

Research on User Experience Under the New Retailing Mode: Using the interactive marketing mode of the Estee Lauder POP-UP store as an example

Lan Liang¹, Young-Hwan Pan^{2*}

¹Master's Course, Dept. of Experience Design, Techno Design, Kookmin University

²Professor, Dept. of Experience Design, Techno Design, Kookmin University

새 소매 모델 방식에서의 사용자 경험 연구: 에스티로더 팝업스토어에서 인터랙티브 마케팅을 예로 들어보자

양남¹, 반영환^{2*}

¹국민대학교 테크노디자인전문대학원 경험디자인학과 석사과정

²국민대학교 테크노디자인전문대학원 경험디자인학과 교수

Abstract The beauty industry of China POP-UP store service, has entered the peak development period. This paper takes China Estee Lauder POP-UP store as an example, based on the user experience of interactive marketing mode in Beauty POP-UP store under the new retailing model, The paper aims to establish a system interaction design process integrating online and offline to help enterprises complete the sustainable development of marketing services. To achieve this goal, this study uses questionnaires to investigate the key elements of user experience, customer journey map to determine the user pain points, and completes the design of the new system process. This process can provide designers with a new perspective through experimental verification, with high timeliness and practicability. It also promotes the collaborative optimisation and upgrading of physical retail and online retail and provides theoretical support and practical basis for other enterprises.

Key Words : New retailing, POP-UP store, interactive marketing, user experience, service design

요약 중국의 뷰티 팝업숍 서비스는 이미 전성기발전시기에 들어섰다. 본 연구는 중국 에스티로더 팝업숍을 예를 들어 새 소매모델하에서의 뷰티숍 인터랙티브 마케팅방식에서의 사용자 체험을 기초로 일종의 온라인과 오프라인을 융합하는 시스템 인터랙티브 디자인 과정을 세우고 기업이 마케팅 서비스의 지속가능한 발전을 이루도록 돕는다. 이 목적을 달성하기 위해 본 연구에서는 설문조사와 인터뷰 조사로 사용자 체험의 핵심 요소를 조사하고 고객 여정 지도를 이용해 사용자의 통증점(접촉점)을 확인하고 새 시스템 흐름의 디자인을 완성한다. 실험검증을 통해 이 과정은 디자이너들에게 새로운 시각을 제공한다. 비교적 높은 시효성과 실용성을 가지고 있고 또한 오프라인 소매와 온라인소매의 협동 최적화와 업그레이드를 촉진하여 기타 기업에 팝업스토어 서비스의 이론지지와 실천적의거를 제공해준다.

주제어 : 새 소매, 팝업 스토어, 인터랙티브 마케팅 방식, 사용자 체험, 서비스 디자인

*Corresponding Author : Young-Hwan Pan(peterpan@kookmin.ac.kr)

Received May 5, 2021

Accepted June 20, 2021

Revised May 30, 2021

Published June 28, 2021

1. Introduction

The three main bodies of marketing change rapidly. When the Internet process enters the second half: the "multi, broken, fast" media information environment makes consumers pay close attention to the scarcity of resources and the non-use value of commodities becomes the core component of brand value and the structural change of consumption demand. The traditional marketing concept has undergone tremendous changes, giving rise to the new marketing concept, which has the aspects and deep connotation of the new era[1].

The essence of the new marketing basic concept is to change the management idea of relying on the competitive advantage created by tangible assets and financial assets in the past. Based on the emphasis on customer assets, it seeks to establish, maintain or strengthen the relationship with customers through various forms to manage more customer assets, and finally establish the core competitiveness and sustainable development ability of the enterprise[2]. The development of new retailing relies on Big Data, artificial intelligence and other new technologies to break through the online and offline data barriers, comprehensively upgrade the existing retail industry and optimise the data-driven goods production and circulation system[3]. In recent years, the phenomenon of blending online and offline has appeared in the development of the retail industry, leading to the emergence of new retail as time demands[4]. For consumers, the traditional shopping centre brand homogenisation is serious, the layout of the store is uniform, which easily leads to aesthetic fatigue, so that the brand loses its characteristics in eyes of consumers. The POP-UP stores are just like a clear stream. These unique shops often bring a new consumption experience for consumers with unique creativity and high-end customised services. This kind of "experiential"

and "social" consumption mode especially suits the consumption psychology of young consumers who generally pursue personalisation and long for constant freshness. Secondly with the development of the Internet, increasingly young people like sharing their lives on WeChat, microblog and other social platforms. The "wanghong" POP-UP store with a novel experience and "topic" undoubtedly touches the psychology of young consumers so that consumers are satisfied with sharing the experience, spontaneously promoting the brand. The brand can carry out self promotion through the POP-UP store and determine the attitude of consumers towards the product after analysing relevant data, which provides a strong basis for the future development of marketing strategy. POP-UP stores do not need long-term leasing or do not need to rent stores, thus, it saves much cost for brand market research. Brands can use a few days or months to explore consumer preferences and minimise their business risks. Hence, the POP-UP store gives the brand more space to try out and opportunities to explore the market. After the impact of e-commerce on traditional sales, the new business model of POP-UP store combined with traditional sales brings brand-new marketing ideas for the brand and more consumption experience for consumers[5].

