Research on Business Model of Sharing Economy Based on O2O Perspective

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Abstract

With the rapid development of information technologies such as the Internet, big data, and cloud computing, and the popularity of mobile smart devices, a sharing economy has emerged. Uber and Airbnb, which were first born in the U.S., have become the representative enterprises of the sharing economy. The domestic representative companies have didi chuxing. They have subverted the traditional taxi industry and hotel industry, increased the utilization rate of idle resources, and established a network platform of point to point, which changes the people’s consumption habits and way of life, more to create a new business model. In the Internet era, many market players have abandoned the traditional business model, began to actively explore online operations, and have fully utilized the major O2O sharing economic platforms to move toward the “sharing economy model”. and the article will analyze the business model under this background.

Keywords

O2O, sharing economy, business model.

1. Introduction

In the era of great economic development, the Internet has become popular and more and more traditional business models have been hit. With the rapid development of the Airbnb and Uber sharing platforms in the accommodation industry and the taxi industry, the sharing economy has emerged strongly. Sharing economy refers to a business model that takes a certain amount of remuneration as its main purpose and is based on a stranger and temporarily transfers the right to use the article. Among them, there are mainly three major entities: demanders, suppliers and shared economic platforms for goods or services. Based on the O2O sharing economy business model, this paper analyzes the factors affecting its development, combines existing problems, and studies and formulates corresponding strategies from the perspectives of innovation elements, overall structure, profit model, operation strategy, and promotion strategy, and strives to build O2O Shared economic business model to carry on the beneficial exploration and try.

2. Related concepts of sharing economy business model

2.1 Sharing economy

Sharing economy refers to a new economic model based on strange relations and the temporary transfer of the right to use of goods. The transferees of the right to use the resources are usually paid accordingly. Is its essence, sharing economy is a kind of online and offline combination of economy, through the integration of offline idle resources, the resource owner can use some network platform will provide out its resource sharing economy, at the other end of Shared economic platform there are a large number of consumers, the consumers could be obtained by sharing economic platform access to resources, so as to solve the problems of the resource allocation efficiency is not high.

2.2 Sharing economy business model

The business model of the shared economy usually includes three main bodies: the demand side of the goods or services, the supply side of the goods or services, and the shared economic platform provided by the third party (see Fig. 1).
The core of the sharing economy is a platform built by third parties for sharing parties. Third-party platforms provide technical support and credit guarantees. The sharing platform builders can be governments, companies or public interest organizations. Consumers share their idle goods or services through third-party platforms. Third-party platforms provide mobile LBS applications and dynamic algorithm pricing technologies, and establish a credit evaluation system for both parties to reach a completely unfamiliar supplier and demand side. Different from the traditional business model, in the shared economy business model, the company usually does not have many fixed assets, only computers, servers, and corresponding computer technologies, and gains revenue by providing technical support and services. These platform-based Internet companies have satisfied the needs of both supply and demand by continuously improving and improving their own technologies. The sharing economy business model mainly has the following characteristics:

Utilize idle resources or services for revenue.

The resources and services that are idle here are the resources and services that the supplier owns, rather than using common resources for sharing. Usually the suppliers provide idle goods or services. If they are not used, they will be a waste of resources. Through the shared economic model, the suppliers can obtain certain benefits. Due to the low opportunity cost, its price is usually lower than the traditional model and it is competitive in the market.

Demidiate.

Under the traditional economic model, demanders need to obtain goods or services through commercial organizations, and suppliers also need to join commercial organizations to provide goods or services more easily. In the past, it was difficult for suppliers of goods or services to separate from business organizations. In the sharing economy model, the supplier does not need to join a commercial organization, and through a third-party sharing platform that does not have a binding relationship, it can provide goods or services to the demander, and the sharing economic platform serves as a bridge between the supply and demand parties of the goods or services. Providers only need to register on the platform to obtain demand information, suppliers and the platform have loose relationships, and can register on multiple platforms at the same time to obtain more information. The shared platform usually has only qualification requirements for suppliers, without time and system constraints. The simplification and diversification of sources of demand information enables suppliers to focus on improving the quality of their products or services so that consumers can get better products or services.
Dynamic pricing.

