DESIGNERS’ PERSPECTIVE OF WEBSITE USABILITY: 
THE CULTURAL DIMENSION

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ABSTRACT
The aim of this paper is to conduct a comparative study between liberal and prescriptive cultures (in this case Arab and British audiences) to extract the views of Web designers in both countries regarding web usability. Its purpose is to determine the most important issues that should be considered when designing for a particular culture. It is also intended to investigate the extent of the usage of the published usability guidelines and tools in the design of the user interface of a website.

The data collection instrument consisted of a 7-page questionnaire for the designers and in many cases, this was followed with an interview or an email to the surveyed designers to clarify their responses.

The main outcome of this study was that the designers in both countries believed that although the users share similar preferences and perceptions about many website usability issues, they differ in the importance they give to certain usability elements such as the adherence to local language, culture and religious beliefs. The results of this study proved that one-size-for-all is not the right approach for a successful website. It highlighted the need to consider the customers’ cultural background and their real world experience.

KEY WORDS
Accessibility, Usability, Globalisation, Readability, User Interface, Oman, UK

1. INTRODUCTION AND BACKGROUND
This paper starts by defining website usability, highlighting its importance, problems in achieving it and the value of usability tools and guidelines. Then, website globalisation and cultural difference issues are discussed leading to the current research and its results and finally a discussion and concluding remarks.

The term usability was coined two decades ago to replace the term “User Friendly”, however, not everyone agrees exactly what is meant by this expression, and various definitions have been proposed. Nielsen (Nielsen, 1994) has divided usability into five different usability attributes. These are learnability, efficiency, memorability, rate of errors and satisfaction. Preece et al (Preece et al., 1994) defined usability as "a measure of the ease with which a system can be learned or used, its safety, effectiveness and efficiency, and the attitude of its users towards it." Keevil (Keevil, 1998) defined it as “how easy it is to find, understand and use the information displayed on a website”. The authors of this paper have developed a simpler and all-encompassing definition of usability, as follows: Usability indicates to what extent it is easy for all intended users to interact with a website to perform their required task(s).
Usability has always been accepted as a major contributor to the perceived success of a system. For web based systems usability is particularly important. Jakob Nielsen puts this very succinctly in the following quotes: “Usability rules the web. Simply stated, if the customer can’t find a product, then he or she will not buy it.” “The web is the ultimate customer-empowering environment. He or she who clicks the mouse gets to decide everything. It is so easy to go elsewhere; all the competitors in the world are but a mouse click away” (Nielsen, 1999).

The main barrier to achieving total website usability is that the user population is continually expanding in expectations, in information needs, in tasks and in user abilities, making more and more demands on the system. Websites should accommodate all these variations over time.

Appropriate website design and evaluation methods help ensure that websites are usable (Nielsen and Mack, 1994). They are so numerous however, it is hard to know which one(s) are best suited for a particular website. Nevertheless, “usability tools”, when used, can help in simplifying the matter to a great extent and do lead to usable websites.

The growing community of website usability experts has formulated countless guidelines and numerous online articles (Rochester, 2002, Lynch and Horton, 1999), papers (Borges et al., 1996, Jose A. Borges et al., 1996, Spool and Scanlon, 1997, Becker and Berkemeyer, 2001, Beirekdar et al., 2002) and books (Nielsen and Mack, 1994) are available to provide help to build a usable website. Many of these guidelines have been based on developer expertise, project experiences, and subjective studies. Existing user interface design recommendations have also been extended to include designing user interfaces for the website (Shneiderman, 2000, Nielsen, 1999, Lynch and Horton, 1999). Those experienced in designing user interfaces provided heuristics or guidelines for designing web pages often by identifying design layout, navigation, and performance issues associated with particular websites (Spool et al., 1999, Hurst, 1999, Flanders and Willis, 1998).

