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Designing the Net

by Tomás García Ferrari and Carolina Short

To develop the presence of a company or an institution in the Internet is much more complex than just designing a few screens. It involves taking various types of communication, technology and design decisions.

The marketing, systems and design areas should be involved in the creation of a website, as a dynamic interdisciplinary team is required for this type of project.

Objectives

It is advisable to have a clear knowledge of the objectives of a website before starting work on the project. This is common to every design process.

Up until some years ago, most of the undertakings —with a few honourable exceptions that became history— had a very diffuse idea of their interests. However, most of the companies, upon seeing their competitors jumping into this new medium, wanted to be a part of it.

To be on the Web was almost the ‘in’ thing to do. Everybody wanted to be on it and nobody knew exactly what for. The catch phrase was ‘you have to be on the Internet’ —and for some it still is.

Nowadays, even though cases like these still exist, most of the companies have realised that the Internet (not only the World Wide Web) is an extremely powerful communication medium that allows for a fluid and bi-directional contact, not only with their clients, but also with the rest of the world. This medium, as such, has its own codes that have to be taken into account from the beginning to define genuine objectives.

The best way to determine the objectives of a hypothetical Internet project (in this case we specifically refuse to use terms such as ‘website’, ‘web’ or ‘site’ as they are neither inclusive nor conclusive) is to start with a series of questions.

What is the mission or purpose of the company?

The objectives of a company or an organisation can be varied. Among the most common ones, we can mention the generation of economic resources (in a business company), the propagation of certain ideas (in a political party), the promotion of a branch of culture (a public welfare foundation), etc. It is very important to understand this clearly before the first step is taken in the wrong direction. Therefore it is vital to be in contact with the person who is the actual decision-maker when it comes to defining the position of the company.

It is very common to have Internet projects run from the systems department of an organisation, where those in charge are not familiar with the company’s main objectives.

What are the short and long term objectives of the project?

The project has to take into account various action time frames because, as opposed to printing projects, once something is posted on the Internet, its objective must remain valid over time. Some possible examples are:

- Establish contact with the users.
- Provide information to current and potential clients.
- Make the company's information systems more dynamic (ticket reservations, purchase of certain products, information on schedules or rates...).
- Provide new services for clients who were difficult to contact because of distance or cost: newsletters, creation of discussion forums, publication of statistics, etc.

What is the target audience?

There will be traditional clients, already familiar with the use of the Internet and the products and services the company provides, that find this medium useful. On the other hand, we will have the potential clients that can be captured through an intelligent strategy and correct advertising of the website, generating new interests and future clients. The creation of new niches is an interesting perspective that results from the possibilities of the medium.

The point of view of the consumer—in general—is to obtain information quickly and easily.

It is proven that a negative reaction occurs when the data is badly arranged and the user gets lost because he gets frustrated and confused and, finally, angry. There are different types of users. Those who know exactly what they want, know the section names of the site, and can rapidly get in and out; those who have a vague idea of what they are looking for and do not know the sections; and those who, when browsing, learn by chance about the existence of products or services that they had not previously considered.

Why will people visit a website (the most visible face of the project)?

A number of factors have to coincide for somebody to visit a hypothetical website, namely:

1. That it offers something the visitor is looking for.
2. That it offers an otherwise not available service.
3. That the name of the company be known in the market.
4. That the visitor knows the address.

For an Internet proposal to be accessible to the public, it is necessary to support and promote it both through the traditional and the new communications media.

It is important that all the addresses be included in all of the company's stationary (e-mail, web, news, etc.) and, if possible, in all other printed matter (ads, brochures, press releases, etc.). It is also important to publish the addresses in the main search engines (Yahoo, Lycos, Altavista, etc.) and, if the budget allows for it, to advertise in the Internet websites known to be visited by the target users.

Why will people revisit the site?

Once a user has found the address and visited it, what will make him return? Something has to be offered to him.

In today's Internet, where so much is offered, projects that give information sparingly or are not constantly updated, are doomed to failure.

