

# A Usability Assessment of Pakistani Universities/Institutions Websites

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## Abstract

Websites are playing a very important role in field of information Technology. Usability is also of much importance in exploring the websites. The objective of this paper is assessing the usability of the websites of the Pakistani Universities and giving the idea of developing the websites of the universities/institutions fulfilling the user needs. Different parameters were analyzed in light of usability in the websites of different universities in Pakistan. It was evaluated that these universities websites have the errors in the parameters not following the rules of usability. The usability of websites of different universities/institutions of Pakistan can be improved applying the one rule for every factor so that the user can encounter every task easily with no tedious effort and confusion. These rules of usability should be announced by the government and the universities should be limited in these rules to facilitate the fresh and experienced users.

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*Index terms—*

## 1 Introduction

Usability is an eminent element that analyzes how the interfaces are easy to use for the user. The following components can easily define the usability [1].

? Learnability is related with encountering the design for the first time; it will be simple for the users to perform the essential tasks. ? Efficiency is how rapidly a user can encounter the different tasks after learning the design. ? Memorability is to which extent the user has the ability to perform different tasks easily which he had encountered few years ago. ? Errors are how many mistakes made by the user, how rigorous they are and how easy they can be recoverable.

## 2 ? Satisfaction is to what limits the design is satisfying?

Usability has much importance in the web e.g. if the website is designed so that a user is feeling comfortable to accomplish different tasks he wants and he is aware of the current location in the website (where he is in website now), so it is good, otherwise he will be confused and will never visit this website.

## 3 a) Logo

On every page, there should be placed a logo of the organization at a constant place (top left corner), so that the user is confident about himself that he is searching the same site to which he has entered some time ago [2].

## 4 b) Title

Title/Name should be placed on every page and there should be a link on it [3].

### 5 c) Search

On all pages of the website, there should a search option so that the users need not to go to the home page to search the specific word or topic [4].

### 6 d) Breadcrumbs

It cannot be expected from the user for using the breadcrumbs efficiently. The competence of the navigation can be increased by using the breadcrumbs in effective way and directions will be provided to the users visiting the website [5].

### 7 e) Visited and Unvisited Links

There should be the proper colors for the visited and unvisited links. A link should be of specific color (blue) before it is visited and its color should be changed to another color (purple) to assist the user to notify him the visited and unvisited links [6].

### 8 f) Avoid Scrolling Horizontally

There should be a proper layout of the page so that the user can get rid of scrolling horizontally. Scrolling horizontally is the time consuming and boring process for the user for viewing the whole contents of the screen [7]. In accordance with the different rules and searching for these rules in the website of the above mentioned institution, it has been taken in the consideration.

The monogram of the institution is present on the home page at its proper place (top left corner), but when the website was further navigated, there is missing of the monogram on the top left corner of linked pages. The title of the site is present on the home page as well as on the linked pages at the top of the page but the link is not available on this title.

According to the rules, there should be a search option on the top right side of the page on the home page as well as on the linked pages, but after searching that site, there is no search option on the home page and the linked pages.

The breadcrumbs are creating step by step in the site when this site is further visited.

When the site was visited for surveying the colors of the visited and non visited links, it was evaluated that when the links were navigated for further searching and was back to that link, it was noticed that the color of the visited link was not change to purple which is a big fatigue for the user using the site because he will not be aware of himself that which part of the site he has visited so far.

There is no horizontal scrolling in the website and the user is free of tedious effort to scroll horizontally.

When the site was checked for the back button, it was evaluated that when the different links were visited in the site, we were able to go back (the back button is enable) and the linked contents do not open in the new window, so the user will feel comfortable to use that site and will be enable to visit further links by clicking on the enabled back button.

The font size is at least 12pts according to the rules which is assistive for the aged people using that site.

The typeface in the site used is Verdana and Arial as in the rules.

As according to the rules, there should be an "About Us" option in which there will be the information about the organization/institution, but after visiting the site of that institution, it has been noticed that there is no "About Us" option present on the page.

The "Site Map" is present on the page of the site which shows all the contents of the site in hierarchy structure, so by clicking on the "Site Map", it will be helpful for the user to see that what contents this site involves. The monogram of the institution is not at the proper place (top left corner).

## 9 PIEAS (http)

The title is available on the home page and on the linked pages but the link is not available on this title.

According to the rules, there should be a search option on the top right side of the page on the home page as well as on the linked pages, but after searching that site, there is no search option on the home page and the linked pages.

There is no creation of the breadcrumbs when the site is further explored.