Although usability guidelines have been found useful, they still suffer from a number of shortcomings that impede their widespread use and reduce their usefulness. Researchers in the field outlined some of these limitations (Vanderdonckt, 1999, Nielsen and Mack, 1994, Scapin et al., 2000). These include the language used comes from various disciplines (e.g., cognitive modelling, psychology, human factors, ethnography) which may prevent designers from easily understanding the guidelines and applying them correctly; it is difficult to interpret when and how general guidelines need to be applied during the website lifecycle; almost all guidelines are based on one natural language (English) and one culture (North American). Many of these guidelines were incomplete or too general to apply to the development of all websites (Becker, 2002, Beirekdar et al., 2002).

Leading research firms arrive at various growth rate predictions but one trend is very clear: Non-English speaking Internet audiences today comprise the majority. This necessitates designing websites for such audiences. To do this designers and site owners need to adopt the appropriate approach to meet the business ambitions; either localisation or internationalisation. Globalisation is the umbrella word that includes localisation and internationalisation and, in fact, covers the entire process of creating a product with versions for users in multiple countries, from the first specification through adaptation to local markets. “A truly globalised website serves every visitor with the same quality experience regardless of location, language, business practices, or cultural issues”(Izar.com, 2002). Internationalisation refers to having a single design that can be used worldwide (Nielsen, 1999). Localization refers to making an adapted version of the Internationalised design for a specific locale (Nielsen, 1999). It involves the process of adapting linguistic and cultural and business rules to specific target audiences in specific “locales.” For example, the Spanish language in Mexico is different from the Spanish spoken in Spain, and the same conditions apply for currency and other business rules.

To design a successful globalised website, designers need to appreciate the cultural differences between nations. Culture can be defined as behaviour typical of a group or class of people. Martin (Martin et al., 1997) asserts that culture “consists of traditional ways of doing things, traditional objects, oral traditions and belief systems that are taken for granted”.

Many factors need to be considered when designing for an international audience. Such factors have been categorized as overt and covert factors (Yeo, 1996). The overt factors are tangible, straightforward and publicly observable elements. These include dates, time, calendars, weekends, telephone number and address formats, character sets, reading and writing direction, punctuation, translation, units of measurement and currency. Covert factors deal with the elements that are intangible and depend on culture or “special knowledge”. Graphics/visuals, colours, functionality, sound, metaphors and mental models are all covert
factors. Covert symbols usually have the same meaning to members of a particular culture. Thus, communication within these cultures using artefacts and symbols would be possible. Different cultures may have different meanings, perceptions or metaphors for the same thing, depending on the context. It is important to note that a user’s interpretation of metaphors is based largely on the user’s past and current knowledge (Murrell, 1998).

Screen metaphors can be misinterpreted in different cultures. The original "trash can" symbol used on desktops, for example, would not be understood by Thai users because in Thailand, a "trash can" is a wicker basket (Sukaviriya and Moran, 1990). In the United States, the owl is a symbol of knowledge but in Central America, the owl is a symbol of witchcraft and black magic (Apple-Computer, 1992). A black cat is considered bad luck in the US but good luck in the UK (Del Galdo and Nielsen, 1996).

Evers and Day (Evers and Day, 1997) have also addressed the role of culture in user interface acceptance. For example, Asians prefer soft colours, fixed menus and explicit text (character)-based interfaces; while the mouse is the best-input device, and sound is very important. Even within Asia, there are differences in interface preferences: Indonesians like soft colours, black and white displays, pop-up menus and new input technologies more than Chinese people do. The use of colour can also give rise to many problems. Barber (Barber and Badre, 1998) gives examples of colour-culture for different countries, for example, the red colour means different things for different people: for the Chinese it means happiness; for the Japanese anger/danger; for the Egyptians death; for the French aristocracy and for the Americans danger/stop. The use of colour can be associated with religion, for example Judeo-Christian favour red, blue, white, and gold; Buddhism saffron yellow and Islam green.

