

VNET5: for an easier navigation on the Web

A web site must be fully satisfactory for its user: it must afford easy navigation, its content must be clear and apt to meet each visitor's demands. 'Usability': this is what adepts call it. A project funded by the Fifth Framework Programme of the European Union, VNET5 puts forward a method to improve the usability of web sites. The project has been developed by the Technology Enhanced Communication Laboratory (TEC-Lab) of the Faculty of Communication Sciences, Università della Svizzera italiana, under the direction of Professors Paolo Paolini and Lorenzo Cantoni.

Some might think that creating a web site is a fairly simple matter; yet, try navigating on the Internet and you will see that this is far from being the case. Even with the correct web address, the clear and pertinent information you are looking for may be hard to come by. "Different elements must join in - says Prof. Lorenzo Cantoni - for the construction of a website. Clearly the first element is the contents of the message we want to convey, and these may be very diverse. Some sites provide information, others are an outlet where all sorts of goods may be sold. There are also sites whose function is simply discussion or game-playing. A site ultimately embodies the objectives of its author, be it a business, a university, or a public institution. The second element is the technical tools used (programmes, network, graphics, etc.) which enable the user's access to contents. Finally, we have the users, especially what they know and their attitude vis-à-vis the computer. A site may be called user-friendly if and when there is a good match between the technique adopted and the skills of those who use it."

■ To foster a user-oriented approach

Whoever sits down in front of a screen generally knows what he is looking for and wants to get to it without wasting any time. Not only, but he will expect that site to meet his needs straightforwardly. Take the case of a student who visits a university website: he will want to find out about how to apply, about class timetables, about examinations. If this information is not easy to get to - little clarity in the design or poor logical structure - he will go back to using the telephone or join the queue at the university's information desk, which then raises serious doubts about the purpose of such a website. Commercial and banks sites run an even greater risk: the chances are that clients frustrated in their attempts to use them will give up and join another bank or another supplier. And so we see that the tools developed by VNET5 are in fact closely relevant to our everyday life.



Professor Lorenzo Cantoni (right) with participants of a VNET5 seminar.

"VNET5 - explains Professor Paolo Paolini - sets up seminars for EU projects entrusted with the task of building web sites in a whole variety of fields: e-business, e-work, e-learning, e-government, tourism and cultural heritage. In these seminars, we teach a number of techniques helping to assess whether a given site is well designed and easy to use." In the midst of divers usability-assessment methods, Tec-Lab contributes MiLE (Milano-Lugano Evaluation Method), the outcome of a joint research venture between the Politecnico of Milan and the Università della Svizzera Italiana. MiLE combines two methods: in the first, a group of users try to find some specific information on the web, and point out any difficulties they may run into on the way. In the second method, a number of experts survey the site systematically, identify its weak points or flaws, and propose solutions. VNET5 also supplies the right tools for an evaluation of the degree of users' satisfaction after experimenting with the product. One ends up with a chart mapping the site's quality and all suggestions for improvement. VNET5 is therefore a project requiring strategies that are diversified though aiming to achieve one single goal: to produce a user-friendly site, easy to understand and even nicer to look at.

Building up and teaching usability



■ What VNET5 can do for you

The VNET5 network (Fifth Framework Programme:IST-2000-25465) analyses the usability specifications of a given web product, and publicises (by means of seminars and workshops) suitable techniques to create products that are easy to handle and, above all, user-friendly. Essentially, a sample group of people are invited to navigate on a website playing a role (find a form, find a news item, find some information). These 'user scenarios' will reveal the flaws of the application when tested against a real case. The sample users are required to describe what they are doing, what they feel or think while interacting with the application. The next stage consists in collecting interviews or organising focus groups. This test then joins up with that of the expert assessor who, by means of accurate protocols, carries out a painstaking analysis of the web site. The two procedures enable a fine-tuning of the navigational structure, the contents, the communication aspects, etc. While work was in progress on the VNET5 project, TEC-Lab in association with its partners, has acted as expert adviser to some fifty member representatives of European research projects into electronic publishing.

VNET5 project partners

NET5 brings together partners resident in five different European countries:

- Germany: "Advance Concepts for interactive technology GmbH";
- United Kingdom: "Performance by Design Ltd";
- Italy: Politecnico, Milan (the Hypermedia Open Center);
- Bulgaria: Department of Human Sciences and Design of the Technical University, Sofia;
- Switzerland: Federal Institute of Technology, Zurich (Ergonomics and Technology Group) and Università della Svizzera Italiana (TEC-Lab).

■ TEC-Lab: interdisciplinary research

TEC-Lab, short for Technology Enhanced Communication Laboratory, stands at the interface between the humanities and the new technologies. It draws on findings of surveys on communication to improve the design of computer applications and of web sites in particular. Because it combines these two research areas TEC-Lab has been an active member of several European projects.



In the picture: Davide Bolchini of TEC-Lab during a VNET5 seminar.

For instance, working with members of the European project, HELP, the Laboratory has successfully built the web site for an exhibition - www.munchundberlin.org. The site enacts a new technique known as WED (Web as Dialogue), developed by TEC-Lab, to improve the use and usability of the site by visually-impaired people. The laboratory also joins forces with the Politecnico of Milan on many (national and European) projects, lending its background and experience in matters of analysis of requisites, planning and evaluating hypermedia applications based on the web. In terms of usability, besides developing usability-assessment techniques, TEC-Lab devotes its resources mostly to creating a whole series of usability kits, which provide the necessary back-up for the assessment of web applications pertaining to various domains (banking sites, museum sites, etc.).

For further information on the project:

Professor Lorenzo Cantoni
TEC-Lab, Faculty of Communication Sciences
Università della Svizzera Italiana
Via G. Buffi CH - 6904 Lugano
Phone: +41 91 912 47 20
Fax: +41 91 912 46 47
Email: lorenzo.cantoni@lu.unisi.ch

WEB addresses:

VNET5 project: www.vnet5.org
TEC-Lab: www.tec-lab.ch
Faculty of Communication Sciences: www.com.unisi.ch
Università della Svizzera Italiana: www.unisi.ch