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Generation Y Expectations for the Location of Web Objects

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Abstract

This study examined the expectations among Generation Y (Gen Y) individuals (age 18-31) regarding the location of specific objects on a webpage. The Web objects were obtained from previous studies with additional common identified: logo, site title, login, searchengine, internal links, external links, languageselection, content, calendar and advertisements. The results found that Gen Y expectations regarding the location of these Web objects were not significantly different from the expectations among other age groups except in relation to two objects, namely, external links and advertisements. This study may help the web developers and the managers to improve the usability of web user interface especially targeting this Gen Y group as target market.

Keywords: *Web object, Gen Y, Schemas, External links, Advertisements*

1. Introduction

Demographic conditions are known to have an effect on the characteristics of a society in general [1]. Gen Y has high expectations and demands of technology, and when technology doesn't measure up, they become impatient [2]. According to the World Population Clock (<http://www.worldometers.info/world-population/#age>), over 50% of the world's population is aged under 30, which is the in-group of Gen Y [3]. Gen Y is a very large and economically powerful generation, consisting of eighty-two million individuals and spending as much as "half the spending in the [global] economy", or US\$200 billion annually [3]. This demographic group has the added distinction of having been exposed to technology since childhood, making it a unique target market, particularly via the Web. However, very little research has been conducted into making websites appealing to this important demographic group[3].

It is not surprising that improving users' Web experiences has become a major theme in industry research labs [4][5]. Research shows that whether or not a user finds a website visually appealing [6][7] often has a powerful impact on his or her perception of website usability [8][9]. Thus, making websites visually appealing has become of great importance to organisations [10-11][3]. According to [12], the majority of websites are still emerging from only a few market-dominating countries such as the United States, forcing users around the world to adapt to embedded cultural values in user interfaces. In today's competitive market, however, companies are increasingly realising the importance of adapting software programs and websites to particular language, culture and local design requirements. These so-called localised websites can reduce the risk of losing consumers to competitors. Localisation can increase market share [7] and profits.

Currently, when constructing websites, designers have little empirically-based information about where to place specific Web objects on the Web user interface. Visitors may expect to find the objects at certain locations [13]. For an e-commerce site, placing these objects in expected locations would give the site a competitive edge over sites that do not place them in the expected locations [13]. The present study seeks to address this need by examining ten of the most common types of Web objects, namely, 1) logo, 2) site title, 3) search engine, 4) language selection, 5) login, 6) internal links, 7) external links, 8) content, 9) calendar, and 10) advertisements, and comparing schemas between the Gen Y group and other age groups.

1.1 Participants

In this study, 85 participants (52 males, 33 females) from ten ASEAN countries (Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam) (Figure 1) were examined. The average age of the participants was 36 (ranging from 18 to 58), with 44% of the participants being Gen Y (18-31). The majority of the participants (87%) reported that they used a computer daily. The following criteria were applied in the selection of the participants in the study: (1) the participants must have been resident in or stayed for more years in ASEAN countries than in other countries, and (2) the participants must have computer literacy and at least be familiar with websites. An additional requirement was that participants must understand basic English.

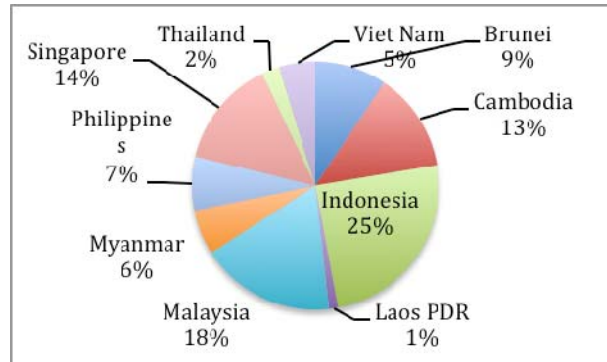


Figure 1. Distribution of participants from different countries

2. Experiment and Results

The experiment adapted the grid squares method from [14]. Using a depiction of a browser window that contained six horizontal and seven vertical grid squares with a white background on a piece of paper, the participants were asked to place a code number representing where they expected each of the examined objects (Table 1) to be located on a website. The code numbers could be placed horizontally, vertically or overlapping, and the grid square locations were named as described in Figure 2.