Graphic literacy may also affect navigation. What may be assumed as a universal may be not even known to others or it may have an opposite meaning; Andrews (Andrews, 1994) pointed out that to an illiterate Zulu speaking person the no smoking sign meant "you can smoke half a cigarette", whilst the emergency exit sign is interpreted as meaning "don't run that way or you will get head, hands and feet chopped off". There are many other documented examples of such differences (Amory and Mars, 1994, Murrell, 1998, Hars, 1996).

2. STUDY

2.1 Research Context

The literature and the users’ preference survey (Al-Badi and Mayhew, 2004) highlighted the importance of understanding the target audience, when designing websites. Thus, to explore this issue further, the aim of this paper is to conduct a comparative study between liberal and prescriptive cultures (in this case Arab and British audiences) to extract the views of Web designers in both countries regarding web usability. Its purpose is to determine the most important issues that should be considered when designing for a particular culture. It is also intended to investigate the extent of the usage of the published usability guidelines and tools in the design of the user interface of a website.

2.2 Research Instrument

The data collection instrument for this research consisted of a 7-page questionnaire for the designers, divided into five main sections (Target Audience Characteristics, Design Tools and Guidelines, Site and Page Structure, Website Localisation and Website Reliability). Respondents were asked to restrict their answers to one particular culture (i.e. British or Arab) which they regularly design for. In many cases the questionnaire was followed by an interview or an email to the surveyed designers to clarify and investigate their responses in more detail.

The data collection was started in the UK, in Norwich, in May 2003 and in Oman, in Muscat, in August 2003 by visiting different design companies in these countries and talking to their designers. A total of 7 design companies and 19 individual designers in both countries were originally approached. A further 6 design companies in Norwich were contacted by phone in March 2004 and the questionnaire was emailed to those who agreed to participate, thus bringing the total number of web design companies to 13 and the individual designers to 30.
3. RESULTS

The outcome of the survey is outlined here according to the five sections listed above:

3.1 Target Audience Characteristics

The responses to the questionnaire sent to the British designers showed that they rarely design for any culture except their own. Occasionally their audience would include Americans and one respondent said he had designed for Arabs.

This rather limited audience range contrasts with the responses from the designers in Oman who have experience designing for various GCC countries such as UAE, Qatar and Bahrain, all of which have a similar culture, as well as for India. The inclusion of India is explained by the fact that a number of website designers in Oman are Indian.

Asked whether they consider the user and country profile before they start designing for a particular culture, it was found that the designers in both countries claimed that they consider most elements (see Table 1 for details).

<table>
<thead>
<tr>
<th>No</th>
<th>Issue investigated</th>
<th>Arab Yes (%)</th>
<th>Arab No (%)</th>
<th>British Yes (%)</th>
<th>British No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Users’ age</td>
<td>57.1</td>
<td>42</td>
<td>63.6</td>
<td>36.4</td>
</tr>
<tr>
<td>2</td>
<td>Users’ gender</td>
<td>42.9</td>
<td>57.1</td>
<td>45.5</td>
<td>54.4</td>
</tr>
<tr>
<td>3</td>
<td>Users’ education background</td>
<td>71.4</td>
<td>28.6</td>
<td>63.6</td>
<td>36.4</td>
</tr>
<tr>
<td>4</td>
<td>Users’ computing skills</td>
<td>71.4</td>
<td>28.6</td>
<td>90.9</td>
<td>9.1</td>
</tr>
<tr>
<td>5</td>
<td>Users’ culture</td>
<td>71.4</td>
<td>28.6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>6</td>
<td>Users’ religious belief</td>
<td>71.4</td>
<td>28.6</td>
<td>20</td>
<td>60</td>
</tr>
<tr>
<td>7</td>
<td>Local data format convention (Address; Currency; Date; Unit of measures)</td>
<td>85.7</td>
<td>14.3</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>Local basic infrastructure (power supply, telephone systems, transportation, cyber-laws, Internet and computers, credit cards)</td>
<td>100</td>
<td>0</td>
<td>54.5</td>
<td>45.5</td>
</tr>
</tbody>
</table>

