Examining User Expectations for the Location of Common E-Commerce Web Objects

By Michael Bernard

According to Keenan Vision Inc. (2001), business-to-customer online purchase revenue is expected to top 180 billion US dollars for the year 2002. By the year 2004, it is expected to grow to 300 billion US dollars. Clearly the importance of online commerce is undeniable, and companies both large and small are constantly seeking ways to entice new online customers. Yet, large barriers still remain between the customer and the virtual store.

One of the barriers to online shopping occurs when customers have difficulty finding their way around the online storefront. In fact, a PriceWaterhouse Coopers (2001) survey found that 40% of the respondents indicated that being unfamiliar with the storefront was a barrier to their online shopping. Moreover, Zona Research (2000) reported that 33% of the people surveyed indicated having difficulty locating products, and 62% indicated giving up looking for merchandise items because they could not find them. Thus, an important advantage for online companies would be to place key web objects, such as the online shopping cart and help button, where they would be expected to be located by a majority of the users. This study sought to investigate user expectations on the location of common e-commerce web objects on a typical website.

Web objects studied

An effort was made to assess web objects that are common to most e-commerce websites. The objects examined were: 1) shopping cart button 2) login/register button, 3) help/service button, 4) account/order status button, 5) internal search engine, 6) "back to homepage" link and 7) grouping of links that go to individual merchandise items.

Participants

A total of 302 participants (43% male, 57% female) were examined. Their average age was 20 (range of 18 to 56), with almost two years of college. They reported using the web primarily for entertainment, followed closely by educational and communication purposes. In addition, 93% of participants reported using the web for a year or more and 88% report using the web a few times per week or more. All participants had bought at least one merchandise item from an e-commerce website (44% of those initially surveyed had not purchased any online merchandise and therefore were excluded from the experiment). Of the participants studied, 28% reported buying 1 merchandise item online, 52% reported buying 2 to 5 items, and 19% reported buying more than 15 items within the last year. These three groups had very similar expectations for the location of the web objects and, therefore, were examined together.

To examine if any e-commerce site had a substantial influence on the expected location of the web objects, participants were asked to state their most visited e-commerce site. Participants' reported to

have visited Ebay more than any other e-commerce website (16% of the participants reported Ebay as the site most visited). The second most visited site was Amazon (9% of the participants reported Amazon as the site most visited). Thus, it is unlikely that one particular site influenced to any great extent, the results of the study.

Procedure

Using a depiction of a browser window that contained eight horizontal and seven vertical grid squares on a white background, participants were asked to place cards representing each of the e-commerce objects where they expected them to be located on a typical e-commerce web page. The cards could be placed horizontally, vertically, or overlap, and could be centered between the grid lines. The cards were also of different sizes, depending upon which web object they represented. This was to approximate their actual size on a web page. The cards representing an internal search engine and the grouping of links going to individual merchandise items occupied two squares on the grid. The rest of the objects occupied one square.

Results

To quantify the expected location of the e-commerce web objects, the cards were simply counted for the number of times participants selected each square for each web object. The number in which each grid was selected for each web object was categorized (see Table 1). Each shade of blue represents a specific range of times a square was selected as an expected location for a particular web object. The darker the shade, the more times a square was selected by participants.


| ≤ 5 | 6-15 | 16-25 | 26-35 | 36-45 | 46-55 | 56-65 | 66-75 | 76 ≥ |
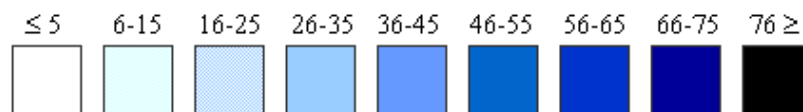
Table 1. The darker the shade of blue, the greater number of times a particular square was selected.

