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Research on Core Essential Elements for O2O Business Model with ANP

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Abstract: The O2O is a fast-growing emerging business model, the O2O business model framework is established and the most basic 7 major elements are identified in our research with Value Net theory as follow: customer, telecom operator, content provider, service provider, software provider, third-party payment platform and offline business entity. Then, we apply the Delphi method to identify 8 secondary elements and 22 three-level elements of O2O business model, and the O2O business model core essential elements evaluation model is also established. We analyze the model systematically and find out 10 core elements with Analytic Network Process (ANP) as follow: network speed and stability, mining the customer subject requirements, customer insight, control the trading risk, the core technology research and development, the life service payment platform, after payment platform, financial services platform development, the detonation of the fulfilled requirements and direct correlation between the maintenance of the enterprise. The 10 elements mainly concentrated in 4 dimensions as follow: customer, telecom operators, software providers and third-party payment platform. We hope that our research can provide enlightenment to O2O enterprise's development and the future trend analysis, and be helpful for all participants of Value Net achieve win-win symbiosis.

Keywords: O2O business model, core elements, Value Net theory, Delphi, analytic network process (ANP)

1. INTRODUCTION

A new business model (Online to Offline, O2O) arises with the interaction between online virtual world and offline real world in the Internet age. But the O2O hasn't formed stable development pattern, and the O2O development in China is lack of stability and maturity, a large number of O2O entrepreneurs are under a state of confusion, confused stage of online offline interaction closed-loop, and any blindly follow and irrational expansion will cause a large number of business failures^[1].

The structure of this paper is as follows, Section 2 is a literature review, explained the concept of O2O business model, the O2O business model based on the Value Net and the application of research methods; Section 3 is the establishment of research framework; Section 4 is the application of the Value Net theory and the Delphi method to establish evaluation system for O2O business model core elements; and Section 5 is to identify the core elements with the Analytic Network Process (ANP), Section 6 is the conclusions.

2. LITERATURE REVIEW

In August 2010, the concept of O2O is introduced by Alex Rampell when he analyzed Groupon, Open Table, Restaurant and SpaFinder, Alex Rampell discovers that their common points are as follow: they are all promote online business to offline business. Consumers can choose and buy, pay online, and then go offline store. It is a process with cycle and constantly promotion^[1]. K.Ye argues that: O2O is a commercial design to realize the trust of the connection between consumer for the brand for integrating online and offline channels with full contact point, applies with social media, mobile Internet, Internet of things, and big data technologies, promotes the big community members and internal resources electronization, and provides consumers with acme closed loop customer experience in anytime and anywhere, and, effectively enhance the brand of social

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capital^[1]. The concept of O2O was introduced into China for the first time in November 2011, and under the promote of some domestic group-buying and life service e-commerce, the O2O business model is gradually understood more and more attention of insiders as the elite Internet, venture investors, entrepreneurs, professional media, etc in 2012^[2]. There were 64 O2O enterprises which get the favor of venture capital investment totally from 2010 to November 2011 according to statistics, and the O2O market investment amount was raised nearly 7 billion only the 11 months ago of 2011^[3].

Bo Zhang, the marketing director of Shanghai Yima Company, defines the O2O as a new business model which is the interaction between the virtual world and the real world in the field of living consumption ^[4]. X.G. Weng. and L.Y. Zhang argue that O2O mode is new commerce model which does a deeper explore to the sales channels, and has a very good prospect. O2O is an electronic commerce mode based on online effective interactivity. This efficient integration mode between virtual world and real world gets support and recognition from all walks of life. O2O aims to maximize the use of offline and online resource, and promotes each other and depends on each other to achieve a win-win situation. O2O e-commerce integration pattern is necessary to establish and improve integration mode which including the physical network, service network, logistics network, data network and mobile network^[5]. H.Peng, and L.Wu argue that the marketing channels, the good faith problem, payment, logistics capability, the audience consumption habits and the web service problem hinder the further development of e-commerce, and they argue the O2O development momentum as follow: (1) The development of mobile communication technology and means of payment. (2) The increase of the offline transaction cost prompts the traditional offline company develop internet, and provides the power for O2O business model. (3) The trend that the online companies expands to entity platform. (4) Consumer demand. (5) Promotion in the transformation of traditional retailing^[6].

