



A study Investigating the Stage-by-Stage Pre-Order Platform Strategies—taking Online Pre-Order Catering Platforms for Example

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Abstract: Through online shopping, it is convenient and fast for consumers to find the products they need. What's important is that online shopping is not limited by time and space and can effectively stimulate consumers' online transactions and generate considerable revenue. For O2O pre-order catering, online catering reservation platforms have been set up since 1998, such as the Open Table, GH, Panera Bread, and Dunkin' Donuts in the U.S. and EZTable and Weiby iStore in Taiwan, which all have created brand new and surprising experiences. However, these platforms need to implement the right platform strategies at the right time to stand out. This study enrolled successful online catering reservation platforms in the U.S., Germany, and Taiwan as the subjects to perform analyses. This research used the case study method to collect academic papers and database documents of the strategies of pre-purchase catering platforms extensively by using secondary data method. This study performed cross-analyses and inductions on multiple successful subjects, used the "innovation diffusion model" to analyze the operating strategies of these pre-order platforms based on the strategy model of Delta Model, summarized the critical factors affecting the sustainable operation of online platforms, and developed propositions that can be put into practice.

Keywords: Delta model strategy model, technological innovation theory, online pre-order

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INTRODUCTION

Research Background

The emergence of the internet has changed the rules of the game in many industries (Arockiyasamy, Surendheran, & Bullard, 2016; Peterson, 1997), and the rapid development of the internet and information technology has driven the trend of online shopping. The topic that is closely related to the public and has high commercial value is "online shopping". The internet not only is innovative with marketing competitiveness (Chang, 2017; Schonland & Williams, 1996), but also provides consumers with an interactive trading platform (Eisenmann, Parker, & Van Alstyne, 2011; Willy, 2017). This is mainly because shopping through the internet is convenient and it is fast to find the products you need. What is important is that transactions can be conducted on the internet without any restriction of time or place, which effectively stimulates consumer network transactions and brings considerable revenue (Kang & Ogawa, 2017; Karayanni & Baltas, 2003). Tapscott (1997) online shopping is that consumers purchase goods or services from virtual

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shops on the internet through the internet. Online shops, on the other hand, display the catalogue of products to be sold on the computer pages of consumers in a multimedia way through the global information network. Taiwan's catering industry is affected by this trend. In 2008, the online catering platform (EZTable) began to develop in Taiwan, and many hotels have also established websites as another sales platform. For a while, running an online pre-purchase platform seems to be another battleground in the catering industry. One of the uses of the network proved to be very successful is to connect various communities into a virtual network with common goals and needs (Poon & Swatman, 1996).

Research Motives

This research is based on the "innovation diffusion model". Like innovative products, network platform management is a socialized diffusion process adopted by the market and will experience many different development processes in different periods. However, each period will face the interference of consumers with different attributes and the economic and commercial environment. Operators must understand that starting from the first customer, the management strategy will be different in each period.

This research took the successful online reservation catering platforms in the United States, Germany and Taiwan as the case analysis subjects, and analyzed the management strategy of these pre-purchase platforms through the "innovation and technology model" in stages, summarized the key factors for the success of such platforms and developed a set of propositions that can be referred to via the cross analysis and induction of several successful cases based on the Delta Model strategy model.

Research Questions

Based on the above research motives, the problems analyzed in this research are:

1. How to make good use of the platform's advantages and establish a successful business model for online pre-purchase catering platform management.
2. Under the innovative science and technology model, how to plan a phased platform strategy for online pre-purchase catering platform.
3. Based on Delta Model strategy model, discuss how online pre-purchase catering platform can develop, continue, grow and retain customers under the strategies of different phases?

LITERATURE REVIEW

Development and Types of Taiwan Online Pre-purchase Catering Platforms

Development history of Taiwan online pre-purchase catering platforms: Taiwan's online pre-purchase catering website started in 2008 with EZTable or Easy Table. Netizens can book seats directly on the "EZTable" website. Weiby Smart Store - catering iPad was established in 2013, and is the first restaurant management system in Taiwan that perfectly integrates POS and mobile ordering App in restaurants. It is hoped that through the innovative App design, more small restaurant operators who have not been introduced into the system can connect with the latest technology. As of now, it has been downloaded 10,297 times, and more than 200 breakfast restaurants are using the system. Consumers are used to surfing the internet and buying food and beverage before eating, instead of buying only from traditional food and beverage shops. As consumers rely on the environment of online shopping, the development of online pre-purchase catering platform has become more vigorous, extensive and diversified. Scholars in the field of e-commerce marketing and information decision-making generally advocate that customer satisfaction has a great influence on customer loyalty (Bhattacharjee, 2001b; Bilog, 2017; Curran, Meuter, & Surprenant, 2003; Gustafsson, Johnson, & Roos, 2005).