The sharing economy platform offers the possibility of flexible pricing for all parties involved in sharing. Through technical means, the supply side can adjust the price strategy at any time according to the current supply and demand. Sharing platform through the use of big data, you can clearly grasp the supply and demand of each time period. When the demand is greater than the supply, the algorithm will automatically raise the price, reduce the demand and increase the supply, so that the supply and demand will reach a new dynamic balance; and when the supply is greater than the demand, the price will return to the initial level. For the supplier, when the shared product or service is not fully utilized, as long as the shared price reaches the expected price, it will participate in the shared economy and gain income.

Two-way constraint mechanism.

In the sharing economy business model, the third-party sharing platform establishes a transparent two-way evaluation mechanism for supply and demand parties by providing technical support, so that both parties can evaluate each other after completion of the transaction, and the evaluation content is visible to other users, which enables the supplier to provide products. When it comes to services, it must strive to be optimal, in order to obtain high praise and get more demand. The demand side also dares not ask the unreasonable supplier to complete the request, otherwise it will not be able to obtain the supply side's products or services later. Through the two-way evaluation mechanism, on the one hand it helps the parties in the transaction to solve the problem of information asymmetry, and provides an important basis for the matching of other service providers and demanders; on the other hand, it provides a credit social system for our country and residents have developed a good credit habit. data support.

3. Sharing Economy Business Model Analysis

3.1 Analysis of Driving Factors of Sharing Economy Business Model

3.1.1 Social demand promotion

For a continuously increasing density of human society, expanding shared economy can effectively reduce individual friction. Usually, the more concentrated the population, the higher the shared demand and matching, and it is more conducive to the application and development of the shared economy model. With the continuous development of national sustainable strategies, people gradually realize that group consumption habits and behavior can also have an impact on the external environment. From the perspective of group psychology development, there are generally social desires, such as desire to communicate, being respected, and being recognized as psychology. With the continuous development of computer technology, the rise of social networks satisfies people's psychological needs and effectively promotes the development of society. When social needs are met with certain satisfaction, people begin to reflect on the altruism of communication and continuously improve the social responsibility system. Through sharing behavior, they can both promote economic development and satisfy people's social needs.

3.1.2 Excessive consumption promotion

At present, from the point of social resources analysis, resource itself and its features, about 40% are idle, due to the formation of resources is mostly through currency exchange, resources idle means resource utilization in the fall, means that the capital backlog. Most of the idle resources are caused by excessive consumption. Many people in the life, because of lack of planning, buy a large number of goods, and its function can not be guaranteed to be used all the time, resulting in a decrease in its overall use. Therefore, over-consumption is one of the drivers of the sharing economy business model.

3.1.3 Technology innovation

With the development of mobile Internet technology, on the basis of traditional electricity, and to derive a more diverse way to trade, both the improvement of the social function, and promote the development of Shared economic model. The rise of intelligent terminal to provide hardware support
for Shared economy, can through the location-based services anytime and anywhere, master client activity rule and resource requirements, can achieve precise marketing. Users can use mobile phones to search on a Shared platform according to individual needs, and they can find the nearest Shared service platform and can own these services at any time and place. To ensure effectively operation O2O mode, we must build the safe and stable payment platform, such as alipay, micro letter brings the rapid rise of the third party payment platform, enables the sharing economy to form a complete closed loop; At the entrance, there are many ways to guide customers, such as NCF, qr code and electronic wallet. It can be said that technological innovation promotes the development of Shared economy. With the continuous improvement of the existing technology system, the sharing economy must become the normal mode.