Shopping Cart

As seen in Figure 1, most participants expected the shopping cart to be located at the top-right corner of the screen. Even though the expected location for this particular object is not as strong as some of the other objects, this location is generally becoming the convention for e-commerce sites. For example many online retailers, such as Bestbuy.com, Dell.com, and Target.com and others place their shopping cart at this location.
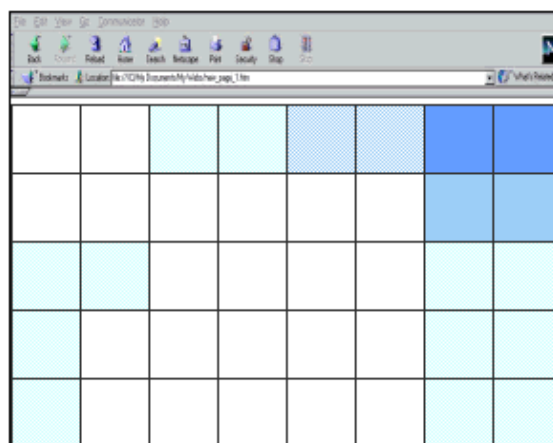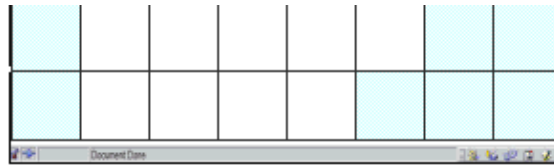
**Figure 1. Shopping Cart**

Login/Register

As seen in Figure 2, most participants expected the login/register link to be located at the top-left side of the screen. This is consistent with many large sites that have a login/register function (for example, AmericanAirlines.com, DeltaAirlines.com, and globalsources.com place their login/register link at this location). The login/register link is usually placed here because this is an area where it is believed visitors initially glance when they view a website. Some studies have found this to be true (Poynter, 2000), while other have not (ZDNet, 2000).
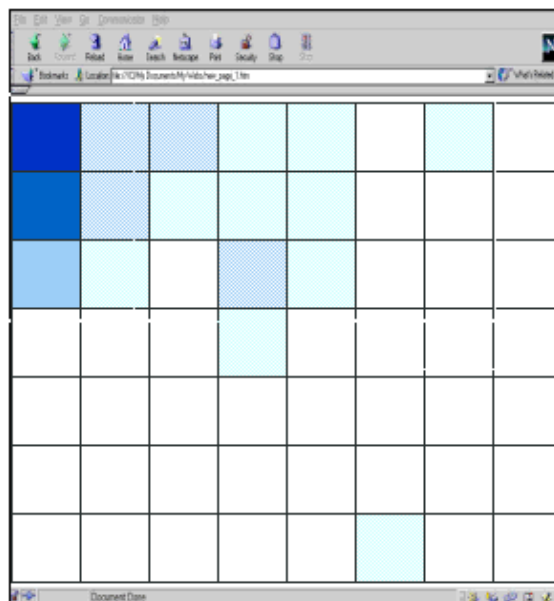

Figure 2. Login/Register

Help/Service

Figure 3 shows that most participants expected the help/service link to be located at the top-right corner of the screen, which is a fairly common location within e-commerce websites (for example, Amazon.com and BlueLight.com place it there). Placing the help link at the extreme top-right is also the convention for locating the help menu on the menu bar. Clearly, this convention has translated well for the expected location of help links on e-commerce sites. Since, the expectation of placing the help link/menu at this location is very strong, it is suggested that it should be placed in this location.
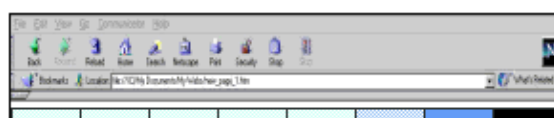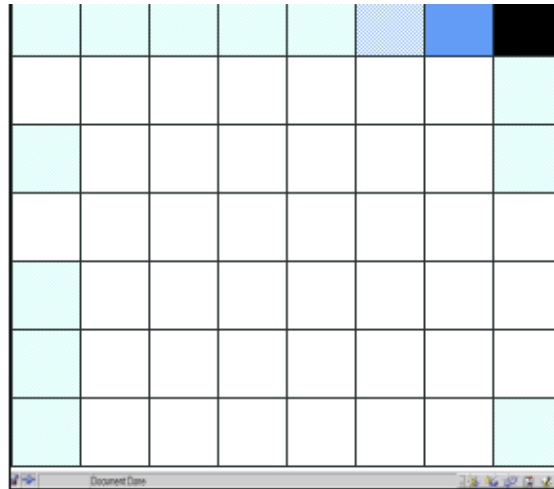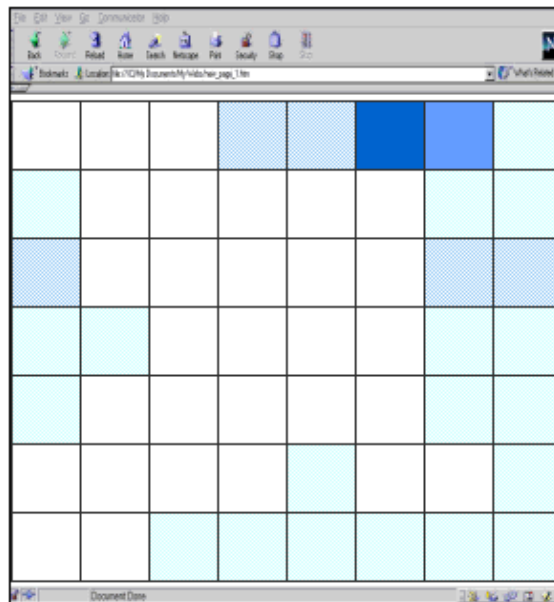
Figure 3. Help/Service

