Explore the management mode of human resources under the C2C sharing economy —— Take the case of Didi Chuxing

Xurui Sun

School of Management, Shanghai University, Shanghai 200444, China

ABSTRACT. *The advent of the sharing economy has brought great influence on society and put forward new requirements and new challenges to the human resource management of enterprises. Based on it, this paper analyzes the advantages and disadvantages of the management mode and optimization strategies by taking typical cases of didi Chuxing behavior and combining interview method and questionnaire survey method. It can provide theoretical reference and practical guidance for human resource management of other enterprises under the background of sharing economy.*

KEYWORDS: *Sharing economy, Loose human resources, human resource management model, Didi Chuxing*

1. Introduction

"Anything surplus can be shared", socialized mass production has brought about the surplus of commodities and goods, as well as the idleness of materials produces waste [1]. In this context, the sharing economy has emerged, replacing ownership with the temporary transfer of commodity use rights Transfer [2]. The sharing economy represented by Airbnb, Didi Chuxing, and Dida Carpool continues to develop, opening up a brand-new commercial model.

In 1978, Felson and Spaeth first proposed the sharing economy in their paper"Community structure and collaborative consumption", explaining a model of sharing cars at leisure, and pointed out that the characteristics of the sharing economy are based on specific information technology platforms. Organizations, commercial institutions or governments can all become platform builders [3].

Robin Chase, another originator of the sharing economy, proposed in her book "Sharing economy: reconstructing future business models" that the three elements of the sharing economy are overcapacity, sharing platforms and everyone's participation. She proposed the essence of the sharing economy what consumers really need is the right to use assets rather than ownership [4]. Felson, Spaeth and

Robin first proposed the concept of "sharing economy" and laid the theoretical foundation for subsequent exploration.

Airbnb CEO Brian Chesky proposed in 2014 that the core of the sharing economy is "use without possession". Many people can share time, space and other resources at the same time without exclusive rights. Gansky believes that the two core concepts emphasized by the sharing economy are "Access over ownership "and "Value unused is wasted" [5]. Chesky and Gansky emphatically pointed out that a major feature of the sharing economy is to obtain usage rights instead of obtaining ownership, which is the essence of the definition of the sharing economy. Liu and Xia proposed that different scholars use different words to describe the sharing economy, which reflects the characteristics of point-to-point communication, part-time work, openness, connectivity and non-ownership transfer [6]. In 2016, Dong proposed that the concept of the sharing economy is a dynamic social behavior of mutual help and mutual assistance between people. Under the "sharing" model, the concept of ownership is weakened and more emphasis is placed on sharing, cooperation, social interaction and loyalty [7]. Sun proposed in 2016 that the essence of the sharing economy is based on the integration of unused resources, allowing providers to obtain corresponding remuneration through the transfer of commodity use rights; consumers temporarily own items by means of leasing, borrowing, and so on. Use rights instead of ownership. The sharing economy integrates idle resources with resource providers, through the matching of supply and demand, realizes the best use of resources, thereby improving the efficiency of resource allocation, and thus the efficiency of resource allocation [8].

In terms of the application of the sharing economy, Katie Finley believes that there are three driving factors for the sharing economy—society, economy and technology. Taking Airbnb as an example, he used interviews to collect users' reasons for using Airbnb, worries and trusts during use, and finally came to the conclusion that Airbnb is a trusted market platform. Subsequently, on the basis of previous research on Airbnb, Georgios simulated the impact of in-flight accommodation on the income of physical hotels by collecting data on in-flight accommodation and Texas hotels. It also received people's recognition of shared consumption, but It does not necessarily translate into behavioral conclusions.

In terms of exploring the human resource management model under the sharing economy, Gu used grounded theory as a research tool in 2014 to deeply explore the shared human resource management of the online car-hailing industry, constructing it from three aspects: support assistance, incentive measures and restraint measures The human resource management model provides a theoretical model for analyzing specific human resource management [9]. In 2017, Gao used the method of multi-case analysis, based on the six traditional modules of human resource management, to summarize and describe the human resource management model, and derived the common characteristics of semi-contractual human resource management under the sharing economy model, which are shared by others. The corresponding management of economic enterprises provides a theoretical reference [10].

The current research on the sharing economy mainly focuses on three aspects: one is to explore the psychological mechanism of people sharing from the

perspective of psychology; the second is to analyze the legality and internal and external structure of sharing economy platform companies from the perspective of law; the third is from the perspective of economics Explore the sharing economy model. However, there are few explorations from the field of management, especially from the perspective of human resource management, which is the foothold of this article.

