

## **A Methodology to Conduct an End User Evaluation of Organisational Web Portal**

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### **ABSTRACT**

An organization's website being the face of an organisation requires a validated structure, easy for the virtual users to access it. The study showcases a methodology that can be utilized for finding how far the web portal is user friendly useful for a virtual user. A web interface developed for the Directorate of Research of Kerala Agricultural University was selected for the study. The web interface was evaluated considering its homepage, navigation, site organization, links and labels and readability. The organization of the web interface registered a high mean score of 3.90. The 'links and labels', and the 'navigation' also registered high mean scores of 3.89 and 3.87 respectively. The improvement was required in readability and appeal of the home page. This methodology clearly provides an insight to whether the developed site is user friendly and appealing thereby helps in the fine tuning of the organization's websites/ interfaces.

**Key words:** Web portal, end user assessment

### **INTRODUCTION**

An organizational website in the World Wide Web consists of collection of information about the organization along with related pictures and videos. A web portal is a website for specific audience that compiles an array of content for providing various services which includes search engines, directories, news, e-mail and chat rooms *etc.* (Piennar, 2003). The users from in and around the world utilize an organization's website for their various uses; therefore it is necessary that the designers of the website see that the website is designed in such a manner that would help the browsers. Many times we find difficulty in using the websites of certain organization due to the lack of many features and difficulty in navigating through the site. This exhibits lethargy in the users mind to further utilize the website. For increased utility of that websites, what required is the end users need based and demand driven web portal design. Therefore a need oriented interface would act as information providing platform for improved service provision. In this study an insight is provided as to how to conduct and end user assessment of a web portal. Various properties in a web portal like the organization of the content, the links and labels, navigation home page and the readability of the information of the web portal can be

assessed using sub elements in order to understand the satisfaction of the users in using the web portal.

### **METHODOLOGY**

The web interface that was developed for the Directorate of Research, Kerala Agricultural University was selected for conducting the end user evaluation. The web interface was subjected to two end user assessment one each for the research administrators and researchers. Ten research administrators and 30 researchers participated for the end user evaluation. The web interface was demonstrated before the respondents/ participants and then was given a chance to use the interface. This was followed by distribution of a questionnaire to evaluate the design of the interface, for which the methodology suggested by Meyer (2007) was used with suitable modification. Accordingly, the design of the interface was evaluated in terms of its homepage, navigation, site organization, links and labels, and readability. Each of these items was evaluated based on some attributes. Thus 4, 3, 2, 7 and 8 attributes were used for assessing homepage, navigation, site organization, links and labels and readability respectively. The participants/ respondents were asked to rate the performance of the interface in each attribute on a five point continuum, the

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points being very poor, poor, fair, good, outstanding, with a score of 1, 2, 3, 4 and 5 respectively. Ultimately the design was evaluated using mean scores.

## RESULTS AND DISCUSSION

A glance at the Table 1 revealed that the organization of the web interface; registered the highest mean score of 3.90. This may be because of links and the draft contents of the web interface were arranged in logical manner. The 'links and labels' and the navigation also registered high mean scores of 3.89 and 3.87 respectively, may be because the end users might have felt that the major links/ labels and navigation were appropriate for their use. While, the mean score obtained for readability of the web interface were 3.47, which show that it requires improvement. Thus it can be inferred that the organization of the interface, the links and labels, the navigation and the home page are of good quality, while the readability needs to be improved.

**Table 1: The quality of various design elements of the web interface as assessed by the end- users**

<b>Design elements</b>	<b>Mean score</b>
Organization	3.90
Links and labels	3.89
Navigation	3.87
Home page	3.67
Readability	3.47

The perceived quality of attributes of each design element is presented in Table 2. In the design element, homepage, the attribute 'content of the home page' had the highest mean score. This may be because the end users might have found the contents in the home page as informative. Over all, the attributes of the homepage were of good quality. However, the appeal of the home page was having a mean score of 3.30 only, which needs improvement.

In navigation, quickness of navigation was having the highest mean score (3.96), which means that the interface navigates fast. This coupled with easy identification of clickable items and enough local navigation made the design element, navigation of good quality.

In the design element, site organization with high mean score was registered by the attribute, easiness to comprehend (3.93) followed by the comfort to use (3.89). Thus both the attributes of the site organization were found good.

The quality of all the attributes in 'links and labels' were found good. The distinguishability of links was having the highest mean score (4.00). The links were found distinguishable from one another, with understandable content grouping, identifiable with purpose, conveniently laid out, matching to the organization and useful to both researchers and research administrators.

**Table 2: Quality of attributes of each design element of the web interface, as perceived by the end users**

<b>Attributes</b>	<b>Mean score</b>
<b>Home Page</b>	
<b>Content of the website</b> (How informative is the home page leading to the inner contents?)	3.89
<b>Quick loading of home page</b> (How fast does it load?)	3.78
<b>Arrangement of contents</b> (Is the home page properly laid out?)	3.74
<b>Appeal (not annoying)</b> (Is the home page pleasant and appealing?)	3.30
<b>Navigation</b>	
<b>Quick Navigation</b> (Is it quick to navigate from page to page? (forward and backward)	3.96
<b>Easy identification of clickable items</b> (Do clickable items stylistically indicate that they are clickable?)	3.89
<b>Enough local navigation</b> (Do major sections have forward and backward local navigations in them?)	3.78
<b>Site Organisation</b>	
<b>Easiness to comprehend</b> (Is the site organization easy to understand?)	3.93
<b>Comfort to use</b> (Is the site organization comfortable to work with?)	3.89
<b>Links and Labels</b>	
<b>Distinguishable links</b> (Are links easy to differentiate one another?)	4.00
<b>Understandable links</b> (Are content grouping (categorization) easy to understand?)	3.97
<b>Identifiable links</b> (In general do the names of the link indicate the purpose for which they are meant?)	3.89

With regard to the attributes affecting readability, line length, fonts used, appropriateness of the design for intended users, and breaking apart of contents were found good with mean scores of 3.91, 3.80, 3.71, and 3.55 respectively. Notably, the attributes which needed

improvement included font size, font colour, background colour and contrast. This was mainly because of the less contrast between the font colour and back ground colour.

In short, the web interface developed was of good quality in terms majority of the attributes of the design elements of organization of the interface, links and labels, navigation and the home page, whereas it needed improvement in readability by enhancing the contrast between the background colour and font colour. The appeal of the home page also needs improvement.

### **CONCLUSION**

The developed methodology can be used to conduct end user evaluation of any websites/ interfaces before launching the sites officially. This methodology clearly provides an insight of whether the developed site is user friendly and appealing or not. The methodology thus helps in the fine tuning of the websites/ interfaces.

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