Evaluating Usability Factors in Three Brazilian Portals

Wabner Alves de Souza, Faculdade Natalense para o Desenvolvimento do Rio Grande do Norte – FARN, Brazil; E-mail: wabnersouza@tjrn.gov.br

Luiz Augusto M. Mendes Filho, Faculdade Natalense para o Desenvolvimento do Rio Grande do Norte – FARN, Brazil

ABSTRACT

The usability of a system is a concept that relates to the quality of the interaction of systems with the users and depends on many aspects. The objective of this article is to carry through an evaluation of usability in three of the biggest portals of information and service of Brazil. A usability test was carried out to reach this objective. It was used users with and without experience in computer science, for the development of specific tasks to test the efficiency of the portals analyzed. The evaluation was made through standards of usability described for Nielsen.

1. INTRODUCTION

The importance of the interfaces of computational applications has been increasing in the last few decades. Thus the necessity to interact with computers is more present in the life of all. The innovation in the field of the Information Technology (IT) has caused changes in the form of living of people that must adjust themselves to this reality. For this reason it is necessary easy information systems that allow to get and to supply information to the users in easy and intuitive way.

Hence, the usability acts to stand out the importance of thinking ahead about the people who are in the other side of the video, and the reaction of them about the use of the computers, systems and interfaces. According to Leite (1998), the usability of a system is a concept that relates to the quality of the systems interaction with the users and depends on many aspects.

At a time where it verifies the emergency of terms as interactivity and usability, it is well-known the function each more critical played by IT, being distinguished the Internet. In this environment, each second worth a lot in the time to conquer users or to offer services. Therefore, the interfaces of the websites must be friendly and easy of use. This account so much to whom uses the Internet for the most different ends.

IT has proportionate a variety of new resources for the development of interfaces with the user. The adequate use of these resources becomes the websites sufficiently friendly and attractive, making with that the access to the information and the resources are efficient and pleasant for the user. It doesn't matter the great resources spend in technology if the user satisfaction isn't reached.

Portals of information and service are used in day-by-day of the Brazilians, since the former supplies notice and information of the most varied types and updated every second. So, the objective of this study is to evaluate the usability factors in three of the biggest portals of information and service of Brazil.

2. METHODOLOGY

This research used a usability test as form to evaluate the usability factors of the three portals. A usability test is a process in which representative participant evaluate the degree that a product is in relation to the specific criteria of usability (Rubin, 1994).

The evaluation of usability of the interfaces was carried out in three of the biggest portals of information and service of Brazil. According to Folha Online (2006), the three portals more cited by internet users were: UOL with 21% of the interviewed ones, whereas Terra and IG (Internet Group) were with 10% and 9% respectively.

The usability test used 12 users for the development of specific tasks to test the efficiency of the portals analyzed, being that nine work with computer science and the other three use the Internet only in the day by day.

The test used standards of usability described for Nielsen (2000), and that they focus the following aspects:

- Design of the page: Land of the screen, Time of reply, and Links;
- Design of the content: Adequate formatting of the texts;
- Design of the site: Metaphor and Navigation.

3. DATA ANALYSIS

3.1 Design of the Page

The first factor to be analyzed is the Design of the Page, divided in three items: Land of the screen, Time of reply, and Links.

3.1.1 Land of the Screen

In the first question related to the land of the screen, 66.67% of the users affirmed that the available space to the content is fine. However, with respect to priority given to the comparative content to the use of the land of the screen to show other resources or services, the analyzed portals still need to improve in this aspect.

It was verified in the second question referring to the land of the screen, that 80.56% of the users said that the spaces blank in the screen of the portals are few, showing that they are using appropriately the available spaces in the screen for the content, navigation or other resources well.

The question of number three asked to the users about if the announcements and propagandas are taking too much space in the portals. According to 52.78% of the respondents, they consider that the announcements are in excesses and confuse the visualization of the site. In such a way, the portals would have to diminish the amount of advertising in their sites, thus it makes possible a better usability for the user.

3.1.2 Time of Reply

As for the reply time, the evaluated portals demonstrated a good performance. Only 5.56% of the users answered that the site did not react fast to the commands, and 36.11% of those found that the time of reply of the portals is enough. The others 58.33% affirmed that the time of reply of the portals is satisfactory.

With regard to the time of download of file of the portals, for 33,33% of the users these portals almost never inform the size of downloads. Only 16,67% said that the portals always inform the size of downloads. Therefore, these portals need to inform to the user the size of the file, and then one can decide if will download it at that moment or not.

3.1.3 Links

The research verified if the portals offered a resource that showed one brief explanation of link before the user clicks on it. The results show that 38.89% affirmed never the portals show the headings of links to facilitate the navigation of the users, and only 22.22% of the respondents answered that always the portals inform the heading of links. Thus, it expects that these portals always inform some information about the link before the user clicks on it.