Table 1. Operational definitions of Web objects

Code number	Web object	Description
1	Logo	Identity design and branding which have different roles that together form a perceived image for a business or product (in this context, a website).
2	Site title	Webpage title banner. It is used to identify/provide information about the site.
3	Internal links	Main menu or links that go from one page on a domain to a different page on the samesite (e.g., "home").
4	External links	Useful links or a hyperlink on a website that points to a page on a differentsite.
5	Login	A subscription-based feature as part of the website (including the user's profile etc.) for user tracking and security reasons.
6	Language selection	Feature to choose other languages.
7	Searchengine	Helps the user locate information available inside and/or outside the Web.
8	Content	Contains information areas, content items and/or links.
9	Calendar	News/events list.
10	Advertisement	A graphic image used on a website to advertise a product or service.

The percentage indicating the participants' expectations was obtained by counting the number of times the participants selected each square for each Web object. The results are presented below in relation to each object. Each shade represents a specific range of times each square was selected as an expected location for a particular Web object. The darker the shade, the greater number of times a particular square was selected (Figure 3).

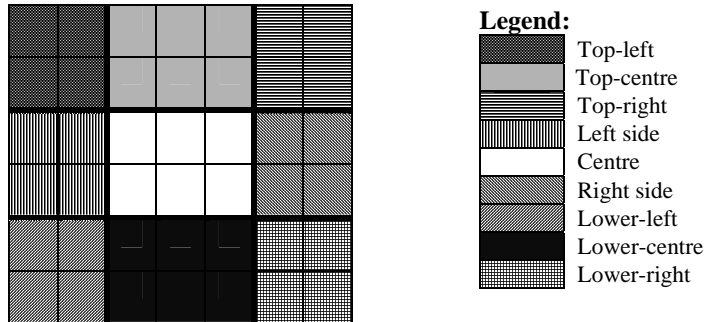


Figure 2. Mock browser window (showing description of nine grid squares)



Figure 3. The darker the shade, the more often selected as the expected location

2.1 Logo

As shown in Figure 4, the majority of the Gen Y participants (61%) expected the logo of a website to be located at the top-left of the webpage. This expectation corresponded with the expectation among the individuals in the other age groups and with the findings in a previous study [15].



Figure 4. Expected location of logo for Gen Y (left) and for other age groups (right)

2.2 Site Title

As shown in Figure 5, most of the Gen Y participants (64.71%) expected the title of a webpage to be located at the top-centre of the page. This contradicts the commonly recommended left-justified position [16]. This result for the Gen Y group showed the least variation from the result for the participants in the other age groups and the results reported in a previous study [16]. This result is not surprising as most website titles are placed in the top-centre position.



Figure 5. Expected location of site title for Gen Y (left) and for other age groups (right)

2.3 Internal Links

As shown in Figure 6, most of the Gen Y participants (70.59%) expected the links leading to webpages within a website to be almost exclusively located at the top of a webpage. This corresponded with the expectation of the participants in the other age groups and with the findings in previous studies [16-17][13]. This was generally anticipated since this area is the conventional region in which to place such a link. However, a significant number (42.86%) of the Gen Y participants also expected the internal links to be located on the left side of the page, which is similar to the finding in the other age groups and previous studies [14][18].



Figure 6. Expected location of internal links for Gen Y (left) and for other age groups (right)

2.4 External Links

As shown in Figure 7, most of the Gen Y participants (63.73%) expected the links leading to webpages that are external to a particular website to be located at the bottom of a webpage, which differed from the expectation of the participants in the other age groups but similar to the findings reported in previous studies [16-17][13]. Only a small number of participants in the other age groups expected the external links to be located in that area. However, a smaller but sizable number (29.41%) of the Gen Y participants also expected the external links to be located on the left side of the page, which was similar to the expectations of the participants in the other age groups and the findings in a previous study [14].