Investigating the UI elements (e.g. icons, metaphors, images, animation) that on cultural or religious grounds might offend the target audience, designers have different opinions according to the culture they design for. The designers in Oman feel strongly that nothing on their websites must offend Arab culture, and special care must be taken not to include anything that would cause offence to Islamic beliefs. This means, in particular, that there should be no images of a naked human body or even a partially clothed body. Pictures of respectably dressed women are permitted but because not everyone may approve of them, they are used with discretion. Website components often incorporate traditional Arabic designs based on Islamic art and using traditional colours, especially varying shades of green. None of the British designers feel so strongly about any issue as Omani designers feel about Islamic religious beliefs. In fact, the general opinion is that there is little that offends a British audience but common decency does not permit sexual imagery or nude images on websites in general. Some British audiences are irritated by the use of American spelling and phraseology, so this is best avoided where possible. Website audiences are more annoyed by intrusive advertising, especially where it is irrelevant to the theme of website concerned. Other issues raised concerned the need to be aware of the sensibilities of the various regions in the British Isles and also the question of currency as it is considered essential to quote every price in pounds sterling.

3.2 Design Tools and Guidelines

Seven well-known usability and accessibility tools were listed in the questionnaire, these were: 508 Accessibility Suites, AccessEnable, A-Prompt Tool Kit, Bobby, LIFT, Vischeck, W3C HTML validation tools.
The designers in Oman use none of these and various reasons for this were given. Some say they rely on user testing, that is testing according to the client specifications; others claimed that they have company proprietary tools; and some said that they have their own in-house developed tools and test location. Some refused to divulge their methods on grounds of confidentiality.

The British designers make more use of the available tools. Over 80% of the designers questioned said they use ‘W3C HTML validation tools’ and quite a few (27.3%) use Bobby from Watchfire. In addition, some of the designers said they use tools that were not listed on the questionnaire such as: Multiweb, JAWS, LYNX, Dreamweaver and CSS validator. These tools are not commonly used but sometimes there is a specific need for them, for example, when the website has to be enhanced for users with special needs.

When asked whether the tools made much contribution to the usability of the website, the British answered positively- 54.5% said “yes” and a further 18.2% said “sometimes”. The Omani designers’ responses to this question were surprising. Despite the fact that in answers to the previous question, they all said they don’t use the specified tools, only 50% answered “no” to this question. Even more odd is the fact that 12.5% said “yes”, the tools made a contribution to the website usability and a further 12.5% agreed that this is sometimes true (the remaining 25% decided not to answer the question at all.)

As many of the tools are based on usability/ accessibility guidelines, it is not surprising to find that the answers given by the website designers were similar to those relating to the question about tools. The guidelines considered in the questionnaire were:

- IBM’s Guidelines for Writing Accessible Applications
- Microsoft’s Guidelines for Accessible Web Pages
- MIT’s Web Accessibility Principles
- Oregon State University Web Accessibility Guidelines
- Santa Rosa Junior College Web Accessibility Checklist
- IEEE Recommended Practice for Internet Practices
- W3C Web Content Accessibility Guidelines (WCAG)
- Section 508 of the U.S. Rehabilitation Act Amendments of 1998
- Section 255 of the U.S. Telecommunications Act 1996
- Section 21 of the UK’s 1995 Disability and Discrimination Act

None of the Arab designers use any of these guidelines except ‘W3C WCAG’ which a small number (12.5%) admitted to using. They all said they use other guidelines but none of them specified the names except for one who mentioned that he uses Jakob Neilsen.

Although the majority of the British website designers (over 80%) use guidelines, only one of the guidelines listed above is consulted. W3C WCAG guidelines appear to be by far the most popular used by over 72.7% of the respondents; the rest (9.1%) use guidelines other than those specified.

