Innovation

Firstly, we need to build a network platform, the platform has two functions, one is the financial transactions (this feature also could not use, customers can also choose to pay in cash); the other one is the product and service display. On this platform customers view products and services and other customer's consumption record and the commentary to choose to meet own need. Secondly, businesses collect customer information including customer's personal information, customer's consumption record and customer's evaluation through the network platform. According to the purpose of the business, the information is pretreated, and businesses use the computer software to carry on the data mining. Finally, the results feed back to the business. Businesses based on data analysis results to improve their business model, so as to provide better service to customers, but also create greater profits for their own. Specific flow chart is shown in Figure 1.

Figure 1. The specific processes of information resources promote service business model innovation.

The Case of Information Resources Promoting Service Business Model Innovation

Enterprises or individuals can no longer spend a lot of money, time to develop new information technology, but by focusing on information resources and the characteristics of information, using mature information analysis software to promote business model innovation. The following will be through a variety of cases to illustrate the use of information resources for business model innovation.

Information Collection

Enterprises focus on information resources through their own, extensive collection of information to carry out business model innovation. The following is the business through the collection of customer information in the traditional line of business models to pay for innovation in the case. Japan has a KURA rotary sushi restaurant. In each card side with a point of the computer, when ordering the customers just click on the screen. So even if traffic increases, the number of single points larger, businesses can also reduce the clerk mistakes rate and reduce complaints and other issues. Also the order data will be reflected in the clerk's computer, so the data will be collected for analysis. After a period of time businesses know what dishes loved by customers, what dishes can be eliminated or change. Although some
food and beverage industry through the computer or order machines, but businesses still need staff to order. These are not as customers to operate in person. Because the indirect transfer of information also need to spend a lot of time. The business model of this Japanese sushi restaurant wills instead customer computer orders of artificial single-point. Such a simple using computer to collect information reform, businesses not only improves the efficiency of single-point, and through simple data analysis software enhances the level of catering enterprises. Therefore, the general catering industry or such service industry should also pay attention to the value of customer information itself, the analysis of customer information, which according to the degree of favorite customers to improve their service products.

**Information dissemination**

Information is characterized by rapid spread, a wide range, and some industries just to seize these two characteristics to carry on the business model innovation. One is the rental industry, the other one is the Wechat Business industry.

The first 10 years of the 21st century, people are going out for an emergency; in addition to private cars, the most common means of transport is taxi. The state of the taxi management regulations are more mature, so people are willing to ride. But with the advent of the Internet era, the taxi industry has emerged a new business model led by the domestic “Didi Taxi”, “Fast Taxi”, and foreign Uber. Here by taking a taxi market share of 44% of the “Didi Taxi” to illustrate this new business model innovation. Before the trip people download a drop of travel software on the phone, then enter the starting point and destination, select the windmill, express and other types, and then call a car. This time your information immediately issued, you can see the nearby vehicle can be orders on the Didi Map. The driver can also see the nearby customers, which will have the driver click on the order by phone asking your specific address, and then come to pick you up. The driver will be sent to your destination, you pay through Alipay or WeChat and evaluation. At this point the whole trip process is complete. The reason why more and more people choose this way of travel, firstly, the car is basically a private car, more comfortable. Secondly, according to the kilometer charges, the company will often subsidize customers, and thus the price is cheaper than the average taxi. Thirdly, in the rush hour, the phone gently can take a ride, to a certain extent, ease the car hit the situation. Didi Taxi better utilize with the mobile client and the characteristics of the rapid dissemination of information, while using the city map created a new business model. It changes the taxi model of traditional non-information, service deficiency. To a great extent, it is convenient for people to travel. At the same time, the company is also concerned about the importance of passenger information collection, by recording the passenger car starting point and destination, and then summarizing each passenger information data, summing up the frequency of the starting point and end, forming similar commercial map valuable information [9]. Through the height of these virtual buildings, “Didi Taxi” get accurate business maps of the cities above the national level, analyzing each passenger travel routes and consumer behavior. Through the software the company can get hundreds of millions of people across the whole of China's data. This information is a lot of companies do not hesitate to spend billions of dollars to buy. Largely, accurately, detailed data is the value of information. It’s easy to find Didi Taxi make good use of with the information resources in the business model innovation, so that the taxi industry develops to a better state.

