

Analysis of components of the Main Page in the SOHO Internet Apparel Shopping Malls⁺

– Comparative Analysis of Women's and Men's Malls –

Jang Eunyoung

Associate Professor, Dept. of Fashion Design, Dong Seoul College

Abstract

The purpose of this study is to do a detailed analysis of the layouts and components of the main pages of the SOHO malls, which serve as its display window, and in turn, find a successful strategy for SOHO malls in the over saturated Internet shopping mall market. To analyze the components and layout of the main page of the SOHO Internet apparel shopping malls, top 50 Internet apparel shopping malls for woman and top 50 Internet apparel shopping malls for man, ranked within Internet shopping mall¹⁰⁾ were selected. Data were collected from the coding sheets surveyed on the Internet apparel shopping malls for one month (September 2012). The result showed different patterns in various aspects between women's and men's malls. 1) The men's malls used product pictures more frequently in their main pages than the women's malls 2) The sections for jewelry and beauties were usually included in men's apparel shopping malls. 3) Men's malls usually had a rather crowded layout with numerous banners in order to expose their promotional items to the fullest. 4) men's malls provided a more detailed promotional and product information regarding the display items on its main pages. 5) Women's malls had a wider range of price distribution and generally higher prices.

Key Words : SOHO Internet Apparel Shopping Malls, components of the main page, layout design

I. Introduction

In 2012, the Internet shopping market accounted for over 30 trillion won in the domestic distribution market, and of that amount, the total

sales in the clothing/fashion industry was responsible for over 5 trillion won. The fact that various Internet shopping mall brands have successfully transitioned¹⁾ into brick and mortar brands show that Internet SOHO malls have

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become the first step in getting entry into the fashion industry. If the success of general Internet shopping malls comes from selling clothes to consumers who look for practicality and affordable prices, SOHO malls have been able to continually grow by providing sensible and unique products to customers, which fulfill their need for aesthetics. The traffic in the Internet shopping malls is brief and ever flowing, as the duration of stay for 80% of its visitors last 10~30 seconds.²⁾ One of the most important features of the Internet shopping malls is the design and layout of its main interface page, as it has a huge influence on inducing purchases as well as return visits. Therefore, the way to induce consumers to stay in web sites and click on the links as much as possible depends on how the malls compose their main pages. Also, since the main purpose of the shopping malls is sales, its main page is at the core of its business planning.

The study will take a look at the main pages of the most popular SOHO fashion malls at the present time in order to analyze the distinctions and characteristics of them as well as extract the factors that induce interest from the customers. In addition to this, a comparative analysis of women's malls and men's malls will be done to find the differences between the two types of malls, and through it, the study hopes to provide a base line data for designing interfaces for start-up SOHO malls. The followings are the specific research problems to achieve the purpose of this research. 1)Analyze the main sections(Domains & logos, Main image cuts) of SOHO Shopping Malls. 2)Analyze the shopping sections(Composition of menu, Types of apparel categories) of SOHO Shopping Malls. 3)Analyze the product section(promotion types of displayed product, price ranges) of SOHO

Shopping Malls. 4)Analyze women's malls and men's malls comparatively in components of main pages of SOHO Shopping Malls.

II. Literature Review

1. Design Components of an Internet Shopping Mall

The most important factors for Internet shopping malls are placement of its products, the composition, and the layout, and depending on these factors, user's desire for convenience can be enhanced. In other words, a successful layout is a webpage that is designed in a way that allows the consumer to absorb and understand the information easily and quickly. The purpose of the interface design in web sites is "to enhance the functionality while it satisfies the aesthetics" at the same time.³⁾ So it has to satisfy both the users desire for convenience and aesthetics. Previous studies on related matters show that Kim Mijin⁴⁾ proposed design components necessary for a web page to be efficient and convenient by performing comparative analysis of interface designs of general Internet shopping malls. She used three factors for the analysis: contents, design, and navigation (layout, image, fonts, and product pages). Jung Myungjin⁵⁾ studied various women's clothing Internet malls, and analyzed factors such as layouts, images, fonts, placement of notices, and product picture sizes. From the results, he was able to locate the problems and propose a more efficient user interface(UI). He stated that having too many pictures of products on the main page could lead to problems with traffic, so it was important to just have moderate amounts of pictures. In contrast to the aforementioned studies, the study done by

Lohse and Spiller⁶⁾ stated that providing a well designed frequently asked questions(FAQ) section and large quantities of products are the most important factors in sales rather than the interface designs.