Figure 7. Expected location of external links for Gen Y (left) and for other age groups (right)

2.5 Login

As shown in Figure 8, most of the Gen Y participants (51.85%) expected the login to be located at the top-right of a webpage. This corresponded with the expectation of the participants in the other age groups and with the results reported in a previous study [15]. A small number of the Gen Y participants (22.22%) also expected the login to be located on the left side, which was similar to the finding in previous studies [13][19].



Figure 8. Expected location of login for Gen Y (left) and for other age groups (right)

2.6 Language Selection

The study by [20] showed that perceived usability increases when the website was originally conceived in the native language of the user. While it seems clear that Internet users are more inclined to abandon an online purchase if the website is not in their own language and if their foreign language skills are not sufficient [20]. Thus, this fact shows that the important of language feature option especially for multicultural webpage. Figure 9 shows that most (71.74%) participants from Gen Y expect the language selection to be located at the top-right of a webpage, similar with others age group.



Figure 9. Expected location of language selection for Gen Y (left) and for other age groups (right)

2.7 Search Engine

As shown in Figure 10, most of the Gen Y participants (69.09%) expected a website's search engine to be at the top-right of a webpage. This was similar to the expectation of the participants in the other age groups and the findings in previous studies [18][21].



Figure 10. Expected location of search engine for Gen Y (left) and for other age groups (right)

2.8 Content

Most of the participants in both groups expected a website's content to be presented from the left side to the right side and the bottom of a webpage, as shown in Figure 11. Among the Gen Y participants, (91.43%) expressed this preference. This finding corresponds with research by [22] that recommended placing important content on the left side of a website. In addition, Nielsen's research on eye tracking found that 69% of Web users paid more attention to the left side [23]. This location is also generally recommended by several style guides [24].

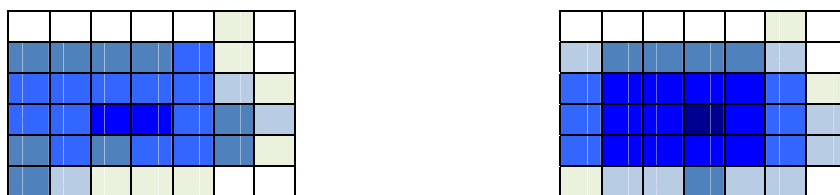


Figure 11. Expected location of content for Gen Y (left) and for other age groups (right)

2.9 Calendar

The calendar is where the user is informed of news and events. As shown in Figure 12, most of the Gen Y participants (50%) expected that the calendar would be located on the right side of a webpage.

This was similar to the expectation among the participants in the other age groups. A smaller number of Gen Y participants (38.10%) expected the calendar to be located on the left side of a webpage.



Figure 12. Expected location of calendar for Gen Y (left) and for other age groups (right)

2.10 Advertisements

As shown in Figure 13, most of the Gen Y participants (82.41%) expected advertisements to be on the bottom-right side of a webpage, which was similar to the expectation among the participants in the other age groups and to the finding reported in a previous study [18]. A large number of the Gen Y participants (71.30%) also expected advertisements to be located at the bottom of the page. However, it may be of more interest to know where participants do not expect advertisements to be located. This is because it is possible that an advertisement may be more effective if it is placed in an area where it is not expected, as the users' attention may be captured by that positioning.



