

A Web Portal Model for NGOs' Knowledge Management

Zuhal Tanrikulu†

† *Bogazici University, Department of Management Information Systems, 34342, Bebek, Istanbul, Turkey.
tanrikul (at) boun.edu.tr*

Abstract: *Non-governmental organizations (NGOs) are representing increasing number of people year to year. On the other hand, Internet is also used by increasing number of people year to year. It became a powerful communication tool with its real time, online, and place independent features, which provides to the corporation a flexible environment to share their ideas, and to produce knowledge and propagate it. In this study, it is discussed whether an official web portal is an appropriate solution for NGOs, and which features a web portal model designed for an NGO.*

Keywords: *Non-governmental organizations (NGOs), Web portal design, Web portal usability*

I. INTRODUCTION

Non-governmental organizations (NGOs) are defined as a private citizen's organization, separate from government but active on social issues (Gordenker and Weiss, 1995). On the other hand, a 1994 United Nations document describes an NGO as "a non-profit entity whose members are citizens or associations of citizens of one or more countries and whose activities are determined by the collective will of its members in response to the needs of the members of one or more communities with which the NGO cooperates" (Simmons, 1998). Within the frame of this description, any group except private business organizations or political parties is an NGO. Non-governmental organizations (NGOs) are getting extremely powerful in the civil society, because they serve for civil society by making them joint and interactive. Internet is used to accessed to civil society in order to share knowledge, give basic or detailed information about different topics, and produce new ideas; NGOs should also use the Internet as a medium to reach the civil society in order to tell them their mission and goals, give information about their activities, and share all related topics with the NGO. NGOs needs are changing and increasing, and their limited budgets remain sometimes insufficient to meet their needs. At this point, Internet and Information Technologies are discussed to help them realize their goals by decreasing costs and enhancing the institutional identity of the NGOs.

NGOs need for technology is a result of the existence of NGOs. A group aiming to activate the society should obviously achieve this by using communication tools. Here, the basic role of technology is speeding up and cheapening the communication. In this frame, needs of NGOs for technology can be listed as below (Cetin and Onal, 2004):

Like the other institutions, the main operational targets of NGOs are effectiveness and efficiency. While effectiveness is defined as the degree to achieve goals, efficiency can be named as measuring the amount of the output obtained from the input. This should be achieved with minimum inputs by the NGOs while working for their goals.

NGOs should adapt themselves for rapid changes. The image and respect of NGOs in the eyes of the society can only be enhanced with on-time reactions.

NGOs should reach more people on-time and faster in order to cooperating and informing them. Coordination among people and keeping the relations alive are supported by this communication.

Obviously, the most important item for an NGO is the presentation of its activities. More effective activities and more feedback can be obtained by presenting its mission to the society. Nowadays, with the introducing of different dimensions of presentation, it is defined no more than just presentation in one channel. From now on, it requires using all kinds of media in a coordinated and integrated manner. NGOs have to be actively involved in areas like e-bulletins, forums, broadcasts of TV and radio, e-mails or web sites. The diversity in presentation facilities offers many opportunities for creating public opinion on a subject.

In NGOs, documentation and knowledge management has become easier with the technology. Easier and faster usage is provided by easy standardization and accumulation of documents in an electronic environment. With the required software, member's information can easily and directly be reached.

Both members and managers of an NGO have to reach the information related with them and update them continuously. NGOs should follow the implementations of other institutions, legal issues, meetings, seminars, congresses and symposiums on their operation area and their communication channels should be remained open and reachable to participate in these sessions.

Some financial aids can be obtained with the help of co-operations. Therefore, in order to develop relationships with international NGOs and intergovernmental NGOs, communication technology should be used actively by NGOs. Funds, information or invitations for international meetings should be obtained, and NGOs have to behave effectively in these environments.

Measuring the quality of activities and services, planning new activities by using quantitative data, reaching thousands of people by electronic surveys and

including their opinion to the NGO's organization should be seen as a requirement and opportunity of technology should be benefited.

II. RESEARCH GOALS

The aim of this study is to design a web portal model/prototype for NGOs considering the needs of communication between NGOs, their members, their branches, and the civil society as a whole. A prototype is an infrastructure for the real product which help project programmers and sponsors to get a view about site's functions, basic views, good and bad ways. By taking this model as a base, every NGO can implement their information on it or they can do some changes. Prototyping is crucial because seeing the portal's design on pages and knowing what button will do what function, is not enough to give implementation decision. They will use the portal prototype, see if there is a problem or there can be improvements.