Types of Taiwan online pre-purchase catering platforms: With the rapid growth of the number of consumers and the influence of foreign network economic model and mobile technology, the changes created by online pre-purchase catering websites are becoming more and more diversified and such websites even have become the pre-purchase platforms integrating multilateral transactions. At present, Taiwan's E-Commerce (EC) online pre-purchase catering platforms can be divided into three major types depending on the type of operation: (1) the network systems established by the merchants themselves, (2) the systems provided by platform suppliers, and (3) virtual and actual integrated ordering systems provided by third-party platforms:

1. Network systems built by merchants themselves: depending on its scale, mode of operation, type of consumers and habits of consumers, the restaurant will request the system provider to build a pre-purchase catering system to

provide consumers with the pattern of online pre-purchasing and offline consumption, such as, the official websites of individual independent catering enterprises.

2. Systems provided by platform suppliers: the platform system suppliers collect various types of restaurants, most of which are small restaurants, to build systems that are linked to the platform system provider, so that consumers order their food on the platform of the system provider before they go to the entity restaurant for consumption or the entity restaurant deliver their food to the designated place of the consumers according to the pre-purchase order of the consumer. Established in 2013, WeibyApps was to build a simple and easy-to-use POS system so that every small restaurant owner can get the greatest help with limited funds.

3. Ordering system provided by the third-party platform: a system of virtual and real integration, where consumers use the third-party payment platform without time and place restrictions to order food in advance and then go to the restaurant, such as, the ordering system provided by EZTable third party platform and operated by O2O.

Scientific and Technological Innovation Theory

S curve of innovation diffusion model: Rogers (1962) of the United States put forward the theory of innovation diffusion or multi-step innovation flow. He thinks innovation is a concept, time or thing that is regarded as novel by individuals or other adoption units. Rogers (1983) defined diffusion as: "innovation is a process of spreading innovation results from certain channels at certain time among members of the social system." Rogers (1962) divided the adopters of innovation into innovators, early adopters, early followers, late followers and laggards. Innovation diffusion includes five stages: understanding stage, interest stage, evaluation stage, experiment stage and adoption stage. However, individual consumers or enterprises gradually accept this innovation at different stages. This kind of diffusion model icon assumes the shape of S (Figure 1), therefore, the adoption model constitutes the S curve of innovation diffusion:

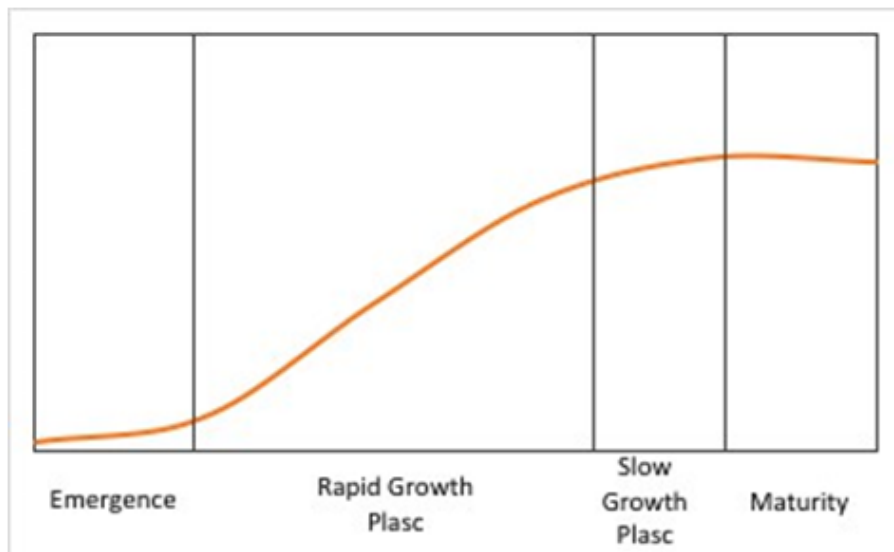


Figure 1 S Curve of Innovation Diffusion (Source: Foster (1986))

Understanding stage, interest stage, evaluation stage, experiment stage and adoption stage:

1. Understanding stage: exposure to new technologies and new things, but with little understanding.
2. Interest stage: generate interest and collect more information.
3. Evaluation stage: evaluate your own needs and consider whether to adopt it.
4. Experiment stage: experience it to see whether it is suitable for your own situation.
5. Adoption stage: decide to adopt and use.

Types and characteristics of innovation adopters: Rogers further pointed out that the process of innovation diffusion is similar to normal distribution, and different categories of recipients are distinguished according to the point in time when innovations are adopted. The innovation adopters are divided into 5 types by standard deviation and time average (Figure 2).