As one of the largest skincare in the world, cosmetics and perfume companies, Estee Lauder ranks eighty-first in the 2019 TOP100 list of smart retailing potential in China[6]. On July 20, 2020, the new product of Estee Lauder's: the seventh generation of small brown bottles was unveiled in Shanghai, and a new product launch was held on the Bank of Huangpu River. Through an immersive experience, we explore the breakthrough discovery of Estee Lauder in epigenetic research and jointly reveal the new energy of the seventh generation of small brown bottles[7]. The new seventh generation small

brown bottle was officially launched on July 29, 2020., in mainland China. Since then, 68 new product POP-UP stores have been launched in 45 cities in China since August. This paper explores the interactive marketing mode of the new POP-UP using the analysis methods and tools of service design, and carries out user experience research through theoretical analysis.

2. Background of Theory

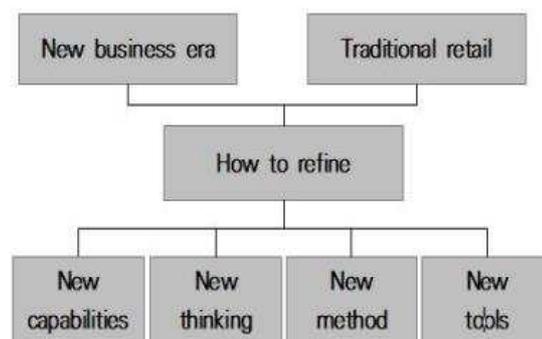
2.1 Development Trend of POP-UP Industry Under the New Retailing Model

Traditional retail is limited by time and experience space. On the one hand, the operating cost is too high and the operating efficiency is low. On the other hand, it cannot meet the consumption needs of customers' anytime and anywhere; thus, the development space is limited. The pure online mode of Traditional e-commerce cannot provide users with a face-to-face experience. There is a time difference between placing an order and receiving goods, leading to a bad experience, which is its inherent weakness. The new retailing emerges as time demands due to the limitations of traditional retail and traditional e-commerce.

Ma Yun, the Founder of Alibaba, pointed out that: "the era of pure e-commerce has passed. In the next 10 or 20 years, no e-commerce will be existing, only new retailing.". This implies that online and offline modes must be combined to gives rise to a real new retailing. New retailing is a product of consumption upgrading and a more advanced and humanised commercial civilisation. In the foreseeable future, no e-commerce or traditional retail will exist, only new retailing. Only when the online and offline logistics and modern logistics are perfectly integrated, infinitely approaching the inner needs of consumers, and providing consumers with efficient and high-value services can there be

new retailing in the true sense[8]. Table. 1 shows the issues discussed under the new retail model.

Table 1. Problems in the new retailing model



"New retailing" is the collaborative optimisation and upgrading of physical retail and online retail, Its production and development process also relies on two types of innovation: first is the realisation of deep integration of online and offline modes and logistics through technology and Big Data which signification improves the overall efficiency of the retail industry; the second is to avoid the shortcomings of physical retail and online retail, realise the collaboration between the two, and meet the needs of customers. The demand of consumption upgrading for service quality improvement meets the multi-dimensional needs of consumers, including shopping, entertainment, and social interaction[9].

Earlier, the POP-UP store did not have such a name, but a guerrilla store, which means "guerrilla shop". In 2004, the first guerrilla POP-UP store in Kawabata was opened in the old city of Berlin, Germany, selling her brand name to des Garcons. The marketing model of Kawabata, which subverts the traditional retail, has been rapidly cloned. The POP-UP store is more like an upgraded version of the guerrilla POP-UP store, and it is more appropriate to call it a POP-UP store. This because the current POP-UP store time is shorter by a month, a week, or even three or two days. Site selection is becoming incresingly diversified, and several