Nearly all the British designers feel that the guidelines make a contribution towards website usability. The majority (63.6%) answered positively “yes” and a further 18.2% said “sometimes”. The remainder said, “don’t know” and none said “no”. In contrast, only 14.3% of the Omani designers said “yes” and a further 14.3% said “sometimes”. There was a high percentage of “don’t know” (28.6%) and the remainder said firmly “no”, these guidelines do not assist usability.

### 3.3 Site and Page Structure

Designers in both countries agreed that it is very important to have a clear navigation bar. All the Omani designers (100%) said it is “very important” or “important” and over 90% of the British designers felt the same.

Regarding the location of the navigation bar, the British designers gave a unanimous response in favour of “top” and “left” (or “top left”). The majority of the Omani designers (62.5%) chose “top” and “right” (or “top right”); the remainder were divided between “top”, “left” and “other”. These responses, top left for the British and top right for the Omans, have an obvious connection with the direction of writing in each language.

Designers in both countries agreed on a preference for short web pages connected with hyperlinks (75% Omans and 81.8% British), rather than one long page that requires vertical scrolling.

Regarding the usefulness of page separators, 91% of the British designers had answers ranging from ‘some use’ to ‘very useful’; 75% of the Omani designers had similar views.
When asked about the design of links (URLs), the word most frequently used by both British and Omani website designers was “consistency” - “consistent text colour/style”, “consistent link colouring”, “consistent style for links throughout the site”, “consistency and familiarity”. Closely related to “consistency” was the importance of “clarity” and “uniformity” - “text size should be clear”, “using the same colour, font style, size throughout the site”, “using CSS to maintain uniformity”. Designers from both countries agreed that the same colour (or “consistent” colours) should be used throughout and that this colour should be different from the text. They all felt that links that have already been visited should be indicated in a different way. They also agreed that the same size, type, and style of font for URLs should be used throughout, and that it is essential the links should work and lead to the desired destination. The ideas about URLs expressed by both designers’ groups could equally well apply to the website design in general.

There was almost a consensus between British and Omani designers that clear and concise content attracts the users most to read written material on a website (87.5% of the Arab designers and 81.8% of the British designers). Both dislike the idea of using animation (87.5% Arab and 81.8% British) and graphics (75.4% Arab and 54.5% British) for this purpose.

Some of the designers in Oman suggested that nice design, clear layout and the use of good titles, attractive words, and sometimes little graphics are factors which attract users to read on. The British added that the text on screen must be more concise than text on the printed page. It should have good typography, use spacing effectively and make the page look attractive. It should also make use of clear headings and images, a clean layout and relevant content.

Regarding the choice of the language level and writing style that is most suitable for the target users, both agreed that the use of “scan-readable” text is the best solution (62.5% of the Arab and 72.7% of the British). Few of the designers from either country bother to survey the target country’s readability level and very few use existing surveys.

As far as the language itself is concerned (English or Arabic or both), some of the designers in Oman said that they make bilingual sites. Regarding the language level for English, they have a "content writer" who possesses a high level of competence in English and is experienced in technical writing; for Arabic they have an Omani translator. The British added that the text is often supplied by the owners of the website, frequently reproduced from printed materials. Practically all the British designed websites are written in English and the designers emphasise the importance of having clear and concise text.

Concerning readability indexes (formulae), both said that they do not use them when designing a user interface for a website (87.5% Arab and 100% British). This finding also enforces the findings in the previous paragraph.

Both agreed on the use of colour to improve readability (75% of the Arab designers and 72.7% of the British), and most of the responses emphasised the importance of contrasting colours for text and background which is particularly important for people with visual impairments. One British designer mentioned that different colours should be used to differentiate sections and to highlight titles but another warned of the danger of using colours that clash and make the text harder to read.

The British designers had quite definitive views on colours or colour combinations to be avoided for either the background or the text. These included garish colours and colours at opposite end of the spectrum such as red and green, and colours very close tonally such as green and grey. While avoiding colour combinations that clash, it is still important to have a good contrast between text and background. Omani designers agreed that “hot” and “gaudy” colours should be avoided, especially red in particular. Their other responses were more general such as: “there is no fixed rule”, “any colour that affects the clarity”, “it depends on client requirements”.