1. Innovators: the courageous pioneers, a group of people who are crazy about technology, extremely sensitive to innovative products and brave to try new products, able to quickly accept new ideas and consciously promote innovation. They account for 2.5% of normal distribution.
2. Early adopters: the promoters of innovation diffusion. Compared with innovators, they are respected social figures and public opinion leaders. They are willing to lead fashion and try new things, but they are cautious in their behavior. They rely more on values and social norms, and early adopters have quite close ties with the local society. These communities are also more likely to become opinion leaders. Their adoption behaviors will affect the subsequent followers. They account for 13.5%, following the innovators.
3. Early followers: they are a group of thoughtful people who are also more cautious, but they are more willing to accept changes earlier than ordinary people. They are cautious and good at collecting market information. They evaluate the advantages and disadvantages of the products to make decisions, and are also very concerned about the practicality of the products. This category accounts for 34% of the adopters.
4. Late followers: they are a group of skeptics who will only adopt new things when the public generally accept them. The behavior of adoption is mostly influenced by friends and family around. Only when the specifications are established and complete will they be willing to adopt them. They are more concerned about the pressure of the group, accounting for 34% of all adopters.
5. Laggards: they are a group of traditional conservatives who are used to sticking to the old ways and finding faults with new things. The laggards are more conservative in their acceptance of new products. They are more paranoid about past purchasing experience and are not easily influenced by external factors. They also do not like new technology. They account for the last 16%.

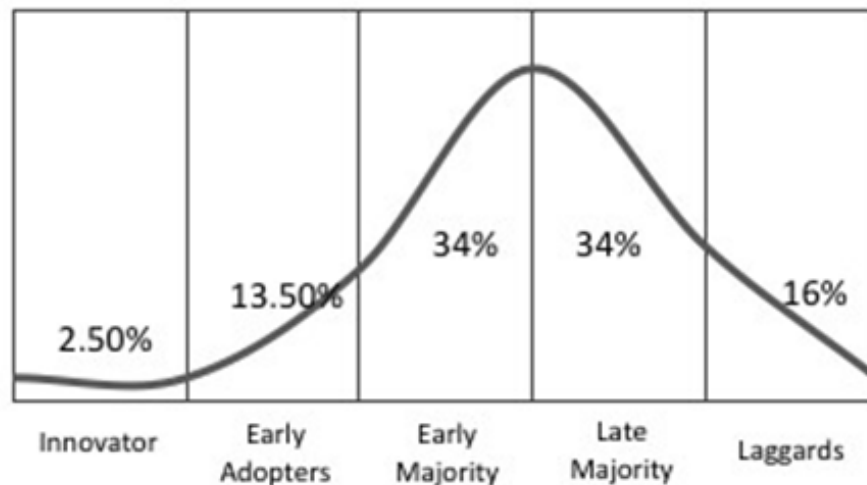


Figure 2 Classification of Innovation Adopters (Source: Rogers (1962))

Delta Model Strategy Model

Professor Hax of Massachusetts Institute of Technology and the scholar Wilde proposed Delta Model triangular strategy model, emphasizing that enterprises can establish an unbreakable and intimate relationship with customers via customer engagement, in particular, the closeness and relevance characteristics of the network economy, which enables enterprises to have a highly competitive position in the structure of customer relationships.

Architecture of delta model strategy model: It is believed by Delta Model triangular strategy model (Figure 3) developed by Hax and Wilde (2003) that today's competitive strategies of enterprises should start from three aspects to form three forces that influence each other, and strengthen and connect with each other. These three strategic aspects are product optimization, total customer solution and system configuration.

1. Product economy: based on the traditional commercial competitive advantage, the low cost or differentiated value of products greatly attracts consumers, which is more important than the production and innovation capabilities of competitors.

2. Total customer solution: the competitive advantage comes from the ability to interact with the needs of consumers. From the perspective of consumers, if enterprises understand the requirements of consumers, it will improve the ability of enterprises to meet the requirements of consumers, thus improving the attractiveness of enterprises to consumers. Most consumers can have their needs met through the company's products or services (Wen, Wen, Pei, Hui, & Shieh, 2018). A transparent and responsible communication platform provides services as a medium. It is strongly recommended to improve the operation of the system after understanding the needs of consumers.

3. System configuration: the activities of enterprises and other suppliers become a unified activity system, thus locking up relevant enterprises and customers in the business and excluding competitors from the system. Strategic considerations should be extended to the entire system related to the enterprise, such as suppliers and consumers. Cultivating and attracting complementor products or services is a key to success.