Account/Order

As shown in Figure 4, most participants expected the account/order link to be located along the top-right side of the screen. This is also a conventional area to place this type of link (for example, Amazon.com, EddieBauer.com, and Bestbuy.com).


Figure 4. Account/Order

Internal Search Engine

As seen in Figure 5, most of the participants expected the internal search engine to be located at the top-center to top-left of the screen. This is consistent with the previous web objects study (Bernard, 2001) that examined the expected location for internal search engines for websites in general. The expectation for the search engine to be located at top-center probably occurs because most search engine sites (like yahoo.com and google.com) place their search field at the top-center portion of their

web page. Even though many websites have their internal searches located in other areas, apparently for most of the participants the expectation created by search engine sites was great enough to influence their expectations related to internal search engines for e-commerce sites.
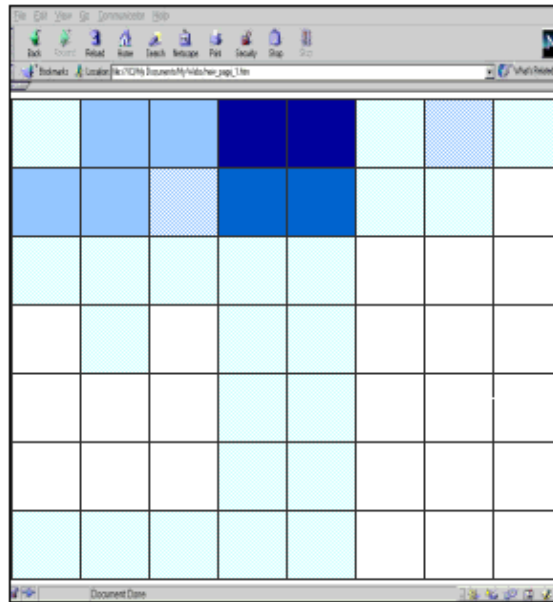

Figure 5. Search Engine

Back to Home Page Link

As seen in Figure 6, most participants expected the " back to home page" link to be located at the top-left and bottom-center of the screen. This was generally anticipated since both areas are conventional regions to place such a link, as well as being the recommended locations by several style guides. It is also consistent with results found by the previous web object study that examined the Web in general (Bernard, 2001). Thus, it is suggested to place links directing users back to the home page in both areas.