Chee Wei Phang, Chuan-Hoo Tan, Juliana Sutanto, Fabio Magagna, and Xianghua Lu argue that O2O commerce can be seen as a specific form of multichannel integration where the focus is on doing online promotion. Examples of social media-enabled O2O include Yelp in the U.S., productreview.com in Australia, openrice.com in Hong Kong SAR, and Dianping.com in China. They investigate how retail businesses may promote their products online to induce offline sales via social media-enabled online-to-offline (O2O) commerce. They focus on a country context where such an emerging e-commerce model is particularly prevalent, i.e., China. Key to leveraging this model is to attract consumer attention and stimulate their actions both online and offline, which may be achieved through information technology (IT)-enabled promotional approaches, such as administering banner adverts and digital coupons^[7].

The president of Tencent, H.T. Ma emphasizes on the new opportunities of mobile Internet that the QR code will be the key entrance for Tencent to integrate online and offline business. The founder of WeChat X.L. Zhang says: "The search box is the Internet portal of PC, and the QR code is the Internet portal of WeChat" ^[8]. Michael Lewis argues that "to glorify all manner of half baked plans". A company didn't need a strategy, or a special competence, or even any customers. All it needed is a Web based business model that promises wild profits in some distant, ill defined future. He confirms that a good business model begins with an insight into human motivations and ends in a rich stream of profits ^[9].

Cinzia Parolini argues that the Value Net is defined by "the participants who create value for the customer ", strategy map is applied to describe the node and the relationship between the interaction, and focus on value creation activities and resources ^[10]. D.M.Lambert etc argue that Value Net is a kind of value creation system which takes the customer as the core, it is a combination of strategic thinking and the latest supply chain management, and then replaces the traditional supply chain model in order to meet customers' requirements of convenience, speed, reliable and customized service ^[11]. The premise of constitute the Value Net model is the association between multiple industries, and the good Value Net establishment among multi-business and

multi-agent is based on both "resources transfer" and "cross subsidy" [12].

The definition of O2O in our research is as follow: O2O is a new business model which realizes the virtual world and the real world fusion effectively with interaction closed-loop in the field of living consumption. Its essence is to connect with digital social media, and its brand cultivation is data-driven individual marketing with "resources transfer" and "cross subsidy". The future of O2O will is a kind of multi-level and multi-dimensional compound ecological system and will evolve forward to both pluralism and cross boundary in the era of mobile Internet.

3. RESEARCH DESIGN

First of all, after reading relevant literature and relevant reports in recent years of mobile Internet and O2O, We apply the Delphi to establish evaluation system for O2O business model core elements with Value Net theory, and apply the ANP to find the 10 core elements (Figure 1).

Dephi method has many advantages, such as the method can avoid some possible disadvantages of group decision. We choose it in our research because this kind of method has the following advantages: (1) It is easy for experts to participate in the prediction, make full use of experts' experience and knowledge. (2) Anonymous way can let the experts make their own judgment independently. (3) We can apply the statistics method to deal with the opinions of the experts, and combining qualitative and quantitative analysis in the two steps behind the circulation with the several rounds feedback of prediction process to converge the opinions of the experts ^[13].



Figure 1. Research framework

The implementation of ANP is mainly divided into four parts as follow: (1) Analysis of the problems, analysis and combine the decision problem systematically, and judge whether the factor level is internal independent, if there is a dependent and feedback, analysis and research in this step is similar to the method of Analytic Hierarchy Process (AHP) . (2) Establish control structure, define the decision-making objectives and

criterion, and the weight of each criterion related to the decision-making objectives is also similar to the method of AHP. (3) Establish network level structure, determine each factor set to classify, analysis the relationship between the elements set structure and the influence to each other. (4) Establish the super matrix of ANP to calculate the weight, and apply the super matrix to calculate the final weight of each interaction factor ^[14].

