

Construction of Mobile-sites/Applications Leading to e-WOM

-From the Perspective of Omni-channel-

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Abstract

Today, the importance of omni-channel strategy is growing in the world around us. The purpose of this study is to reveal the effects that e-WOM has on retail companies that use omni-channel strategy through mobile-sites/applications. Consumers are putting more emphasis on e-WOM through the increased use of mobile and omni-channelization consumption behaviors. We focus on mobile-sites and applications that are increasingly important for omni-channel, and establish what affects the customer experience when using mobile-sites and applications to four elements: convenience, information volume, enjoyment, and coupon. While there is no clear link between these factors, we have concluded through our surveys and research that enjoyment is the most important channel to e-WOM in Japanese omni-channel strategies.

Keyword: Omni-channel, Customer experience, Mobile-sites/applications, e-WOM

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I. Introduction

Today, the online retail market is growing and will continue to grow, as companies like Amazon have proven in recent years with their online-shopping strategy (Euromonitor International, 2018a; Euromonitor International, 2018b). This tendency is a threat for traditional business with only physical stores; the importance of the digital business is undeniable for the fleeting brick and mortar stores. From the survey of Deloitte (2014: 3), 84% of the consumers that buy things at physical stores use the digital device to get some information before or while shopping. In brief, the digitalization of consumption behaviors is under way, with the effects of e-WOM (a particular type of WOM which occurs in the online setting) in SNS growing. According to PwC (2018: 35), SNS is the most effective online media for shopping. However, it is difficult to control e-WOM and its impact in the market. It is the ability to control this impact that will become important for companies in the future (Okutani & Iwai, 2018).

Many retail companies try to adapt to such situation by introducing their own mobile-sites and applications. According to PwC (2018: 47), the mobile utilization rate in the past 6 years increases by about 10%, while the PC utilization rate decreases by 7%. While consumers who use both offline and online channels accounts for only 7% of the whole group, they create 27% of the total sales (Criteo, 2017). Therefore, offline-companies should introduce mobile-sites and applications in order to promote omni-channel strategy which enable the use of offline and online channels.

However, under these circumstances, many mobile-sites and applications which create customer satisfaction are exclusively online-companies. Research by App Annie (2017: 14) states that the satisfaction of the mobile-sites and applications provided by Japanese offline-companies is extremely low compared to the other 7 countries that participated in the research. This low level of satisfaction indicates that companies are not fully utilizing mobile applications. This result also appears in the scale of the market. In America, the scale of the retail business market in 2016 grew 1%, on the other hand, in Japan it decreases 1% (Euromonitor International, 2017a: Euromonitor International, 2017b). As it is believed that this tendency will last. There is a need to create mobile-sites and applications which approach omni-channel strategy and the changing consumption behaviors. This is problem we seek to solve with our research.

In this research, we will prove how mobile-sites and applications of retail companies that take omni-channel strategy affect e-WOM. At the same time, we will consider how to construct mobile-sites and applications in order to approach omni-channel strategy.

In the previous research, the existence of customer experiences has been cleared as a factor of e-WOM (Keiningham et al., 2007). It can be said that mobile-sites and applications that companies offer provide diverse customer experiences. This research will also focus on customer experiences that mobile-sites and applications offer and e-WOM. According to Lemon & Verhoef (2016: 83), management of customer experience in the omni-channel strategy is prioritized in practice and scholarly research is lacking.

Therefore, clarifying the relationship between customer experience and e-WOM is considered to give great implications to academic aspect. Furthermore, in practice, the influence of e-WOM has become stronger for consumers, so it is very significant to consider how to build mobile-sites and applications leading to e-WOM. In particular, it is thought that it offers some big implications for the usual Japanese retail companies on the decline.

II. e-WOM and Customer Experience

1. Definition of Omni-channel

Okutani (2016:26) defines omni-channel as how "The existing channel connects from both distribution and information flow while centering on mobile devices, providing a seamless shopping experience from the consumer's point of view". Rigby (2011: 67) defines omni-channel as "integrated shopping experience combining real stores with the advantages of online shopping experiences that can obtain sufficient information". Multi-channel deals with both offline and online stores but has no connection with consumer's data while omni-channel does this and connects consumers data (Kondo, 2018: Okutani, 2016). In brief, while multi-channel is intended for each channel, omni-channel is intended to integrate all channels and to create experience. Keywords of omni-channel includes "seamless", "customer experience", and "shopping experience" (Kumakura, 2015: Okutani, 2016: Verhoef et al., 2015). However, the main take-away

from the omni-channel strategy is the concept of mobility. Consumer lifestyle has been changing due to rapid development and spread of mobile in recent years (MIC; Ministry of Internal Affairs and Communications, 2013). As people, goods, and organizations are connected to networks, large amounts of digital data are being processed by new enterprises as they try to understand their potential value (MIC, 2018). According to a survey by Deloitte (2012: 7), purchasing behavior at a real shop is affected by mobile rather than by an individual's purchasing behavior. It is possible to integrate online and offline services by mobile and to actively participate in the purchasing decision-making process when consumers are not visiting stores or EC sites (Okutani, 2016). In other words, the existence of mobile is promoting the omni-channel strategy. Based on the above, this research comprehensively understands the definition of omni channel as "a seamless shopping experience for consumers provided by the integration of all channels by mobile".