2. Product Assortment of an Internet Shopping Mall

For Internet shopping malls, having a wide assortment of products plays an important role in meeting the customer desire as well as enhancing their satisfaction.⁷⁾ Consumers want to be able to buy the same products that they can buy in a traditional brick and mortar shop, and by going through diverse channels be able to have the same selection of products, quality, brands, and shopping experience from the Internet stores. Also, a research result has shown that the following are the primary reasons for consumers shopping online: affordable prices (50.4%), convenient transaction (17.3%), abundant product information (11.6%), and wide assortment of products (11.3%).⁸⁾ So, the results show that pricing, information, and selections are the biggest factors. Also, many Internet shopping malls have competitively low prices as well as attractive sales promotions. Spiller and Lohse⁹⁾ reported that Internet shopping malls are providing sales, advertisements, and promotional items in order to attract customers to their sites.

In order for promotional products to get the most exposure, the products need to be placed in spots that create the fastest visual line to the product. In other words, sections need to be separated into colors, and the main section and the shopping section need to be separated as well. Then the menu section and the product display section need to be distinguished, as well as the primary menus and the secondary menus.¹⁰⁾

Internet Shopping mall is divided into 3 categories: a general shopping mall, special shopping mall, and SOHO shopping mall. SOHO shopping mall is a shopping mall that has low new-technical skill or speciality but secures competitiveness by selling unique item or marketing products.¹¹⁾ And SOHO has 3 ways of launching. The first one is to launch a mall in retail power center or special shopping center, and the second one is to launch a mall using online portal sites that is specialized for SOHO shopping malls.¹²⁾ The last mean to launch a SOHO mall is running an independent store, and this research is focused on it. This kind of shopping malls can be managed successfully only when they have high web-production ability like sophisticated design, differentiated shopping service, etc.

III. Research Methods

1. Data Collection

To analyze the components and layout of the main page of the SOHO Internet apparel shopping malls, top 50 Internet apparel shopping malls for woman and top 50 Internet apparel shopping malls for man, ranked within Internet shopping mall¹³⁾ were selected. Data were collected from the coding sheets surveyed on the Internet apparel shopping malls. Data collection was conducted for one month (2012.9.)

2. Instrument

The coding sheets previously developed to code information from previous studies¹⁴⁾¹⁵⁾¹⁶⁾¹⁷⁾¹⁸⁾¹⁹⁾ were expanded in this study. The contents of the coding sheets were composed of the

components and layout of the main screen (overall layout of the main image, domain logo, menu types, banner type, product display, photo type of the product, price ranges and product description). This study used nominal and two-point scales: unavailable (0) and available (1), this study recorded the actual number of items and products.

3. Data analysis

The statistical package for the social sciences (SPSS 14.0 for Windows) was used to analyze the data. Frequencies were used to investigate components and layout of the main page of

Internet shopping malls. and Chisquare and t-test were used to examine statistically significant differences in the components between women's malls and man's malls.

IV. Results and Discussion

1. Analysis of main section

1) Domain logo & Foreign language version

As to the domain logo, English accounted for more than 80% in both women/men's shopping malls. It is a statistically significant difference that 58% of women's malls situated the logo on