III. METHODS

A. The Design Steps of an NGO Web Portal

NGO web portal was prepared by HTML, CSS, and ASP. MS FrontPage was used to write codes; Paint and Photoshop was used to arrange; MS Access was used to create a database. With HTML frames, tables the overall infrastructure of the page were prepared. In MS Access, the tables were created and make connections with prepared HTML pages. ASP was used to get and write data between forms and databases. In the last part, with CSS the colors and styles were arranged and the pictures were found for logo, buttons, and articles.

Usability plays a role in each stage of the design process. Numerous web sites were examined before making design, and then an outline of the portal was created. First the content was determined, and then the page titles, menu, link titles and their content were created. The most related and useful subjects were chosen for users who are interested in NGO. Then the site was drawn on pages. The four different placement styles were drawn. The most appropriate was decided.

In the database, two tables were created. One is for to keep the NGO members personal information. The other is for showing NGO members their subscription status and learning whether they have a due.

In memberIdentity table the username and password, which was given in the subscription period to NGO, member name, surname, father name, mother name, birth place, birth date, marital status, registered city and other identity information, mobile phone, home phone, e-mail, address, blood type and citizenship identification numbers, the administration level were kept. The aim of keeping these data was to make appropriate connections between members. If one need a person in one place or search a person to make project, he/she can search or call NGO to give information. After NGO get a confirmation from other member to share his/her information, the connection between members is set. So the communication between members will be

developed. They can reach the member in the convenient way. The connection is necessary because today in most NGO the projects can not accomplish, because they do not have a system to keep track of their members and found a connection if necessary.

There are two administration levels. One for web site administrator who can change, add, delete information. The other NGO members, who can use forum, e-groups, see dues and update their information.

In Subscription table, subscription number, subscriptionMember Number, the date and amount of due, if there is, was kept. A member can see if there is a data. After the connection is set, the member who visit the site can see the in the right part the username and password part. When a member enters own data and click login button, in the right part of page a welcome message is appearing and in the main part of the site. Members can see their information.

The web design Internet sites and books were examined. With the help of these information button, web page, menu, picture samples were searched from Internet. The logo and animations were created by Paint, Photoshop and Flash.

B. User Levels of an NGO Web Portal

The page categorization is also beneficial. If it is related to health, education or games, comics but NGO sites can be read because the users are willing to help or work with that NGO and they interested in what is happening. "User types" should be considered the portal's design process.

In NGO portal, there are three levels of users. One is the site administrator; other is a member of NGO and the portal visitor who are not a member but want to learn NGO's activities. While the site administrator has an all authority to change and see every part of the page, NGO members can not change something in portal but have an authority to read everything, join forums. Portal visitors can just see the places that NGO give permission. There are some documents that some NGO management does not want to show portal visitors but member can see. The annual reports, financial reports, general meeting minutes and executive board minutes are significant parts. Most of the NGOs do not give permission to their members to see and examine these documents whenever they want. They mostly explain and show the decisions taken in the executive board and financial tables on the general meeting. On the other hand, some NGOs allow site visitors to examine them. To be an open society, members should have authority to see the NGO's reports. For distinct purposes, NGO management does not want to show the detailed report to public, the portal visitors. Because there can be two different choices from NGOs, the prototype should be prepared to satisfy both part. There would be two models; one would allow everybody to see report, and one would show a message as 'Please be a member to see this page' when they click NGO Documents link.

After the NGO Management choose different options and give approval to prototype to apply their site, the designer converts the model to NGO's individual needs, content and design. Differences would be in content, colors, images, links and the of NGO's category.

IV. RESULT: NGO-NET WEB PORTAL

The aim of the suggested system is to enable using of information and communication technologies in order to unite and offer a more effective way for arranging common activities of the NGOs. The advantages of this system are listed below:

With the use of NGO-NET, all resources can become open to all member institutions that operate in different areas at the same time. Besides this, with the help of web-based tools, NGO can be directly connected to the outer sources.

Web-based Job Center: With this center, announcements for the volunteers can be easily made on the web by NGOs. Moreover, people looking for a job or want to be a volunteer can send their CVs via NGO-NET to the related institutions.

Web-based Fund Center: With the help of this center, collecting donations both from abroad and domestic resources will be possible. In other words, a direct communication channel will be created between the institution and the people who want to make donations.