2. Consumer Attraction through e-WOM

(1) Corporate Touch Point Management

Today consumption behavior facilitates the development of omni-channel. As companies involve various purchasing processes through mobile, consumers will access more touch points, which can be classified into several stages depending on the relationship between companies and customers. There are mainly two types, including

touch points designed and managed by companies (eg. stores and advertisements), and consumer-led touch points (eg. SNS and e-WOM) (Baxendale et al., 2015; Lemon & Verhoef, 2016). Conventionally, consumer-led touch points is considered to be uncontrollable (Okutani & Iwai, 2018). However, according to Okutani, how to control consumer-led touch points becomes important with the omni-channel strategy, as the rise of mobile and the omni-channelization of consumer behavior have made it more reliable than the advertisement on social media (Source by Interview with Mr. Okutani; Kotler et al., 2017).

(2) Overall Importance of e-WOM

We focus on WOM that influence degree has increased by the changing consumption behaviors. Recently, due to the change in the consumption behavior, which is heavily influenced by the omni-channel strategy, WOM has become increasingly important (NTT Resonant, 2012). Sugitani (2009, 47) mentioned that "the importance has risen sharply by introducing WOM". Today, most consumers exchange reviews through WOM when purchasing goods (Sugitani, 2009; Tanaka & Shimizu, 2006). And WOM can be conducted by face-to-face (WOM) or by electronic devices (e-WOM) (Hamaoka & Satomura, 2009); a survey by PwC (2018: 35) reveals that SNS plays a key role for consumers' decision making, implying the easy accessibility of information and the prevalence of mobile devices. And according to Iijima (1995: 575), "the influence of the

e-WOM is increasing as the shadow of the information society". As a result, it is crucial for companies to grasp and develop the e-WOM as a marketing strategy. Conducting a research that clarifies the realities and effects of the e-WOM has become an urgency (Negoro, 2006), in which customer experience becomes the prior consideration.

3. Customer Experience through Mobile-sites/Applications

This section will focus on what type of customer experiences will be brought to consumers, specifically when using the omni-channel strategy with a focus on mobile, a key-point to the omni-channel strategy.

(1) Customer Experience

A customer experience can be created at various points when a product is offered (Lemon & Verhoef, 2016). The major opportunities are advertising the product (i.e.the WOM) in a customer community (Schwager & Meyer, 2007). Lemon & Verhoef (2016: 70) defines customer experience as a, "customer's cognitive, emotional, behavioral, sensory, or social reactions to offerings by companies that have a multifaceted structure and occur throughout the purchasing process."

(2) Customer Experience in Multi-channel and Omni-channel

The insufficient study of customer experience is the key obstacle of the current omni-channel development (Lemon & Verhoef, 2016). The research of other strategy like that of multi-channels is fairly advanced and it is possible to have a large amount of insight as to how the strategy work, but there has been an increased willingness to research into omni-channel strategy (Lemon & Verhoef, 2016). Wang et al. (2015: 2) is returning to research on online shopping in multichannel in research on mobile. In addition, Childers et al. (2001: 526-527) clarified that the means aspect such as "convenience" and the pleasure aspect such as "enjoyment" have the same degree of influence on the use of online shopping. In addition, the use of "coupon" is being studied as a customer experience capable of affecting consumer purchasing behavior (Lichtenstein, 1990). It is also suggested that using "coupon" may lead to "enjoyment" in purchasing behavior (Togawa, 2015; Im & Ha, 2014).

Next, we need to consider the customer experience peculiar to the omni-channel (Rose et al., 2011). Therefore, in this research, we will cover a study by Shetty et al. (2018: 201-206) which conceptually clarified how customer experience in omni-channel relates to customer loyalty formation. He has characterized the customer experience in the omni-channel as a "seamless experience"(Shetty et al., 2018: 201-206). And the customer experiences are "convenience", "visual information", "customer support", "personal management", "mutual relationship among customers" and the like.

(3) Customer Experience in Mobile-sites/Applications

Knowing the elements that apply to the mobile-sites and applications from the customer experience is crucial. Therefore, we applied a table that ranks the consumer use of retail applications from both online and real stores. (Table-1). The reason why we compared the U.S. with Japan is that the U.S. ranks the top in omni-channel progress and mobile-sites, and its application market is at the maturity stage (PwC, 2017). After confirming the omni-channel strategy of the company that provides the application is the same as the research's definition of the omni-channel, we classified functions included in mobile applications in terms of different aspects of customer experience. As a result, the majority of companies introduced elements such as "convenience", "information amount", "enjoyment", "coupon", and "personal management". Among these elements, though it is crucial to register and manage personal information in the omni-channel strategy, since "individual management" has already been introduced by all companies, we omitted it in this case.

For the remaining four customer experiences, the following definitions were made according to previous research.

Convenience: Convenient and enjoyable purchasing experience through mobile-sites /applications.

Information amount: The abundant information obtained by mobile-

sites/applications.

Enjoyment: Enjoyable experience through mobile-sites/applications.

Coupon: Coupon service you can receive via mobile-sites/applications.

Table-1: Customer experience in mobile-sites/applications.

	Convenience	Information amount	Ease of use	Enjoyment	Coupon	Customer support	Personal control	C2C interection
Japan								
1 GU	○	○		○	○		○	○
2 MUJI passport	○	○		○	○		○	
3 UNIQLO JP	○	○		○	○		○	○
4 T-Point				○	○		○	
5 Matsumotokiyoshi	○	○		○	○		○	○
US								
1 Walmart	○	○	○				○	
2 Walgreens	○	○	○			○	○	
3 Cartwheel			○	○	○		○	○
4 Kohl's	○	○			○		○	
5 Target	○				○		○	
total	8	7	3	6	8	1	10	3

Source: Created by the author based on App Annie "MAU ranking of real store / online combined retail applications (first half of 2017)" and each company's website.

