The Analysis of Total User Experience for B2C Mobile Shopping*

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Abstract - The B2C mobile shopping has become the highlight of the development of mobile e-commerce gradually, user experience is becoming increasingly important. Firstly, according to the "2012 of Chinese e-commerce market data monitoring report" published by the China Electronic Commerce Research Center, 10 typical B2C mobile shopping clients are selected as samples to analyze. Secondly, this paper analyzes the shopping process of samples, in order to establish the main components of total user experience for B2C mobile shopping. The study contributes to the understanding of the whole process of the mobile shopping experience for e-commerce companies in objective way. Finally, this paper also gives some suggestions to improve the quality of user experience for mobile shopping.

Index Terms - Mobile B2C, Mobile Shopping, Total User Experience, Empirical Analysis

I . Introduction

Mobile Shopping has emerged form intuitive. The B2C (Business to Customer) mobile shopping is to purchase products or services through mobile terminals with wireless communication network in the B2C businesses. According to China Electronic Commerce Research Center shows that in 2012 Chinese mobile shopping market transactions reached 55.04 billion, mobile shopping is e-commerce emerging growth highlights in the future [1]. More and more B2C e-commerce companies have launched mobile shopping client, the level of user experience reflects the quality of service is good or bad B2C e-commerce companies directly, the user experience is the key factor that affect the overall competitiveness of e-commerce businesses. A good user shopping experience is the goal of B2C e-commerce businesses and driving force of innovation.

The concept of "user experience" is to be widely known in the 1890s, it has been popularized by Donald Norman. According to the definition in ISO 9241-210, user experience is the user use the product, system or service perception impression and response [5]. User experience is operation process or use of a product or service, thinking, feeling, related to the products and services provided to the user's rational values and emotional experience [7]. Moeslinger thinks that includes practical experience, sensory experience and emotional experience as part of user experience. The total user experience is the whole processes that from user know the product, understand the product and give the feedback of product [8].

The total user experience for B2C mobile shopping is that the whole process of user to browsing goods, understanding goods and purchase with mobile shopping App. B2C mobile shopping user experience will impact on the user's purchase decision directly. Creating a good user experience for mobile shopping App will be provide a good shopping experience and increase the wishes of visiting to the mobile shopping App, so as to stimulate the user to make a purchasing decision. The B2C mobile shopping provide users with better service and experience help to enhance customer loyalty and increase of the customer groups, the user experience is more and more important in mobile e-commerce field. In this paper, we focus on the need for the total user experience for B2C mobile shopping.

II . The Total User Experience For B2C Mobile Shopping

A . Sample Selection

According to the "2012 of Chinese e-commerce market data monitoring report" published by China Electronic Commerce Research Center. We know that the typical B2C e-commerce enterprises, which spread over 89.8% of 2012 China's B2C online shopping market 10 B2C e-commerce companies as: Tmall, Jingdong, Suning, TencentB2C, 51buy, VANCL,AmazonChina,Coo8,Dangdang,51buy, Newegg [13-22]. These e-commerce companies have launched Mobile Shopping App in different operating system. These App will meet users' shopping needs that no limitations of time and space.

B . The Introduction Of B2C Mobile Shopping Client

The selected samples have different operating system versions. The introduction of B2C mobile shopping client as follows:

Table I The Typical B2C Mobile Shopping Apps' Introduction

App Name	Business Type	User Type	Supported Operating System
Jingdong	3C Products	General Users	Android, iOS,Symbain, Windows , Phone, Windows 8
Suning	3C Products	Purchasing Electronic Products Users	Android, iOS Windows Phone,Windows8
51buy	3C Products	Purchasing Electronic Products Users	Android, iOS
Newegg	3C Products	Purchasing Electronic Products Users	Android, iOS,Windows Phone,Windows 8
Coo8	3C Products	Purchasing Electronic Products Users	Android, iOS
Tmall	General Merchandise	General Users	Android, iOS Windows Phone
Tencent B2C	General Merchandise	General Users	Android, iOS
AmazonChina	Books, Audio and Video Products	General Users	Android, iOS
Dangdang	Books, Audio and Video Products	General Users	Android, iOS, Windows Phone
VANCL	Clothing	Purchase Fashion Accessories Users	Android, iOS, Symbain, Windows Phone7