4. ESTABLISH EVALUETION SYSTEM FOR O2O BUSINESS MODEL CORE ELEMENTS

We combine the O2O business model to establish business model framework which is based on the Value Net theory, and identify the most basic 7 major elements as follow: customer, telecom operator, content provider, service provider, software provider, third-party payment platform and offline business entity (Figure 2).



Figure 2. O2O business model framework which is based on the Value Net

The Dephi method expert group is composed of 12 experts as follow: expert 1, 2 and 3 from the domestic well-known Internet company, and the company provides the O2O service platform; expert 4, 5 and 6 respectively come from three telecom operators in China, their posts are product manager; expert 7 and 8 from domestic mobile payment platform as product manager; expert 9 and 10 from O2O life service start-up company as product manager; expert 11 and 12, they are senior online consumers who has rich experience in consumption experience. We collect the feedback information for the further analysis and combine with the in-depth interviews of experts' opinions, and by comparing the raw data, concepts constantly through the first round of the open research and four rounds evaluation type of circulation research, finally we established 8 secondary elements and 22 tertiary, then built the evaluation system for the O2O business model core elements (Table 1). The meaning of the tertiary elements in our research is illustrated in Table 2.

Primary Elements	Secondary Elements	Tertiary Elements				
A ₁ Customer	B ₁ Source power of Value Net	C ₁ Mining customer demand				
-		C_2 Detonation driving of fulfilled demand				
	B ₂ Demand correlation	C_3 The maintenance of direct correlation enterprises				
		C ₄ Customer insight				
A ₂ Telecom		C ₅ Network speed and stability				
operator	B ₃ The diversity of business value	C ₆ To pay before				
		C ₇ To pay after				
A ₃ Content		C ₈ Product and content of innovation				
provider		C ₉ Content and quality maintenance				
A ₄ Service	B ₄ Service pattern innovation	C_{10} The combination of rich online and offline set				
provider		C ₁₁ Digging new service field				
	B ₅ Grasp the market environment	C ₁₂ The environmental impact of S&T				
	incisively	C ₁₃ Political environment impact				
A ₅ Software		C ₁₄ The core technology research and development				
provider	-	C ₁₅ Third-party software developers				
A ₆ Third-party		C ₁₆ Control the trading risk				
payment	B ₆ "Pay" development with	C ₁₇ Life service class payment platform				
platform	platform	C ₁₈ Financial services platform development				
	B ₇ Personal transformation	C ₁₉ Business revolution from offline to online				
A7 Offline		C ₂₀ Big data analysis and management				
business	B ₈ The landing of products and	C ₂₁ Online and offline smooth cohesion				
entity	services	C ₂₂ Control the quality of products and services				

Table 1. Evaluation system for the O2O business model core elements which are based on the Value Net

Table 2. The meaning of the tertiary elements

Influence Elements	Illustration
C1 Mining customer demand	Customer demand refers to the existing unmet customer need, as well as the existing demand which is
	satisfied roughly but have room to improve, and mining customer demand can increase the driving of
	Value Net.
C2 Detonation driving of	Customer demands need to be met, and to fulfill the customer needs can bring overall value to other value
fulfilled demands	subjects which in the Value Net, and the size of the overall value affect the speed and passion of the Value
	Net operation.
C ₃ The maintenance of direct	Good maintenance for the direct correlation enterprises which in the Value Net, and keep up the good
correlation enterprises	cooperative competition equilibrium model.
C4 Customer insight	We trace back to the customer demand, and analyze these correlation exists between the demands, or
	what relationship can they produce, and satisfy customer needs with both the strategic cooperation and
	the aid of big data analysis technique.
C5 Network speed and	Good service is the foundation of all online and offline activities to smooth, and the speed and stability, is
stability	also the top priority of telecom operator. Today, domestic the 4G network is popular, China Unicom and
	China Telecom has got the 4G licenses, and it also illustrate that the speed and stability of the network is
	strengthen constantly.
C ₆ To pay before	The most common form of Telecom operator business is sale the products and services to customer and
	earn profits from customer directly.
C7 To pay after	It's a relatively new type of internet business model for the normal customers, the products and services
	are free, and telecom operator charge fees from enterprises for providing services, and the enterprise earn
	profits from customers by other means, the pay after is customizable, primarily makes strategic cooperate
	with some enterprises to balance development through the way of resource transfer and cross subsidy.
C8 Product and content of	Capture the diversification of customer needs, learn about the user interests and hobbies to provide
innovation	services in order to met the user multiple needs. We can make use of the UGC (user generated content)
	and also can make the PGC (the content which is produced by the enterprises and experts).
C9 Content and quality	Guarantee the instantaneity of content, maintain and operate the UGC products, guarantee the stability of
maintenance	quality, keep audit work convinced to ensure the stability and legality of quality and also increase
	authority.