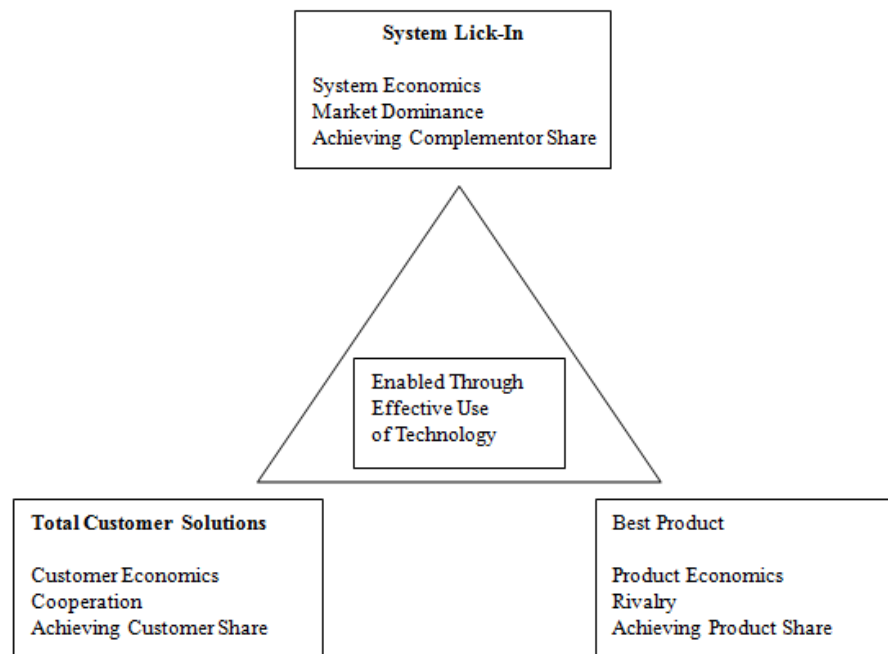


Figure 3 *Delta Triangle Model* (Source: Hax and Wilde (2003))

Aspect evaluation of delta model strategy model: Hax and Wilde (2003) further pointed out that when enterprises consider the positioning of industrial competitive advantages and make strategic choices, they can develop suitable strategic layout and resource allocation according to the evaluation of the following detailed factors:

Product economy: (1) Economize products: through mass production of economies of scale, enterprises can reduce the cost of products and give back price cuts to consumers in order to strive for maximum market share and get higher profits than their peers.

(2) Differentiate competitors: increase added value in the application of products or services so as to effectively differentiate themselves from competitors and further increase market share.

(3) Achieve product sharing: allow products or services to be modularized or form common commercialization, reduce costs and quickly respond to customer demands, thus producing customized products.

Total customer solution : (1) Customer economization: in order to meet the important needs of customers, provide products or services exclusively belonging to customers; re-position the customer's product value and establish the experience of customer consumption, increase the added value of products and establish value marketing of repeated purchases by customers. Scholars in the field of e-commerce marketing and information decision-making generally hold that customer satisfaction has a considerable influence on customer loyalty (Bhattacharjee, 2001a; Curran et al., 2003; Gustafsson et al., 2005).

(2) Comprehensive cooperation: enterprises should consider cooperating with suppliers, consumers and even competitors in order to create higher customer value and meet the overall needs of consumers.

(3) Customer sharing: enterprises should establish alliances with other stakeholders to serve customers together and improve customer adhesion and contribution. For example, to cooperate with suppliers, communities or employees,

consumers and even competitors.

System configuration aspect: (1) System economization: an open framework should be adopted to attract the participation of all kinds of complementary parties, and a system mutual exclusion mechanism or high conversion cost should be established to facilitate the construction of a survival system and the establishment of a complete ecosystem.

(2) Dominant position in the market: in order to achieve the market locking effect, the exclusive product standards should be acceptable to complementary manufacturers and customers. Provide the guarantee of the unique function and consumer certification of special trading platforms, thus locking in consumption patterns and constructing market standards.

(3) Realizing mutual complementation: in order to bring profit opportunities for both the enterprise itself and the complementary parties, all suppliers and complementary manufacturers should join together to enhance the value of products or services for customers and generate positive circulation, such as restaurants, parking lots, department stores, nearby scenic spots, etc.

RESEARCH METHOD

This research used the case study method of qualitative research, took the successful online reservation catering platforms in the United States, Germany and Taiwan as the case analysis subjects, and analyzed the management strategy of these pre-purchase platforms through the "innovation and technology model" in stages, summarized the key factors for the success of such platforms and developed a set of propositions that can be referred to via the cross analysis and induction of several successful cases based on the Delta Model strategy model.