3.2 Design of the Content

For 55.55% of the users, the content available for the portals is satisfying the necessity of them with regard to the quality and brevity of the texts. The others

44.45% were indifferent as regards to the adequate formatting of the texts in the site. Therefore, as the result was not satisfactory for the great majority of the respondents, it is expected that the portals try to develop more objective contents, dividing the subjects in topics, facilitating and providing to the user a clearer and direct reading.

3.3 Design of the Site
In respect of the use of metaphors in portals, 47.22% of the users demonstrated indifference to this aspect, affirming that the use of metaphors does not harm and nor contributes for a good navigation. No informer answered that the metaphors helped a lot in the navigation, and 38.89% said to be satisfactory the use of metaphors in the portals.

In the aspect of the navigation, referring to the identification of where the user is in the site, 61.11% of the users said that is satisfactory or very satisfactory the navigation of these portals. This information proves that the portals are informing the localization of the users whenever possible, facilitating to get the information in any place of the site, and not leaving them to lose during the navigation.

4. CONCLUSION
The results in general showed that the users have a good impression as regards to the usability of the portals. The purpose of this research was exactly to show the reality of the main Brazilian portals since all internet users currently access theses sites at least once per day. In such a way, verifying the usability of these portals and identifying possible deficiencies in them, it can solve them, and consequently to facilitate the access of the information for any type of user, from the least to the most experienced in the Internet.

The majority of the developers and Brazilian companies still invest very little in usability, and usability tests still are something rare. Therefore, it must be had in mind that the elaboration and accomplishment of tests to evaluate the usability, applied to a product, as it was the focus of this work, is a good pointer to display problems in potential. This sufficiently minimizes the risk of offering an unstable product and of difficult learning in the market.

This work did not intend to analyze all the existing problems with the usability of these portals since the research would be much more ample. As recommendation for future research aiming at practical results, it is suggested a work deepened in this subject using more professional without experience in computer science, in order to get a set of suggestions for the improvement of the usability in the sites of the Web. This set of suggestions can be carried through one checklist or developing a method of evaluation for portals of information and service.

REFERENCES
Folha Online. (2006). "Folha iBrands: Universo Online é o Top do top da internet". Accessed October 03, 2006 from http://www1.folha.uol.com.br/folha/informatica/ult124u8053. shtml
Leite, J. C. (1998). "Modelo e formalismo para a engenharia semiótica de interfaces de usuário". PhD Thesis. Rio de Janeiro: Pontifícia Universidade Católica – PUC.
Nielsen, J. (2000). "Designing web usability". New York: New Riders Publishing.
Rubin, J. (1994). "Handbook of usability testing: how to plan, design and conduct effective tests." New York: John Wiley & Sons.

Related Content

Preventative Actions for Enhancing Online Protection and Privacy
Steven Furnell, Rossouw von Solmsand Andy Phippen (2011). *International Journal of Information Technologies and Systems Approach (pp. 1-11).*
www.irma-international.org/article/preventative-actions-enhancing-online-protection/55800

The Influence of Structure Heterogeneity on Resilience in Regional Innovation Networks
Chenguang Li, Jie Luo, Xinyu Wangand Guihuang Jiang (2024). *International Journal of Information Technologies and Systems Approach (pp. 1-14).*
www.irma-international.org/article/the-influence-of-structure-heterogeneity-on-resilience-in-regional-innovation-networks/342130

Design of a Structured Parsing Model for Corporate Bidding Documents Based on Bi-LSTM and Conditional Random Field (CRF)
Lijuan Zhang, Lijuan Chen, Shiyang Xu, Liangjun Bai, Jie Niuand Wanjie Wu (2023). *International Journal of Information Technologies and Systems Approach (pp. 1-15).*
www.irma-international.org/article/design-of-a-structured-parsing-model-for-corporate-bidding-documents-based-on-bi-lstm-and-conditional-random-field-crf/320645

Time Series Invariants under Boundedness: Information Symbols and Early Warning Signs
 (2013). *Boundedness and Self-Organized Semantics: Theory and Applications (pp. 29-47).*
www.irma-international.org/chapter/time-series-invariants-under-boundedness/70272

Geographic Information System (GIS) Modeling Analysis and the Effects of Spatial Distribution and Environmental Factors on Breast Cancer Incidence
Akram Gasmelseedand Ali H. Alharbi (2018). *Encyclopedia of Information Science and Technology, Fourth Edition (pp. 3448-3459).*
www.irma-international.org/chapter/geographic-information-system-gis-modeling-analysis-and-the-effects-of-spatial-distribution-and-environmental-factors-on-breast-cancer-incidence/184056