C . The Analysis Of B2C Mobile Client Shopping Process

Consumer use the B2C mobile shopping App to complete a shopping transaction process. Kalakota&Whinston think that the shopping process related to post purchase evaluation, purchase, purchase behavior in three stages[10].we have been given the generalized mobile B2C shopping process as follows.
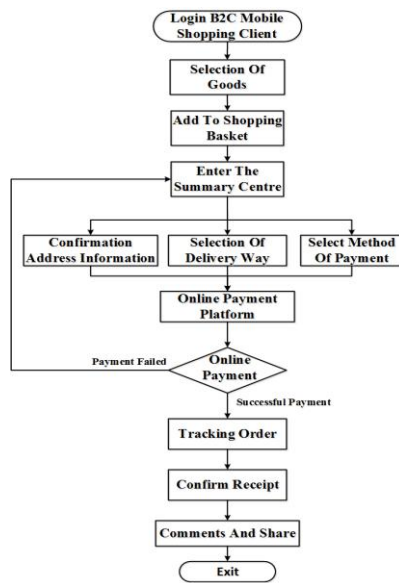

Fig. 1 The B2C Mobile Shopping Client Generalized Shopping Process

In the process of mobile shopping, there is a series of interactive behavior will occur between user and mobile shopping App. App's content and operation are the main factors, which impact to the users' shopping cognition. While mobile shopping is an emerging way to shop, but it is similar to the traditional shopping. Consumers have a cognitive process of goods that users select goods through different channels, such as search, category, promotional information, etc. Composition of final knowledge and attitude for goods, then they will make a shopping decision. If the consumer intends to buy the goods, they will add the goods to the shopping cart and confirm the address information, select payment method, online payment and other activities.

D . The Main Components Of Total User Experience For B2C Mobile Shopping

In this paper, we have established the main components of total user experience for B2C mobile shopping, which consists of Cognition-Decision, Checkout-Payment, Logistics-Distribution, Using-Feedback.

1) Cognition-Decision

Cognition-Decision is the first part of total user experience for B2C mobile shopping. Consumers have a cognitive process of goods that users select goods through different channels, such as search, category, promotional information, recommendation, etc. They will compare a lot of goods and contact the merchant, as well as view the goods details and comments. These activities will be formed the final cognitive for goods, which determine whether add the good into shopping cart. Of course, the following three parts will also affect the user's purchasing decision. This part should focus on the departure from the user's cognitive needs and consider what factors will affect the generation of user's purchasing decision.

2) Checkout-Payment

This part is the summary on the purchase of goods and payment.Consumers will be confirmed the receptor's information, delivery way and method of payment. Payment and payment processes will affect the shopping experience.

3) Logistics-Distribution

This part of the business to arrange the shipment, distribution, picking and goods sent to consumers in the logistics node in accordance with the requirements of the users' order. Logistics -Distribution is an important part in the B2C mobile shopping total user experience. In particular, speed of delivery, delivery time, packaging, logistics service attitude have a direct impact on the user experience.

4) Using-Feedback

Using-Feedback is the last part of B2C mobile shopping total user experience. Consumers will confirm receipt and use of goods and the process of evaluation and sharing. They will give feedback the feeling of the good, logistics and other aspects of information through comment, also to share with friends through social tools. Social comment and sharing will increase the cognition of goods.
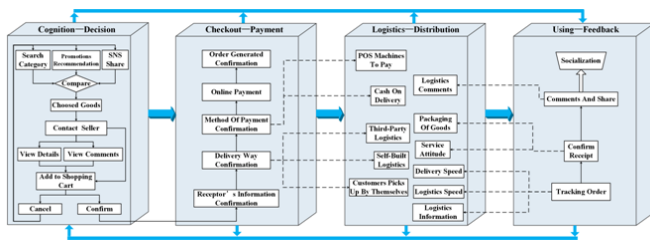
Fig. 2 The Main Components of Total User Experience for B2C Mobile Shopping