<Table 1> Domain logo & Foreign language version

Factors		women's malls	men's malls	total
logo types	English	43(86.0)	40(80.0)	83(83.0)
	Korean	6(12.0)	10(20.0)	16(16.0)
	mixed type	1(2.0)	0(0.0)	1(1.0)
	total	50(100.0)	50(100.0)	100(100.0)
	$\chi^2 = 2.108$ df = 2			
logo position	left	29(58.0)	17(34.0)	46(46.0)
	centre	18(36.0)	33(66.0)	51(51.0)
	right	3(6.0)	0(0.0)	3(3.0)
	total	50(100.0)	50(100.0)	100(100.0)
	$\chi^2 = 10.542^{**}$ df = 2			
language version	one language	31(62.0)	45(90.0)	76(76.0)
	two language	2(4.0)	0(0.0)	2(2.0)
	four language	17(34.0)	5(10.0)	22(22.0)
	total	50(100.0)	50(100.0)	100(100.0)
	$\chi^2 = 14.005^{**}$ df = 2			
menu type	horizontal type	15(30.0)	35(70.0)	50(50.0)
	vertical type	28(56.0)	9(18.0)	37(37.0)
	mixed type	7(14.0)	6(12.0)	9(9.0)
	total	50(100.0)	50(100.0)	100(100.0)
	$\chi^2 = 21.868^{***}$ df = 2			

P<.01, *P<.001

the left side, while 66% of men's malls disposed the logo in the middle. And about the foreign language version of the sites, <Table 1> shows that 34% of women's malls translate their site in 4 different languages. However, when it comes to men's malls, only 10% of them have their sites in 4 different languages, which mean women's malls became more international than men's.

2) Types of Main Image Cuts

Photographic images accounted for 87.0% and video clips made up 11% in overall sites. <Table 2> shows that, in terms of photographic images and image-photo cuts constituted 41% which was the highest, and the model solo cuts (20.0%)

and model/product combined cuts (20.0%) hold the second rank. Also, the product series cuts (8.0%), illustration cuts (4.0%), price cuts (1.0%) and promotion cuts(1.0%) are used occasionally. The average number of the cuts is 3.14 in men's malls and 2.64 in women's malls, which means that men's malls are more trying to show various image multiply than women's counterparts. The background color of the sites is white in all women's malls, while two of men's malls used black one and one of them used blue one.

2. Analysis of Shopping Section in SOHO Apparel Shopping Mall

1) Types of menu bar

<Table 2> Types of Main Image Cuts

image photo type		women's malls	men's malls	total
image file type	Photographic images	45(90.0)	42(84.0)	87(87.0)
	video clips	5(4.0)	6(0.0)	11(11.0)
	photo+video	1(2.0)	1(2.0)	2(2.0)
	total	50(100.0)	50(100.0)	100(100.0)
	$\chi^2 = 5.321$ df = 2			
image photo type	model solo cut	10(20.0)	10(20.0)	20(20.0)
	image-photo cut	21(42.0)	20(40.0)	41(41.0)
	illustration cut	2(4.0)	2(4.0)	4(4.0)
	model/product combined cut	14(28.0)	6(12.0)	20(20.0)
	product series cut	2(4.0)	6(12.0)	8(8.0)
	product price cut	0(0.0)	1(2.0)	1(1.0)
	promotion cut	0(0.0)	1(2.0)	1(1.0)
	etc.	1(2.0)	4(8.0)	5(5.0)
	total	50	50	100
	$\chi^2 = 10.224^{**}$ df = 7			
the number of image cuts		M=2.64	M=3.14	M=2.89

**P<.01

It is a significant difference that women's malls are using a vertical type of menu bar while men's malls are using a horizontal type (see Table 1). The horizontal menu bars are generally located on the top of the main page. However, in case of vertical menu bar, it is usually located on the left side in women's sites, while it is located on the right side or upper/down side of the image cuts with sub menus in men's malls.

2) Types of Apparel Categories

It was found that there was no significant difference between women's malls (6.08) and men's malls (6.18) in number of clothes item.

And it was founded that the most malls use 5 to 7 categories generally. Category of 'Shoes and Accessories' is generally included (97%) in both women's and men's sites menu bar (see Table 3). Category of 'Bag' is more frequently shown in the men's sites (95%) than women's counterparts (86%). Category of 'Jewelry' is included in all men's malls but in women's malls only 37% of them have the 'Jewelry' category. Moreover, 80% of men's malls has category of 'Beauty' while only 3 women's mall have it. Interestingly, compared to women's malls, men's malls have more diverse categories and products in terms of Jewelry and beauty.