With the rapid spread and wide range of information, another major industry is the WeChat business. WeChat business use mobile Internet tools such as smart phones, tablet etc. which engaging in business activities. Generally refers to rely mainly on WeChat business,
MicroBlog, MOMO and other third-party platform engaged in e-commerce activities [10]. WeChat business is different from the traditional business. Traditional electronic business is based on goods as the center. As long as the product of good quality and attractive price, the goods will be able to sell well. While WeChat business is based on people as the center. It expands and deepens interpersonal relationships and achieves trust by good attitude, then sell products. Therefore, WeChat business market small input, low threshold and wide range. The main channels used for promotion are social networks [11]. WeChat business is a traditional e-commerce business model innovation. Basically everyone in today's social circles has mobile social tools, which is conducive to the development of more WeChat business, but also provides entrepreneurial opportunities to those who do not have sufficient capital or who do not know how to do business. While it also provides opportunities for those who are relatively disadvantage groups, such as mothers with children at home, people with disabilities, college students can carry out the WeChat business. This emerging industry - WeChat business, using information to achieve business model innovation for more people to provide a living dependency.

Information Sharing

Everyone has information in the modern world, and everyone can share information via the Internet, and others can get what they want by these shared information. For example, in Taobao, people compare the same kind of goods and select the most cost-effective products; another example is the aircraft booking system, people can view the system information on the platform to compare the fare and select the lowest price tickets. While some industries can also share the information collected in order to obtain profits. Online tourism is a typical case.

First of all, we look at two figures (Figure 1, Figure 2). From the two figures we can see from 2009 to 2015, China's online travel and overall tourism sales are rising, while online travel in 2009 accounted for about 6% of total tourism, and online travel by 2015, accounting for about 10% of overall tourism. It is not difficult to see that the proportion of online travel increase continuously, so its promotion space is very large. In the online travel, there are two models that using Information sharing to achieve business model innovation. Respectively, they are online travel vertical search and social and commentary website (UGC).

Figure 2. 2009-2015 China's online travel market transactions scale chart (unit: billion).
The online travel vertical search collect the products of other travel sites through the Internet search engine technology, and then share this information, display on their own platform for classification parity to help customers to find the lowest price in similar products. The characteristics of the business model is “Professional, Refined, Deep” and it offers a comprehensive range of search results to our customers. The representative of the business model has Qunar, Ctrip and so on.

Another business model better interpret that how to achieve business model innovation by Information sharing. This is the social and commentary site (UGC). UGC means users generate content. For the online travel industry it is means that travel social and share. It allows users to publish travel knowledge and experience on the website and share more travel information to enthusiasts, then help them to develop tourism plan. This is a breakthrough in online travel industry. These enterprises essentially are a kind of tourism consulting sites. Most of them have their own business characteristics, such as Ant honeycomb flagship “Travel Guide” for the travel enthusiasts to provide wonderful road book Raiders; Donkey comment network focus on “hotel reviews” to share the real stay experience; Daodao network (TripAdvisor's official website in China) launches “China Hotel Link” to help customers to directly link to the hotel. Due to the late emergence of the business model, it is not mature enough in China. However in foreign countries it has already a mature model, the world's largest travel community - TripAdvisor, tens of millions of real comments every month attract the world's numerous tourism Lover. This model is primarily profitable with the click-through rate of the site [12].

The way of travelers share their information create a better opportunity for online travel. Because the travel information brought about by the hobby is more convincing, they provide information, whether tourist attractions or prices are basically more practical. China online travel can gradually learn this business model, without too much money, without any technology, only need to provide tourists with a communication platform. This is more in line with the modern idea of individuality.

**Conclusion**

The use of information resources for service business model innovation is more suitable for
ordinary people or some insufficient funds for small and medium enterprises. Many companies abuse some information technology or spend a lot of money to develop information technology without research which may lead to little benefit. But if we learn to seize the value of the information resources itself, use some already mature or easy-to-understand data analysis software, this may give the company more unexpected results.

References