4. Hypothesis

We assumed the elements lead to an effective e-WOM through omni-channel customer experiences. Based on our assumption, we have made some hypotheses.

First, we classified customer experience into four elements (convenience, amount of information, enjoyment, coupon). And because of the close relationship between customers experience and reviews (Keiningham et al., 2007), we set the following hypotheses (H1-a to H1-d) to verify the way how each customer experience factor

affects "e-WOM".

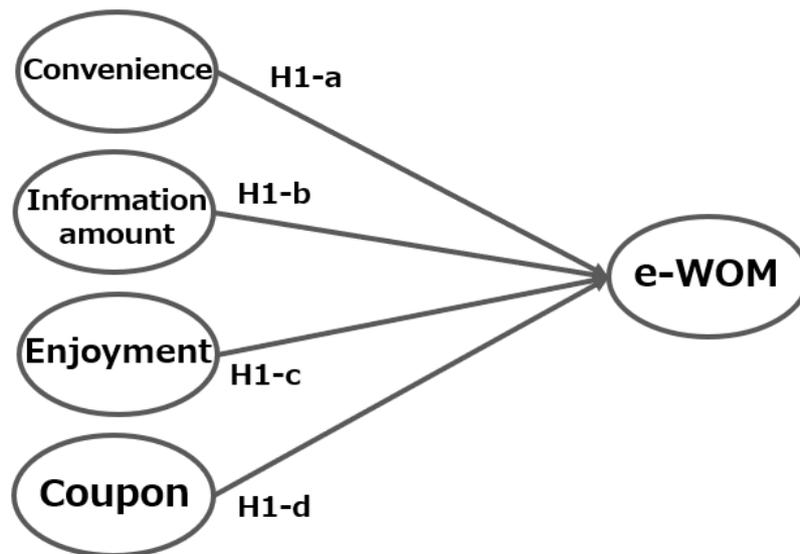
H1-a: The effects of “e-WOM” will be greater when "convenience" is increased.

H1-b: The effects of “e-WOM” will be greater when "information amount" is increased.

H1-c: The effects of “e-WOM” will be greater when enjoyment" is increased.

H1-d: The effects of “e-WOM” will be greater when "coupon" is increased.

Table-2: Hypothesis model diagram



Source : Author.

III. Empirical Study

In the previous section, we conducted a questionnaire survey for Japanese residents and U.S. residents to verify the hypotheses set. It is unlikely that Japan will be able to

obtain sufficient verification results, because Japan's degree of progress in omni-channel ranks the ninth in the world and its consumer's satisfaction with mobile applications is low. Meanwhile, since the omni-channelization is at the forefront for the U.S., and because of its highest rank score, the U.S. receives more effective results (App Annie, 2017; Kasey et al., 2016; Schmaus et al., 2017).

1. Method

(1) Data Collection

The survey lasted for 8 days, from September 28, 2018 to October 5, 2018, and a survey was conducted on the website at the same time. We conducted a questionnaire for Japanese and U.S. residents. For respondents, companies in the survey have multiple selling channels, including offline stores, online shopping, and also a mobile website, and we collected their answers. Since the survey targets at the group of people who use mobile-sites, the total number of respondents was 359. However, the number of valid respondents excluding those without a history of use was 270: 168 residents are Japanese and 102 residents are from the U.S.

(2) Measures

In this research, the existing scale which confirmed the reliability is used for every item. Seventeen questions that concerning "e-WOM", "convenience", "information amount", "enjoyment" and "coupon" were prepared. Each question provided a Likert scale from the lower level to the higher one; they includes "strongly deny", "deny", "can not say either", "affirm", and "strongly affirm". Also, we conducted a back translation for Japanese and English to improve the equivalence of the questionnaire (Three speakers, native in both English and Japanese, performed back translation. This ensures the translated English item and the original Japanese sentence conceptually coincided in all the items.) The Table-3 shows a general idea of the research pattern.

Table-3: Results of question items and confirmatory factor analysis

Factor	Source	Question item	Factor Loadings	Cronbach's α
e-WOM	Goyette et al. (2010)	Q01 I have recommended this retailer on the internet (including social media).	.468	.781
		Q02 I mainly talk about positive things.	.615	
		Q03 I am proud to tell others that I am a customer of this retailer.	.834	
		Q04 I recommend using this retailer.	.606	
		Q05 I speak to others about this retailer beneficially.	.760	
Convenience	Childers et al.(2001)	Q06 Using this mobile site (including mobile applications) is convenient for me.	.573	.660
		Q07 The mobile site (including mobile applications) enables us to reduce shopping time.	.688	
		Q08 The mobile site (including mobile applications) enables us to purchase products at any time.	.637	
Information amount	Forsythe et al.(2006)	Q09 The mobile site (including mobile applications) enables us to see all the products.	.589	.501
		Q10 The mobile site (including mobile applications) enables us to check the store stock.	.400	
		Q11 The mobile site (including mobile applications) enables me to receive details about the product.	.521	
Enjoyment	Forsythe et al.(2006), Childers et al.(2001)	Q12 Receiving points by going into the store is enjoyable.	.707	.687
		Q13 Receiving points by purchasing products is enjoyable.	.719	
		Q14 Receiving points by going to events held by this mobile site (including mobile applications) is enjoyable.	.560	
		Q15 I think I can get new experience by shopping on the mobile site (including mobile applications).	.445	
Coupon	Lichtenstein (1990)	Q16 The coupon comes from the mobile site (including mobile applications) at an appropriate time.	.596	.586
		Q17 I find it is beneficial to receive coupons from the mobile site (including mobile applications).	.699	

Source: Author.