**Figure 6. Home Page Link**
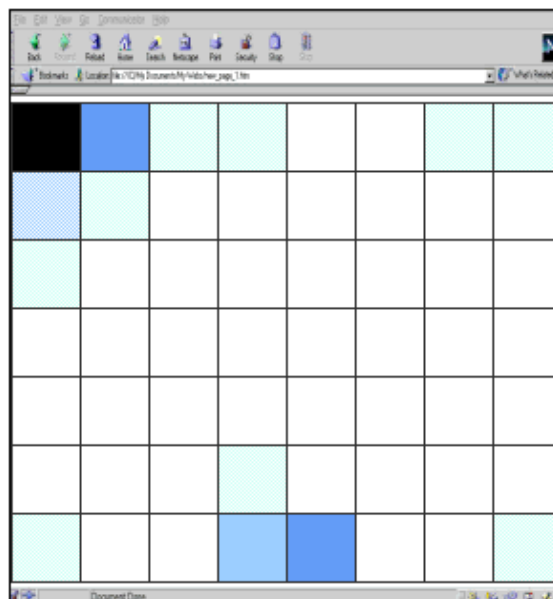
Links to Merchandise Items

As seen in Figure 7, most of the participants expected the links to merchandise items to be located at the center-left of the screen, which is similar to the screen layout of many online retailers, such as EddieBauer.com and Landsend.com.
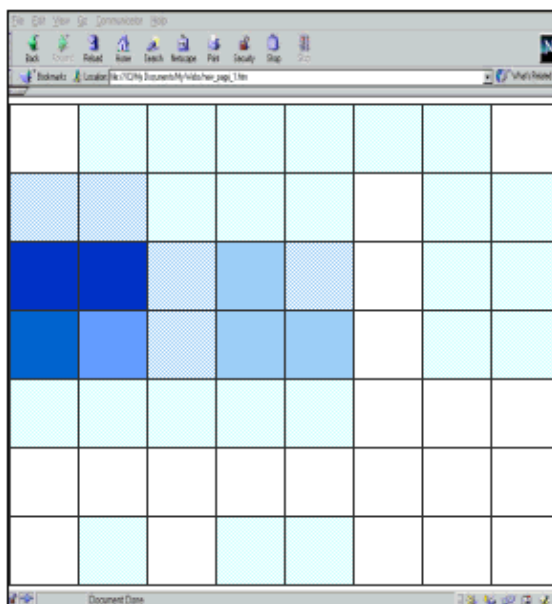

Figure 7. Links to Merchandise Items

CONCLUSION

The combined expectations for the location of common e-commerce web objects are presented in Figure 8. For most of these objects, there was a general consensus among participants on location. It is certainly probable, then, that placing these objects in expected locations would give an e-commerce site a competitive edge over those that do not place them in their expected locations. It must be cautioned, however, that well established sites may already have their own conventions for the location of web objects and thus visitors may expect to find the objects at those locations. Also, since this study was conducted in only one country the results may or may not apply globally. Future studies will address this issue.
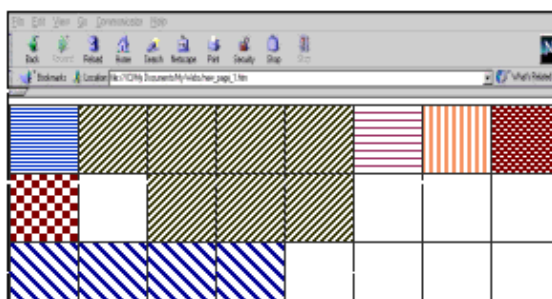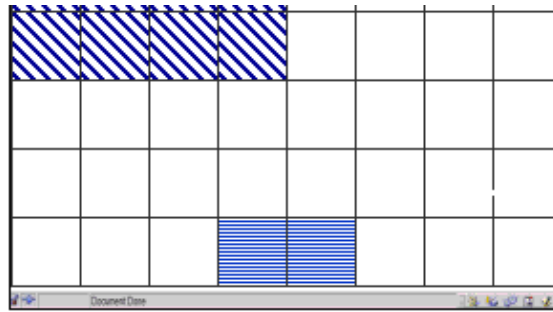
Figure 8. Combined expectations
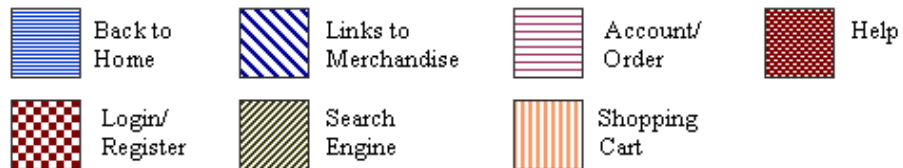
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