While the wave of sharing economy brings new business models, it also puts forward new requirements and new challenges to the human resource management of enterprises[11]. The original human resource management model can no longer meet the demand. With this as a background, this article explores how to develop new models of human resource management in sharing economy enterprises.

The purpose of this article is to explore how a sharing economy company like Didi Chuxing should manage human resources, and explore the components and implementation of the management model. The research results can provide enlightenment and reference for the human resource management of enterprises under the wave of sharing.

2. Methodology and data analysis

2.1 Interview

2.1.1 Acquisition of interview materials

Table 1 Outline of Didi Driver Interview

Name		Age	
Business engagement	Didi Express, Didi Shunfeng or Didi Private Car	Vehicle model	
Interviewer		Interview time	
Interview description: The purpose of this interview is to understand Didi's management content for you, as well as your evaluation and improvement suggestions for Didi's management. The interview data will provide valuable experience for Didi's human resource management optimization suggestions. Thank you very much for taking the time to cooperate with the investigation during your busy schedule. The conversation will be recorded in order to organize the data. Thank you again for your understanding and support.			
1. Are you working as a Didi driver full-time or part-time?			
2. What are your daily working hours?			
3. What support and help does the platform company provide to you?			
4. How would you evaluate the job as a Didi driver in general?			
5. What do you think is the difference between being an online ride-hailing driver and signing a labor contract?			
6. What management and services does the platform provide you?			
7. Are you satisfied with these management and services, and how do you think they should be improved?			

Through interviews, we can grasp a large number of dimensions and information points about Didi's human resource management, which can provide reference ideas for the design of the questionnaire, and improve the scientificity and effectiveness of the survey. A total of 20 Didi drivers were interviewed, including 10 Didi Express drivers, 5 Didi Shunfeng drivers and 5 Didi special car drivers.

2.1.2 Analysis of interview data

After preliminary collation of the interview data, nearly 50,000 words of original data were obtained, which will become the starting point and basis of the entire coding work. After the sentence analysis of each piece of original data, the key sentence is extracted, and then the key sentence is converted into code. The key sentence is the content of the original data that is closely related to the purpose of the interview. A piece of material that has not changed the original expression of the original data is intercepted from the original data. The code refers to the condensed and refined key sentence to make the meaning expression more accurate. After getting the code, the code was abstracted into concepts one by one with the ideas of "this phenomenon belongs to what management measures Didi has taken to drivers" and "this phenomenon reflects how drivers evaluate Didi's human resources management". Finally, 98 codes and 36 concepts were obtained through continuous coding of the original data. The following takes the extraction of the concept of "rejection will affect rewards and face titles" as an example to illustrate the process of code and concept extraction, as shown in Table 2 below.

Table 2 Extract code and conceptual examples from core statements

Original information and number	Code extraction	Concept extraction
(07-01) I am running to and from get off work, because I rejected a lot of orders this week, I came out today to rush orders, or I won't get rewards	After rejecting the order, you need to flush the order to recover the reward	Rejection will affect rewards and face closures
(17-08) Orders cannot be rejected as required by the platform. If the orders are rejected, there will be no rewards	No reward if the order is rejected	
(18-10) Give you 100 orders, reject orders cannot exceed 10 orders	The rejection rate cannot exceed 10%	
(18-11) If the proportion of rejected orders is high, the money will be deducted, and the number will be blocked if it is serious.	If the rejection rate is high, you need to deduct money or ban your account	
(21-03) But you don't take too many orders. If you don't take orders for three times, you will stop for 2 minutes. If you take them again, they may not be sent to you.	Rejection affects system dispatch	
(29-05) It seems that starting from September 5th, drivers can no longer cancel orders; if they cancel more than 6 orders per week, 8 yuan will be deducted for each order	Rejection will be deducted	

After summarizing the concept, five main categories are obtained: job characteristics, recruitment rules, incentive measures, restraint measures, and management evaluation. Job characteristics refer to the unique characteristics of loose employees that are different from formal employment, including six concepts such as strong work autonomy and flexible working hours; recruitment rules refer to the Didi platform's screening criteria and rules for Didi drivers, including online 6 concepts including registration, platform review, and affiliated leasing company; incentive measures refer to the mobilization of the company's platform to the driver's work enthusiasm and initiative, including 9 concepts such as peak subsidies, order redemption rewards, and driver refueling discounts; restrictive measures are companies The platform's standardized management of drivers includes 9 concepts such as high or low scores affecting rewards, and too low scores will be blocked; management evaluation is a manifestation of drivers' satisfaction with Didi's human resources management model, including the alignment system 6 concepts including evaluation and management by economic means. The main scope and the corresponding relationship of each concept are shown in Table 3 below.