3.2 O2O-based Sharing Economy Business Model Construction

3.2.1 Analysis of innovation factors

Effective sharing network
A huge number of potential contributors and demanders are basic conditions for sharing the economy. Only when the potential huge market volume reaches a critical value can the energy of the Shared economic and business model be developed. O2O platform Shared economic and commercial activities, and is living with the Internet technology, can undertake the supply and demand docking across space and time, and whether sharing, sharing space, Shared product, is because of these requirements and are fragmentation exists in the society, the randomness is too large, these resources or knowledge with some associated connect them, without being limited by the physical geography, but widely dispersed in society. Shared economic business activities of the first big innovation point, is to these seemingly random material and human resources, through their own platform for integrating and concentrated, display in the open platform, has certain resources and willing to share the user, can through the way of releasing information to add, in this way, the platform of the resources is becoming more and more users spontaneity is getting stronger and stronger.

Make full use of idle production capacity
Idle production capacity is the most obvious and important feature of the sharing economy's consumer behavior. Idle production capacity often has underutilized time, space, objects, etc., which are potential social and economic values. For the market, if the idle assets owned by the participating entities in the shared economy market attract other participants, they can transfer the unused assets or the right to use the goods at a low marginal cost, and obtain considerable marginal revenue. The use of many products is limited or not often used. For individual users, these products may be useful to other users at other times. Therefore, the sharing economy fully embodies this point. Helping idle spaces, time, skills, and articles find the right users at the right time not only reduces the cost of use, but also extends the useful life and usage of the goods.

Socialization
Traditional e-commerce mode, or dominated by business, businesses to provide products and services through a network of information, the user access network consumption, the evaluation function of the commodities, even if is the last user use the platform for interaction is less, for users, not sharing comments on power. But Shared economic business activities based on social network, you log in to your account is your social accounts, sharing and you recommend page, is shifting from the merchant platform to their own social circle of friends, you can find the same in the use of their own social account application/product/service friends, can share your own experience or experience. And word of mouth is also the biggest asset of a business, and when it reaches a critical point, you don't even go to the market, and there are a lot of users signing up every day.

Trust Mechanism
Sharing-economy business activities are based on transactions with strangers, so a well-established and trusted trust system is an important mechanism for developing and maintaining business activities in the sharing economy. When a new business model emerges, it must attract users to use it
to create its value. Due to the openness and scalability of the platform, it is bound to face the trust value of the registered users and be measured by some indicators obtained in the activity. Under normal circumstances, the sharing of economic business accounts and personal information links closely, due to the need to log in and pay, generally through an existing social account or communication account to log in, thus access to this person's social network, can become trusted on the one hand. On the other hand, through the mutual evaluation and recommendation among users, a fixed field scoring mechanism is formed and converted into a quantified trust value. In general, participating members of the sharing economy's business activities are all users who share the concept of consumption, and those who are willing to try and accept are incapable of maintaining tolerance and caution.

In the 21st century, new trust networks and new reputational intangible assets will be redefined and reflected in all aspects, and will change people’s standards of review of wealth, markets, rights, and personality.

Openness, inclusiveness and commonality.

O2O Shared economic business platform, is the medium between supply and demand, it has a bridge, but many, extensible slot so as long as eligible users, are likely to become a potential supplier, the value of the transfer is not merely a business relationship and platform, and more is passed between the user and the user. In the sharing economy, users have the same or similar consumption concept, environmental protection concept and development concept, so not only the platform is open, but also the acceptance degree of users is very high.

Mobilization

The sharing economy business model realizes the innovative service based on geographical location through LBS technology. By the user sign in positioning, access platforms to provide product or user information, and more for localization, and merchants or service providers can be found through the platform near the needs of users, through the information docking and comparative view, information service providers and demanders docking success. At the same time, users can also scan through the offline mobile terminal to obtain corresponding information and preferential activities.

Fig. 2 A general architecture diagram of Shared economic business model based on O2O.
3.2.2 General framework analysis
Based on the analysis of each member of the value network of the Shared economic business model under O2O environment, the basic value network model of O2O Shared economic business model is constructed. On this basis, through the analysis of the factors of business model innovation and from value creation, value, value delivery, the perspective of value realization, integration between each main body relations of cooperation, build a Shared economic business model based on O2O total architecture. As shown in Fig.2.