The user experience affects the users' purchasing decision directly. If consumers are displeasure at some part in B2C mobile shopping process, they also not satisfied with the services provided by the e-commerce businesses, these dissatisfied factors that may prevent the user reaches the next stage of shopping completely. These three parts of Cognition-Decision, Checkout-Payment and Logistics-Distribution may be reflected in the part of Using-Feedback. Behind the three parts of Checkout-Payment, Logistics-Distribution, Using-Feedback will affect the part of Cognition-Decision. In addition, improvement of any part will contribute to total user experience for B2C mobile shopping. Therefore, we study all parts of total user experience for B2C mobile shopping, in order to get the greatest satisfaction and a good shopping experience.

III . The Comments Of 3C Product Mobile Shopping App

Based on the result of the main components of total user experience, this paper comments the characteristics and inadequacies of the selected sample of 3C products' mobile shopping clients and gives some suggestions to improve the quality of user experience for mobile shopping.

Table II The Characteristics And Inadequacies Of 3C Product Mobile Shopping App And Suggestions

App name		Characteristics	Inadequacies	Suggestions
Jingdong	Cognition-Decision	• Personalized search service. • Personalizd promotionl. • A good visual effect.	• Does not support real - time communicati-on.	• Add the function of Comm -unication with consumers. • Add Locate based services and Order Status visualization
	Checkout-Payment	• The" Purchase Easily" feature simplifies shopping process.		
	Logistics-Distribution	• Personalizd logistis servics • Logistics inform-ation displayed by map		
	Using-Feedback	• Good user feedback. • Photo Comments		
Suning	Cognition-Decision	• Time shopping! • Group-buying ! • Recommend the goods		• Provide third-Party login services. • Simplification of order processing • Logistics visualization • Integration of online and offline • Order Status visualiz-ation
	Checkout-Payment	• "Suning 's Yi Fubao"	• Complex process to cancel the order	
	Logistics-Distribution	• Free delivery	• Does not support the logistics information by map	
	Using-Feedback	Photo Comments	• Provide user feedback function is invalid	
51buy	Cognition-Decision	• limited stock, Group-Buying, Daily specials, Pocket!		• Modify Product Details interface layout. • Add photo Comments • Order Status visualiz-ation
	Checkout-Payment	• More convenient for modify the items in the cart		
	Logistics-Distribution	• Personalizd distribution services: Three times a day to send		
	Using-Feedback		• Does not support photos Comments	
Newegg	Cognition-Decision	• Limited stock,Hot Products!	• Group–Buying is not supported. • Modify cart is inconvenient	• Provide more secure mobile payment platform • Add the Group-Buying • Photo Comments • Order Status visualization
	Checkout-Payment		• Only supports Alipay online payment.	
	Logistics-Distribution	• Personalize-d logistics services: constomers pick up by themselves,served 24 hours		
	Using-Feedback	• Users may view the new egg the microblog		

IV . Conclusion And Future Directions

The result of the main components of total user experience for B2C mobile shopping not only the understanding of the whole process of the mobile shopping experience for e-commerce companies in objective and comprehensive way, but also help to understand the attitude and willingness of users to make purchasing decisions' influencing factors. The aim of this paper is to provide methods improve user shopping experience. The total user experience for B2C Mobile shopping has a certain theoretical significance and practical value. If the B2C mobile shopping client to give the user a good experience, not only to the successful completion of the user's goal, and should make the user feel friendly, but also the service system should be maximized to meet users' needs.

With the development of mobile e-commerce, mobile shopping could become an indispensable element in our lives, it is the main shopping way in the future. The user understands the B2C mobile shopping client in-depth, there will be generate more users' shopping needs. Mobile Shopping App should focus on users' needs and provide richer user experience. If some new technologies such as Location-based services (LBS), augmented reality (AR), Near Field Communication (NFC) and other technologies combine with mobile shopping, which will give user a new mobile shopping experience.

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