

HIGH-DEFINITION PROTOTYPING OF COOPERATION'S PORTAL AND ITS INTEGRATED FÓRUM (ORÁCULO): COLABORATIVE RESOURCES FOR IMPLEMENTATION OF INTEGRATED MANAGEMENT SYSTEMS SIG-UFRN

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Keywords: usability, content analysis, information architecture

1 Context

Information is essential in the process of learning and building knowledge. Making information available to interested parties in an organized and easy-to-understand way, enabling productivity and fewer user errors is challenging in the area of Design. This area presents several possibilities for applying methods and techniques in a web environment, in which layout, typography, colors, images, among others are discussed, so that the information is presented in an efficient and effective way.

SINFO is the body responsible for UFRN's Information and Communication Technology (TIC) policy and since 2009 it has been responsible for transferring technology from UFRN's integrated management systems (SIG-UFRN) to public institutions aiming at networking in a collaborative way.

This network identified the need for a tool called the Cooperation Portal in which everyone could share knowledge and exchange experiences through a forum. However, it was found that the information architecture was not aligned with the interests of the users, presenting a high rejection rate. In addition, the forum was not used, with a preference for individualized technology, skype.

Thus, the objective of the present study is the redesign of the cooperation portal and the integral forum tool in the construction of a proposal that allows greater integration

of the partners of the IFES networks, federal education institutions and CICLO, direct administration organs of the federal government, in response to their needs for the good implementation of the SIG-UFRN systems.

2 Method

The qualitative study carried out with content analysis in three stages, namely:

In the first stage a questionnaire was applied to the technical and business consultants of UFRN on the information that should be available on the portal for a good implementation of the users by the partners that was compared with the result of the previous work, which diagnosed the information needs of the users of the cooperation portal.

In the second stage, the consultants were asked about the Skype and Forum tool in an attempt to understand the difficulties and complexities of leaving the unidirectional interaction model (UFRN-Instituição) through Skype, for a collaborative model, through the Forum, in request from the partner users.

In the last step, prototyping was performed using Garrett's proposal (2011), which presents five elements of the user experience: strategy, scope, structure, skeleton and visual.

3 Results

The questionnaire applied to technical and business consultants demonstrated alignment with the information needs of users raised in the study conducted by Lins, Pinho & Santa Rosa (2016), as relevant information was identified so that the implantation of the SIG-UFRN by the partners was accomplished in its fullness.

In this sense, it was noticed the importance of actions by the consultants, such as the availability of updated documentation, also reported by the partners; providing a training environment with consistent data for the partners' use; list of major errors and their corrections in the process of deploying a module / system; a work of conscientization that the work is complex and needs to be careful and the need of a dedication of the consultants in the answer of doubts.

Given this information, the proposal of a new wireframe / redesign was necessary to represent the content raised by users and consultants of the Cooperation Portal and the forum.

The prototyping was used in this work as a simulation of the final product, allowing the user to have an overview of the redesign of the cooperation portal focused on the forum to understand if what is being proposed actually meets the expectations of users, possible changes in the final product.

In this sense, the five elements of the user experience were used within the product development (Garrett, 2011): strategy, scope, structure, skeleton and visual. These elements involve different disciplines, including information architecture, interaction design, and interface design.

The strategic plan is the first step to outline the strategy to be adopted for project development. It defines what users want to find on the site, balanced with the site's own purpose (Garrett, 2011). In the case of the Cooperation Portal, some of the strategic objectives are very clear: users want information to be able to implement SIG-UFRN systems, and SINFO wants to transfer knowledge to its partners. In order to search for this information and to identify how this transfer should be performed better, we listen to the users to understand their information needs through the research conducted by Lins, Pinho & Santa Rosa (2016).

The scope plan is responsible for defining the characteristics of the product and being concerned with presenting the real needs of the users. The previous work of the authors associated to the questionnaires applied to technical and business consultants allowed to raise the contents to be made available in the Cooperation Portal and the improvements for the Forum tool.

The structure plan proposes a hierarchical organization of pages. Here we work on Interaction Design, in defining how users will interact with the identified functionalities, but also, Information Architecture as a solution for access to content in an intuitive way.

Thus, using the visual vocabulary for Information Architecture and Interaction Design as a guideline for use of the elements of the pages proposed by Garret (2011: 103), the menu diagram of the cooperation portal was developed, presenting the forum as the main focus, not forgetting to explore the other aspects of content as a menu item with information on cooperation, flow of calls, news, implementation by modules of each partner, licensees, documentation, contact and restricted area to UFRN's users.

In the skeletal plane, we mainly deal with arrangement through Interface Design. Thus, the wireframe was developed for the proposal of the new cooperation portal, to make available the contents raised and it was suggested to create an area for quick access (queries), change in menu items, last forum questions, besides emphasis in the forum, in attendance to the collaborative environment, using the Pencil Project tool, <http://pencil.evolus.vn>.

In the surface plane we deal with the visual design, that is, here the graphic treatment of the interface elements is performed (GARRETT, 2011). In this sense, the Coopera-

tion Portal underwent a procedure of visual improvement of image and text, taking into account the typography and colors defined for the systems of internal use to SIN-FO.

4 Conclusions

The redesign proposal of the Cooperation Portal and the Oráculo tool met the product scope defined by the users and technical consultants and the scope of the project defined by the management of SINFO, presenting in a clear and organized the contents necessary for the good implementation of the systems SIG-UFRN.

The construction of the prototype was focused on the user and good solutions were found in discussions with SINFO's design team and developers in generating many ideas for fast and efficient prototyping, observing source, file size, colors, data update, grouping of information, readability and readability.

The portal was redesigned considering the priorities of information defined by users, presenting in the main part the Oráculo tool with images and language that represented the systems in compliance with Resolução 005/2013-CONSAD, corroborating with the visual communication, associated to the last questions and an area for quick consultation, replacing the previously presented news that were less prominent.

In addition, all the menu items were revised and reformulated, incorporating the contents raised, reorganizing the available information so that the user-system communication occurred in an intuitive way, always concerned with preventing errors, balancing interaction and functionality, and adapting system responses to user input.

In this sense, a menu item was proposed for cooperation with relevant information in the relationship UFRN-Parceira, news for comunicués, situation of implementation of the institutions by module, user service, initially with step by step in text, but with a diagram proposal and drawings that represent with ease how to act in a certain situation (error, improvement, doubts, meetings). In addition to the data of the currently licensed companies, updated technical documentation and links to the day-to-day work tools such as wiki, iProject and Oráculo, meet the unique user request for authentication.

The Oráculo incorporated new elements as a possibility to verify who interacts more, represented by reputation functionality, option to vote in the best response, generate tags that allows queries of the subject of interest, and receive notification in the tool and / or by email of the issues that are of interest, being able to share news that pass through a moderator, UFRN, for approval and mainly fulfills the role of sharing in-

formation between partners without losing the response time that has been estimated in a service level agreement of up to 24h.

To prove the effectiveness of the use of the tools, it is proposed as future work the analysis of the prototype initiated through the technique cooperative evaluation with selected users of the IFES and CICLO networks, in order to listen to users during and interaction with the tools, and which already has satisfactory preliminary results.

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6 Acknowledgments

To the entire SINFO team who understood the problem and the need for collaborative work to deliver the appropriate solution to the users' needs. Especially the people of Henrique André, Thiago Marques, Felipe Alves, André Grilo, Laura Caroline, Geraldo Lins, Stéfanie Maia, Fernanda Pessoa and Gibeon Aquino.