Influence Elements	Illustration
C ₁₀ The combination of rich	Explore the feature of online and offline is actively to collision of different service mode. Simple O2O
online and offline set	could combine to different service mode, such as Online to Offline, Offline to Online, and Offline to
	Online to Offline which is continuously grope from the providers and customers.
C ₁₁ Digging new service field	In addition to the different combination of online and offline. there is other field be worth exploring such
	as new products and service field, and mining new products and service will also rich the pattern
	continuously. It is influenced by many elements and also linked to people demand and the complicated
	market environment significantly;
C ₁₂ The environmental impact	An enterprise which can't keep up with new science and technology (S & T), and it's difficult to make a
of S&T	big innovation, the cost will be higher too. The development of technology will promote the development
	of products and services, and bring more intelligent user experience as well as reduce the cost.
C ₁₃ Political environment	The collection between political environment and development of Internet enterprise is more and more
impact	closer, the Internet has already permeated every aspect of life in recent years, and our law is also in
	developing and improved continuously, keep up with each political legal change will bring out new
	content and produce better service.
C_{14} The core technology	The software providers focus on the research and development of core technology, and pay more
research and development	attention to the influence of S& I environment than any other enterprise, an excellent software provider
C Third contract conference	The development of Q2O is more focus on the gread and greating compared with the informatization
C ₁₅ Third-party software	and tachnicalization in other enterprises, because of the intervention of third party software development
developers	and technicalization in other enterprises, because of the intervention of third-party software developers,
	heavily:
Cyc. Control the trading risk	The trading security is an important part of e-commerce from the start of distrust to nowadays popular
C ₁₆ Control the trading lisk	only with the good control of risk can make users trade online, and the risk of trade can divided into three
	stages as follow: before the trade, during the trading, after the trading, and the risk during the trading
	attracts the most attention, the risk before and after trading is generally controlled by the businesses, and
	the third platform regulate indirectly.
C ₁₇ Payment platform for life	Entrepreneurs don't hope that their software is only a simple application or tool, they wish the APP can
service	change into a one-stop service platform gradually. In addition to provide payment and security services,
	more and more offline living payment service also can use the online payment platform directly which is
	more convenient for user life services.
C ₁₈ Financial services	Such as AliPay and Bestoay, they turned into online wallet from the beginning of being a payment
platform development	security tool, and then evolved into an online financial services platform, and even shocked the offline
	bank financial services.
C ₁₉ Business revolution from	Before the transform of enterprise, it's necessary for enterprise to have a deep understand of its internal
offline to online	process, analysis the existing business, appropriate products and services need to be removed online
	positively, so that is good for publicity and reduce cost, at the same time, the supporting work in offline
	business also needs to be better improved so that can combine online to offline perfectly.
C ₂₀ Data-driven operation	Abandon the past simple statistics system, we need more with analysis, and can't rely on data
	management and simple complement to conduct business, we need positive use of big data analysis to
	understand the whole demand trend, so as to get better grasp of the user's needs and provide better
C Online and offline successful	products and services.
C_{21} Online and offline smooth	In terms of service implementation, the incorporation between online and offline is important, online is not only simple attraction, it should combine with the offline, the attraction online is supposed to support
011531011	the offline only the cooperation is good to brought good experience to customer and it mainly includes
	the process of online to offline excessive naturally and make customers enjoy the convenient and fast
	service experience come from both online and offline.
C ₂₂ Control the quality of	Online attractive, offline consumption, most of the merchants in the online publicity tend to be excessive
products and services	it will cause that the customer offline consumption has psychological gap directly, so they should pay
r - minis interstations	attention to the actual quality of products and service, because the implementation process is the main
	value of the Value Net.