2. Result

(1) Confirmatory factor analysis

Since the existing scale was used in this study, confirmatory factor analysis was performed on each of the five factors to assure the reliability. The results are shown in Table-3. Since each cronbach's α expressing the reliability of each factor all showed appropriate values, the reliability of the scale of five factors was confirmed.

(2) Result of Covariance Structure Analysis (SEM)

In order to verify the hypothesis model, covariance structure analysis was conducted from the survey of Japan and the U.S.

Table-4 shows the results of Japanese residents. A positive relationship was found between "e-WOM" and "enjoyment" ($\beta = .362, p < .01$), "e-WOM" and "coupon" ($\beta = .335, p < .05$). However, this study neither shows any relationship between "e-WOM" and "convenience" ($\beta = -.041, p = n.s.$), nor between "e-WOM" and "information amount" ($\beta = .140, p = n.s.$). Therefore, H1-c, H1-d were supported, H1-a, H1-b were not supported.

Table-5 shows the results of U.S. residents. Relationships between "e-WOM" and "convenience" ($\beta = .614, p = n.s.$), "e-WOM" and "information amount" ($\beta = .477, p = n.s.$), "e-WOM" and "enjoyment" ($\beta = -.053, p = n.s.$), and "e-WOM" and "coupon" ($\beta = -.028, p = n.s.$) were not significant. Therefore, H1-a, H1-b, H1-c, H1-d were not supported in the U.S.

Table-4: Results of Japan Residents

	Coefficients	p-Value
H1-a: "Convenience"→"e-WOM"	-.041	.831
H1-b: "Information amount"→"e-WOM"	.140	.491
H1-c: "Enjoyment"→"e-WOM"	.362**	.007
H1-d: "Coupon"→"e-WOM"	.335*	.010
$\chi^2=317.937$, GFI=.819, AGFI=.746, CFI=.775, RMSEA=.107, AIC=405.937 $p<0.05^*$, $p<0.01^{**}$		

Source: Author.

Table-5: Results of U.S. Residents

	Coefficients	p-Value
H1-a: "Convenience"→"e-WOM"	.614	.069
H1-b: "Information amount"→"e-WOM"	.477	.094
H1-c: "Enjoyment"→"e-WOM"	-.053	.833
H1-d: "Coupon"→"e-WOM"	-.028	.906
$\chi^2=448.499$, GFI=.693, AGFI=.584, CFI=.678, RMSEA=.137, AIC=558.499 $p<0.05^*$, $p<0.01^{**}$		

Source: Author.

From above, both GFI and AGFI, the indicators of the conformance degree of the hypothesis model in Japan and U.S., were lower than 0.9. Therefore, we attempted to correct the hypothesis and model in this study.

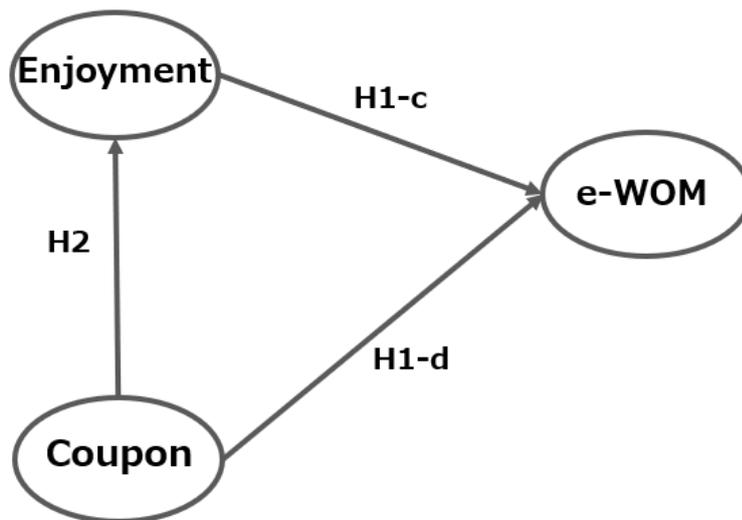
(3) Re-establish the Model

In the final model, it was deemed that using coupons could lead to "enjoyment" in purchasing behavior; therefore, we set H2. In this hypothesis, this study considered the path from "coupon" to "enjoyment" because some studies indicated "coupon" make "enjoyment" (Im & Ha, 2014; Togawa, 2015) (Table-6).

H2 : The effects of "enjoyment" will be greater when "coupon" is increased.

In both analyzes of Japan and the U.S., since paths to "e-WOM" were not supported from "convenience" and "information volume", variables are deleted from the model in the final model.

Table-6: Final model



Source: Author.

(4) Result of Re-establish Model

As a result of analyzing the reset hypothesis model, both the GFI and AGFI of the model were improved. As a result of modifying the model, in Japan, GFI improved from .891 to .911, AGFI improved from .746 to .856, and AIC improved from 405.937 to 138.655. In U.S., GFI improved from .718 to .854, AGFI improved from .604 to .765, and AIC improved from 430.633 to 153.601.

Table-7 shows the analysis results of resident in Japan. Relationship between "e-WOM" and "enjoyment" ($\beta = .404, p < .01$), "e-WOM" and "coupon" ($\beta = .327, p < .05$), "enjoyment" and "coupon" ($\beta = .459, p < .01$) was found positive relation in all paths. Considering these results, H1-c, H1-d, H2 were supported.