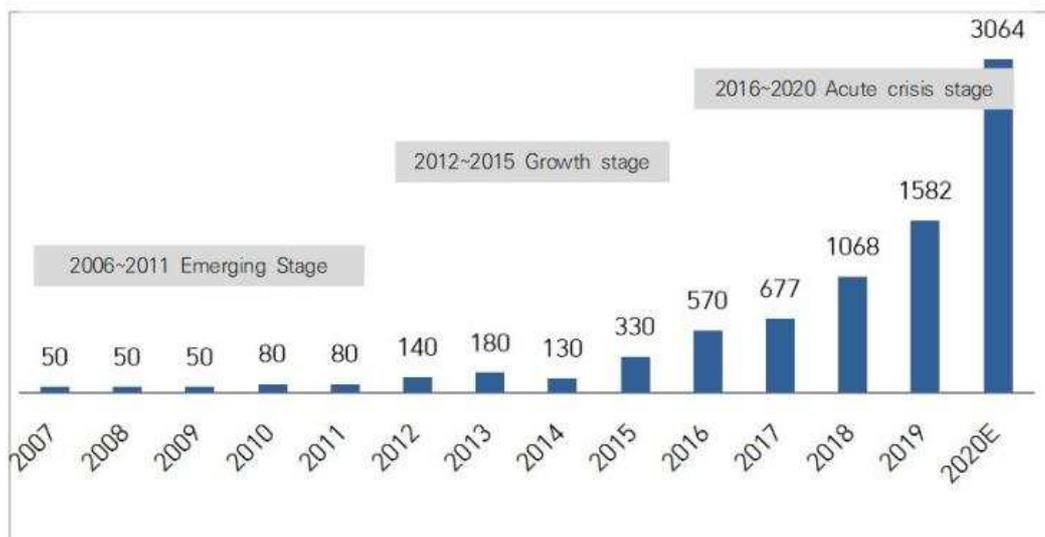


Fig. 1. Growth trend of POP-UP stores in China

brands are trying to establish shops in the busy areas with large traffic, such as squares and shopping centres. Statistics indicate that the number of POP-UP store launched in 2018 has exceeded 1000. The popularity of POP-UP store has also remained high since 2019[10]. Ruiyide China POP-UP store Research Report shows that, before 2012, the POP-UP stores were in the embryonic stage in China starting from 2012 to 2014, and entered a fast lane from 2015, with an average annual compound growth rate of more than 100%. Approximately more than 3000 POP-UP stores will be in China by 2020[11]. Fig.1 shows the growth status of the number of POP-UP stores.

2.2 The Purpose and Necessity of the Research

"POP-UP" as the official "temporary stall" of the brand is the return and reconciliation of the electricity economy of the supplier economy to the physical retail. On the one hand, it has the advantage of the real experience of the physical store, and consumers can see products intuitively and evaluate them using their own senses. Besides, the "POP-UP stores" is deeply embedded in the Internet gene, with novel themes and diverse activities. It has the characteristics of the

user first experience, free mode and disruptive innovation [12]. POP-UP core user thinking, traffic thinking, and scene thinking create a scene consumption experience supplemented by the word-of-mouth effect and freshness of POP-UP stores. It also builds a good relationship between users and brands, detonates online and offline voice, and help in brand communication. Close attention should be paid to the POP-UP device and play method design to allow users "involuntarily" participate and get an immersive experience[13].

The data of "2020-2026 Market Research and future development prospect report of the beauty industry in China" released by Zhiyan consulting shows that the annual output value of the beauty industry in China was approximately 400 billion yuan by 2018. The development trend of the beauty industry predicted that the market scale of the beauty in China would reach 422.5 billion yuan in 2019, exceed 500 billion yuan in 2022, and increase to 549 billion yuan in 2023. The forecast shows that the average annual compound growth rate from 2019 to 2023 is approximately 6.77%, and the beauty industry has a huge development prospect[14]. The beauty industry in China is entering a new stage of

integrated development. The three basic elements of people, goods and market have been reconstructed. The brand focus has changed from product-driven to exploration and innovation around consumer demand to cope with the changes brought by the new retailing[15].

Along with the development of the Internet industry, there are constant mentions of user experience which underscores the critical importance of user experience design. For instance, the biggest difference between new and traditional retail is that the contexts businesses and consumers have changed. Moreover, the breadth and depth of the dynamics between user data and business are also different. In addition, consumer consumption modes have gradually reversed to lead to the changes in production modes. Thus, consumers are important in the competition process of major retail enterprises. In other words, consumers loyalty can be enhanced only by constantly improving the consumers' shopping experience[16]. Thus, consumer experience is an important research direction in brand exploration and development.

Since 2018, the author has been engaged in the interactive design of brand POP-UP stores in China. Based on traditional POP-UP stores, the design of digital interactive experience aims to maximise brand marketing. The purpose of this paper is to study and analyse the user experience of Estee Lauder's POP-UP store, explore the experiences of users in the three stages(before, during and after), and design a new interactive marketing mode from the perspective of the user experience to create a design that is closer to the inner needs of consumers according to the latest research findings and to promote the development of the brand and industry.