When asked about the strategies they used to enable users to scan-read text on a web page, both British and Omani designers use “Highlighted words and phrases” and “Meaningful sub-headings”. (The Omanis gave 100% response to the two statements, the British 81.8% and 63.6%). Most of the British thought that the use of “Bulleted lists” helps users (63.6%), fewer of the Omanis (42.9%) agreed with this. About 42.9% of the Omanis thought it was a good idea to emphasise the beginning of the sentences while only 27.3% of the British concurred.

When asked about the most eye-catching position on a web page, the Omani designers’ responses varied between “top right” (37.5%) and “centre” (37.5%), and “top left” (25%). Again, this has to do with the direction of writing the Arabic language. It must be understood that most designers in Oman speak English and are designing bi-lingual site, hence the preference of 25% for “top left”, following the natural direction
of writing in English. British designers naturally favoured “top left” (60%) although “centre” was also popular (40%).

When the designers were asked how important it is for customer satisfaction to have grammatically correct text in a web page, 100% of British designers believed that it was important and similarly 88% of the Omani designers believed this too.

To avoid users’ frustration, when designing online data entry forms, both groups agreed completely with the following statements:

- Form fields should be clearly labelled with appropriate textual information
- Form fields should be clearly labelled as to whether required or optional
- Formatting requirements of a field should be clearly presented (e.g., date is DDMMYY)
- Messages should be displayed when data or data formats are incorrect or incomplete
- Default values should be displayed whenever possible
- Data facilitation should be provided (e.g., list boxes, pop-up boxes)
- The form should remember latest values entered

The designers were asked whether they agreed or disagreed with a number of issues relating to website design. There was widespread accord between the two groups of designers in their replies, over 60% of both groups (in some case 100%) agreed with the following statements:

- A web site should prove its authenticity (author, date, etc) to customers
- Providing what is called “Cookies Crumb/ Bread Crumb” trail on a web site is crucial
- It is important to have consistent error, confirmation and prompt messages
- It is important to have a search service on a web site
- The placement of elements on a web page has an effect on ease of use/ improves visual appeal
- The use of white space can improve visual ease of use/improve visual appeal
- The amount of text within the page affects the ease of use
- The choice of font types (e.g., Arial, Times Roman) affects ease of use
- Consistent font type aids readability
- The choice of font size affects ease of use
- The appropriate choice of font style (e.g., bold, italics, shadowing) affects ease of use

Both groups unanimously disagreed with the statement “It is good practice to have lots of horizontal scrolling” and both groups showed no strong opinions about the statements “A colourful web site is more attractive and preferable” and “Animation helps convey information”.

### 3.4 Website Localisation

There was much less unanimity when the designers were asked whether it is better for companies to adopt “Localisation” or “Internationalisation”. It seems that the British designers are strongly in favour of localisation (90%); the Omani designers are also in favour of this but less so (57.1%). There were, however, some strongly dissenting voices on both sides, many making the common sense point that it depends on the type of market, the site and the target audience. Although designers were generally in favour of localisation, the point was made that it can be expensive, perhaps beyond the budget of non-profit based websites and small businesses.

### 3.5 Website Reliability

There was widespread agreement from the designers of both countries that the features of the target computing environment strongly influence the design of a web site UI. There was 100% agreement that it is crucial to take into account size and resolution of the monitors. Consideration of the browser type and version is thought to be almost as important (Omani 100%, British 81.8%); similarly Internet connection speed (Omani 87.5%, British 72.7%). Both also agreed that the operating systems and database strongly influence the design of website User Interface but with slightly less emphasis (Omani 75%, British 63.6%).