Figure 13. Expected location of advertisements for Gen Y (left) and for other age groups (right)

3. Conclusion

This study examined the expectations of Gen Y individuals regarding the location of certain Web objects on a webpage. The results can be summarised as follows: 1) the logo is expected to be located at the top-left of the webpage, 2) the site title is expected to be located at the top-centre of the webpage, 3) the internal links are expected to be located at the top of the webpage, 4) the external links are generally expected to be located at the bottom of the webpage, 5) the login is generally expected to be located at the top-right corner of the webpage, 6) the language selection is expected to be located at the top-right of the webpage, 7) the search engine is generally expected to be located at the top-right of the webpage, 8) the content is generally expected to be located from the left side to the right side and the bottom of the webpage, 9) the calendar is expected to be located on the right side of the webpage, and 10) advertisements are generally expected to be located at the bottom-right of the webpage. A summary of the results in the form of the schema of both groups is shown in Figure 14. Even though the experimental method was traditional and time-consuming[12], the advantage is that the results will provide a more accurate picture of users' expectations.

The scope of this study was similar to previous research by [16], which noted several limitations including the age of the participants. In [16], the majority of the participants represented a fairly young population. The present study sought to address that limitation by including participants of a variety of ages. Although each age group has its own unique characteristics, Gen Y individuals are of particular interest because they have been exposed to a lifestyle that is fundamentally different from their predecessors. Gen Y is techno-savvy, having grown up in an era of pervasive technology and the Internet revolution [1]. In addition, the present study included participants with a broad range of Web experience, from novices (six months of Web experience) to experienced users (four or more years of Web experience), which was already covered in the 2001 study by Bernard [16].

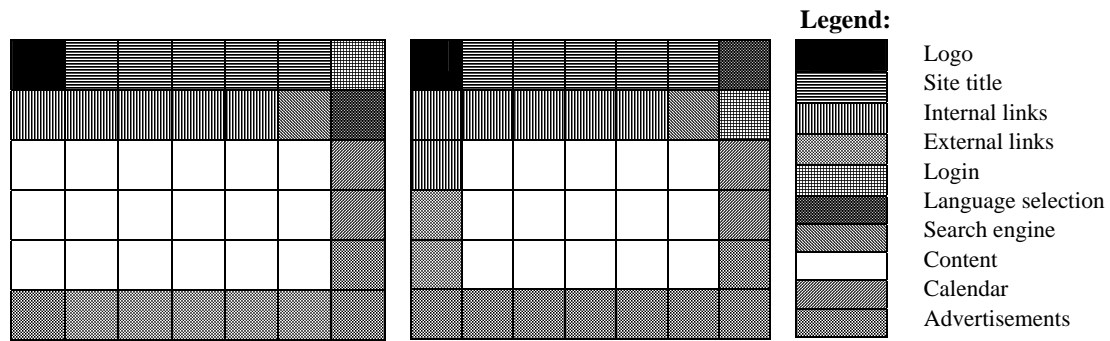


Figure 14. Schema for Gen Y (left) and for other age groups (right)

As stated by [25], “age still is one of the most important demographic variables.” The results of the present study showed that Gen Y (aged 18-31) and other age groups, specifically Gen X (aged 32-58), only have dissimilar expectations regarding the location of Web objects for two objects, namely, external links and advertisements. The results also showed differences in the schemas between the individuals in the two groups (Figure 14 above). The differences in the expectations regarding the locations of the external links and advertisements were most probably due to the different ages and mentalities among the two groups, reflecting the different ways they think. This supports the observation by consultant and former editor of the Wall Street Journal, Ron Alsop, that the “impatient Generation Y...with their great and sometimes unrealistic expectations” is clashing with the older Generation X [26]. However, more than 80% of the results for the Gen Y participants in the present study corresponded with the results from the participants in the other age groups. The differences schemas, specifically interface’s layout between the two groups may reflect the advance in technology over the years whereby the back-end programming affects the layout of the objects at the front-end. This view was mentioned by [18] in an Indian study on the expected location of Web objects, and supports the conclusion in [27] that there is a need to review the location of Web objects every few years in order to see if there are any changes in technology and users’ expectations. In terms of Gen Y, Gen Y has grown up in a different world of computer-based technology and witnessed many world-changing events including the rise of mass communication and the Internet. In addition, a larger and more diverse group of users with various demographic characteristics now accesses the Internet.