3. Research on User Experience

3.1 Analysis of the User Experience Process

In the new retail field, offline entity marketing and online marketing have gradually begun to integrate. To form a more mature and complete service system. The analysis of POP-UP stores in this paper is done through the cross-integration of both offline and online marketing modes. Through questionnaire surveys, user interviews and other methods, this paper evaluates the problems that users encounter as they experience the POP-UP stores. The experience process includes five stages: (1)before entering the POP-UP stores,(2)getting familiar with the functional areas of the POP-UP stores,(3) queuing for experience products,(4)entering the smart shopping area,(5)leaving the POP-UP stores.The behaviour, contact points and problem points of the online and offline participation of consumers in each stage are recorded and analysed. by mapping user experience and journey, analysing the user contact points at each stage and finding the pain points of users. Optimisation suggestions from the users' experience from both online and offline mode are included.

1) Before Entry: User contact with people or objects influence their entering the POP-UP stores.For instance, they may see online or offline brand advertisement, or they may be attracted to the appearance of the POP-UP stores. These contact points can directly or indirectly affect user experience before entering the POP-UP stores.

2) Familiarisation: When users enter the POP-UP stores, they understand each functional areas of the store by using the in-store guidance system or through the explanations by service personnel in the shop.

3) Queueing: To register as official account numbers, users scan the brand WeChat public number two-dimensional code and enter their user name and mobile phone verification code. Then they are eligible to access new product experiences. Through the on-site touch screen, they can input the collection code to check off

the items and obtain the experience products. This stage involves the interaction between the user and the online brand access system, or between the user and the offline gift distribution device.

4) Entry: After receiving the trial equipment, the user enters the smart shopping area. After choosing their preferred items, the screen provides the product's QR code. The user can scan the QR code via their mobile phone and enter the online mall to order the product.

5) Exit: After leaving the POP-UP stores, users can enter the member centre through their mobile phones, view the product orders they have purchased, evaluate their shopping experience, and obtain member points. Moreover, the brand operation team can analyze user data of offline data and online shopping behavior. On the Internet, the WeChat official account motivates target users to increase brand trust and encourages return purchases.

3.2 The Survey Questionnaire

This paper analyses the contact points between the user and the machine as well as between the staff and the online registration system. At the same time, it proposes ways to improve the user experience.

The survey focuses on the user experience when they select trial products and place orders on the smart shopping platform. The field survey conducted near the POP-UP store of Shanghai New World department store on August 10, 2020, included 42 participants ranging from 53 years to 20 years of ages. Of these, 6 were male investigators who accompanied their female partners; 36 were female investigators, 13 came alone, 2 came together, 7 came in groups. The investigators use their mobile phones to scan the on-site QR code to enter the online questionnaire page and fill out the survey questionnaire. The survey location is shown in

Fig. 2.



Fig. 2. Field survey questionnaire

Analysis of the population flow in the beauty brand area indicates that most of the participants are women. While men were there to accompany their partners. Some male were willing to participate because they can get free sample of new products.

The questionnaire is designed for practicability, ease of use, dissemination, safety and sustainability. The survey content mainly focuses on channels to learn about POP-UP stores, customer problems encountered aspects for improving the POP-UP stores, whether they will recommend the POP-UP stores to friends and so on. Survey analysis indicates that 33(78%) respondents came through the POP-UP stores, 5(12%) respondents were the staff of nearby shops, 4 (10%) respondents were attracted by brand advertising on online social platforms (microblog, WeChat, and so on.). Survey results on the issues experienced show that most users experienced a negative emotion caused by queuing to receive products samples(Fig. 3).

At least 23 (55%) survey respondents indicated that they would recommend the POP-UP store to colleagues and friends. Table.2 shows that the users who participated in the questionnaire had the most reactions and wanted to improve.

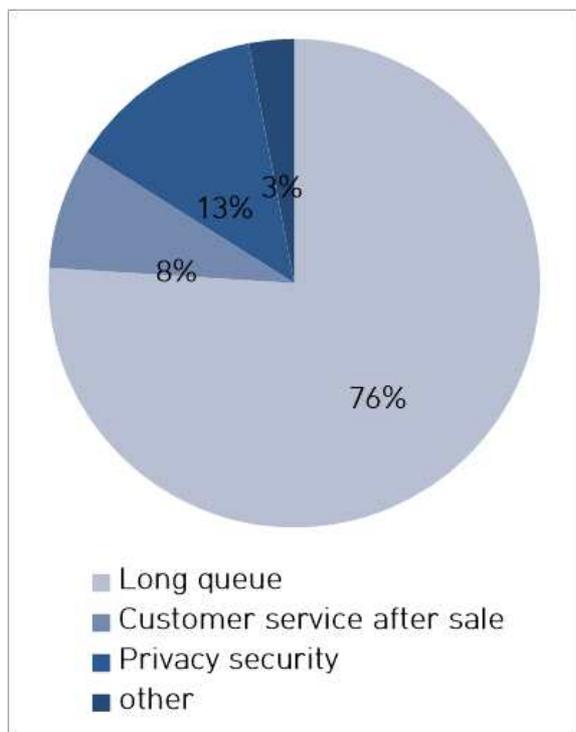


Fig. 3. Problems encountered in the user experience

Table 2. Problems in the process of participation

What users want to improve (multiple choices)	Selection number
The registration process takes too much time	16
Solve the regional restrictions	23
Boring process, lack of experience	20
There are too many people at the scene	19
The perplexity of personal information leakage	8