Table 3 Correspondence table of main categories and concepts

Main categories	Corresponding concept
1. Work characteristics	1-1 Flexible working hours; 1-2 Income is not fixed; 1-3 Income decline; 1-4 Strong work autonomy; 1-5 Free working hours; 1-6 Poor sense of belonging
2. Recruitment rules	2-1 Online registration; 2-2 Affiliated company; 2-3 Platform audit method; 2-4 The difference between joining a car and applying for a driver; 2-5 On-site registration required for some; 2-6 Relevant document review procedures
3. Incentives	3-1 Peak subsidy; 3-2 Full order upgrade; 3-3 Order acceptance rate reward mechanism; 3-4 order rate reward mechanism; 3-5 redemption rewards; 3-6 salary market settlement; 3-7 subsidy policies constantly changing; 3-8 driver refueling discounts; 3-9 newcomer benefits; 3-10 invite newcomers User reward
4. Constraints	4-1 Service scores affect the dispatch rate and rewards; 4-2 Passenger complaints will affect rewards and punishments; 4-3 If the score is too low, they will be blocked; 4-4 Passengers who are not satisfied can refuse to pay the fare; 4- 5 If you do not take orders for a long time, your account will be frozen; 4-6 rejected orders will affect rewards and face bans; 4-7 service points determine priority dispatch; 4-8 platforms generally ignore drivers; 4-9 fail to meet the requirements will be Deduct money
5. Management Evaluation	5-1 The platform charges management fees; 5-2 The way of dispatching orders; 5-3 attaches importance to the feelings of passengers and ignores the feelings of drivers; 5-4 Many regulations are too demanding; 5-5 The evaluation of the entry system; 5- 6 Manage by economic means

2.2 Questionnaire survey method

In order to gain an in-depth understanding of Didi's management model and the evaluation of Didi's drivers and passengers on Didi's management, this paper adopts a questionnaire survey data collection method. The options and topics of the questionnaire refer to the conclusions obtained from the previous interview method to improve the scientificity and validity of the questionnaire.

The subjects of the questionnaire survey are divided into two categories, one is Didi drivers, and the other is passengers who have a deep understanding of Didi. In order to ensure the scientific nature of the investigation of Didi's human resource management data, Didi drivers are still the main part, and some passengers are selected to provide more perspectives when analyzing the advantages and disadvantages of the management model and optimization strategies.

The main content of the questionnaire consists of three parts. The first part is the basic information question, which is the background information of this survey; the second part is mainly about the Didi human resource management profile and the driver's work situation; the third part is the Didi human resource management The second and third parts are the main part of this survey. The questionnaire is distributed in a combination of online and offline methods. The questionnaire is produced, sent and analyzed through the questionnaire star online, and the expressions and options are recorded by communicating with the driver offline. A total of 271 questionnaires were issued in this survey, and 271 were recovered, with a recovery rate of 100%; among them, 253 were valid questionnaires, with an effective rate of 93.4%, and the efficiency was high.

3. Results and discussion

This paper adopts a combination of questionnaire survey and interview method. First, the interview method is used to extract the dimensions and viewpoints of the evaluation of Didi's management model, respectively from the three dimensions of consumers, platforms and Didi drivers, combined with the six major sections of human resource management. After analyzing, and then using the paper survey method to concretely corroborate and discuss the advantages and disadvantages of its management model, the following conclusions were obtained.

3.1 Analysis of advantages of Didi's human resource management model

3.1.1 Simple and convenient recruitment procedure

Registering as a Didi driver only requires three simple steps: the first step is to register on the platform with a mobile phone number; the second step is to fill in personal information including driving license and driving license; the third step is to wait for platform qualification The review will generally give a reply within 2 working days, and sometimes the account can be used in about 15 minutes.