5. IDENTIFY THE CORE ELEMENTS WITH ANALYTIC NETWORK PROCESS

We established the control layer, primary factor respectively is in the following: customer A_1 , telecom operator A_2 , content provider A_3 , service provider A_4 , software provider A_5 , third-party payment platform A_6 and Offline business entity A_7 . There are 7 main parts of our framework for analysis with O2O business model

core factor which is based on the Value Net as the decision goal. The 7 components will be regarded as relatively independent of each other to control criterion layer in our research. According to Table 1 we could sort out the elements in the network layer, and there are 8 factor sets in the network layer, with other and the 8 elements sets there are 22 elements totally. It is illustrated in Figure 3 that the ANP structure of O2O business model core elements evaluation system in our research.



Figure 3. The ANP structure of the O2O business model core elements evaluation system

Based on analysis the interaction between the element layers in Figure 3, we calculate the relative weight of the elements which are in the same layer and interactional relationship with each other with experts scoring and establishing the judgment matrix, and we combine these results to generate a super matrix (Table 3).

Table 3. Super matrix											
Weight	C ₁₀	C ₁₁	C ₁₂	C ₁₃	C ₁₆	C ₁₇	C ₁₈	C ₁₉	C ₂₀	C ₂₁	C ₂₂
	0.419	0.106	0.166	0.310	0.696	0.075	0.229	0.390	0.171	0.319	0.120
C ₁₀	0	0.136	0.527	0.540	0	0	0	0	0	0	0
C ₁₁	0.540	0	0.139	0.297	0	0	0	0	0	0	0
C ₁₂	0.163	0.237	0	0.163	0	0	0	0	0	0	0
C ₁₃	0.297	0.626	0.333	0	0	0	0	0	0	0	0
C ₁₆	0	0	0	0	0	0.800	0.875	0	0	0	0
C ₁₇	0	0	0	0	0.750	0	0.125	0	0	0	0

Weight	C ₁₀	C ₁₁	C ₁₂	C ₁₃	C ₁₆	C ₁₇	C ₁₈	C ₁₉	C ₂₀	C ₂₁	C ₂₂
	0.419	0.106	0.166	0.310	0.696	0.075	0.229	0.390	0.171	0.319	0.120
C ₁₈	0	0	0	0	0.250	0.200	0	0	0	0	0
C ₁₉	0	0	0	0	0	0	0	0	0.637	0.683	0.156
C ₂₀	0	0	0	0	0	0	0	0.286	0	0.200	0.595
C ₂₁	0	0	0	0	0	0	0	0.571	0.258	0	0.249
C ₂₂	0	0	0	0	0	0	0	0.143	0.105	0.117	0

We can get the stable weight limit super matrix (with the help of super decisions software to calculate the data) through convergence algorithm to the super matrix, the results are illustrated in Table 4.

Weight	C ₁₀	C ₁₁	C ₁₂	C ₁₃	C ₁₆	C ₁₇	C ₁₈	C ₁₉	C ₂₀	C ₂₁	C ₂₂
C ₁₀	0.281	0.281	0.281	0.281	0	0	0	0	0	0	0
C ₁₁	0.262	0.262	0.262	0.262	0	0	0	0	0	0	0
C ₁₂	0.157	0.157	0.157	0.157	0	0	0	0	0	0	0
C ₁₃	0.300	0.300	0.300	0.300	0	0	0	0	0	0	0
C ₁₆	0	0	0	0	0.452	0.452	0.452	0	0	0	0
C ₁₇	0	0	0	0	0.362	0.362	0.362	0	0	0	0
C ₁₈	0	0	0	0	0.186	0.186	0.186	0	0	0	0
C ₁₉	0	0	0	0	0	0	0	0.365	0.365	0.365	0.365
C ₂₀	0	0	0	0	0	0	0	0.229	0.229	0.229	0.229
C ₂₁	0	0	0	0	0	0	0	0.295	0.295	0.295	0.295
C ₂₂	0	0	0	0	0	0	0	0.111	0.111	0.111	0.111

 Table 4.
 The limit super matrix

We can calculate the global weight of each indicator element combining with the combination weight, the final result is illustrated in Table 5.