This study elicited the following conclusions:

1) The member registration process on the mobile terminal is too cumbersome or too difficult for some which can lead to the loss of users, particularly those who give up and leave when they encounter difficulties. About 80% of the participants are under 40 years old, and are proficient in mobile phone use with strong adaptability to digital procedures. However, about 20% are over 40 years old, are not as proficient in mobile phone use, and feel some resistance to digital procedures. The design process must consider the needs of this second group.

2) The offline mode includes limitations due to location and time constraints. For instance, about 78% of the participants are passers-by. Moreover, online advertising attracts very few people to visit offline POP-UP stores. Store visits can be increased by solving customer limitations caused by time and space constraints.

3) The process of accessing experiential items is boring not very attractive, and does not engage users. To increase traffic, redesign of the digital experience in this stage can focus on increasing user engagement, adding fun factors, and motivate past users to participate again.

4) The stage that obtaining the user's personal information (e.g., name, mobile phone number) can elicit resistance and worry in some users resist due to concerns about information leakage such as phishing and identity theft.

5) Some customers who buy products through from offline POP-UP stores, are concerned that after-sales processing will be affected by the closure of POP-UP stores.

3.3 Customer Journey Map

Analysis of the user experience process and the survey results provides insights into user behavior during the process and helps in mapping the customer journey (Fig.4).

The customer journey map divides three stages: (1) before entering the store, (2) in the store, (3) after leaving the store. The customer journey map indicates that most of those who go to the POP-UP store are passing by from nearby destinations. Thus, placing advertisements in a certain area around can increase the number of users. In the members registration process, users are concerned about information security. At the same time, users dislike the process of entering information, obtaining verification code and submitting information because it takes too long and is complex for them. In addition, some users choose to leave because the process of getting an experience pack is tedious and

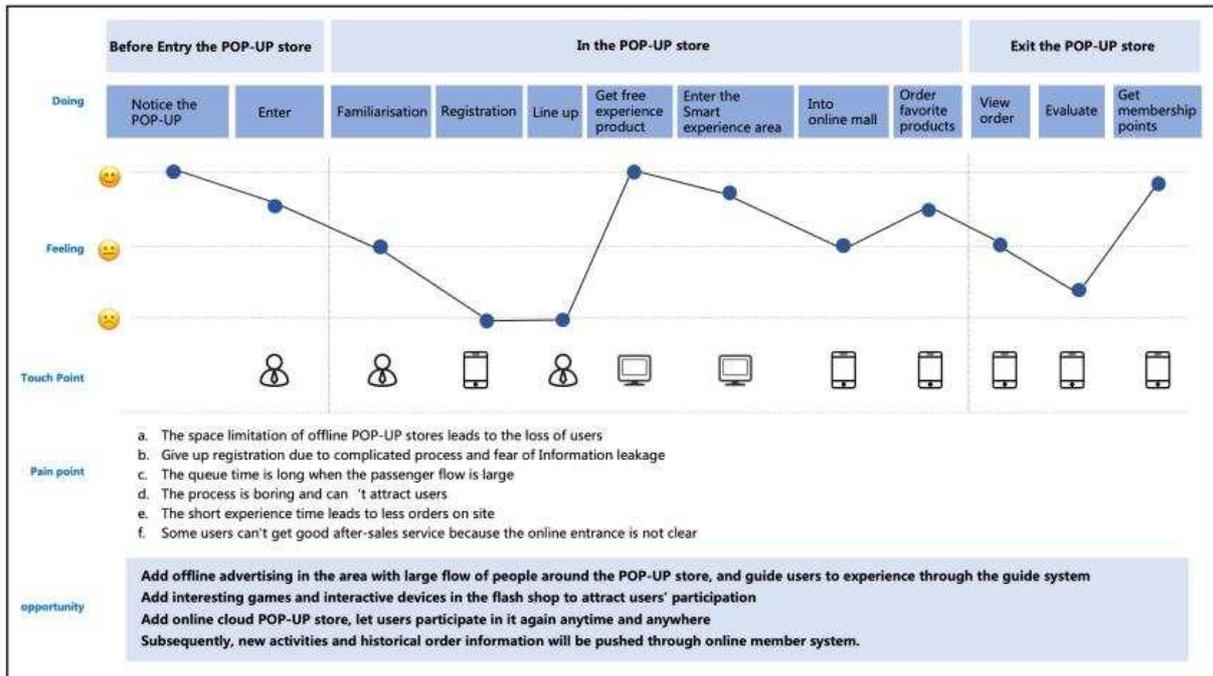


Fig. 4. Customer journey map

time-consuming. Thus, redesigning the process to increase user interaction and interest may motivate users to complete this stage the this stage. Moreover, since the space limitations of offline POP-UP stores only meet the needs of some people in specific areas, a redesign that allows online and offline activities to be carried out at the same time can increase the number of users.