<Table 3> Types of Apparel Categories

Factors		N	Mean	SD	t-value
clothes item	women's malls	50	6.08	1.988	-0.312
	men's malls	50	6.18	1.082	
	total	100	6.13	1.593	
shoes item*	women's malls	50	0.94	0.240	-1.769
	men's malls	50	1.00	0.000	
	total	100	0.97	0.171	
bags item*	women's malls	50	0.86	0.351	-2.245*
	men's malls	50	0.98	0.141	
	total	100	0.92	0.273	
accessory item*	women's malls	50	0.96	0.198	-1.429
	men's malls	50	1.00	0.000	
	total	100	0.98	0.141	
jewelry item*	women's malls	50	0.36	0.485	-9.333***
	men's malls	50	1.00	0.000	
	total	100	0.68	0.469	
beauty item*	women's malls	50	0.00	0.000	-14.000***
	men's malls	50	0.80	0.404	
	total	100	0.40	0.492	

*P<.05, ***P<.001

* two point-scale : unavailable (0), available(1) (M=0.94 means 94%)

3) Types of Promotion Banner

Over half of whole shopping malls have no promotion banners. In case of malls that has promotion banners, 'sale goods' banner are mostly shown in women's mall while 'best goods', 'MD recommendation goods' and 'sale goods' banners are shown evenly in men's malls. According to <Table 4>, there is a significant difference ($p < 0.05$) between men's malls (0.96) and women's malls (0.36) in the average number of promotion banners. The average number of advertising banner in men's malls is higher than women's counterpart but there is no statistically significant difference (see Table 5).

3. Analysis of Product Section in SOHO Apparel Shopping Mall

1) Displayed Product

Overall shopping malls display 'clothing', 'bags', 'shoes' and 'accessories' product on the main screen. In terms of facing plan, women's malls display products mostly in 4 rows while men's malls display them in 4 or 5 rows, which means that men's malls are more likely to display lots of products at one time. According to <Table 6>, the average total number of displayed products on the main screen is 135.22(32~304) in women's malls and 125.86

<Table 4> Promotion Banner types of Shopping Section

Types of Promotion Banner	women's malls	men's malls	total
none	24(48.0%)	29(58.0%)	53(53.0%)
best goods	3(6.0%)	8(16.0%)	11(11.0%)
new goods	1(2.0%)	2(4.0%)	3(3.0%)
MD recommendation goods	0(0.0%)	8(16.0%)	8(8.0%)
sale goods	22(44.0%)	5(10.0%)	27(27.0%)
etc.	1(2.0%)	0(0.0%)	1(1.0%)
total	50(100.0%)	50(100.0%)	100(100.0%)
χ^2 -value	$\chi^2 = 33.240^{***}$ df = 5		

*** $P < .001$

<Table 5> Promotion Banner types of Shopping Section

Factors		N	Mean	SD	t-value
the number of promotion banners	women's malls	50	0.36	0.802	-2.813**
	men's malls	50	0.96	1.277	
	total	100	0.66	1.103	
the number of advertising banner	women's malls	50	1.40	0.700	-0.619
	men's malls	50	1.62	2.415	
	total	100	1.51	1.772	

** $P < .01$

<Table 6> Product Section Analysis of main page

Factors		N	Mean	SD	t-value
the number of product displayed	women's malls	50	4.04	0.283	-5.867***
	men's malls	50	4.52	0.505	
	total	100	4.28	0.473	
total number of displayed products	women's malls	50	135.22	53.158	1.184
	men's malls	50	125.86	17.253	
	total	100	130.54	39.599	
lowest price	women's malls	50	7,016.00	3,781.66	3.787***
	men's malls	50	4,498.00	2,793.03	
	total	100	5,757.00	3,541.25	
highest price	women's malls	50	130,026.00	105,395.27	3.503***
	men's malls	50	75,696.00	30,325.09	
	total	100	102,861.00	81,844.56	

***P<.001

(84~244) in men's malls which means the outcomes makes no odds. From these results, it is found that SOHO shopping malls are trying to display as many products as possible on the main page to provide the convenience of the customers. In this way, customers do not have to click the mouse frequently but can see various products at once.

