

Research on the influence of we-chat applet on improving user experience

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● 요약 ●

As a service application developed for users, we-chat applets can be used without downloading and installation, which realizes the immediate response between offline enterprises and users, and more importantly, it provides users with a convenient platform to find products and improve the cost-effective channel for customers. Therefore, it is beneficial to improve the user experience in the future by studying how to use wechat applets. Realize the long-term market competitiveness of enterprises.

키워드: We-chat applets, User experience, Convenient

I. Introduction

In 2013, Baidu President Robin Li announced the launch of the light application platform at Baidu World Conference, namely the concept of "no need to download, namely search and use." However, after being put into the market, it did not achieve the expected success. Until the official launch of we-chat applet in 2017, it realized the application of the concept of "available at the touch of the hand, go when you run out". In the post application era of Kathleen (2020), mobile app has long promoted the development of digital business model. However, smart-phone users are increasingly reluctant to download services that are not frequently used. The development of we-chat applets (MPS) embeds lightweight micro applications into the social information platform of we-chat, so that native applications can not meet the specific needs of platform users, and can be realized through MPs innovation.[1]

Therefore, compared with app applications, wechat apps first need R & D cost and later promotion and marketing to get users' installation and use, and every step of the process should be gradual; the former can let them do it at the same time,

for example, after the development of kakao taxi app is completed, it can be directly embedded in wechat (kakaotalk), but not in mobile phones Kakao taxi is installed, but it can be used normally through kakaotalk. No matter whether the user uses it or not, such a small program is saved in wechat in the form of bookmarks, which prompts the user to use it again conveniently. At the same time, it avoids the frequent update of app, the occupation of mobile memory and the degradation of mobile performance, which makes the user experience worse. Therefore, the birth of wechat applet avoids many defects of APP application and brings better user experience. Moreover, the research and development of wechat applets breaks the traditional mode of getting users to make profits again. Instead, they can get profits immediately when the user needs to be generated, and transform users into long-term active users.

II. Reconstruction of Volumetric Models

2.1 Literature review

Tang Wenjie (2014) thinks that light app is a browser application with the double advantages of web app and native app [3]; Kuang Wenbo (2017) points out that wechat app is an online application that can be used without downloading, and can be obtained by scanning QR code or sharing with friends and groups [2]. Zhang Xiang (2017) differentiates the wechat applet from the new applications of PC and app. With the help of wechat user base, it is more suitable to connect offline users [4]. Calvo (2017) found through empirical research that: Based on the flow experience theory, users' satisfaction with digital technology mainly comes from their perceived ease of use and the characteristics of the content itself. By providing an easy-to-use and accessible digital platform, users' participation can be enhanced [5]. Guo Hongli (2006) obtained through empirical research that experience effect, experience dimension and experience design are three elements to make users feel positive and unique experience perception (such as pleasure, novelty and selflessness) and the ultimate goal of user experience management [6]

2.2 Research design and model hypothesis

Because there are few scales to measure the dimension of wechat applets, and most of the existing wechat applets are grafted through the original app application. The current application scope of applets is mainly shopping / Express / life / food and drink in the tool category, so this study will mainly focus on iPhone app store, and evaluate the top five users in Appstore through Qimai data network On data collection, and will get high-frequency vocabulary for statistics, so as to develop dimensions and measurement scales suitable for this study on wechat applet.

By using the word segmentation tool of rst-cm software, the high-frequency vocabulary statistics as shown in Table 1-1 is obtained. According to Liu Rong (2019) in the user experience evaluation research of wechat small program mall, the factors affecting user experience are divided into three indicators: product experience, service experience and reputation experience. [7]In this study, the words describing the product experience in the highest evaluation: affordable, cheap, fast, logistics, appointment examination and other words are divided into product quality, product conformity, product price; the words most helpful to describe the service experience in the evaluation: guarantee, convenience, one-way happiness, stability, hope and other words are divided into distribution information integrity, transaction

security, product introduction Integrity; the words describing the reputation experience in the lowest evaluation: liar, spam, compulsion, overtime and other words are divided into commodity brand, personalized service and after-sales service.

