

Identifying Gen Y Schema for the Location of Web Objects: A Case Study of ASEAN Community

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Abstract

According to the World Population Clock, over 50% of the world's population is currently aged less than 30 years, specifically comprising the individuals belonging to Generation Y (Gen Y). It is believed that in specific demography studies, age groups or generations will have different behavior processes when accessing web pages. The aim of this study is to improve website design and implementation which is important based on specific user expectations. This study examined the circumstances wherein individuals from Gen Y (age 18-31) expect specific web objects to be located on the website. The web objects were: Logo, Site title, Login, Search engine, Internal links, External links, Language selection, Content, Calendar and Advertisement(s) respectively. The results found a pattern schema for Gen Y relating to defined expectations concerning the location of these web objects. It is anticipated that this will ultimately help web designers to improve the usability of web page specifically for Gen Y as target users.

Keywords: Advertisements, Demography, External Links, Gen Y, Schema, Web Object

1. Introduction

Demographic conditions are known to have an effect on the characteristics of a society in general¹⁸. Individuals comprising Generation Y (Gen Y) have high expectations and demands pertaining to technology. When, for various reasons, their expectations are not met, they become quite impatient⁸. Gen Y is the generation of a very large and economically powerful group, comprising some eighty-two million people who can spend up to "half the spending in the economy", or \$200 billion a year. This demographic 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 done so far into making the site appealing to such an important demographic¹¹.

It is not surprising that improvement of users' web experiences has become a major theme in industrial research labs (e.g.,^{22,24}). Research shows that an issue such as whether a user finds a website visually appealing^{14,15} often

has a strong effect on forming his or her perception of website usability^{20,23}. Thus, making websites visually appealing has become of great importance to organizations in recent years¹¹⁻¹³. According to¹⁹, the majority of web pages are still being provided by a few market-dominating countries such as the USA. This thereby forces users worldwide to adapt to embedded cultural values in user interfaces. In today's competitive market, however, companies are increasingly realizing the importance of adapting software programs and web sites to particular country, language, culture, and local design requirements. These so-called localized web sites, which believed could reduce the risk of losing consumers to competitors. Localization can increase market share¹⁵ and would give an e-commerce site a competitive edge over those that do not place web objects in their expected locations⁶.

Currently when constructing websites, designers have little empirically-based information and guidelines as to where to place specific web objects on a web page. But, visitors may expect to find the objects at those locations⁶.

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Thus, by looking at improving the usability of a website, this study has sought to address this need by examining ten of the most common types of web objects. These are, 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. Advertisement(s).

2. Materials and Methods

2.1 Participants

In this study, 85 participants, comprising 52 males and 33 females (61% males), from ten ASEAN countries (Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam respectively) (Figure 1.) were examined. The average age of the participants was 36 (range of 18 to 58 years) with 44% of the participants belonging to Gen Y (18-31 years). Results showed that 87% indicated that they used the computer daily. The criteria for the selection of the participants included the following: 1. Participants must be resident in or have lived for more years in ASEAN countries than in other country/ countries, and 2. Participants must be computer-literate or at least be familiar with websites.

2.2 Experiment

Using a depiction of a browser window containing six horizontal and seven vertical grid squares of white background on a piece of paper, participants were asked to place code numbers representing each of these objects (Table 1.) indicate where they expect objects to be located on a website.

The percentage was attained by simply counting the frequency of selection of the same code number by

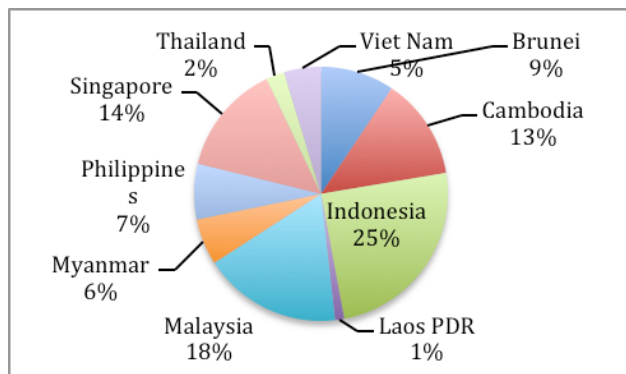


Figure 1. Distribution of participants from different countries.

