온라인과 오프라인을 융북합 생태계:
Dianping.com 사례연구

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Online to Offline Convergent Ecosystem:
a Case Study of Dianping.com

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요 약 경쟁이 치열한 세기에 다양한 제품과 서비스를 인터넷과 스마트 폰을 통해 판매하는 기회와 도전이 모두 존재한다. 온라인 서비스들은 더 이상 온라인에만 머물지 않으려 하며, 더 큰 시장이 있는 오프라인 시장으로 영역을 확대하고 있다. 온라인 상거래 시장과 오프라인 상거래 시장이 합쳐지는 교집합 영역을 O2O(Online to Offilne) 시장이라고 볼 때, 모바일과 인터넷 기술의 발전으로 교집합인 O2O영역이 점차 늘고 있다. 이 연구는 사용자와 오프라인 가맹점을 연결하는 인터넷 회사의 성공적인 노력의 모범 사례를 통해서 사례 연구를 진행한다. 중국 Dianping.com 성공 사례를 바탕으로, 오프라인과 온라인 효과적으로 연결된 생태계를 구축하기 위한 프레임 워크를 분석한다. Dianping. com 10년 넘게 싸여있는 성공 경험이 다른 융복합 분야에서 운영하는 온라인 기업들에게 유용한 경험담을 제공 할 수 있다.

주제어 : 고객 리뷰, 공동구매, 소셜커머스, O2O커머스. 융복합

Abstract In this highly competitive century, selling products and service through Internet and smart phones offers both opportunities and challenges. Online commerce is expanding it's wings to the offline market. The connection between online market and offline market is called O2O(Offline to Online) market. In this study we examine the best practice case study of an Internet company's successful efforts to connect users and offline merchants. Based on Dianping.com success story in China, a successful framework for building online to offline ecosystem is examined. Dianping.com successful experience may provide suggestions for other online companies operate in the convergent field.

Key Words : Customer review, Group buying, social commerce, O2O commerce, Convergence

1. Online to Offline Business Model

As online transactions and mobile apps gain currency, they are fueling the rise of O2O (Online to Offline). The definition of O2O may vary, but essentially it means attracting users online and directing them to physical stores in the offline realm. O2O is the link between online discovery and actual commerce in the physical world. The online website helps consumers discover a product or service and pay for it, after which they are directed to the offline world where they do the actual purchase and consumption. O2O helps marketers close the loop between product discovery and the actual transaction[13]. The key to O2O is that it finds consumers online and brings them into real-world stores. It is a combination of payment model and foot traffic generator for merchants, as well as a product discovery mechanism for consumers, which creates offline purchases.

Why O2O gains so much attention these years? Online B2C commerce is largely stuff which you order online and gets shipped to you in a box. However, express companies can't deliver social experiences like restaurants, bars, Yoga, sailing, tennis lessons, or dancing. Average American earns about $40,000 per year. Only $1,000 is spent in online shopping for physical products. Most of their disposable income after taxes is spent locally. People spend money at coffee shops, bars, gyms, restaurants, gas stations, plumbers, dry-cleaners, and hair salons[5]. O2O figures out a way to sell service in online environment. Because of the special features distinguishing service from physical products, the consumption of service must happen offline in the physical store, online website or mobile apps only works as a media to connect online users and offline business[15][Fig. 1].
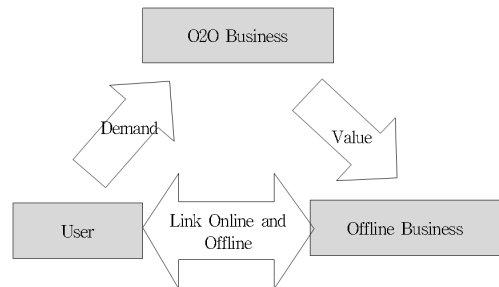
[Fig. 1] Online to Offline Business Model

2. Dianping.com: an Introduction

Unlike other fast come and fast go Internet companies, Dianping. com as one of the biggest O2O companies in China, has been in the industry for more than 10 years. Established in April 2003, Dianping is a leading online city life guide and one of the first online independent third-party consumer service rating sites worldwide, committed to providing restaurant, shopping,
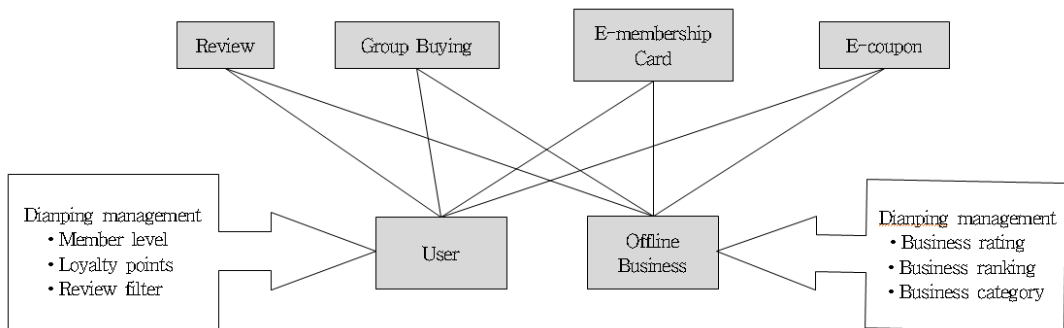
[Fig. 2] Business Model of Dianping.com