When the site was visited for surveying the colors of the visited and non visited links, it was evaluated that when the links were navigated for further searching and was back to that link, it was noticed that the color of the visited link was not change to purple which is a big fatigue for the user using the site because he will not be aware of himself that which part of the site he has visited so far. There is no horizontal scrolling in the website and the user is free of tedious effort to scroll horizontally. When the site was checked for the back button, it was evaluated that when the different links were visited in the site, we were able to go back (the back button is enable) and the linked contents do not open in the new window, so the user will feel comfortable to use that site and will be enable to visit further links by clicking on the enabled back button.

The font size is at least 12pts according to the rules which is assistive for the aged people using that site. The typeface in the site used is Verdana and Arial as in the rules.

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95 "About us" is present in the site providing the information of the Institution.  
96 "Site Map" is not present which can lead to confusion for the user because the "Site Map" provides the contents  
97 of the website in tree structure from which a user can estimate that what the contents it involves in less time.  
98 The monogram of the institution is not at the proper place (top left corner).

## 99 10 Aga

100 The title is available on the home page and on the linked pages.

101 The search option in this site is present on its proper place (top right corner) following the rule which is  
102 assistive for the experienced and fresh users to search all the contents of the website which he wants to search by  
103 saving precious time.

104 The breadcrumbs are creating step by step in the site when this site is further visited.

105 When the site was visited for surveying the colors of the visited and non visited links, it was evaluated that  
106 the when the links were navigated for further searching and was back to that link, it was noticed that the color  
107 of the visited link was not change to purple which is a big fatigue for the user using the site because he will not  
108 be aware of himself that which part of the site he has visited so far.

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118 so by clicking on the "Site Map", it will be helpful for the user to see that what contents this site involves. The  
119 monogram of the institution is present on the home page but is not on its proper place (top left corner) and is  
120 not available on the linked pages.

## 121 11 University of

122 The title of the page is available but there is no link available on the title.

123 According to the rules, there should be a search option on the top right side of the page on the home all the  
124 contents of the website which he wants to search by saving precious time. page as well as on the linked pages,  
125 but after searching that site, there is no search option on the home page and the linked pages.

## 126 12 Global

127 There is no creation of the breadcrumbs when the site is further explored.

128 When the site was visited for surveying the colors of the visited and non visited links, it was evaluated that  
129 the when the links were navigated for further searching and was back to that link, it was noticed that the color  
130 of the visited link was not change to purple which is a big fatigue for the user using the site because he will not  
131 be aware of himself that which part of the site he has visited so far.

132 There is no horizontal scrolling in the website and the user is free of tedious effort to scroll horizontally.

133 When the site was checked for the back button, it was evaluated that when the different links were visited in  
134 the site, we were able to go back (the back button is enable) and the linked contents do not open in the new  
135 window, so the user will feel comfortable to use that site and will be enable to visit further links by clicking on  
136 the enabled back button.

137 The font size is at least 12pts according to the rules which is assistive for the aged people using that site.

138 The typeface in the site used is Verdana and Arial as in the rules.

139 "About us" is present in the site providing the information of the Institution.

140 The "Site Map" is not present in the site to assist the user to see the contents of the website in less time. The  
141 logo is present on the home page at top left corner but the link on it is not available.

## 142 13 University of the

143 The title of the page is available but there is no link available on the title.

144 After visiting this website it has been noticed that there is a search option present on the home page as well  
145 as on the linked pages but it is wonderful to see that only the "search" text is present and there is not text field  
146 present beside it but when the search text is clicked, the search text field appears.

147 The breadcrumbs are creating step by step in the site when this site is further explored.

148 The non visited links appear blue as and when these links are visited, they also change color from blue to  
149 another color rather than a purple as according to the rules.

150 There is no horizontal scrolling in the website and the user is free of tedious effort to scroll horizontally.

151 When the site was checked for the back button, it was evaluated that when the different links were visited in  
152 the site, we were able to go back (the back button is enable) and the linked contents do not open in the new

153 window, so the user will feel comfortable to use that site and will be enable to visit further links by clicking on  
154 the enabled back button.

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158 The "Site Map" is present on the page of the site which shows all the contents of the site in hierarchy structure,  
159 so by clicking on the "Site Map", it will be helpful for the user to see that what contents this site involves. The  
160 monogram of the institution is at the proper place on every page.

### 161 **14 National**

162 The title is available on the home page and on the linked pages but a link on it is not available.

163 The search option in this site is present on its proper place (top right corner) following the rule which is  
164 assistive for the experienced and fresh users to search all the contents of the website which he wants to search by  
165 saving precious time.