Research Subjects

This research collected secondary data of online pre-purchase catering platforms, and selected representative and successful platform operators as the objective of case study, including Open EZTable, the largest in the United States, Foodpanda of Germany, and EZTable, Taiwan's largest online food and beverage purchasing platform. All of the three case subjects are platform leaders in the online pre-purchase catering industry. They are not only advanced businesses, but also successful cases in the industry, which are sufficient to serve as the typical cases.

Research Method

This research used case study method to collect academic papers and database documents of the strategies of pre-purchase catering platforms extensively by using secondary data method, and constructed a model for the development of platform strategies through the collation and analysis of public distribution of data by enterprises, newspapers and magazines, network data, academic papers, industrial research and other secondary materials. And the representative platforms were selected; Open EZTable of the US, Foodpanda of Germany, and EZTable of Taiwan are the case objectives of the analysis. Based on the cross-mapping of the three cases, the key factors of success were summarized to develop enforceable strategic propositions.

CASE STUDY

Delta Model Phased Strategy for Innovation Diffusion in its Infancy

We observed that when the online reservation catering platform was just launched, it was in the initial stage of new products entering the market for the market and was regarded as the embryonic stage of innovation diffusion. Because most people were not familiar with this technology or held a wait-and-see attitude, the diffusion speed was slow and the number of users was small, which can only attracted innovators and early adopters to purchase. The degree of innovation and technological energy of this product directly affect the main factors that determine whether innovation is accepted or not (Marquish, 1982). If innovative things have comparative advantages over old ones, they can bring greater benefits or satisfaction to individuals or enterprises, etc, and innovative things are more easily accepted. According to the strategic aspect of Delta Model, the aspect of product optimization of Delta Model should be used as an important strategy and resource layout for the strategic model in the embryonic stage, including the additional value in the application of products or services to differentiate from competitors, competitive advantage over traditional products, and consumers being attracted by the low cost or differentiated value of products.

OpenTable is undoubtedly the most representative among the online catering reservation enterprises in the United States. Established on July 2, 1998 in San Francisco, California, it is the world's leading online restaurant reservation

provider with online reservations for over 46,000 restaurants, and it can accommodate more than 25 million diners per month. OpenTable network connects special restaurants and consumers to help consumers find and book perfect tables, and help restaurants to provide personalized services so that consumers can continue to order. OpenTable has served more than 1.6 billion users through online subscriptions around the world. After Apple Pay was released in Apple, Matthew Roberts, CEO of OpenTable pointed out in an interview with US Bloomberg News that in response to mobile payment, they launched the restaurant menu on the new service of "Click App" on the mobile App, so that with a swipe of fingers, dinners can use their mobile phones to pay directly without the need to wait for pay the bill any more. OpenTable used the mobile payment function to save consumers' time waiting for paying the bill on the one hand and save the restaurant attendant the trouble of settling the bill on the other hand. This is the "all-round dining experience". OpenTable uses online reservation to transform the catering industry, makes the restaurant inventory electronic through the establishment of an ERB (Electronic Reservation Book) system, attracts online users to book the restaurant through the website to improve the efficiency of ordering and differentiate competitors. OpenTable service enables customers to check which restaurants have available tables, select restaurants based on consumer-verified post-dinner comments, menus and other useful information to meet customers' demand for restaurant reservation and to achieve product sharing.

German online reservation platform Foodpanda was founded in Berlin, Germany in March 2012. Foodpanda is a world-renowned e-commerce platform APP offering online delivery and ordering service, and it has been launched in Taiwan, Singapore, Thailand and other countries and operates in more than 40 countries around the world. It also works with many restaurants, including some famous restaurants such as T.G.I. Friday's, Sweet Dynasty, Second Floor Cafe, etc. towards the development of product economy. Restaurant ranking will be based on distance, recommendation, comment and relevancy, and the restaurants that are currently operating will be placed at the top of the web page, so that users can quickly understand they can order food from which restaurants at present. And the type of restaurant that users want to find can be screened out according to the classification method, quick screening function and type of food to differentiated by competitors. Currently it covers 33 countries on 5 continents, with over 2,000 employees and over 300,000 special restaurants, handling 10 million takeout transactions per month. Users can pay online, store favorite restaurant menus and comment on restaurants. In the preview of restaurants, the restaurant's minimum ordering amount, delivery fee and average delivery time can be seen to make the products shared.