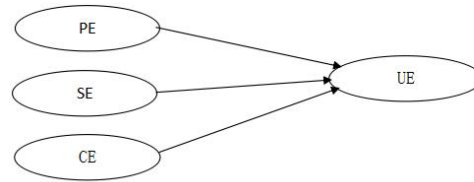


Fig. 1. Research model

III. Research results

According to the research purpose of this paper and the specific characteristics of the research object, the questionnaire survey will be used. For the Chinese network users, the survey time is from April 1, 2020 to May 30, 2020. First of all, we collected 100 questionnaires, hoping to find out the problems in the questionnaire through the information feedback of 100 customers, so as to improve the modification of the questionnaire, and then we implemented the formal questionnaire. A total of 445 questionnaires were sent out. After the questionnaires were recovered, excel checked the data first, including 21 invalid questionnaires, and finally 424 effective questionnaires were recovered, with the actual recovery rate of 95%. Finally, 424 valid questionnaires were used for analysis, and SPSS 22.0 was used for reliability analysis, validity analysis, correlation analysis and equation model analysis.

Table 1. Reliability Analysis

Variable types	Variable	number of entry	Cronbach's α
The independent variables	PE	3	0.88
The independent variables	SE	3	0.91
The independent variables	CE	3	0.91
The dependent variable	UE	3	0.90

Table 2. Validity analysis

	Component			
	1	2	3	4
CE3	.862	.142	.144	.150
CE2	.837	.271	.198	.213
CE1	.753	.213	.289	.301
SE2	.203	.833	.293	.290
SE3	.209	.790	.342	.291
SE1	.386	.711	.278	.311
PE2	.178	.332	.801	.287
PE1	.260	.295	.755	.307
PE3	.380	.325	.651	.344
UE1	.175	.349	.323	.769
UE2	.324	.309	.318	.744
UE3	.402	.307	.336	.681

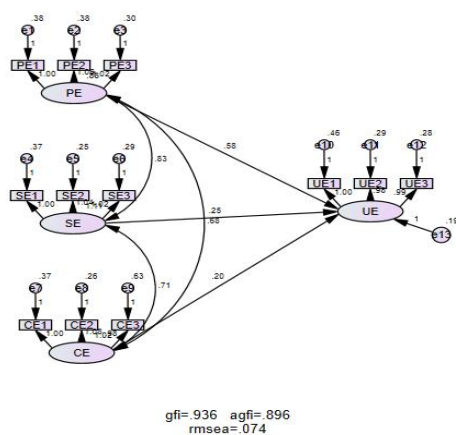


Fig. 2. Structural equation model

Table 3. hypothesis test

			Estimate	S.E.	C.R.	P
UE	←	PE	.578	.083	6.969	***
UE	←	SE	.250	.064	3.882	***
UE	←	CE	.202	.048	4.209	***

In terms of the verification of the basic adaptation index of the model, according to the test method of bogozzi (1988) and other scholars[8], as shown in Figure 2 and. GFI = 0.936, AGFI = 0.896, RMSEA = 0.074 < 0.08 and other results. According to the criteria of index determination, we can completely determine that the result can be judged by the criteria of model fitness.

The evaluation indexes of hypothesis test results are sorted out, as shown in Table 4. According to the hypothesis test results of the construction equation, we can get the following research results: H1: product experience has a significant positive impact on user experience; H2: service experience has a significant positive impact on user experience; H3: reputation experience has a significant positive impact on user experience.

IV. Conclusions

Through the research of this paper, it is found that in the future, when enterprises develop tools like wechat applets, they can enhance users' experience from three aspects: product experience, service experience and reputation experience, and attract users to use them. Compared with the traditional app, the development of wechat applet is simpler in system architecture and simpler in page code. For mobile phone users, WeChat applets touch on the PC web page, official account, H5, APP, which can not be touched. In general, it is born to help users solve some special needs. For example, when users have no time, want to control cell phone memory space, do not want to APP, and so on, the applet can play its value, which is in line with the next generation mobile Internet. The trend of "micro, small and light" industry

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