

Design Guide for the Method to Express Product Information in Internet Shopping Sites

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Abstract: As Internet is becoming more generalized and convenient, product purchase process is moving from offline to online, and profits from online sales are rapidly increasing. Which specific information from vast amount of information provided by Internet shopping malls influences consumers' purchasing decision from their desire to purchase, whether information available online is the information consumers really need, and how the information is organized and delivered to consumers are still in question. This is because products cannot be physically touched or tested like in a store and necessary information for products purchase cannot be obtained immediately. Purchases are solely dependent on information from images and texts provided and this signifies the product information presenting method of online shopping malls. As for apparels and home electronics products, where the sales have been rapidly increasing compared to early 2000, various conditions such as texture, color, size, internal structure and movement mechanism of a product are making consumers even more confused about their choices. However, even with these problems, many online shopping malls are providing product information with a standardized layout and form. Therefore, to provide an immediate and specific product information for Internet shopping mall sites and to propose a guideline for online shopping mall product information presenting method, this research primarily analyzes the product information presenting method of domestic and overseas Internet shopping malls accordance to the successful product purchase process; and studies the factors that affect the Internet shopping and the information consumers seek through documented cases.

Key words: *Information Design, Information Architecture, User Interface Design, Texture Expression, Web Grid and Layout*

1. Introduction

The study proposes a guideline for online shopping mall product information presenting method for an immediate and specific product information provision through case studies; what kind of information generates consumer's interests and leads them to purchase a product; whether information provided online is what consumers really want; how information is organized and delivered to consumers.

2. Method

2.1 Subject

The scope of the problem; product information presenting method of product information pages are analyzed based on the products of general shopping malls with large sales volume, and based on the information provided, search an alternative plan and a solution.

2.2 Materials

Lower prices than store based business, convenience of information collection, and saving of shopping time are few reasons why shopping experience through the Internet is increasing. However, even with these advantages, Internet shopping malls have a lot of limitations and problems depending on the characteristics of products they carry. Evaluation of the aesthetical and technical side of the products based on direct experiences such as apparels and cosmetics, especially, are difficult and these products are not being sold in Internet shopping malls as much.¹ By analyzing the factors that affect consumer's desire to purchase in Internet shopping malls, product related information including product quality, product price, number of product images, product update, and product brand is the major factor, and larger numbers of product images affect the product purchases as well.

2.2 Procedure

The product detail page, along with the main page, is the most important pages of a shopping mall; and since consumers decide whether or not to purchase the product with the details provided in this page, it must provide product information and advantages to consumers accurately. Information architecture is a process that progresses both the definition of the concept of an e-commerce project and grouping, structuring, design phase of the interface planning product information as one.²

3. Results and Discussions

¹ Jung-hwan Seong, Hee-won Seong, Study of Effect of Internet Apparel Shopping Mall Using Virtual Reality on Consumer Purchase Decision Process, Design Study, Issue 58, Vol. 17, No. 4, p291

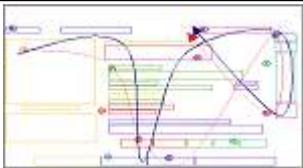
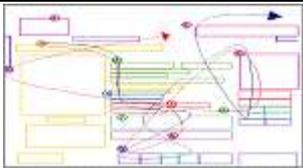
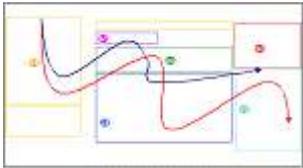
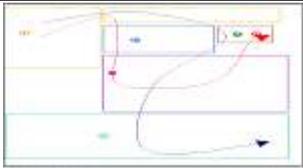
² System performance and reliability, easiness and convenience of information collection, appropriateness of product information, easiness of product order, convenience and reliability of payment method, customer information protection, convenience of order return and exchange, diversity of services, credit rating on cyber mall management as criteria

A page arranging process of information items based on logic for easier understanding and simpler presentation so users can collect information easily and conveniently. Product information layout must be arranged to appropriately utilize standardized size, shape, location, and color of factor elements so that individual information can be easily revealed. Thus, in order to create a visually stratified structure using these elements, their visual priority must be adjusted after considering amount of content, navigation process, grouping of individual information, and logical relationship of intra-group information.

Table 1. Product Information

Item	Information	Color
①	Basic information	 #F9C805
②	Price information	 #499700
③	Order information	 #E40202
④	Shipping information	 #045FB5
⑤	Customer service	 #D504A1
⑥	Event information	 #5A0CC4
⑦	My page	 #0DB080

Table 2. Product Information Layout and Flow of Different Sites

Site	Screen Layout
GS eshop	
CJmall	
Amazon.com	
Sears	

The color and number on the table 1 can be referred for product information on each product. The table 2 is the layout of overseas and domestic Internet shopping malls based on the product information classification and the red arrow represent the flow of product information observation of a user. The blue arrow represents the order of screen observation regardless of information, which is the eye flow of a user from top left to the bottom right. Considering the shipping detail information before the purchase of a product, information flow from ①~⑦ was used as a basis, the flow from ④ to ⑤ was also considered depending on the information arrangement of ③ order information and ④ shipping information. This means that when information is scattered everywhere on the screen grid, one information group interferes with another information group, meaning other information interferes while customers observe necessary information, making customers to memorize the entire information while shopping. This degrades the customer concentration, and can definitely create confusion with excess information. Therefore it is necessary to group information based on the purchase process so it can be observed in succession, and to bundle similar information together to reduce interferences for customer.

4. Conclusions

First, a website must be designed with proper information classification and arrangement to prevent confusions and foster accurate purchase activities through a standardized layout.

Second, users make purchase decisions from the product information presented in the product detail page. Therefore, the product information presenting method must be designed with appropriate font size, color, product name, product function, and utilize graphics conveying accurate point delivery on product images so users can observe them clearly.

Third, the purpose of visiting an Internet shopping mall is to purchase a product with cheaper price and to receive them at a convenient location. Therefore, the website must be designed after considering what kind of information is necessary for consumers.

Fourth, in terms of information express, basic product information consists of text, color, image, and graphic elements. A shopping mall website should be designed to consider the characteristics and the effects of such elements. A series of purchase and order process is accomplished from a communication of an accurate product information provision. Detailed design of an accurate production information provision, user interface design, and information architecture should be done in order to ensure an accurate delivery of the ordered product to increase sales and amplify consumer confidence.

Lastly, this research primarily re-established product information on the product detail pages through labeling activity, and analyzed the product information presenting method fitted with the series of purchase process and the information flow. It does have a weakness of not having a mathematical model for analyzing and labeling the properties of the product information, future research will try to study the product information presenting method that will help an accurate and clearer information observation.

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