Table-8 shows results from residents in the U.S. There is a positive relationship between "e-WOM" and "enjoyment" ($\beta = .623, p < .01$), "enjoyment" and "coupon" ($\beta = .470, p < .05$). On the other hand, there was no significant relationship between "e-WOM" and "coupon" ($\beta = .488, p = n.s.$). Therefore, H1-c, H2 was supported, but H1-d was not supported.

Table-7: Results from residents in Japan after revision

	Coefficients	p-Value
H1-c: "Enjoyment"→"e-WOM"	.404**	.002
H1-d: "Coupon"→"e-WOM"	.327*	.011
H2: "Coupon"→"Enjoyment"	.459**	.002

$\chi^2=88.655$, GFI=.911, AGFI=.856, CFI=.914, RMSEA=.083, AIC=138.655
 $p<0.05^*$, $p<0.01^{**}$

Source: Author.

Table-8: Results from residents in the U.S. after revision

	Coefficients	p-Value
H1-c: "Enjoyment"→"e-WOM"	.623**	.002
H1-d: "Coupon"→"e-WOM"	.488	.058
H2: "Coupon"→"Enjoyment"	.470*	.030

$\chi^2=103.601$, GFI=.854, AGFI=.765, CFI=.780, RMSEA=.123, AIC=153.601
 $p<0.05^*$, $p<0.01^{**}$

Source: Author.

IV. Interview Survey on Seven & i Holdings Co., Ltd.

In this research, we conducted a qualitative survey on Seven & i Holdings Co., Ltd. (hereinafter called "Seven & i HD") to further deepen the interpretation of quantitative study and grasp the current situation in practice about omni-channel strategy.

1. Seven & i Holdings Co., Ltd.'s Business Outline

Seven & i HD is a company engaged in the planning and management of the Seven & i Group, centering on convenience stores, supermarkets, department stores, specialty shops, and other businesses, founded in September 1st, 2005, and the capital is 50 billion yen (Source: Seven & i Holdings Co., Ltd. Website). It also has approximately 11,900 stores in North America including the U.S. (Source by Seven & i Holdings Co., Ltd. Website). In Seven & i HD, they started "Omni 7" in November 2015 as part of the Omni-Channel Strategy, and from June 2018 starting "Seven Mile Program" to implement CRM (customer relationship management) strategy. "Seven Mile Program" is a loyalty program linked with mobile applications of domestic group companies (Source by Seven & i Holdings Co., Ltd.'s reports). Seven & i HD is a very advanced company in the field of omni channel strategy in Japan, and qualitative data obtained from interview survey is considered to be highly effective (Kondo, 2018; Okutani, 2016).

2. Research Methods

The Digital Strategy Department was the business department responsible for the core of omni-channel strategy in Seven & i HD, and was able to obtain abundant information on "Omni 7" and "Seven Mile Program". We used a semi-structured interview for the interview. The reason why we use this method is because it can carry out a high-quality survey while having time constraints by detailedly conducting

questions limited to the omni-channel strategy and obtain new knowledge and data by related questions.

3. Semi-structured Interview

(1) CRM Strategy with Utilizing Digital

Seven & i HD aims to provide a new value experience with two pillars : "strengthen relationship with customers" and "pursue convenience from the customer's position." The power of "digital" is newly utilized. Specifically, they collect the customer data from approximately 23 million customers in the entire group by using a common ID called "7iD". This data is linked with purchasing information and financial information at each site and store of the group companies such as "Omni 7". In addition, we also promote to develop a new business in the data sharing organization "Seven & i Data Lab" in cooperating with other companies. These CRM strategies aim at "making habits into visitors and inviting customers to visit", "promoting reciprocal reception within groups". Regarding to the position of "Omni 7" started in 2015 and the CRM strategy started in 2018, "Omni 7" is a measurement to prepare a wide range of channels for customers. And as for CRM strategy, it will improve experience value by offering services that express such feelings as "enjoyment", "sense of value", and "convenience".

(2) Providing "enjoyment" with Seven - Eleven Apps

In September 2018, Seven & i HD renewed the Seven - Eleven application and added the function "Badge" in the application (Appendix-1). This is a function that points are accumulated and the badge rank is raised by performing specific actions such as shopping at the Seven - Eleven store and launching the applications. This badge is subdivided by the product category and the type of behavior. The application has "enjoyment" like breeding game and coupon function at the same time. Seven & i HD initially aimed at further reducing the distance between the store and the customer by making an "enjoyable and affordable application that customers want to open every day". And the application also gives pleasure to everyday shopping. After introducing this service, the game nature of this function spread among consumers, leading to "e-WOM". And there was a relationship between the number of increasing application reviews and the number of increasing online visitors (sourced by interview research). In other words, the game nature in mobile applications has brought "enjoyment" to the customer, and it appears in "e-WOM", which means that it also has the ability to attract customers.

Besides, offering coupon only tends to fall into a negative spiral (Discounts are costly for companies. Customers also refrain from purchasing until coupon are issued.). Providing "enjoyment" with gaming properties is a way to avoid this phenomenon. A game like a "badge" function feels the customer "enjoyment", and they are expected to

unintentionally visit a store or an EC sites. Therefore, it is possible to prevent customers from waiting for coupon.

V. Discussion

We examined how the mobile-sites and applications of a retail company promoting the omni-channel strategy relates to the increase of e-WOM on the Internet. In this section, we discuss the result.