2) Price ranges & Declaration of Displayed Product

In terms of price ranges, the lowest price ranged from 1,500 won to 19,900won (M=7,016 won) in women's malls and 1,600 won to 12000 won (M=4,498 won) in men's malls. In contrast, the highest price ranged from 49,000 won to 677,000 won (M=130,026 won) in women's malls and 12,900 won to 189,000 won in men's malls, which means that women's malls have wider price range and higher price than men's malls.

Besides, indication of sale price declaration is existent only in 52% of overall malls (see Table 6)

3) Photo Types of Displayed Product

'Model's front side picture' accounted for 69.0% among the photo types of displayed product which is the highest, and 'body cut' and 'hanger cut' (31.0%) are the next. And Some malls show products in lots of color or models in varied side by pictures. Besides, the number of cuts per product is 1 in 75% of men's malls and 2 or 3 in more than half of women's malls. It is found that there is no significant difference between women's malls and men's malls (Table omitted).

4) Promotion Manner of Displayed Product

In terms of promotion manner, 'Order flood' accounted for 62.5% which is the highest, and

'special price'(43.2%), 'Hot'(13.5%), 'Self-production'(10.9%), 'the day-delivery'(9.5%), 'BEST'(9.5) in sequence. These signs are generally shown together by 2 and about 20% of malls showed them more than 3. In case of product usage explanation, 65% of malls just offer picture without any explanation and 35% of malls have explanation. Moreover there were some malls that have 3-4 line description. The indication of colors of displayed products is not existent in 62% of women's malls while it is existent in 68% of men's malls. Moreover, the indication of sizes of displayed products is not existent in 98% of women's malls while it is existent on the bottom of product photos in 50% of men's malls (Table omitted).

V. Conclusion

After performing component analysis for the main pages of the SOHO Internet apparel shopping malls, the following results were attained.

First, though the main pages of each shopping malls have diverse types of pictures, which are dependent on the concept of the malls, the men's malls use product pictures more frequently in their main pages than the women's malls, which commonly use other images or pictures that reflect the theme of the mall. This result shows that male consumers are more interested in seeing the actual products that are available rather than concept or image shots.

Second, in regards to the menu composition, the sections for jewelry and beauties are usually included in men's apparel shopping malls. This is a sign that men usually buy their jewelry and other beauties with their clothes.

Third, SOHO clothing malls do not place banner advertisements on their interface page, however they do place banners for the promotions that are currently going on. men's malls usually have a rather crowded layout with numerous banners in order to expose their promotional items to the fullest.

Fourth, the display method of the items on the main page shows that the men's malls have abundant amounts of product pictures on display. While the women's malls try to attract customers by displaying its items with pictures of the front and backside or several pictures with diverse poses, the men's malls provide easy access to information regarding the available colors and sizes as well as remaining stock for specific types. Also, men's malls provided a more detailed promotional and product information regarding the display items on its main pages.

Fifth, in regards to the price distribution of the display items on the main pages of the malls, women's malls have a wider range of price distribution and generally higher prices. This showed that most of the SOHO shopping malls used the multiple price level strategy, and so they showed products with a wide range of prices on their main page. Also, both men's and women's malls displayed a lot of product pictures on their main pages, which indicated a strategy of attempting to expose as many products as possible at once.

The results of the study were attained by analyzing the main pages of the top 50 Internet shopping malls for both men and women. The factors used in the analysis were limited to visual components of the pages, and in turn, it is an overreach to propose an effective strategy using just the results of the study. So, it is important to look at the results without over

interpreting or justifying it without further studies. I hope that later researches regarding SOHO malls will combine factors such as design layouts, web page components, and preference, in order to come up with proposals for a more efficient and functional UI design.

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