The Web layout of Gen Y expectations, as illustrated in Figure 15, would be a useful guideline for Web designers when developing websites, specifically websites that are targeted at Gen Y users. These results demonstrate the opportunity to provide Gen Y-adapted interfaces, rather than providing all users with a “standard” webpage version. Gen Y has high expectations of technology and when it doesn’t measure up, they are impatient [2]. Therefore, it is a challenge for Web developers and managers to improve the usability of a website and to build user loyalty and revisit intention. In addition, it has been stated that users will locate information more quickly and efficiently when their expectations about the location of Web objects are satisfied[18].

This study focused on the user interface in the context of using conventional technology to access websites, and not specifically on mobile technology. The user interface and Web object location on websites accessed by mobile technology might be different. The example of the present study may inspire others to undertake similar analysis and design efforts. Further study on mobile technology, as well as the use of other experimental or investigative methods and more detailed measurements, may yield further insights and more specific design recommendations in the future.

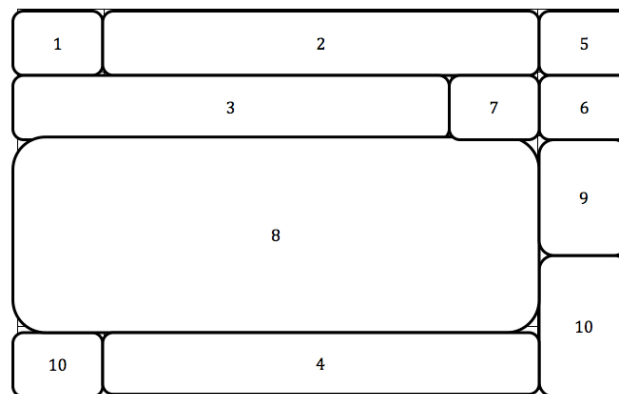


Figure 15. Web layout of Gen Y expectations

4. References

- [1] Noor Hazilah, A.M., Dinon, M., Kalthom, A., "Satisfaction among Gen Y patients", *International Journal of Islamic and Middle Eastern Finance and Management*, vol. 3, no. 3, pp.253-266, 2010.
- [2] Martin, C. A., "From high maintenance to high productivity, What managers need to know about Generation Y", *Journal of Industrial and Commercial Training*, vol. 37, no. 1, pp.39-44, 2005.
- [3] Djamasbia, S., Siegelb, M., Tullis, T., "Generation Y, web design, and eye tracking", *International Journal Human-Computer Studies*, vol. 68, pp.307-323, 2010.
- [4] Tedesco, D.P., Tullis, T., "A comparison of methods for eliciting post-task subjective ratings in usability testing", *Usability Professionals Association (UPA) Conference*, Denver, Colorado, 2006.
- [5] Tullis, T., Stetson, J., "A comparison of questionnaires for assessing website usability", *Usability Professionals Association (UPA) Conference*, Minneapolis, MN, 2004.
- [6] Lavie, T., Tractinsky, N., "Assessing dimensions of perceived visual aesthetics of web sites", *International Journal of Human-Computer Studies*, vol. 60, no. 3, pp.269-298, 2004.
- [7] Lindgaard, G., Fernandes, G., Dudek, C., Brown, J., "Attention web designers: you have 50 milliseconds to make a good first impression!", *Behaviour & Information Technology*, vol. 25, no. 2, pp.115-126, 2006.
- [8] Schenkman, B.N., Jönsson, F.U., "Aesthetics and preferences of web pages", *Behavior and Information Technology*, vol. 19, no. 5, pp.367-377, 2000.
- [9] Tractinsky, N., Katz, A.S., Ikar, D., "What is beautiful is usable", *Interacting with Computers*, vol. 13, no. 2, pp.127-145, 2000.
- [10] Djamasbi, S., Tullis, T., Hsu, J., Mazuera, E., Osberg, K., Bosch, J., "Gender preferences in web design: usability testing through eye tracking", In *Proceedings of the 13th Americas Conference on Information Systems*, Keystone, Colorado, 2007.
- [11] Djamasbi, S., Tullis, T., Siegel, M., Ng, F., Capozzo, D., Groezinger, R., "Generation Y & web design: usability testing through eye tracking", In *Proceedings of the Fourteenth Americas Conference on Information Systems*. Toronto, Canada, 2008.
- [12] Reinecke, K., "Culturally Adaptive User Interfaces", Thesis, 2010.
- [13] Bernard, M., "Examining User Expectations for the Location of Common E-Commerce Web Objects", *Usability News*, vol. 4, no. 1, 2002. Retrieved December 16, 2009 from http://www.surl.org/usabilitynews/41/web_object-ecom.asp
- [14] Bernard, M., Sheshadri, A., "Preliminary Examination of Global Expectations of Users' Mental Models for E-Commerce Web Layouts", *Usability News*, vol. 6, no. 2, 2004. Retrieved from http://www.surl.org/usabilitynews/62/web_object_international.asp
- [15] Adkisson, H., "Identifying De-Facto Standards for E-Commerce Web Sites", Unpublished Master's Thesis, University Of Washington, Washington: US, 2002.
- [16] Bernard, M., "User expectations for the location of web objects", *CHI: Conference on Human Factors in Computing Systems ACM*, Seattle, Washington, pp.171-172, 2001.
- [17] Bernard, M., "Examining user expectations of the location of web objects", *ITG Internetworking 3.3* [Online], 2000. Retrieved from http://www.internetg.org/newsletter/dec00/article_bernard.html