Firstly, as a result of the quantitative survey, it was confirmed that the "enjoyment" provided by the mobile-sites and applications of the Japanese and the U.S. residents has a positive relationship with the "e-WOM". However, the "coupon" and "e-WOM" have a positive relationship with Japanese residents, but there is no correlation with the U.S. residents. The qualitative survey also confirmed that "enjoyment" relates to the increase in "e-WOM", which leaves a positive effect on companies. It can be concluded that the customer experience the most affects "e-WOM" in the mobile-sites applications is "enjoyment". Also, "coupon" is considered effective for Japanese residents, but considering the results of surveys for residents in the U.S. where the omni-channel is the most advanced, "coupon" is not an optimal choice.

The above considerations seem to give great implications to the mobile policy of retailers that have emphasized "coupon" so far. Currently, many mobile-sites and applications provided by retail companies are centered on "coupon" function. According

to a survey by App Annie (2018), it is possible for mobile apps that offering coupon become popular in japan, and it has been clarified that mobile applications are used for developing discount campaigns. However, as evidenced by the results of the qualitative survey, "coupon" has potential risks of falling into a negative spiral. What's worse, if discounts are made with "coupon", the contribution to sales will also become less effective.

Therefore, it is considered effective to increase "e-WOM" by providing "enjoyment" instead of using "coupon". One example of such service is Nike's "SNKRS" application. In this application, we are acquiring popularity with mobile applications focusing on "enjoyment", such as providing treasure hunting game to acquire the privilege of limited sneakers to utilize AR (augmented reality).

However, for retailers who have built mobile-sites and applications originally focusing on the "coupon" function, changing their focus to "enjoyment" may leave fears in terms of value loss. Regarding this point, "coupon" shows a positive relationship with "enjoyment" in the result of a quantitative survey. In the qualitative survey, it became clear that the number of consumer reviews increased by giving gaming rather than providing simple coupons. Therefore, great influence will be given to "e-WOM" by using "enjoyment" as the means. With this method, it is possible to develop "e-WOM" while allowing consumers maximizing the economic value. In fact, Seven & i HD, which conducted a qualitative survey, succeeded in increasing the number of visits and

the number of visited stores per person by this method. Lawson also revised their mobile application to offer "coupons", since October 2018, it has introduced a stamp rally utilizing GPS to mediate "enjoyment" in providing a "coupon", this strategy is considered to be highly effective.

From the above, we will consider the whole study. Both quantitative and qualitative surveys demonstrated that it is more likely that consumers will do "reviews" by receiving "enjoyment" through mobile-sites and applications. Therefore, retailers should manage consumer-led touch points called "e-WOM" by constructing mobile-sites and applications, a smart strategy to provide "enjoyment" for customers.

VI. Conclusion and Further Study

With the trend of digitization, there is a need for people to pay attention to the reviews of retailers' mobile-sites and applications, "e-WOM" plays a role. Through the careful investigation for e-WOM, this research came out with the results that benefit both academic and practical situations.

From the academic learning, we are taught that the customer experience leads to "e-WOM"; however, the specific experience factors have not been clarified. This study made it possible to clarify the concrete relationship between "e-WOM" and customer experience. And we also add a new perspective in the research field of customer experience in omni-channel research which is in front of practice.

From the practical situation, the concrete construction method of the mobile-sites/applications that is important in the omni-channel strategy is not clarified. Especially in Japan, this has led to the progress of omni-channelization and shrunked the retail market. In response to this trend, it is important to have the element of "enjoyment" to mediate the "e-WOM" in this research. That is, when building a mobile-sites/applications, it is important to give pleasant feelings to form psychological ties for consumers.

Furthermore, some Japanese companies are entering into Asian countries, with the aging of retail markets and the rise of online shopping. Asia ranks the first place in the world in terms of the percentage of transactions using mobile-sites and applications, accounting for 71% of the total online transactions (Criteo, 2018). It can be said that the method of building mobile-sites and applications is an important criterion for retailers entering to the Asia market. Meanwhile, providing "enjoyment" through mobile-sites/applications is also essential.

However, this study has some limitations. One problem is that there is a clear difference of the sample size in Japan and the U.S. Moreover, this research conducts a survey for people who use retail services in Japan or the U.S., but the survey subjects are not necessarily from neither of the two countries. Under this circumstance, the cultural and psychological differences should be taken into account. These limitations would like to be considered as future research.

References

- Baxendale, S., Macdonald, E. K. & Wilson, H. N. (2015), “The Impact of Different Touchpoints on Brand Consideration”, *Journal of Retailing*, Vol.91, No.2, pp.235-253.
- Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001), “Hedonic & utilitarian motivations for online retail shopping behavior”, *Journal of Retailing*, Vol.77, No.4, pp.511-535.
- Forsythe, S., Liu, C., Shannon, D. & Gardner, C. (2006), “Development of a scale to measure the perceived benefits & risks of online shopping”, *Journal of Interactive Marketing*, Vol.20, No.2, pp.55-75.
- Goyette, I., Ricard, L., Bergeron, J. & Marticotte, F. (2010), “e-WOM Scale: Word-of-Mouth Measurement Scale for e-Services Context”, *Canadian Journal of Administrative Sciences*, Vol.27, No.1, pp.5-23.
- Im, H. & Ha, Y. (2014), “Determinants of mobile coupon service adoption: assessment of gender difference”, *International Journal of Retail & Distribution Management*, Vol.45, No.5, pp.441-459.
- Keiningham, T. L., Cooil, B., Weiner, J., Aksoy, L. & Andereassen, T. W. (2007), “The value of different customer satisfaction & loyalty metrics in predicting customer retention, recommendation, & share-of-wallet”, *Managing Service Quality*, Vol.17, No.4, pp.361-384.
- Kotler, P., Kartajaya, H., setiawan, I. (2016) *Marketing 4.0: Moving from*