4. New Interactive Marketing Mode

To analyse the dynamics between users and interactive marketing, this paper takes Estee Lauder's seventh-generation small brown bottle POP-UP store as an example. Thus, the optimisation proposal suggests solutions to address issues in the registration process, to increases user interest and participation in the experience process, and to enhance the user experience. To address the limitations of offline POP-UP store space, the online cloud POP-UP store is suggested as a way to prevent the loss of

users caused by space constraints.

4.1 Trial Product Area Design

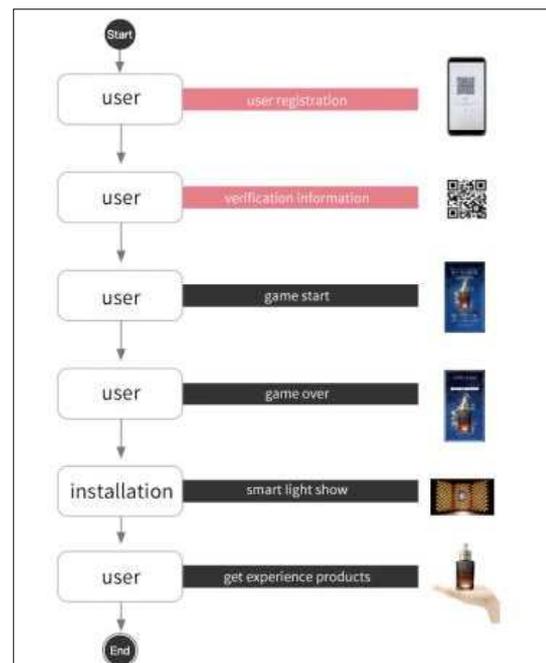


Fig. 5. User experience optimization

The process of getting experience products can be improved. For instance, regional game

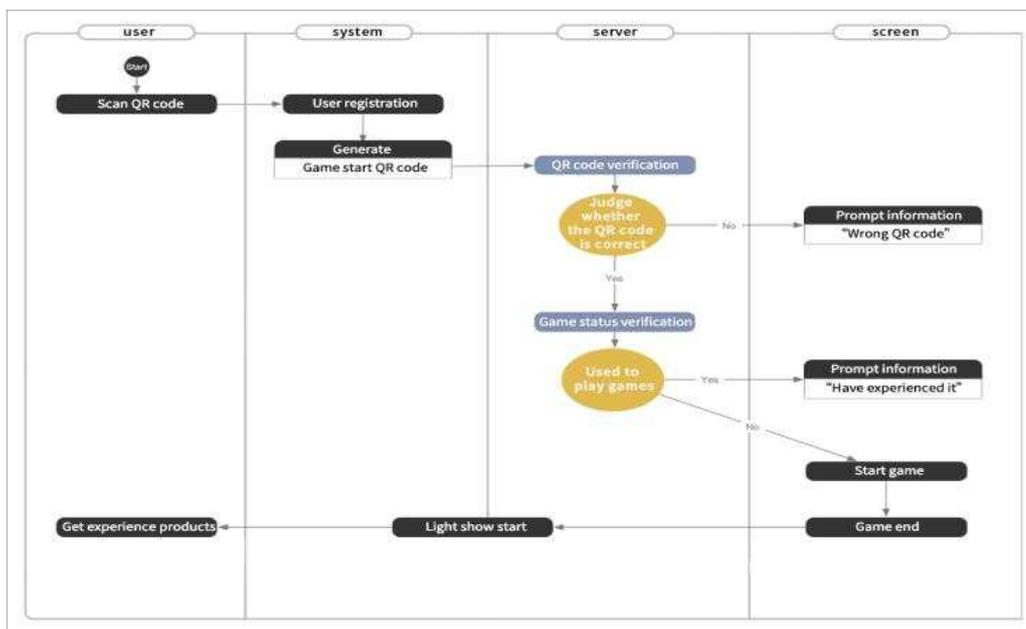


Fig. 6. System interaction process

levels can be added and product-related lighting can be installed to provide users with a stronger sense of participation and experience. To reduce the negative emotions caused by the cumbersome registration process suggestions for user experience optimisation are shown in Fig. 5.

As well, a detailed flow of user-system interaction is shown in Fig. 6.

According to the design scheme, draw the 3D design renderings are shown in Figure 7.