EZTable, Taiwan's online restaurant reservation website was established in 2008. It is believed by its founders that the individual pre-purchase catering which has become the mainstream in Europe and the United States will eventually dominate Taiwan's restaurant market, but there is a huge bottleneck in its operation as consumers have to rely on the service personnel of the entity catering service one by one to provide service on their behalf when there is no information to refer to and choose from due to the fragmentation of the supply chain (e.g. hotels, restaurants, beverage shops, etc.). EZTable will regularly publish (1) restaurants with the highest cumulative bookings, (2) the top 100 restaurants with the highest satisfaction in Taiwan, (3) the top 20 restaurants with the most popular cumulative reservation and the highest popularity throughout Taiwan and (4) the list of all kinds of rankings of popular restaurants to provide the basis and reference for consumers searching for restaurants. It also provides all kinds of restaurants such as Chinese cuisine, Korean cuisine, vegetable cuisine, Thai cuisine, American cuisine, Japanese cuisine and Italian or French cuisine. It provides in alliance with businesses corporate food and beverage concessions, corporate integrated service/corporate procurement and business dinners to satisfy consumers' critical appetites for food and beverage and effectively differentiate themselves from competitors in the provision of catering services. Based on the above observation, this research proposes:

Proposition 1: in the embryonic stage, the customers that online catering reservation platforms are facing are innovators and early adopters, so they need to use Delta Model's strategy of product optimization to strive for the first wave of customers with better value.

Delta Model Phased Strategy for Innovation Diffusion Growth Period

When an innovative product is accepted by a certain number of basic customers and firmly established, it will begin to enter the next period of rapid growth. Adopters in hesitation will quickly accept the innovative product. At this moment, potential competitors are investing one after another, enterprises are investing heavily in research and development and increasing investments, new technologies have matured and developed rapidly, and products are diversified to rapidly expanding market share. The innovators at this stage are the early adopters. At this stage, the total

customer problem solving strategy, consumer demand and interaction ability of Delta Model strategy model should be considered at the same time, and continuous attention should be paid to the customer's demand side. This is an effective way to maintain competitive advantage. In order to meet the overall needs of consumers, businesses should consider cooperating with suppliers, consumers and even competitors in order to create higher customer value and improve customer dependency and contribution value.

Regarding OpenTable's reservation catering solutions, besides the company's websites and mobile applications, OpenTable also offers online reservations to nearly 600 partners, including many of the most popular global and local brands on the internet. OpenTable service allows customers to see which restaurants have tables available. According to the post-dinner comments, menus and other useful information put forward by consumers, restaurants are selected to meet the customers' demand for ordering food and beverage. And private catering restaurant services are provided to solve the privacy issues considered by consumers, improve customer satisfaction, and establish value marketing for repeated purchases by consumers. OpenTable has implemented two expansion strategies: (1) Restaurant expansion: on the one hand, it continues to expand these high-end restaurants that have strong demand for reservations. In addition, OpenTable Connect products are also launched to expand catering businesses that have a certain demand for reservations. (2) International expansion: in addition to the US mainland, OpenTable also realizes the increase of catering businesses through international expansion. In particular, the acquisition of TopTable, the leading food ordering website of the UK, was completed in October 2010. In May 2012, OpenTable system was used for the UK's partner merchants, which greatly increased the number of merchants. OpenTable believes that there is still a lot of room for growth in the number of restaurants in the future, which can provide a guarantee for OpenTable's long-term development. OpenTable has maintained a strong competitive edge to this day. In order to meet the demand of global consumers for food ordering, it has cooperated with the restaurants that can accept reservation in more than 20 countries, including Australia, Canada, Germany, Ireland, Japan, Mexico, Nederland, Spain, United Kingdom and the United States. It also provides many languages such as Dutch, English, French, German, Italian, Japanese and Spanish.

Foodpanda's convenient online food ordering and professional food delivery service are continuously bringing forth new ideas to solve consumer problems. For example, you don't want to go out for dinner in rainy days? I don't know where to book lunch at noon. Foodpanda online ordering and professional delivery service will solve these problems for you! At present, Foodpanda also has a considerable market in Taiwan, providing online food ordering services for over 3,000 restaurants in Taipei City, New Taipei city, Taichung, Kaohsiung, Hsinchu and Taoyuan. Whether you want to eat steak or hot pot, or a cake or ice cream after dinner, all kinds of delicious food are within the scope of service. It can completely meet different needs of all consumers. Delivery Hero made a major move to acquire Foodpanda so the two sides changed into partners from the original rival competition relationship. It has strengthened the power of Delivery Hero, provided consumers with higher added value of products, established effective value marketing, and reached the goal of sharing products with customers.