Traditional to digital, Wiley (恩藏直人監修, 藤井清美訳 (2017) 『コトラーのマーケティング 4.0』 朝日新聞出版)。

- Lemon, K. N. & Verhoef, P. C. (2016), “Understanding Customer Experience Throughout the Customer Journey”, *Journal of Marketing*, Vol.80, No.6, pp.69-96.
- Lichtenstein, D. R., Netemeyer, R. G. & Burton, S. (1990), Distinguishing Coupon Proneness from Value Consciousness: An Acquisition-Transaction Utility Theory Perspective, *Journal of Marketing*, Vol. 54, No. 3, pp. 54-67.
- Rigby, D. K. (2011), “The future of shopping”, *Harvard Business Review*, Vol.89, No.12, pp.65-76.
- Rose, S., Clark, M., Samouel, P. & Neil H. (2011), “Online Customer Experience in e-Retailing: An empirical model of Antecedents and Outcomes”, *International Journal of Management Reviews*, Vol.88, No.2, pp.308-322.
- Schwager, A. & Meyer, C. (2007), “Understanding Customer Experience”, *Harvard Business Review*, Vol.85, No.2, pp.116-126.
- Shetty, A. S., S., Jeevananda & Kalghatgi, J. R. (2018), “How to win back the disgruntled consumer? The omni-channel way”, *Journal of Business & Retail Management Research*, Vol.12, No.4, pp.200-207.
- Verhoef, P. C., Kannan, P.K. & Inman, J. J. (2015), “From Multi-Channel Retailing to Omni-channel Retailing: Introduction to the Special Issue on Multi-Channel Retailing”, *Journal of Retailing*, Vol.91, No.2, pp.174-181.

- ・ Wang, R. J., Malthouse, E. C. & Krishnamurthi, L. (2015), “On the Go: How Mobile Shopping Affects Customer Purchase Behavior”, *Journal of Retailing*, Vol.91, No.2, pp.217-234.

- ・ 飯島正樹 (1995) 「口コミの効果に関する研究」 『日本経営工学会誌』 第 45 巻第 6 号, 575-580 頁。

- ・ 奥谷孝司 (2016) 「オムニチャネル化する消費者と購買意思決定プロセスーMobile Device がもたらす小売業の未来と課題ー」 『マーケティングジャーナル』 第 36 巻第 2 号, 21-43 頁。

- ・ 奥谷孝司・岩井琢磨 (2018) 『世界最先端のマーケティングー顧客とつながる企業のチャネルシフト戦略ー』 日経 BP 社。

- ・ 熊倉雅仁 (2015) 「購買プロセスの変革とオムニチャネルシステム構築の理論的考察ー購買行動の変革とオムニチャネル化社会の到来への予見ー」 『高千穂論叢』 第 50 巻第 2 号, 47-73 頁。

- ・ 近藤公彦 (2018) 「日本型オムニチャネルの特質と理論的課題」 『流通研究』 第 21 巻第 1 号, 77-89 頁。

- ・ 杉谷陽子 (2009) 「インターネット上の口コミの有効性；製品の評価における非言語的
手がかりの効果」 『上智経済論集』 第 54 巻第 1・2 号, 47-58 頁。

- ・ 田中洋・清水聡 (2006) 『消費者・コミュニケーション戦略-現代のマーケティング戦略 4』 有斐閣アルマ。

- ・ 外川拓 (2015) 「購買前の情報探索行動が購買後の消費者満足度に及ぼす影響：解釈レベル理論に基づく検討」『千葉商大論叢』第 52 巻第 2 号, 141-156 頁。
- ・ 根来龍之 (2006) 『mixi と第二世代ネット革命：無料モデルの新潮流』東洋経済新報社。
- ・ 『日経 MJ』2018 年 10 月 17 日付け第 13 面, 「スタンプラリーでローソン巡り」。
- ・ App Annie (2017) 「実店舗・オンライン併用型の小売アプリの MAU ランキング (2017 年上半期)」『小売アプリ モバイルにおけるデータ活用』, (<https://www.appannie.com/jp/insights/market-data/global-mobile-app-retail-report-2017/>, 2018/11/05 アクセス)。
- ・ App Annie (2018) 「小売業界においてアプリ活用を成功させるために重要な視点」 (<https://www.appannie.com/jp/insights/top-trending-apps/appstrategyinretail/>, 2018/11/14 アクセス)。
- ・ Brinker, M., Loabaugh, K. & Paul, A. (Deloitte) (2012) “The dawn of mobile influence” (<https://www2.deloitte.com/us/en/pages/consumer-business/articles/dawn-of-mobile-influence-retail.html>, 2018/10/29 アクセス)。
- ・ Criteo (2017) “Global Commerce Review : Japan, Q4 2017” (https://www.criteo.com/wp-content/uploads/2018/04/17_GCR_Q4Report_Japan_EN.pdf, 2018/10/29 アクセス)。
- ・ Criteo (2018) 「グローバルコマース調査レポート アジア太平洋地域版：2018 年第 2 四