There are known cases of newspapers and magazines, famous all over the world, that tried to sell their Web contents through subscriptions and failed (or did not have the expected success). Why would somebody pay to read the New York Times Magazine when the Salon Magazine is available for free...? In short, for somebody to return, something has to be offered. For example:

1. Updated contents.
2. Services
3. Community type activities
4. Prizes for operating through the Internet, special purchase offers, gifts, discounts.

Defining the audience

Once the basic objectives of the project are clearly understood, it is vital to start with the definition of the possible visitors.

Some people think —erroneously— that an audience is defined by the technology it uses to access the net. That the users connect to the net at this or that speed or with this or that browser is only a part of the definition of the audience. To really define a user, one must know how he or she consumes and obtains the services or products the company offers. For example, it will be useful for those who are designing the architecture of a website that sells household appliances to see how the clients buy these articles in a real store.

In many cases, an internal department in a company takes the initiative to develop a website (and here we do use this term, as more often than not in their planning they have forgotten to include a strategy of electronic mail, ftp services, etc.) and it ends up being a project focused on that specific department's needs and vision, ignoring the overall vision of the other areas of the company. A website is a very particular communication piece and its form and contents should be reviewed by all the departments in the company, or at least by all those involved in communicating with the client.

A proposed exercise to define the user could include a brainstorming session focused on the target audience, asking questions such as:

- Is there any sector of the audience to which we are assigning undue importance (the competition, employees, etc.)?
- Is there any difference between the main audience and the one that will use the website with greater frequency?
- What will motivate the audience to visit the site? And to revisit it?
- Rank the audience in order of importance.
- Identify the three information requirements of each audience that the website should include.

It is also advisable to generate a table with this information and distribute it among the team members. This will also help to document the process.

Contents

Once the objectives and the audience are defined, it is time to establish the structure and the organisation of the contents. The definition of the elements forming the contents of the website and the way in which they will function are fundamental.

It is useful to create a list of the contents and another of the technical functional requirements, in order to organise all the ideas on how the website should work.

The types of contents can be divided into:

- static contents: explanatory texts on the company, regulations, copyright notes, etc.;
- contents: formed by variables and data that is updated regularly, such as weather tables, product catalogues, etc.;
- functional contents: forms to update information, data searches, etc.;
- transactional contents: all those related to on-line operations that will be performed by the users (purchase forms, subscription orders, product registration, etc.).

Ideally, these lists should be circulated among everybody in the company involved in the website development, so as to create an inventory of contents that will serve to define the requirements and to confront them with the technological and economic possibilities.

Site structure

A well organised site, in which the consumer does not get frustrated in his search, represents a great advantage for the company; and, in the case of an internal net (intranet), the employees will feel comfortable working with it and will not lose time trying to understand how it works. Comparing a website with another tangible object will help us understand how to determine the objectives of any project: if we compare it to a house, the number of rooms, the layout, the building materials... All design decisions are linked to their future use. Many houses and buildings turn out badly because their designers do not live in them and do not understand their objective, or because they respond to interests unrelated to those of the inhabitants of the house.

Structuring the information plays a very important role in the development of projects for the Web.

It can be summarised by its three main aspects: classification, labelling and surfing. A good outline will help to meet the previously agreed upon objectives as these are closely related to the user. This holds true for any data handling project. We have already mentioned how frustrating getting lost in the Web and not finding what one is looking for, can be. Every project should have its own method, which takes into account the ways in which the information may be looked up: if we know somebody's surname, the telephone directory is useful because it is organised alphabetically; if, on the other hand, we are looking for a plumber, a listing sorted by category will be much more useful. A preliminary classification could be: alphabetical, chronological, geographic, ambiguous, by category, by task, by audience type, metaphorical.

The labelling of the sections and parts is a matter of the utmost importance. It is the way of representing a concept, an idea or a group of data; it constitutes an action of human thought. For example, a section named 'contact' includes a name, an address, telephone and fax numbers, e-mail address, etc. The label

'contact' is sufficiently trustworthy to efficiently represent the contents of the section. It is also compact, so it does not take up much space in the surfing menu.