entertainment, leisure and lifestyle services through its interactive platform[4]. The site provides detailed merchant information, featured promotions along with consumer services ratings. In addition, the firm provides one-stop precision marketing solutions for small and medium-sized businesses, including e-coupons, keyword promotion and group buying[8][Fig. 2].

Dianping has also successfully expanded into the mobile internet sector with the firm's mobile apps having become indispensable to many of the inhabitants of China's major metropolises. The invention of smart phone and location-based service gives Dianping a huge chance to develop. At the end of 2009, Dianping developed its mobile application and lunched in both IOS and Android store. One year after that, 20% of it's visitors visited Dianping through smart phones. From 2012, more visitors visited Dianping through smart phones than PCs. As of Q3 of 2013, Dianping (including Dianping.com and Dianping mobile apps) had more than 2.5 billion page views monthly, out of which, over 70% came from mobile users[6]. Until now, Dianping provides services in more than 30 main cities in China, with a 8 million customer base and 5 million customer reviews available online. As of Q3 of 2013, Dianping had more than 75 million monthly active users, over 28 million reviews, and more than 6 million local businesses across China[7]. Dianping has already developed an online word of mouth database which can affect people's dining consumption, complemented by information about entertainment, beauty treatments, wedding, gym, hotel, and other life service.

3. Online Customer Review

The purpose of Dianping is to remain an objective, independent third party platform, which has been consistent and accepted by both users and offline businesses throughout the years. For users, Dianping is an urban lifestyle consumption companion which helps people conveniently search for and share information, write reviews and find discount information about service merchants. Dianping is also a platform where offline businesses can communicate with their customers, gain customer feedback on their products and service, and also get in touch with customers' evolving needs and consumption trends.

Every offline business (restaurant, hotel, et. al.) has its own webpage on Dianping, with reviews generated by actual customers. Users can also create a new webpage for a new offline merchant. Besides of text information, amount of consumption per person, recommended dishes, degree of liking, transportation and parking information are also provided[2]. Each reviewer needs to rate for flavor, environment, service using 0-4 points[11]. Dianping calculates average rating for each indices and the overall valence. All the reviews and ratings are generated based on customers experience after they actually consumpt in the offline store.

Dianping counts realtime volume of customer reviews and ratings to rank offline business (for example, restaurant ranking). There are many different ranking mechanisms on the website and rankings are all continually fluctuating and updating with realtime data[1]. For instance, there is an integrated ranking, in which flavor, environment and service ratings all account for certain percentages of the integrated ranking, while the volume of reviews, and number of page views also affect the integrated ranking. It's a complex formula; all the elements involved are weighed against each other. Dianping also has specific rankings for flavor, service and environment, and are geared towards customers based on their career(students, white collar, etc), or gender(women, men) [14].

Every customer provides a review on the website after they dined in the restaurant. Dianping also has a mechanism to encourage users to review, such as user ranking, loyalty points, special coupon, et. al. Reviews and ratings are user created contents, which suffer

from low credibility and errors. Dianping has a rigorous monitoring system. Every reviews are not published directly after they are generated, but after a rigorous filter process. Review generated by a newly registered user will not be published, as the user ranking is too low, and this review only contributes a slight portion to the business ranking. This can effectively prevent advertisement or peer cut-throat competition. Any review that is suspected as a advertisement is screened, and website will contact the user through e-mail or phone to verify any disputable contents. Those IDs which have made many times irresponsible reviews will be suspended. Users can also report reviews that they think do not meet the requirements of the website, which will be deleted if verified by the website to be justified.

Under the strict management, online world of mouth database has become a big fortune of Dianping, which is big data source of urban life consumption. The accumulated big data over 10 years of hard working gives Dianping a special core competitiveness, not easily surpassed by competitors.

4. Group Buying Service

The severe competition among group buying companies in China, which is called "thousand regiment war", has raised customer complaints toward restaurants[9]. Some customers check restaurant information, such as price, quality, service, before they make a deal on a group buying website. Group buying is a natural extension of Dianping's main business (online customer reviews). Dianping launched the group buying service in June 2010 as a slow mover in group buying market. However, with so many years of solid experience in Online to Offline platforms, Dianping has rapidly taken the lead in the country's group buying sector.