- 半期」 (http://www.criteo.com/jp/wp-content/uploads/sites/6/2018/09/18_GCR_Q2_Report_APAC_JP-1.pdf, 2018/11/14 アクセス)。
- Euromonitor International (2017a) “Sector Capsure: Mixed Retailer in Japan” (<https://www.euromonitor.com/mixed-retailers-in-japan/report>, 2018/10/29 アクセス)。
 - Euromonitor International (2017b) “Sector Capsure: Mixed Retailer in the US” (<https://www.euromonitor.com/mixed-retailers-in-the-us/report>, 2018/10/29 アクセス)。
 - Euromonitor International (2018a) “Sector Capsure: Internet Retailing in Japan” (<https://www.euromonitor.com/internet-retailing-in-japan/report>, 2018/10/29 アクセス)。
 - Euromonitor International (2018b) “Sector Capsure: Internet Retailing in the US” (<https://www.euromonitor.com/internet-retailing-in-the-us/report>, 2018/10/29 アクセス)。
 - GU のウェブサイト, (<https://www.gu-japan.com/app/member/>, 2018/11/05 アクセス)。
 - Kohl’s のウェブサイト, (https://cs.kohls.com/app/answers/detail/a_id/1345/~kohls-app, 2018/11/05 アクセス)。
 - Loabaugh, K., Ohri, L., Iwabuchi, M., Watanabe, S. & Matsuo, J. (Deloitte) (2016) “Navigating the New Digital Divide” (<https://www2.deloitte.com/content/dam/Deloitte/jp/Documents/technology/dd/jp-dd-navigating-the-new-digital-divide-220716.pdf>, 2018/10/29 アクセス)。
 - Nike のウェブサイト, (<https://news.nike.com/news/nike-snkrs-app-japan>, 2018/11/15 アクセス)。

- ・ NTT Resonant (2012) 『「購買行動におけるクチコミの影響」に関する調査』, (<https://research.nttcoms.com/database/data/001436/>, 2018/10/6 アクセス)。
- ・ PwC (2017) “The 2017 Global Omnichannel Retail Index & Omnichannel on the march” (<https://www.strategyand.pwc.com/report/2017-global-omnichannel-retail-index>, 2018/11/14 アクセス)。
- ・ PwC (2018) 「世界の消費者意識調査 2018」, (<https://www.pwc.com/jp/ja/knowledge/thoughtleadership/consumer-insights-survey.html>, 2018/10/29 アクセス)。
- ・ Schmaus, B., Maekelburger, B. & Felsmann, D. (2017) “The 2017 Global Omnichannel Retail Index: Omnichannel in the march” (<https://www.strategy&.pwc.com/media/file/The-2017-Globalomni-channel-Retail-Index.pdf>, 2018/10/29 アクセス)。
- ・ Target のウェブサイト, (<https://www.target.com/c/target-app/-/N-4th2r>, 2018/11/05 アクセス)。
- ・ T-point のウェブサイト, (<https://tsite.jp/r/app/tapp/pc/index.html>, 2018/11/05 アクセス)。
- ・ UNIQLO のウェブサイト, (<https://www.uniqlo.com/jp/app/>, 2018/11/05 アクセス)。
- ・ Walgreens のウェブサイト, (https://www.walgreens.com/topic/apps/learn_about_mobile_apps.jsp, 2018/11/05 アクセス)。
- ・ Walmart のウェブサイト, (<https://www.walmart.com/cp/walmart-mobile-app/1087865>, 2018/11/05 アクセス)。
- ・ オムニ7 のウェブサイト, (<https://www.omni7.jp/top>, 2018/10/29 アクセス)。

- ・株式会社セブン&アイ・ホールディングス「会社案内」, (http://www.7&i.com/dbps_data/_template/_user/_SITE_/localhost/_res/company/pdf/profile/profile_2018.pdf, 2018/10/29 アクセス)。
- ・株式会社セブン&アイ・ホールディングス「統合レポート 2018」, (http://www.7&i.com/dbps_data/_template/_user/_SITE_/localhost/_res/ir/library/ar/pdf/2018_all.pdf, 2018/10/29 アクセス)。
- ・総務省 (2013) 「平成 25 年度情報通信白書」, (<http://www.soumu.go.jp/johotsusintokei/whitepaper/ja/h25/pdf/25honpen.pdf>, 2018/10/29 アクセス)。
- ・総務省 (2018) 「平成 30 年度情報通信白書」, (<http://www.soumu.go.jp/johotsusintokei/whitepaper/ja/h30/pdf/30honpen.pdf>, 2018/10/29 アクセス)。
- ・マツモトキヨシのウェブサイト, (https://www.matsukiyo.co.jp/sp/point/mkappli_op, 2018/11/05 アクセス)。
- ・無印良品のウェブサイト, (<http://www.muji.com/jp/passport/>, 2018/11/05 アクセス)。

Appendix

Appendix-1: Seven-Eleven application



Appendix-2: Detail of qualitative research

Date	May 11th, 2018 10:00-11:00
Objects	Oisix ra daichi Inc. Executive Officer: Takashi Okutani (former Oisix.daichi Chief Omni-Channel Officer)
Place	Oisix ra daichi Inc. Osaki head office
Contents	・ Outline of omni-channel and mobile marketing

Date	October 5th, 2018 13:00-14:00
Objects	Seven & i HLDGS. Co., Ltd. Digital Strategy & Planning Department Excective Officer: Ken Shimizu, Officer: Takeshi Yamamoto
Place	Seven & i HLDGS. Co., Ltd. head office
Contents	Outline of "Omni7" and "CRM strategy".