Dimensional	Weight	Element	Relative weight	Global weight	General weight
A ₁ Customer	0.282	C ₁	0.404	0.114	2
		C ₂	0.129	0.036	8
		C ₃	0.125	0.035	10
		C ₄	0.342	0.097	3
A ₂ Telecom	0.230	C ₅	0.750	0.173	1
operator		C ₆	0.078	0.018	18
		C ₇	0.172	0.039	7
A3 Content	0.031	C ₈	0.667	0.021	15
provider		C ₉	0.333	0.010	21
A ₄ Service	0.082	C ₁₀	0.281	0.023	13
provider		C ₁₁	0.262	0.021	15
		C ₁₂	0.157	0.013	20
A ₅ Software	0.102	C ₁₃	0.300	0.025	12
provider		C ₁₄	0.8	0.082	5
A ₆ Third-party	0.194	C ₁₅	0.2	0.020	17

Table 5. The global weight of indicator element

Dimensional	Weight	Element	Relative weight	Global weight	General weight
payment		C ₁₆	0.452	0.088	4
platform		C ₁₇	0.362	0.070	6
A ₇ Offline	0.079	C ₁₈	0.186	0.036	8
business		C ₁₉	0.365	0.029	11
entity		C ₂₀	0.229	0.018	18
		C ₂₁	0.295	0.023	13
		C ₂₂	0.111	0.009	22

We sort the 22 elements which are in the element layers, and indicate the top 10 elements according to calculation result as follow: network speed and stability (C_5 : 0.173), mining customer demand (C_1 , :0.114), customer insight (C_4 :0.097), control the trading risk (C_{16} :0.088), the core technology research and development (C_{14} :0.082), life service class payment platform (C_{17} :0.070), to pay after (C_7 :0.039), financial services platform development (C_{18} :0.036), detonation the driving of fulfilled demand (C_2 :0.036), the maintenance of direct correlation enterprises (C_3 :0.035). The 10 elements mainly concentrates in the 4 dimensions as follow: customer (A_1 : 0.282), telecom operator (A_2 :0.230), software provider (A_5 :0.102), and third-party payment platform (A_6 :0.194).

It is illustrated that customer, telecom operator, software provider and the third-party payment platform are the core elements which affect the whole O2O business model Value Net significantly, and our research also identifies 10 key elements. It is necessary to make the improvements in the following in order to improve the quality of O2O business model from the perspective of the whole Value Net and increase customer satisfaction:

(1) Adding the driving of Value Net, and dig demand relationship. Customer as the driving of Value Net is the common creator of value, also the client of the final value. So, as the core element of Value Net, value create the driving force of activity, research in how to increase customer value flow in at the same time customer consumption value that created by other value subject which is in the Value Net will be worthwhile. Driving force can be the direct injection of money and resource value, it also could be an invisible high efficiency catalyst. Customer demand need to be met, and to satisfy the customer need will create overall value for the other value subject which in Value Net, the size of overall value will directly affect the speed and passion of the Value Net operation. The complex demand of customer will link the value subjects which have no intersection in the past magically, and mining user requirements deeply until trace back to the source, analysis the interaction of these demands and take strategic cooperation to satisfy customer needs with resource transfer and cross subsidy to balance the value acquirement.