- [18]Shaikh, A.D., Lenz, K., “Where’s The Search? Re-Examining User Expectations of Web Objects”, Usability News, vol. 8, no. 1, 2006. Retrieved from <http://www.surl.org/usabilitynews/81/webobjects.asp>
- [19]Costa, C., “Cultural Factors and Usability User Expectations for the Location of E-Commerce Web Objects Case Study in Portugal”, 2010.
- [20]Nantel, J., Glaser, H., “The impact of language and culture on perceived website usability”, Journal of Engineering Technology Manage, vol. 25, pp.112-122, 2008.
- [21]Vasantha, R.N., Harinarayana, N.S., “Identifying the Location of Web Objects: A Study of Library Websites”, 8th International Caliber - 2011, Goa University, Goa, Paper presented at 8th International Caliber, pp.28-39, 2011.
- [22]Chapman, C., “10 Usability Tips Based On Research Studies”, 2010. Retrieved from <http://sixrevisions.com/Usabilityaccessibility/10-Usability-Tips-Based-On-Research-Studies/>
- [23]Nielsen, J., “Will pain-text ads continue to rule?”, 2003. Retrieved April 11, 2011 from *Jakob Nielsen’s Alertbox*, 2003. Retrieved from <http://www.useit.com/alertbox/20030428.html>
- [24]Aslina, B., Azizah, J., “Cultural Adaptivity for Sustainable User Interface: Investigating User Expectation on ASEAN Countries”, Proceedings of the International Conference on Future Trends in Computing and Communication Engineering (FTCC), pp.45-49, 2013a.
- [25]Herbert, J., “Three different generations”, Bellevue Reporter, 2010. Retrieved from <http://www.bellevuereporter.com/opinion/101913043.html>
- [26]Shelter Diagnostic System (SDS), “Managing Generation Y, Techniques and Recommendations for Managing the Generation Gap”, The Humane Society of the United States.
- [27]Aslina, B., Azizah, J., “Users’ Expectation of Web Objects Location: Case Study of ASEAN Countries”, In Proceeding(s) Springer 2013 Lecture Notes In Computer Science ISBN 978-3-319-02957-3, Advances In Visual Informatics - Third International Visual Informatics Conference, IVIC 2013, Selangor, Malaysia, pp.383-395, 2013b.