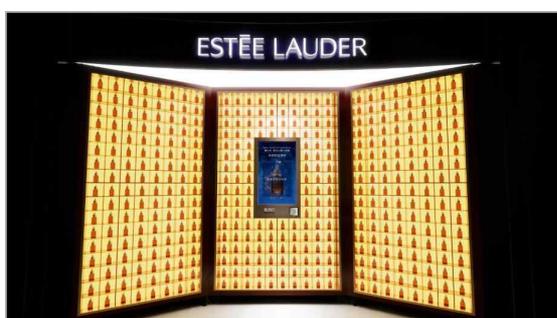


Fig. 7. 3D visual effects

4.2 Online Cloud POP-UP Store Proposal

Because offline space limitations can lessen users participation or share with friends, new product POP-UP activities can be offered

synchronously. For instance, during online membership registration, a link allows participation in new product activities anytime and anywhere. The initial interface is shown in Fig. 8.

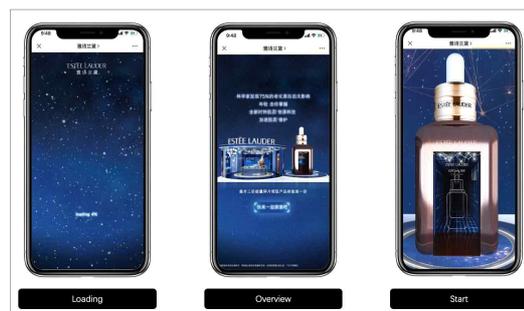


Fig. 8. Online POP-UP store interface

After completing the process, once can pay online postage to get the new experience product. Figure. 9 shows the interaction process between users and the system. Here, users do not need to go to an offline POP-UP store to participate, they only need to click on the link and register as brand members. At the same time, they can recommend the store by sharing links with friends. Thus, the threshold of participation is greatly reduced and the number of users can be increased.

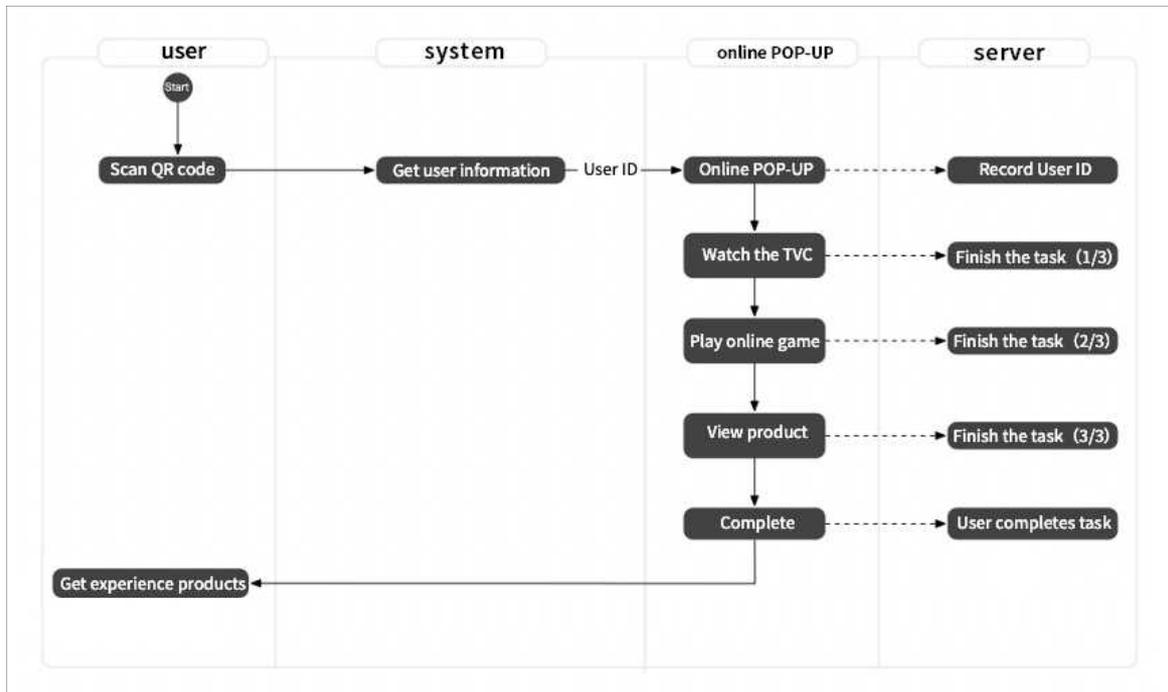


Fig. 9. Interactive process of online POP-UP store system

4.3 User Evaluation of the New Interactive Marketing System

The actual effects of the new design system are shown in the follow-up pilot construction, and the development of the POP-UP store scoring test. This evaluation system sets standards using five aspects: practicability, ease of use, dissemination, safety and sustainability. The maximum score of each aspect is 10 points with an overall score of 50 points. Fig. 10 shows the 40 valid scores that were collected.