(2) The network speed stabilization, business diversity, and the core technology optimization constantly. Telecom operator takes place as organizer in the whole mobile Value Net, mainly to provide high quality mobile Internet experience. Its advantage is the large number of customer resources, as the organizer in the O2O business model Value Net, telecom operator keep close relationship of cooperation to provide client with high quality services or products. Good service is the foundation of all online and offline activities to smooth, and the speed and stability is the top priority of telecom operator. Telecom operator can provide content and service to customer and enterprises directly, and also can provide a platform for other enterprises to create value in its operating scope. For example, to pay after is a relatively new type of Internet business model which is mainly about the strategic cooperation between enterprises, and through the way of resource transfer and cross subsidy to balance its development. Software provider provides application solution to telecom operator and the software provider with core technology has extremely strong competitive. Meanwhile, the explosive

development of third party software provider brings a unified solution for the company with weak Internet capability, and it helps these companies saving cost, develop in batch template, speed up the development.

(3) Online trading risk control, and payment platform diversification development. Third-party payment platform is indispensable for O2O business model Value Net, if there is lack of payment mean which is convenient and quick or security payment guarantee model, it will make O2O business model not easy to attract customers. It will bring more value and be appeal for the users on the condition introducing the escrow and regulatory platform and maintain a good online consumption system. The O2O platforms can establish their own payment platform and also be free to choose the cooperation with third party payment company operations because the constant development of third-party payment platform, the Internet financials is to become big hot topic. The online trading risk is the top priority, it can make users trade online only with the good control of risk, and the risk of trade can divided into three stages as follow: before the trade, during the trading, and after the trading. The risk during the trading attracts the most attention, the risk before and after trading is generally controlled by the businesses, and the third platform regulate indirectly. Entrepreneurs don't hope that their software is only a simple application or tool, they wish that the APP can change into a one-stop service platform gradually. In addition to provide payment and security services, more and more offline living payment service also can use the online payment platform directly, which is more convenient for user's living services. It turns into online wallet from the beginning of being a payment security tool, and then evolves into an online financial services platform, and even shocks the offline bank financial services.

6. CONCLUSIONS

We establish the framework of O2O business model which is based on Value Net theory, and then apply Dephi method to construct the evaluation system of O2O business model core elements, and finally apply the Analytic Network Process to identify the top 10 core elements as follow: network speed and stability, mining customers' demand, customer insight, control the trading risk, the core technology research and development, life service class payment platform, to pay after, financial services platform development, detonation the driving of fulfilled demand, the maintenance of direct correlation enterprises. The 10 elements mainly concentrate in 4 dimensions as follow: customer, telecom operator, software provider, and third-party payment platform.

The Dephi method as the application of the methodology, although there are some advantages, but there are some defects too, such as subjectivity. In our research, the object of the Dephi method is the O2O business model with strong professional which is ambiguous to general managers and the public, so the evaluation relies on the experts' opinions heavily, the professionals in other fields are hard to have a say. Expert's judgement on O2O business model mainly depends on the data of each expert and also depends on their comprehensive analysis and logical reasoning ability, so the individual ability, the depth and breadth of knowledge, quality and quantity of information sources, and personal preference will also affect the result. Therefore, expert's subjectivity is the main drawback in Dephi method, and it's necessary to absorb more public opinion including the unprofessional, especial big data analysis.

The O2O business model is a complicated process which involves multiple elements, it is still in a high-speed development and the process is improved continuously. The O2O business model may be disruptive influence on the future business environment compared with the ordinary online electricity and offline businesses. Today, the research of the O2O is more focus on some particular vertical O2O enterprises, and we research O2O Value Net in the view of macro aspects. For those O2O enterprises which are in the vertical market, our research can help them to find their position accurately, and then solve the substantive issues from a higher dimension.

O2O has its unique advantages and disadvantages as a new business model. For example, O2O's advantage

for customer is to provide a lot of reference information, more favorable price, and make search and online consulting easier, etc; but there are also some problems, such as the actual quality of products or services may be far away from customer expectation, and as well as related after-sales service problems are difficult to solve; and merchants can get more opportunities and user data as well as they can reduce operating costs with O2O platform, at the same time, there will be more competition and limited publicity; the model can bring a lot of users and businesses as well as the huge funding sources and profit space for O2O platform, but the platform integrity, business platform for the assessment system and its innovation advantage also hinder its own development. Future research can focus on the problems existing in the O2O business model and also can combine with the core elements of O2O business which are concluded in this paper.

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