In the recruitment process, the requirements for drivers are relatively concise, and they can participate in registration if they meet some basic requirements, such as a driver's license, a qualified car, and complete documents. Generally, only online registration is required, and offline confirmation is not required. But Didi special car and Didi driving on behalf of the other are exceptions, both of which need to prepare complete information to go to the company for registration, and even have an interview session, such as the special car will consider the appearance, behavior and other qualities of the applicant. Overall, Didi's recruitment process is much simpler than that of traditional companies.

3.1.2 Flexible working hours

Didi drivers are different from corporate employees in that they need to have fixed working hours every day, such as the 8-hour workday in general companies. The driver can start receiving orders by logging in to the account on the platform, and stopping by exiting the account. According to the questionnaire survey (Figure 2 below), of the 253 people surveyed, 12.65% worked less than 2 hours, 11.46% worked 2-5 hours, 36.76% worked 5-8 hours, 39.13 % Of people work for more than 8 hours. It can be seen that there is no uniform standard for the working hours of Didi drivers, which can be determined by personal circumstances, and the working hours are relatively free.

Didi has created a new time management model for human resource management. Most of Didi's loose employees are part-time drivers, creating additional value during their idle time [12].

3.1.3 Assessment mechanism based on consumer evaluation

On the platform of Didi Chuxing, performance evaluation uses a combination of computer evaluation and passenger evaluation, adding the dimension of consumers, highlighting the principled status of passenger satisfaction in the evaluation system.

When passengers use the Didi Travel software, they must fill in the evaluation of the driver, including star rating and text evaluation, before paying the payment after the trip. Some common options will appear above the text evaluation, such as cleanliness in the car and so on. Consumers' evaluations will affect drivers' service ratings and thus the quantity and quality of orders they receive.

3.2 Analysis of disadvantage of Didi's Human Resource Management Model

3.2.1 Competency inspection that does not pay attention to the quality of the driver

The over-simple recruitment process and the lack of inspection of drivers' personal qualities and professional ethics have made the quality of Didi drivers vary greatly, and some drivers have even exhibited uncivilized behaviors and infringed on the interests of passengers. The recent news that a Didi driver sexually harassed a female passenger has aroused eager attention, which has affected passengers' trust in Didi drivers. In the sharing economy, mutual trust is a very important factor. Due to

the lack of inspections on the quality of drivers, the safe travel of passengers faces challenges from all sides.

According to the questionnaire, the majority of Didi drivers have a high school and junior college degree. The overall low level may also have a negative impact on the behavior of drivers.

Faced with such a situation, Didi can adopt a two-step strategy. The first is to strictly control the recruitment process, and resolutely refuse to adopt the responsibility for serious traffic accidents in the short term, and for those with low personal credit. Personnel should also copy carefully. The second is to conduct comprehensive and systematic training in the later training links, and strengthen training on professional ethics, in order to show a good company image.

3.2.2 Failure to implement a systematic training system

Although Didi claims to have launched a "Baichuan" training system and launched a series of quality courses, Didi drivers are required to start receiving orders after completing relevant courses. However, in actual investigations and interviews, it was found that this kind of training was useless. Not only the content coverage is smaller, but the time is shorter.

The lack of systematic training has adverse effects on drivers, passengers and platforms. For drivers, the lack of comprehensive knowledge makes their service spontaneous and random. The quality of service depends on the degree of subjective awareness and the mastery of various aspects of knowledge and skills. For passengers, the safety and comfort of their journey cannot be guaranteed. For the platform, the lack of driver behavior will affect the establishment of the corporate image and thus affect the competitiveness of the company. In summary, Didi Travel should establish a comprehensive training awareness to ensure the safety and comfort of passengers.

3.2.3 The performance appraisal mechanism that focuses on passengers has defects

Didi's integration of consumer evaluation into its assessment system and establishing the status of consumers in its services is a major innovation. However, in actual situations, malicious bad reviews of some passengers also appeared, which affected the credit score and remuneration of drivers.

Didi's current assessment system focuses on passengers' evaluation of drivers, but it lacks restrictions on unreasonable behavior of passengers. In the process of interviews with Didi drivers, it was found that some passengers clearly rated the service as good, but only gave one or two stars. The one-way evaluation system will affect the enthusiasm and initiative of Didi drivers. In the sharing economy, passengers and drivers should form a good dialogue system and two-way communication.

3.2.4 Platform subsidies and driver income have gradually decreased

When Didi first entered the market, in order to quickly grab a large share of the market, it adopted a strategy of heavily subsidizing passengers and drivers.