Successful strategic transformation relies on strong support at the business level. As a representative illustration of a successful O2O application, Dianping's group buying business has developed rapidly, not only by taking the No. 1 position in the group buying marketplaces in tier 1 and 2 cities such as Beijing, Shanghai and Guangzhou, but by also strategically and effectively subduing its rivals. In 2014, the company continued the huge lead it has against its rivals in tier 1 and 2 cities, while rolling out their full agenda in tier 3 and 4 cities[12].

Dianping has professional employees to provide marketing suggestions for its business partners to participate in group buying business. 2000 of its 3000 employees are working off-line to communicate with merchants, which is quite different from other online companies. Marketing consultants from Dianping tell off-line merchants what customers need based on data from Dianping's online database, and how to promote off-line service on-line. Consultants of Dianping are ranked from 1 star to 5 stars according to their expertize[10]. A good marketing consultant must not only be an expert of Internet, but also knows the field where merchants are doing business. They must know when is the peak season, when is off-season, in which season cost rises. By knowing all of these the consultants can recommend a best group buying deal which satisfies both merchants and customers. For example, consultants won't suggest a abalone group buying deal for a fancy restaurant, because they know need of online customers is different from offline customers. For a hair salon, "shampoo, haircut and blow-dry" group buying deal will not be recommended because consultants know thant males don't buy the deal, girls usually visit hair salon only to blow dry. Dianping has a knowledge management system with real cases from actual experience. All the consultants can search for solutions from the knowledge database and ask questions for a new problem they encounter. Thousands of consultants in the firm can provide answers to it[3].

5. E-membership Card and E-coupon

E-membership card is not a new business for Dianping. Dianping launched plastic membership card service as early as 2005, which turned out to be a failure. Only 1% users constantly use the plastic membership cards, although millions of membership cards have been issued. Most customers either forget to take out the membership card when they pay the bill, or think it is too bothersome.

With the wide adoption of smart phones, Dianping relaunched e-membership card service, which can be issued and stored in smart phones. After 265 days of the launch, more than 10 million e-membership cards were issued. Only on May 28th, 2013, the number reached 130,000. Development of smart phone makes the use of membership card service more convenient and reduces the cost to issue membership card. In the past, the cost to produce a plastic membership card was 1. 2 yuan per card, plus a 800 yuan design fee. "Jiangbianchengwai Grilled whole fish" Shanghai Branch issued 90,000 plastic membership cards, which costed more than 110, 000 yuan. Now, using smart phone enabled e-membership card, the cost is almost 0. E-membership card not only decreases financial cost but also can promote special marketing campaign for membership card holders. "Jiangbianchengwai Grilled whole fish" Hongkou Branch launched a campaign aimed at e-membership card holders — "members can get a 10% discount plus a free cold dish if they come to dine in the restaurant". The promotion message was sent to each member through smart phones, In 3 days after the message was sent, more than 130 members dined in the restaurant.

With the adoption of smart phones in the country, the trend of consumers receiving promotions via mobile devices has clearly taken hold. In 2011, the number of e-coupon downloads via the mobile devices is more than double that of the number via the website. Users can check e-coupon when they are outside of home or office through mobile application. In the past, e-coupon could only be checked from PCs before users left home or office, and sometimes coupon needed to be printed out. Now, what users need to do is just to show the e-coupon from smart phone without print it out.

Smart phone has been proved to be an effective tool for customer relationship management. Each smart phone is connected to a specific customer. Consumption information, preferred taste, birthday and anniversary can be recorded timely. What dishes does the customer like? What drinks does he/she like, which KTV does he/she prefer? Which type of movie does he/she like? When users are using group buying or coupon services, Dianping can recommend the most suitable service to the customers. This can also benefit business partners. Based on big-data analysis of customer needs and characteristics, personalized advertisement can increase the exposure of brand name to increase customer acceptance and advertizing effect. Business can develop suitable marketing promotions. For instant, a restaurant assigned staff to monitor customer review and consumption data of membership card owners. They found that 7 customers were females out of every 10 customers, as a result free desserts may be a better promotion than free beers.

6. Strategic Collaboration with Other Companies

Dianping has a strategic collaboration with many other online companies. In 2014, Dianping launched several new business, such as restaurant booking, hotel, movie and oversea review. According to some official data, online booking service covers more than 500,000 hotels, 200 popular tourist city and 2000 movie theater in 300 cities. These new businesses are all based on cooperation with other companies. Hotel booking service is cooperated with Xiecheng.com and Yilong.com, and movie booking service is cooperated

with Gewala.com. The strategic collaboration leads to a quick development of Dianping's new business.