In addition two other features were considered important. There was 100% agreement from the designers of both countries that the organization’s strategic goals (business nature) influence the design of the User Interface. Nearly all Omanis (87.5%) and most of the British designers (80%) agreed that it is important to provide some assurance indicating that online transactions are secure and reliable.
3.6 Designers’ General Views and Comments

Designers from both countries were given the opportunities to add general comments at the end of the questionnaire. Although many of these comments repeated the answers given to previous questions, they did, in fact, highlight the issues that the designers thought most important.

The Omani designers strongly emphasised the importance of the need to respect Islamic religious beliefs and adhering to Arabic cultural values. An awareness of these issues dominates the priorities of designers in Oman as indeed it would in other Arab countries. The second most important issue was the need to make the website bilingual (Arabic and English) and closely allied to this was the interest in local elements of a website involving local people in the design process. There were also a number of comments about technical aspects of the local computing environment, such as Internet connection speed, monitor size and resolution and whether your target computing audience has the necessary plug-in. The Omani designers also felt it is important to design a website that can be downloaded fast by limiting the size of images, graphics and animation.

The British designers’ comments were entirely devoted to technical aspects of website design, for example, the website must scale to small resolutions but still take advantage of large resolutions; the website must load quickly on a slow Modem connection; the navigation bar should be located on top or left due to accessibility for screen readers; horizontal scrolling must be avoided but vertical scrolling is accepted though should not be too long; usability is a very important issue especially reducing the amount of information the user needs to type; data entry form fields validation and auto-completion (subsequent forms inherit details whenever possible). One designer commented that software and hardware limitations arising from different environments affect website design, for example, browser type and version.

4. DISCUSSION AND CONCLUSION

Certain generalities apply to all website design. The research showed that British and Omani designers were in total agreement that fundamental to good design is an understanding of the needs of the organisation commissioning the site, i.e. the nature of the business involved. Of almost equally importance is an understanding of the target computing environment, e.g. monitor size, browser type and version, database and Internet connection speed.

There was a complete consensus of views that clear and concise content attract the users most, ensuring they read the material on the website and that colour improves readability, they both use “highlighted words and phrases” and “meaningful subheading” to enable users to scan-read. They both favour short pages connected with hyperlinks rather than one long page that require vertical scrolling. They both agreed on the importance of a clear navigation bar but they differed in their preferences for it location. The British preferring “top” and “left”. The Omanis generally, preferring “top” and “right”. There was also complete agreement over the need for consistency throughout the site, for URLs, text colours, text size, font type and style, all of which combine to make the site attractive to look at, easy to read and quick to navigate.

When it come to the use of tools and guidelines there were noticeable differences between the British and Omani responses. The British used both the tools and guidelines frequently, but only certain tools, especially W3C HTML validation tools and to a lesser extent, Bobby, plus a number of others not listed in the questionnaire. The majority of the British said they were using some guidelines, in particular, W3C WCAG. In contrast, the Omanis used none of the listed tools but some relied on a user testing and some had developed their own propriety tools. This may be because most of the tools are designed to meet North American standards. A small percentage of Omani use W3C WCAG but none of the other guidelines. They all said, however, they use other guidelines, presumably ones they have developed themselves which are specific to their market.

Omanis are always aware of having to design websites with two languages (Arabic and English) in mind but the greatest difference between the two cultures was that Omani designers were always conscious of designing for an Arab culture. This involved primarily respecting the teachings of Islam and Arabic cultural values. In contrast, the British made little comment about cultural values. In fact, few of them even answered the question about UI elements that might offend a target audience and those who did, mainly mentioned
advertising and Americanisation especially spelling and symbols (e.g. the American mailbox). The British also consider British currency and British measurement important.

What become clear though this study is that no matter what tools are used or how logically the site is designed, if the designer has not fully understood the culture and the client’s market, the site is unlikely to succeed.

Large number of web design companies in both the UK and Oman showed their great interests in the research outcome and offered their full cooperation in this regard. Therefore, it is planned to extend the research to include more designers from both countries to make it more representative and to validate the current findings.

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