EZTable, Taiwan's online pre-purchase catering website, said that consumers must rely on the service personnel of the entity catering service one by one without information to refer to and choose from. This is a huge bottleneck in operation, causing bottlenecks in personnel, cost and products for catering providers, as well as bottlenecks of information, time and choice for consumers. Therefore, EZTable set up the best solution to connect the scattered catering terminals to the same platform through the platform connection of EZTable. On this 24-hour around the clock website, consumers can find the products they need and the appropriate price anywhere, anytime, and then book and transact directly on the internet to achieve customer sharing and meet customer demand. The competition in the catering industry is very fierce. According to statistics, 60-80% of the new restaurants failed in the first year. About 80% of the people in the past year had a greater chance to close their doors in the next 3 to 5 years. Therefore, restaurant owners who focus on new businesses need to pay attention to two important aspects: (1) how to maintain the happiness of existing customers when trying to attract new customers and how to make all customers come back regularly. The best way is to establish relationships with customers and provide them with an amazing dining experience, which will make a huge difference between one-time customers and customers who come frequently. Based on the above observation, this research proposes:

Proposition 2: in the growing period, the online restaurant reservation platform is facing customers who are early adopters and early majority, and needs to attract customers with a total customer problem solving strategy based on Delta Model strategy model to stimulate network effect and establish economies of scale.

Delta Model Phased Strategy for Innovation Diffusion Maturity Period

After the rapid growth period, the platform is maturing in terms of products, technology, services, cooperation, marketing and so on, and the growth in the number of customers is gradually slowing down. At this time, the platform has gradually entered a slow growth period. The implementers of this stage are already late majority and laggards of the market. At this time, the pressure of the group and members of the organization will affect their willingness to accept new products. The platform operator strategy should adopt the system locking strategy of Delta Model strategy model, not only considering the value creation within the industry, but also trying to extend to the whole system related to the enterprise, such as suppliers and consumers. Cultivating and attracting complementary products or services will be the key to sustainable operation.

OpenTable uses online booking to transform the catering industry, makes the restaurant inventory become electronic through the establishment of Electronic Reservation Book (ERB) system, and improves the efficiency of ordering food through the website to attract online users for reservation. OpenTable's ERB system is its core product and has been updated and upgraded for more than 10 generations. In addition to the reservation function, OpenTable's ERB system has several other functions: (1) reservation management: manage orders, modify, cancel and confirm reservations. (2) customer management: track VIP users, including their contact information and hobbies, so as to realize better service or carry out specific marketing activities. (3) table management: assist the restaurant attendant in table management, set the reserved table, and check the table status. (4) POS integration: integrate POS into ERB system to obtain consumption data. (5) report presentation: provide high data analysis function to improve the efficiency of catering, form a survival system and create a systematic economy. OpenTable's system setting strategy is to develop by increasing more catering businesses and attracting more ordering consumers. Providing more restaurant choices can encourage more consumers to use it. And if more consumers use it, OpenTable can also be promoted to cooperate with more catering businesses. In order to achieve a positive cycle between catering businesses and consumers, OpenTable has also exerted efforts in these two areas to achieve a strong position in the market. OpenTable has actively expanded its partners in other client platform websites. The reservation service is provided on the cooperative platform or website, and the reservation processing link dealt by OpenTable's ERB system. In general, the reservation service on the cooperative website is marked with OpenTable logo. This expands OpenTable's coverage and gives complementary vendors the opportunity to share.

Delivery Hero develops its own POS system to create a win-win situation between restaurants and consumers. For consumers, Delivery Hero can detect the nearest restaurant and show other people's comments on food at the App. The consumer can just click on the menu and the delivery service will deliver hot food to the door to solve the worries of many takeout consumers. For special restaurants, Delivery Hero is not only a delivery platform, but also a new channel for selling meals. They only need to pay platform usage fees for Delivery Hero to provide professional POS machines (which refers to the processing of commodity information, cash flow, member management through computers, such as cash register). The POS machine introduced by Delivery Hero is 9Cookies which can be used to count what kind of food consumers in different regions prefer, calculate the bestselling and worst-selling products each month, and even detect the products of nearby restaurants. For example, there is no shop selling hot dogs in Queens County in the United States. The system will recommend nearby shops to introduce hot dog-related food to stimulate consumers to buy. Through the 9Cookies system, Delivery Hero can uniformly control the information of special merchants. If it is found that the sales volume of a restaurant is really poor according to the data, staff of Delivery Hero will personally call it to find out the situation and discuss with the team to work out a corresponding solution. 9Cookies system provides not only better management methods for restaurants, but also tailor-made "delivery tracking" function for consumers. It has established high conversion cost for consumers, formed a survival system and created a systematic economy.