This labelling could be divided into two categories: textual and iconic. In the first case, some conventional titles have become popular and are familiar to many users:

- homepage, home, main page.
- search, find, surf, site map.
- contents, table of contents, index.
- contact, contact us, write to us, e-mail, who we are.

Many of these labels are partially or fully written in English, because it is the predominant language in the Internet. But with Spanish sites becoming more common, Spanish words are becoming a part of this cyber language.

Icons can represent information as well as, or even better, than texts, always provided they correspond closely to the concept.

In many cases, they make surfing easier or work well in combination with textual labels. We can well imagine a site on animals, where the main sections are represented by icons, such as dogs, cats, birds and fish and the subsections are represented by texts such as breeds, care, feeding.

Labels influence the users greatly and they must reflect the website's spirit. The language to be used to name the sections must be in accordance with the tone of the communication and must be related to the previously defined audience. The use of metaphors is also an interesting system for labelling sections. It works especially well in entertainment, music and child websites.

Surfing determines the possible paths that can be taken to look for information. It is self-defining once the structure is determined.

By now, we have already defined how the users will use the site, and we also have the list of contents that determine the main sections, how the different subsections will unfold and how they interrelate.

We should not fail to include the availability of a surfing menu in all the site pages.

In the same way as a footnote guides us when reading a magazine, the surfing menu gives us the freedom to move about the site without having to worry about not being able to return to the page we have visited five minutes ago. (Browsers have their own surfing system to go backward or forward, or to return to previously visited pages, but not only do they not serve the same function as a good surfing menu, but it is also not convenient to assume that everybody uses the software in the same way.) Besides the surfing menu, it is possible to add links in various parts of the text that point to pages that include related information. In these cases, it is useful to make clear where the user will be taken if he clicks on the link. When this is not self-evident, explanations of the type: 'see programming', 'click here for other options', 'application form', etc. are useful.

Surfing bars have become very popular in websites as they summarise the sections, while appearing in all the pages as a fixed reference. They also link to other known interfaces, such as personal computer operating systems (Macintosh or Windows). A system of frames can also be used whereby the page is divided into sectors that load information independently. This system allows for the creation of a fixed frame that includes the menu (which can be changed if necessary), that activates another dynamic frame,

the contents sector. Pull-down menus are very useful when there are many options to choose from, as, for example, choosing a destination in an airline website. 'Remote systems' are another option, where a smaller window appears within the main one. They are metaphors, analogous to tv sets or electronic equipment remote controls. Finally, we can mention 'guided tours' or 'site maps' that include graphics showing the structure of the complete website and allowing the user to link directly to any place he wants to visit, while displaying a global picture of the contents.

Surfing systems can be combined and used alternatively in all sections.

Behind the 'visible' structure described so far, the 'non-visible' structure of the website deals with correct file organisation, file names and classification, database usage, image preparation and knowledge of the technical resources that will optimise the operation and ease the job of the designer, who will not be obliged to perform tedious tasks that a computer can execute in a more economical and efficient way. The user is generally oblivious to all this organisation, except when things do not work properly.

Visual design

Once the objectives, the users, the structure and the contents have been decided, it is time to develop the graphic interface of our project. This is where graphic design gives the project its visual and communication style. Many projects are criticised for reducing the Internet to a common medium where everything is thrown into the same bag. A serious mistake, indeed. The Internet is just a communication medium. The World Wide Web is no more than one of its aspects. The way in which this medium is used depends on the type of discourse desired, the stipulated objectives; on who is talking and to whom the talk is addressed. Again, the same as for all design projects.

The www is not only for 'fireworks'.

The technology to be used should be selected carefully from all the available options. We do not think that a magazine should use flash animation just because it is possible, nor that a company whose objective is to publicise and promote its products or services should embellish its homepage with animation and signs with moving typography. To use all the available technology (or, what is even worse, all the technology the producer of the website has learned) is counter-productive. It is 'overdesign'.

Conclusions

What we have just described will be eliminated from our reality in the next few seconds. The Internet is a medium undergoing constant change, therefore the only way to remain updated is to use it every day. There is no better way to learn to develop projects in this medium than by seeing what our colleagues in the rest of the world are doing.

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