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 website.
2	Site title	Title of the website, used to 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 same site.
4	External links	Useful links or a hyperlink on a website that points to a page on a different website.
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	Search engine	Helps the user locate information available either inside or outside the World Wide Web.
8	Content	Contains information areas, content items or/and links.
9	Calendar	News/events list.
10	Advertisement	A graphic image used on websites to advertise a product or service.

participants per square for each web object. The results are presented below. Each shade represents the frequency of times each square was selected as the location expected for a particular web object. The darker the shade, the greater the number of times a particular square was selected (Figure 2).

3. Results

3.1 Logo

Results given in Figure 3 show that the majority (61%) of the participants from Gen Y expected the logo of a website to be located at the top-left of the Web page, which corresponded with results from a previous study¹.

3.2 Site Title

Figure 4 show that most of the participants from Gen Y (64.71%) expected the title of a web page to be located



Figure 2. The darker the shade, the greater the frequency of selection.

	8	3	3	2	3	7
3	2	1	1	1	1	1
1				1	2	
				1	1	
1						1

Figure 3. Expected location of logo.

1	18	25	26	21	12	2
1	4	6	5	5	3	1
1	1	2			1	1

Figure 4. Expected location of site title.

at the top-center of the page, instead of the left-justified position that is commonly recommended. This was the most similar result to that of a previous study⁴. This expectation is not too surprising since most site titles are placed here.

3.3 Internal Links

Figure 5 show that the majority (70.59%) of participants from Gen Y expected an internal links to be almost exclusively located at the top of a web page. This corresponds with previous studies⁴⁻⁶. The response was generally anticipated since this area is the conventional region in which to place such a link. However, a small number (42.86%) of participants also expected it to be located on the left side of the page, which is similar to results from previous studies^{7,21}.

3.4 External Links

Figure 6 show that most (63.73%) participants from Gen Y expected external links to be located at the bottom of a web page. This finding corresponds with that of previous studies⁴⁻⁶. However, a smaller (29.41%) but sizable number of participants from Gen Y also expected them to be

located on the left side of the page, which is similar to findings from a previous study⁷.

3.5 Login

Results in Figure 7 show that most (51.85%) participants from Gen Y expect the login to be located at the top-right of a web page. This corresponds with results from a previous study¹. A small number (22.22%) of participants from Gen Y expect the Login to be located on the left side as well, which is similar to results from previous studies^{6,10}.

3.6 Language Selection

The study by¹⁶ showed that perceived usability increased when the website was originally conceived in the native language of the user. Moreover, it seems clear that Internet users are more inclined to abandon an online purchase

2	3	2	4	3	1	1
15	12	12	10	9	6	4
9	2	4	3	2	1	2
4						
3	1	1	1			2

Figure 5. Expected location of internal links.

1	1	2	3	1	3	2
3				1	3	4
7	1				1	4
3	1	2	1	1	2	1
4	9	12	11	9	7	2

Figure 6. Expected location of external links.

				1	3	11
3	2					9
4	1	2	1		2	
2	1	1	1			
				1	1	
1		1	1	1	1	1

Figure 7. Expected location of login.

if the website is not in their own language and if their foreign language skills are not sufficient¹⁶. Thus, this fact demonstrates the importance of the Language feature option, especially for a multicultural web page. Results from Figure 8 show that most (71.74%) participants from Gen Y expect the language selection to be located at the top-right of a web page.

3.7 Search Engine

Results in Figure 9 show that most (69.09%) Gen Y participants expected a website's search engine to be at the top-right of a web page, similar to conclusions of previous studies^{21,25}.

3.8 Content

Results in Figure 10 show that most (91.43%) participants from Gen Y expected a website's content to be located

1					4	15
1				1	4	10
				1	1	1
			1			
1			2	1	1	1

Figure 8. Expected location of language selection.

2					4	4
			2	2	9	10
1	1		3	1	3	5
	1	2	1			
					1	1
					1	1

Figure 9. Expected location of search engine

					2	
8	8	8	8		1	
11	16	14	16	14	4	1
10	16	17	18	16	8	4
8	9	8	11	11	7	2
5	4	2	2	2		

Figure 10. Expected location of content.

from the left side to the right side and at the bottom of a web page respectively. This finding corresponds with research results by⁹ that discovered the benefit of placing important content on the left side of a website. In addition, Nielsen in his study of eye tracking, stated that 69% of users devote a greater percentage of their attention on the left side¹⁷. This was also the recommended location for several style guides in general².

3.9 Calendar

Calendar denotes an instrument whereby the user is informed of news and events. Results shown in Figure 11 indicate that most (50%) participants from Gen Y expected the Calendar to be located on the right side of a web page. A smaller number (38.10%) expected it to be located on the left side of a web page.