3.2.3 Profit model analysis
From the analysis based on the O2O sharing economy business model, there are mainly the following profit models:

Platform service fee
Online platform service fee income is the cost of providing online promotion services. Based on the O2O operating platform, after completing a transaction with another user (demand side), a certain fee is extracted for this transaction as the platform's operation management fee. Many Sharing economic operating platform for members to implement such a charge, such as France coach sharing business platform, according to each transaction, the consumer, the customer (buyer) charge the 1st to the 8th European range, according to the volume to calculate. In addition to this, Zipcar, for example, charges a one-time fee of 25 US dollars to its members, and then users can freely trade between them.

Platform promotion fee
Online platform promotion costs, also known as profit brought by information integration, mainly through the platform's marketing capabilities, grasp a large number of customer base, so as to bring together traffic advantages, open platform advertising space, is the main source of promotion revenue. The platform's promotion service can not only recommend users according to the region's individuality, but also make it possible for service providers in the region to more clearly define their own user groups and effectively promote them.

Outdoor income offline
Platform providers can use the offline exhibition board to conduct another way of income. For example, the car-sharing company Zipcar, apart from having a certain number of member cars, puts a lot of vehicles into the market on its own, and many of the vehicles are loaded with outdoor advertising content. While Airbnb is a typical example of shared accommodation, many individuals who join Airbnb have also added a number of commercial promotions through other businesses outside their homes to gain certain business activities. And many publicity is achieved through mobile technology such as two-dimensional codes and NFC tags. As a result, the waste of advertising is reduced, and the target audience and audience for marketing are clearly defined. And can easily replace the contents of the two-dimensional code. This information attracts many businesses and also constitutes a major source of platform fee income.

Value-added services
"As the O2O platform for the accumulation of vast amounts of user data, including successful O2O platform will be more and more become the center of data on the user's consumption behavior, when accumulated to a certain amount of the data resource, think it will also gradually through an open, to encourage more third-party developers to create richer O2O application, to boom the business ecosystem." The platform holds a huge amount of data, and if the data analysis report can be provided through the traffic analysis tool, it can help them to make management decisions and obtain a certain service fee. For example, some enterprises want to obtain information: the check-in user can master the frequency and loyalty of the customer, and the daily check-in number can master the development trend chart of the business.

3.2.4 operational model analysis
Credit rating.
The first Sharing economic business model is the origin and get to know each other between friends or colleagues, everybody's circle is transparent, has a high credibility, in the process of the transaction is steadfast. Sharing business model then economic development to the commercial activities between strangers, so this will require a platform operator has a good supervision mechanism, credit evaluation mechanism and product protection mechanism. In carpooling or Shared business activities, for example, Scorpio to each car insurance reached at least $one million, and they have matching positioning system on every car, through the headquarters platform can monitor each car's situation, in addition, also for business activities involved in user review, need through Facebook and other social networking account login, closely connected with personal information. In credit evaluation system, The sharing economic business model, is not only the consumer the unilateral evaluation of services or products, at the same time, the product service providers can, in turn, give consumer users to evaluate, recommend, stroke mechanism on both sides. They trust and that is to say, if a user is recommended degree is low, so the back of the suppliers in order to refuse his request, the measure is the guarantee of the rights and interests of the provider of service products.

Interactive word-of-mouth marketing.

Social networks make information more transparent and accessible. The evaluation mechanism is also more two-way interactive. On the one hand, the user experience for services or products, is the best effect of word of mouth publicity, this is the best advertising, with the help of a large social network, between users is the viral marketing. On the other hand, through the evaluation of users, the service provider can provide a clearer understanding of the user's demand for products or services. Through discussion area, activity area, questionnaire, coupon, etc., inspire users to share, get feedback from users and strengthen customer relationship.