EZTable allows consumers to book the best restaurants in Taiwan on the internet 24 hours a day. At the same time, it provides restaurant operators with an e-based booking management system (cloud, iPad, smart phone). For promotional sales activities, EZTable has (1) the announcement of the newest restaurant, (2) the main star of each month: the super restaurants with newest discount are all here and (3) the joint discount activities with various credit card companies, such as CTBC Card, Citibank Card, Cathay United Card, Taishin Card, First Bank World Card, and car company Lexus owners enjoy 10% discount of Michelin. EZTable provides a quick and convenient 24-hour online booking platform for consumers. Whether it is a friend gathering, family dinner or celebration of an important festival, it enables consumers to solve the problem of crowded people, queuing or making phone calls on site in the quickest and the most efficient way. For special restaurants, EZTable has created a new way of booking and marketing so that all restaurants achieve

more efficient restaurant management with the help of the E-reservation system. As a communication bridge between consumers and restaurants, EZTable's personalized options for human nature also enables restaurant operators to understand consumers' ideas and have a direction of improvement. It provides special service mechanisms to strengthen the unique functions of its trading platform and the protection of consumer certification to lock the consumption model and form the market standards. Based on the above observation, this research puts forward:

Proposition 3: in the mature period of the online pre-purchase catering platform, the customers it faces are late majority and laggards. It is necessary to retain customers with the system locking strategy of Delta Model strategy model to raise the level of attachment and win more followers.

RESEARCH RESULTS AND SUGGESTIONS

Research Results and Strategic Suggestions on Innovation Diffusion in Embryonic Stage

1. Industrial life cycle: the characteristics of the embryonic stage refer to the initial stage when innovative products begin to enter the market. At this stage, there are not many competitive enterprises and the diffusion speed is relatively slow. The maturity of the new technology is not enough, the function of the product is simple, and the sales volume is small. They can only attract innovators and early adopters to buy.

2. Innovation adopters: (1) innovators, a few people who are crazy about technology. They love new products, new technologies, have the courage to try new products, and can quickly accept new ideas and concepts. They are the forerunners of the market. (2) early adopters, a group of very prescient people, and also the promoters of innovation diffusion. Compared with innovators, they rely more on values and social norms. However, the early adopters are also very close to the local society, and these communities are also more likely to become opinion leaders. Their adoption behaviors will affect the subsequent followers.

3. The best product strategy of Delta Model strategy model: the production and innovation capabilities to attract consumers to use the product because of its low cost or differentiated value and to win over competitors are very important.

Proposition 1: the strategy to optimize the product in Delta Model shall be used in the initial stage to attract innovators and early adopters to use the product. The customers that the platforms are facing in the initial stage are innovators and early adopters. It is necessary to attract customers with the best product strategy and strive for the first wave of consumers with better value.

Research Results and Strategic Suggestions on Innovation Diffusion in Growth Stage

1. Industrial life cycle: during the growth period, innovation is recognized by the mass market. The adopters on the sidelines quickly accept this innovation and potential competitors continue to invest in it. Many manufacturers have begun to increase investment and research and development in large quantities, new technologies have matured, products have developed rapidly and diversified, applications have become clearer than in their infancy, profits from selling products have gradually increased and the market share has also expanded rapidly.

2. Innovation adopters: early adopters and early followers are users of thinking. They are cautious and good at collecting market information and evaluating the advantages and disadvantages of products before making purchasing decisions. At this stage, the users are very concerned about the practicality of the product.

3. Total customer problem solving strategy of Delta Model strategy model: competitive advantage comes from the ability to focus on interaction with consumers' needs. From the point of view of consumers, most consumers can get satisfaction through the products or services of special restaurants.

Proposition 2: during the rapid growth period of online platforms, the customers they face are early adopters and early followers, and they need to attract customers with a total customer problem solving strategy based on Delta Model strategy model to cause network effect and establish economies of scale.

Research Results and Strategic Suggestions on Innovation Diffusion in Maturity Stage

1. Industrial life cycle: for the mature stage, the speed at which innovation is accepted is gradually slow, and the growth also reaches the critical point, but the adoption continues. The number of new consumers is relatively lower than that of the previous period. Most of them are repeat buyers. Price competition appears in the market to maintain market share.

2. Innovation adopters: late majority and laggards, who are mostly influenced by their friends and family, and care about

the opinions of social groups. The pressure of groups will affect their willingness to accept new products. There is a lack of judgment as to whether the product can operate, but once doubts are removed, action will be taken immediately.

3. System setting strategy of Delta Model strategy model: strategy consideration not only considers the value creation within the industry, but also tries to extend to the entire associated system of the enterprise, such as in the downstream supply chain and consumers, and cultivating and attracting complementary products or services is a key to success.

Proposition 3: in the mature stage of the platform, the customers it faces are late majority and laggards. The system setting strategy of Delta Model strategy model should be used to retain customers, raise the degree of attachment and win more followers.

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