3.10 Advertisement(s)

Results in Figure 12 show that most (82.41%) participants from Gen Y expected advertisements to be located on the bottom-right side of a web page. This is similar to results found in a previous study²¹. A large number (71.30%) expected it to be located at the bottom of the page. However, what may be more interesting is determining where the participants do not expect the advertisements to be located. That is, it is possible that an advertisement may be more effective if it is placed in an area where it is

		1				
		1		1	1	3
5	2	1	1	1	1	12
8	2	1	1	1	1	11
8	4	1	1	1	1	4
2	1	1	1	1	1	

Figure 11. Expected location of calendar.

1	2	2	2	2	2	1
	1	2	2			
2		1	1	1	2	6
4					2	11
4	2				3	15
7	7	4	6	4	6	15

Figure 12. Expected location of advertisement(s).

not expected because people may pay more attention to this area.

4. Discussion

This study examined the points at which individuals from Gen Y expect certain web objects to be located on a common website. The results are summarized as follows: 1. Logo is expected to be located at the top-left of a site, 2. The Site title is expected to be located at the top-center of a site, 3. The Internal links are expected to be located at the top of a site, 4. The External links are generally expected to be located at the bottom of a site, 5. The Login is generally expected to be located at the top-right corner of a site, 6. The Language selection is expected to be located at the top-right of a site, 7. The search engine is generally expected to be located at the top-right of a site, 8. The Content is generally expected to be located from the left side to the right side and at the bottom of a site, 9. The Calendar is expected to be located on the right side of a site, and 10. The Advertisement(s) are generally expected to be located at the bottom-right of a website. The summary of the Gen Y result and comparison result with other age groups is shown in Figure 13. The comparison was shown that only two objects have slightly dissimilar expectations; External links and Advertisement(s). This two differences location of objects was most probably because of the different ages and mentality from the two age groups, which is the way different they think. However, more than 80 per cent of the results of Gen Y, reflecting the results from others age group.

This study has covered issues in a previous study by⁴, which mentioned several limitations with respect to the different demographic groups. These included the majority

of the participants being represented by a relatively young population. Although each of these groups has its own unique characteristics, Gen Y has been of particular interest because they grew up in, and were exposed to, a lifestyle that is fundamentally different from its predecessors. Gen Y is techno-savvy, having grown up in an era of pervasive technology and the Internet revolution¹⁸. Second, this study dealt with a broad range of web experiences, from novices (six months of web experience) to experienced users (four or more years of web experience), which were previously covered in Bernard's study in 2002.

This study showed that the Gen Y participants examined (age group 18–31) do have their own schema pattern on user expectations when looking a website. Gen Y will have a significant influence on reflecting the results by the fact of advances in this technology-savvy based generation. It is anticipated that their expectations will affect the layout of web objects on the front-end and might change over time. This statement had mentioned by²¹ in a study concerning location of web objects in India. It was predicted that there would be a need to review the location of web objects after a few years, particularly every five years, in order to determine if any changes had been reflected in technology and users' expectations over the preceding years³. In addition, it can be seen that a larger and more diverse group of users with diverse demographic factors access the Internet worldwide.

It was believed that users would locate information quickly and efficiently when they are satisfied and when the location of web objects placed in the site meet their expectations²¹. This result might inspire others to undertake further research studies reflecting details concerning the issue of culture, not merely at the country level. In addition, in view of advances in technology and different platform applications, it is anticipated that further studies could look into the issue of mobile applications, for instance. This could potentially help the usability and improvement of a web page to stimulate users' intentions to revisit in future.

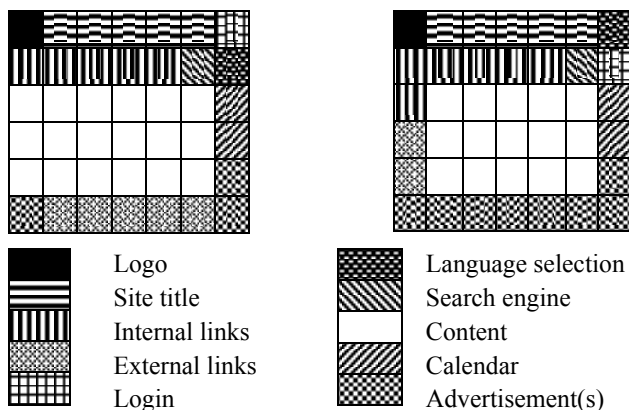


Figure 13. Results of schema for Gen Y (left) and others age group (right).

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