Mobile Internet marketing

The steady growth in sales of smartphones and smart mobile devices has prompted a shift in consumer behaviour and the advent of the mobile Internet. Users use the web version of the mobile terminal, or cell phone APP, for Internet browsing service or product information needed, by positioning and map entry, fast to supply and demand docking, narrowing the scope of requirements, through mobile money and other third party mobile payment technology for wireless transmission, and predetermined or payment. Gets the required sequence number, or qr code, or digital information. Thus, after the transaction is completed, the service/product can be enjoyed in the physical store or offline, and the funds will be automatically returned to the merchants through the third-party payment system. There are not only credit CARDS in the wallet, but also a variety of membership CARDS, discount CARDS and gift CARDS. Users will no longer need to carry all kinds of CARDS at any time, just through the application of electronic payment, the mobile terminal is close to the sensor coil, and the last link of consumption can be finished. In the era of mobile Internet, all kinds of information about personal business activities can be stored in the mobile phone in a digital form, which is convenient to use.

3.2.5 Promotion Strategy Analysis

Promotion based on sharing economic organization platform

The O2O-based sharing economy business activity is a consumption model advocated by Western governments. Now it is increasingly valued in China. A large number of organizations, such as the sharing economy, collaborative consumption, and cooperative economy, have established their own organizations and recruited employees. Together with a large number of scholars and business elites have promoted and discovered the emerging shared economy business model. They engage in meaningful cooperation with various sectors of society through speeches, books, reports, and commentary articles to promote the promotion of new consumption patterns in the sharing economy. Therefore, it is a very effective way to explore the business model by borrowing such platforms, and it can obtain certain directional guidance both theoretically and practically.

Promotion based on social networks and mobile platforms
Sociality and mobility are one of the characteristics of the sharing economy business activities under O2O. Therefore, effective commercial promotion can be achieved through mobile commerce platforms and social networks. First of all, mobile network and social network, has a large number of users, Facebook, twitter, Pinterest, Google +, Linkedin, foursquare, and so on, in the country owns renren, weibo, micro letter, QQ space, etc., all these social networks have been very mature intelligent mobile terminal applications, convenient for people to use. The O2O sharing economy and business activities are mostly connected to these social networks as accounts, simultaneously synchronizing personal information and sharing their sharing experiences. Social networks can attract the attention of friends and friends, and this promotion measures gives full play to everyone’s friends resources and personal value network. Through the way of friend invitation, mail link, and address book matching, it is connected with the social network of the individual. This will give full play to the value of this platform and effectively find potential customers.

Promotion based on promotion incentive

When a new business model, or a new application, especially in the credit system is still in the process of construction, in order to prompt the user to use the application, break the user in the heart of defense, to promote the new Shared economic and commercial activities, the first thing you need to give the first experience of certain interests temptation, through a lot of promotions and preferential measures to attract people to use, thus to establish the initial trust system and use the registration number. To get the first batch of users and potential users, the price is a sensitive factor, and the right amount of promotion of electronic coupon code can expand the user scale.

4. Conclusion

The current sharing economy has become a very viable new economic model. As more and more market players emerge, more sharing economic platforms will be created and more resources will be effectively deployed. This article presents a conceptual discussion of the current shared economy and discusses the establishment of a business model in the context of a shared economy. Although the reference to the article is not sufficiently detailed and the theoretical analysis process is a bit simple, it is still hoped that the research results or analytical ideas in this article can provide a certain degree of reference and reference for other scholars in the field to conduct research. The current China continues to develop its economy at a steady pace and continues to deepen reforms as it develops. All kinds of industries have undergone a transformation, eliminating the factors that do not meet the current development rhythm in the traditional model, establishing and developing more advanced development models and methods, and adapting to the increasingly open world economy. Under this economic background, it is believed that in the near future, the sharing economy model will lead the development of the entire market economy with a more mature attitude and make greater contributions to the country’s progress.

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References