166 The breadcrumbs are creating step by step in the site when this site is further visited.

### 167 **15 Year**

168 When the site was visited for surveying the colors of the visited and non visited links, it was evaluated that the  
169 when the links were navigated for further searching and was back to that link, it was noticed that the color of  
170 the visited link was not change to purple which is a big fatigue for the user using the site because he will not be  
171 aware of himself that which part of the site he has visited so far.

172 There is no horizontal scrolling in the website and the user is free of tedious effort to scroll horizontally.

173 When the site was checked for the back button, it was evaluated that when the different links were visited in  
174 the site, we were able to go back (the back button is enable) and the linked contents do not open in the new  
175 window, so the user will feel comfortable to use that site and will be enable to visit further links by clicking on  
176 the enabled back button.

177 The font size is at least 12pts according to the rules which is assistive for the aged people using that site.

178 The typeface in the site used is Verdana and Arial as in the rules.

179 "About us" is present in the site providing the information of the Institution.

180 The "Site Map" is not present in the site to assist the user to see the contents of the website in less time.

### 181 **16 Pir Mehr Ali**

### 182 **17 No**

183 Both the logo and title are present, the logo is at its proper place having a link on it but the title has no link on  
184 it.

185 According to the rules, there should be a search option on the top right side of the page on the home page  
186 as well as on the linked pages, but after searching that site, there is no search option on the home page and the  
187 linked pages.

188 The breadcrumbs are creating step by step in the site when this site is further visited.

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200 "About us" is present in the site providing the information of the Institution.

201 The "Site Map" is not present in the site to assist the user to see the contents of the website in less time. Both  
202 the logo and title are available but there is no link available on it.

### 203 **18 University of**

204 The search option is also not present and breadcrumbs are also not creating in the website of this institution.

205 When the site was visited for surveying the colors of the visited and non visited links, it was evaluated that  
206 the when the links were navigated for further searching and was back to that link, it was noticed that the color  
207 of the visited link was not change to purple which is a big fatigue for the user using the site because he will not  
208 be aware of himself that which part of the site he has visited so far.

209 There is no horizontal scrolling in the website and the user is free of tedious effort to scroll horizontally.

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210 The back button in this site became disabled when further navigation is encountered which is problematic for  
211 the user because a new window is opened for each navigation and the user cant go back by clicking on the back  
212 button which became disabled.

213 The font size is at least 12pts according to the rules which is assistive for the aged people using that site.

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## 220 19 II.

## 221 20 Conclusion

222 After detailed study of the websites of different universities/institutions, it has been concluded that most of the  
223 institutions/universities do not follow the web usability rules due to which the users (fresh & experienced) face  
224 different problems exploring these sites and also a time consuming process. When the user visits a site which  
225 has no usability rules became bored in the first time of the exploring and never visits this site again. Different  
226 universities/institutions must follow the usability rules to facilitate the user in encountering different tasks which  
227 leads to time consuming free exploring tasks. Different parameters were analyzed in light of usability in the  
228 websites of different universities in Pakistan. It was evaluated that these universities websites have the errors in  
229 the parameters not following the rules of usability. The usability of websites of different universities/institutions  
230 of Pakistan can be improved applying the one rule for every factor so that the user can encounter every task  
231 easily with no tedious effort and confusion. These rules of usability should be announced by the government and  
the universities should be limited in these rules to facilitate the fresh and experienced users. <sup>1 2 3</sup>



Figure 1:

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<sup>2</sup>© 2013 Global Journals Inc. (US) Global Journal of Computer Science and Technology

<sup>3</sup>Logo Yes

S. No.	Parameters	Yes	No
1	Logo		No
2	Title	yes	Link not available
3	Search		No
4	Breadcrumbs		No
5	Visited & unvisited Link		No
6	Avoid Scrolling horizontally	yes	
7	Back button enable	yes	
8	Font Size	Yes	
9	Typeface	yes	
10	About us used for org. info	yes	
11	Site Map		No

Figure 2:

233 .1 Link not available 2 Title Yes

234 Link not available

235 .2 No

236 In the website of this institution, the logo and title both are present but the link is not available on both of them.  
237 The search option and breadcrumbs are also not available in this site.

238 When the site was visited for surveying the colors of the visited and non visited links, it was evaluated that  
239 the when the links were navigated for further searching and was back to that link, it was noticed that the color  
240 of the visited link was not change to purple which is a big fatigue for the user using the site because he will not  
241 be aware of himself that which part of the site he has visited so far.

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267 the enabled back button.

268 The font size is at least 12pts according to the rules which is assistive for the aged people using that

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