Dianping also announced its investment and cooperation agreements with Tencent in 2015, a leading provider of comprehensive Internet services in China. The two companies will cooperate deeply by integrating Dianping's high quality and rich content, user base and offline merchant network accumulated over the past 10 years with Tencent's leading social communications platforms, such as QQ and Weixin to build the leading O2O ecosystem in China. The cooperation is expected to provide users with better experience of local services, further enhancing the two companies' platform advantages in China. Through this strategic cooperation, Dianping's high quality local life content, such as merchant information, consumer reviews, discount, group buying, online restaurant reservation and take out ordering services, will be integrated with Tencent's social communication platforms such as QQ and Weixin, as well as other Tencent products. This integration will enable better user experience when accessing high-quality local life content across multiple platforms, allowing users to share local life experiences conveniently with their friends, and providing merchants efficient O2O solutions in the mobile Internet age.

7. Application

Some Korean companies do similar business as Dianping, however, most of them only has group buying service. Dianping's success story provides several marketing suggestions for other korean companies operating in the same field. Firstly, online and offline service must be effectively combined. A well developed core competence (customer review of Dianping) can prevent destructive competition on group buying price. Secondly, provide diverse customized service to customers. Besides group buying service,

Dianping also provides e-membership card, e-coupon service. These service can increase user viscous to the main group buying service. Lastly, based on online big data, successful analysis of customer preference can provide best marketing solution to the company. In the fast developing online and offline market, only those companies which can adapt to the new opportunity can succeed in the last.

REFERENCES

[1] D. N. Bao, D. H. Dong, X. H. Meng, Parasocial Interaction between Browser and Poster in Virtual Communities: An Empirical Study on dianping. com , Chinese Journal of Management, Vol. 7, pp. 1010-1020, 2011.

[2] N. Wang, X. L. Shen, Y. Sun, Transition of electronic word-of-mouth services from web to mobile context: A trust transfer perspective. Decision Support Systems, Vol. 54, No. 3, pp. 1394-1403, 2013.

[3] P. C. Li, Y. S. Zhong, A Study of Offline Merchants' Acceptance of Mobile O2O Commerce. Contemporary Finance & Economics, Vol. 9, pp. 75-87, 2014.

[4] P. C. Wei, C. Tan, J. Sutanto, Leveraging O2O Commerce for Product Promotion: An Empirical Investigation in Mainland China. Engineering Management, IEEE Transactions on, Vol. 61, No. 4, pp. 623-632, 2014.

[5] T. M. Tsai, P. C. Yang, W. N. Wang, Pilot study toward realizing social effect in O2O commerce services, Social Informatics. Springer International Publishing, pp. 268-273, 2013.

[6] X. H, Lu, Y. Feng, Value of online word of Mouth－ An empirical study of online restaurants review, Management world, Vol. 7, pp.126-132, 2009

[7] X. Qin, F. Zhen, S. J. Zhu, G. L. Xi, Spatial Pattern of Catering Industry in Nanjing Urban Area Based on the Degree of Public Praise from Internet: Dianping.com, Scientia Geographica Sinica, Vol. 34, No.7, pp. 800-817, 2014

[8] Y. L. Xue, T. J. Lv, J. Y. Qi, X. Chen, E-commerce Operation under Complex Network Based on Analytic Hierarchy Process－An Empirical Study of Dianping. com, Journal of Beijing University of Posts and Telecommunications (Social Sciences Edition), Vol. 16, No. 4, pp. 34-39, 2014.

[9] Y. M. Baek, Current status of E-commerce market in China and implication, Journal of Digital Convergence, Vol. 13, No. 1, pp. 111-124, 2015.

[10] Y. Yuan, Dianping.com lives in uncomfortable are a, China entrepreneur, No. 14, pp. 48-52, 2014.

[11] Z. Zhang, Q. Ye, R. Lawl, The impact of e-word-of-mouth on the online popularity of restaurants: A comparison of consumer reviews and editor reviews, International Journal of Hospitality Management, Vol. 29, No. 4, pp. 694-700, 2010.

[12] Z. Zhang, Z. Zhang, F. Wang, Factors influencing the effectiveness of online group buying in the restaurant industry, International Journal of Hospitality Management, Vol. 35, pp. 237-245, 2013

[13] http://knowledge.ckgsb.edu.cn/2014/09/30/technolog y/o2o-primer-online-to-offline-commerce-in-china

[14] http://knowledge.wharton.upenn.edu/article/zhang-t ao-of-dianping-there-will-be-more-integration-be tween-online-and-offline-service/

[15] http://wiki.mbalib.com/wiki/O2O

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