Beginning in August 2014, Didi canceled the subsidy for regular orders received by drivers, and changed it to give drivers a certain amount of subsidies when the target amount was fulfilled or to adjust the tight demand.

Beginning in August 2017, the Didi Travel platform began to separate the driver charging mechanism from the passenger payment mechanism, canceling the 20% platform fee for each order previously charged to Didi drivers, charging 0.5 yuan per order, plus a 1.77% management fee. Didi said that after this adjustment, car owners' income has not changed compared to before. The remuneration of some car owners will also increase with the separation of the passenger payment mechanism and the driver's payment mechanism, and the income can be increased by about 10%-18%.

However, in the actual implementation process, due to various reasons and platform rules, Didi generally charges a higher percentage of platform fees. The fees charged by drivers have not changed much, but Didi charges more.

3.3 Optimizing strategy of Didi's human resource management model

3.3.1 Introduce social credit information system and review of moral character

How to conduct a comprehensive survey of the quality of loose human resources is a major difficulty faced by shared economy enterprises. The large team of human resource providers and limited management costs make personnel control challenges. Due to the simple screening and the different quality of service providers, many problems have been exposed in the service.

If Didi wants to occupy a dominant position in the sharing economy, it must pay attention to the recruitment and selection of drivers. In addition to screening basic skills and knowledge, it must also examine the moral quality of drivers. For example, the driver can be asked to provide a certificate of good credit and a certificate of no criminal record, or to conduct further review in cooperation with the local public security department.

The introduction of the credit information system can screen out candidates with unqualified credit quality during the driver recruitment process, which can improve the overall quality of the driver team and improve the service quality and better serve passengers.

3.3.2 Establish a comprehensive training system and online MOOC

Didi should comprehensively train employees, establish a complete training mechanism, and make corresponding regulations on training methods, training content, and training requirements.

In terms of training methods, a combination of online training and offline training can be selected, with online training as the main method and offline training as an auxiliary method. Online training can be set up with a series of high-quality courses, and it is simple and easy to adopt online MOOC. Offline training can invite professional trainers or public security personnel to train drivers, which is more professional and can greatly improve the knowledge and skills of drivers.

In terms of training content, it mainly includes four aspects—platform use and rules training, safe driving training, service awareness training and emergency training. In particular, it is necessary to focus on training on safe driving and service awareness.

In terms of training requirements, corresponding regulations need to be made, such as the need to complete the class hours on time, otherwise the order will not be accepted; when watching the video, you need to manually confirm to continue watching every 15 minutes to improve the effectiveness of the training.

3.3.3 Improve the performance appraisal mechanism of two-way mutual evaluation

Establishing a system of mutual judgment can enable passengers and drivers to directly form a good dialogue system and two-way communication, which is a more correct and benign way.

Although the Didi driver is a service provider, he should also have his own choice for a passenger driver with poor quality or lack of basic etiquette. The scores of Didi drivers on passengers will form the credit scores of passengers, which will affect their travel. This approach can mobilize the enthusiasm and initiative of both parties.

This two-way restraint mechanism will change the stereotype that the service provider must unconditionally satisfy the consumer, so that the service provider has the same rights as the consumer. Under reasonable circumstances, the consumer can also be selected appropriately, which can inspire Didi drivers to be passengers provide more high-quality and comfortable services.

3.3.4 Reduce platform withholding amount and increase revenue

During the conversation with the driver of Didi Express, it was discovered that for a trip of 65 yuan, the Didi platform would charge a service fee of about 20 yuan. The high service fee caused some drivers to bypass the platform and contact passengers privately to travel. Unlike Didi, which gave drivers a large amount of subsidies during promotion in the early stage, some subsidies are only given when the prescribed workload is completed. The reduction of subsidies also greatly reduces the income of drivers.

Increasing fuel costs and more and more private cars joining Didi have squeezed out the profit margins of existing drivers. According to a questionnaire survey, 72.33% of drivers think their income is average. It can be seen that Didi drivers have an overall Not very satisfied.

In the context of the sharing economy, human resources are characterized by looseness. These loose employees lack the emotional connection with the company and the recognition of the corporate culture. They cannot implement employee incentives based on psychological contracts. They need to increase the attractiveness of compensation to promote Joining and stability of potential human resource persons.

4. Conclusion

The article analyzes the advantages, shortcomings, and optimization strategies of the human resource management model of Didi, and draws enlightenment for the human resource management of other sharing economy enterprises.