Statistical analysis shows the final average score of 44. The score for communication and ease of use is more than 9 points. Users say that the operation is simple uses little time and add some fun to the participation process. In addition, they are willing to take photos to share with friends or to send links of activities to friends via social platforms. However, the score is low for security, as most users still have concerns about the security of their personal information. Aside from that, users are generally satisfied with the interactive system.



Fig. 10. User evaluation

5. Conclusion

According to elements of service design, user analysis, questionnaire survey and the user experience map, this paper evaluates user experience in the suggested interactive marketing system. As a result, it is proposed that the digital experience process should optimise some elements of the user experience process in traditional POP-UP stores. Moreover, this study elicited following conclusions. First, in the POP-UP store design some processes are necessary and cannot be simplified. However,

gaming entertainment can be implemented to increase user participation and sense of achievement as well as to reduce negative emotions caused by complex processes. Second, limitations of time and space in POP-UP store can cause the loss of some users. Thus, where possible, the same activities can be perioded online and offline during certain periods of time. In this offline-online blending, users can access a full range of services, and brands, which can also improve brand publicity and marketing. The eusability score from actual users averaged at 44 out of 50, particularly in communication and ease of use. Thus, this paper's proposal can become the preferred promotion mode for brand POP-UP stores. Finally, it is hoped that this study will add practical values to other brands as well as to the entire retail industry.

REFERENCES

[1] H. Y. Huang & F. X. Zhang. (2019). Current situation analysis and Strategy Research of Pop-up store under new marketing. *New marketing*. 46-47.

[2] T. Wang & L. Xu. (2002). Development and integration of new marketing theory. *Commercial economy and management*. 20-23.

[3] Z. Y. Lin, Y. Ge & W. B. Bao. (2017). The "New Retail" in the Light of the Strategic Cooperation between Alibaba Group and Bailian Group". *China business and market*. 31(3), 124-128. DOI:10.14089/j.cnki.cn11-3664/f.2017.03.014

[4] W. Zuo & A. Yang. (2020). Research on service design of community unmanned store from the perspective of new retailing. *Idea&Design*, 25-33.

[5] Y. Q. Zuo. (2019). Pop-up store wins the popular C position under new retailing business model; *New industrial economics*. 72-75

[6] Q. Qian. (2019). 2019 Smart retailing TOP100: *Internet Weekly*, 32-35.

[7] Tencent fashion. (2020). *Estee Lauder's new seventh generation small brown bottle comes on the market*. <https://fashion.qq.com/a/20200721/016821.html>

[8] Y. C. Dong. (2018). *New retailing: Online + offline + Logistics*; Beijing; *Tsinghua University Press*

[9] L. Y. Wu, J. S. Han & H. H. Kim. (2019). Review of the

Research & Development of "New Retailing" *Journal of the Korea Convergence Society*. 10(6), 15-24.

[10] Y. Lu. POP-UP Store-New consumption scenario. *Fashion Beijing*, 80-83.

[11] Ruiyide. (2018). POP-UP Retail in China. 01-02.

[12] Y. Yang & F. Z. Wu. (2018). Innovation and practice of Pop-up Bookstore under the background of new retailing. *Publishing research*.

[13] Kuang Liu. (2018). *Pintu-Business Review*. Good-looking is also a strength. <https://www.pintu360.com/a56182.html>

[14] Industry channel. (2020). *Analysis on the development status and future development prospect of China's beauty industry in 2020*. <https://www.chyxx.com/industry/202003/840472.html>

[15] Yibang Power Research Institute. (2018). Under the new retailing outlet, the future of China's beauty industry has come. *Chinese cosmetics*. 100-103.

[16] Z. C. Song, H. Chen & L. Bi. (2018). Research on user experience design in new retail industry. *Industry/concern thinking*, 82-83.

양 남(Liang Lan)

[학사학위]

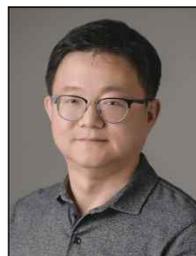


· 2011년 9월 ~ 2015년 6월 : 노신미술대학교 미디어 애니메이션 학과(학사)
· 2019년 9월 ~ 현재 : 국민대학교 테크노디자인전문대학원(석사)
· 관심분야 : 인터랙션디자인, UX, 디지털 미디어 디자인

· E-Mail : lanliang921123@gmail.com

반 영 환(Young-Hwan Pan)

[석사학위]



· 1991년 2월 : 한국과학기술원 산업공학과(공학사)
· 1993년 2월 : 한국과학기술원 인간공학(공학석사)
· 1999년 8월 : 한국과학기술원 인간공학(공학박사)
· 2006년 9월 ~ 현재 : 국민대학교 테

크노디자인전문대학원 교수

· 관심분야 : 인터랙션디자인, 사용자 경험(UX), HCI

· E-Mail : peterpan@kookmin.ac.kr