Firstly, focus on potential human capital. Companies should promote their ideas and core values through various channels and paths, give appropriate remuneration to attract potential human capital, and implement employee incentives based on psychological contracts, so that potential human capital can be used to create value for the company. At the same time, we must also focus on screening potential human capital in publicity channels. The large potential service providers also make their quality different. Enterprises should eliminate the unsatisfactory parts and retain excellent human capital providers.

Secondly, undertake corporate tax liability. On the issue of taxation, the sharing economy model has been wandering on the edge of the law, and has been interviewed and suspended by the government many times. At present, various platforms have a vague attitude towards taxation issues, and platforms have not made specific statements about responses, and drivers are often punished. Having income but not paying taxes is contrary to national policy. It is not a long-term solution for the platform to have no clear attitude to deal with tax issues. In practice, the platform can withhold taxes to meet the interests of social groups. Paying taxes on time is also a manifestation of a company's demeanor and social responsibility.

Thirdly, improve the human resource management of loose employees. In the sharing economy, a major feature of human resource management is the desalination of functions, and the platform will assume part of the functions of human resource management [13]. How to manage a large group of loose employees is an urgent problem. To improve the human resource management of loose employees can refer to the six functions of human resource management, including strict control of recruitment links, implementation of a comprehensive training system, and establishment of a two-way communication mechanism. The advantages, shortcomings and optimized strategies of Didi Travel's management model can be used as reference objects for enterprises.

Finally, relying on " Internet accelerated speed " to promote the transformation and upgrading of the service industry. A major thrust of the rapid development of the sharing economy is the maturity and development of Internet technology[14]. With the help of information technology, sharing economy enterprises have more advantages than traditional enterprises [15]. The use of Internet technology to upgrade corporate strategies is the future trend. Mobile taxi applications such as Didi Chuxing based on " Internet accelerated speed " technology use advanced communication technology to match the supply and demand of passengers and drivers, and provide technical support and information management in the service. The advantages in technology and information management distinguish Didi from the traditional taxi industry, promote the transformation and upgrading of the taxi service industry, and play an important role in the optimization of the entire industry.

Therefore, in the context of the sharing economy, companies must combine "Internet accelerated speed" with corporate strategy and human resource management in order to cultivate unique competitive advantages and enable them to occupy an advantageous position in the increasingly fierce competition.

References

[1] Chen X, Li P. Sharing economy and emerging human resource management model——Taking Airbnb as an example [J]. Human Resource Development, 2016, (6): 21-24.

[2] Ni Y, Yu Z. Sharing economy megatrend[M]. Beijing: Machinery Industry Press, 2015.

[3] Felson M, Spaeth J. Community structure and collaborative consumption: A routine activity approach[J]. American Behavioral Scientist, 1978, 21 (4): 614-624.

[4] Robin C. Sharing economy: Restructuring future business models[M]. Zhejiang: Zhejiang People's Publishing House, 2015.

[5] Gansky L. The Mesh: Why the future of business is sharing [J]. Portfolio, 2010, 16(5): 22-27.

[6] Liu Y, Xia C. Sharing economy theory and policy dynamic research [J]. Economic Dynamics, 2016, (4): 116-125.

[7] Dong C. Sharing economy: Theory and reality [J]. Journal of Guangdong University of Finance and Economics, 2016, (5): 4-15.

[8] Sun Z. The era of sharing economy is coming [J]. Internet economy, 2016, (1): 32-35.

[9] Gu Y, Wang D. Exploration of shared human resource management model——Based on the rooted research of online car-hailing platform [J]. Case study, 2016, (4): 108-116.

[10] Gao C. Research on the semi-contractual human resource management model under the sharing economy model——Based on multiple case studies of 6 companies [J]. Human Resource Development in China, 2017, (6): 16-21.

[11] Liu G, Wu B. Sharing Economy 2.0——Disruptive changes in individuals, businesses and society [M]. Beijing: Enterprise Press, 2015.

[12] Peng J. New thinking of human resource management in the internet age [J]. Human Resource Development in China, 2014, (16): 6-9.

[13] Goldratt E M, Cox J. The goal: A process of ongoing improvement [M]. Aldershot: Gower, 1993.

[14] Knorringa P, Stamer J M. New dimensions in enterprise cooperation and development [J]. Clusters to Industrial Districts, 1998, (4): 245-256.

[15] Du X. A Summary of domestic human resource management informationization research [J]. Times Finance, 2016, (18): 246-255.