Web-based Project Offer Center: Project offers prepared by a NGO member or some party outside the NGO will be conveyed to the international environment by using this center. Hereby, the chance of the project to be accepted will increase.

The NGO members will have the chance of creating free web sites on NGO-NET by using some formats. Furthermore, their projects or researches will be announced to masses with the assistance of NGO-NET. Hereby, the relationship between the NGO and the people supporting the NGO, and the chance for cooperation with the other NGOs will be given.

The functions of the suggested system will be as follows:

- opportunity for providing communication to everyone needing information,
- giving authorization for some parts of the web site to only NGO members,
- giving particular communication permissions to some organizations (international institutes, research centers, etc.).

The basic items on the NGO-NET main page will be listed below:

- general information,
- member registration part,
- a guide giving the opportunity to reach member web sites and making searches both at category (industry, health, research, etc.) and regional level (Aegean Sea, Eastern Black Sea, etc.),

- an electronic agenda showing conference and meeting dates,
- an interactive electronic conference system on NGO-NET web site for real-time communications,
- file download area for enabling information exchange in the NGO,
- subscribe and unsubscribe forms of e-groups for NGO members,
- visitor feedback part consisting of bulletin board, visitor's book and forum,
- a learning tool is for providing the NGO members with training for reaching and using the needed information with the help of using "Distance Learning" on the web. In addition to this, members will be trained better with learning programs of universities, schools or institutes giving the distance learning service. Hereby, NGO-NET will be developed by trained members and this will give the organization continuity.
- connection to the network formed of NGOs operating in other countries,
- NGO-NET services (e-commerce, web based donation encouragement module).

All the main pages and linked pages, and the missions of these pages are given below:

About Us Main Page: covers basic information about the NGO. NGO's mission, goals, history, founders, executive board, organization chart, branches, and regulations are linked under the name of About Us Main Page.

Our Activities Main Page: covers the topics related with the events organized by the NGO. It also covers the agenda set by the NGO, ongoing projects carried on by the NGO, and other news related with the third sector in order to give all stages in the NGO and the sector.

Documentation Main Page: covers all reports and minutes produced in the NGO. Annual reports, financial reports, general meeting minutes, and executive board minutes are located under this page in order to give a sense of open society, share managerial issues with their members, and give a chance of comparisons the reports year to year.

Publications Main Page: Lots of NGOs have published some books, booklets, articles, and other printed media related with their core business after making researches. The NGO should list them in order to broadcast the knowledge created by it. The prices if they are sold, the abstracts to give an overview of the articles or books, the ways to order the articles and books and purchase them, and any other useful information related to the documents.

Membership Main Page: covers all information about membership in the pages designed as application, terms, VIP, members, and member search. So members and candidate members may learn all the procedures about the membership.

Press Room Main Page: In the page, there will be news published in printed and visual media. So web site users may see past news about the NGO and its activities.

Promoters Main Page: Promoters which donate for the NGO, volunteers who actively participate while organizing or broadcasting the activities, and some other state and private institutions are parties that can support the NGO. So the NGO can afford its activities. The NGO needs some financial aids or donations from civil society in order to give them back to the civil society by adding values such as knowledge. The NGO should publish its promoters in its web site so that civil society can trust the NGO that it is supported by other parties in the society. Therefore, who the supporters or donors are, how they support the NGO, what the NGO is expected to counter, and what kind of campaigns or projects are supported are crucial issues to answer when adding the donors to the NGO's web site. So civil society may determine whether the ongoing projects are feasible and whether they have funds for their projects, and decide to support the NGO tangible and intangible. The part of the NGO's official web site should contain all the names of people, companies, and other institutions which support the NGO if possible, and they should be linked to their web sites.

Multimedia Main Page: An NGO should give some multimedia tools in its web site. Screensavers, some corporate videos and images, photos from activities, other documents and files related with the advertisement and promotion of the NGO. So members and web site users can access these documents and download them into their desktops.

Complaints Main Page: In order to be an open institution serving for the civil society, an NGO should listen to the people who have problems, suggestions, requests, appreciation, and questions so that it has a strong relationship with its members or even web site users. So members or web site users may feel extremely comfortable when they share their ideas in the concept of open society, and they can perform it a more speedy way.

Other Features Main Page: There are also lots of features that are not located in the menu of the navigation system. These features are located in the top, right, or left parts of the pages according to needs of web site users. Main page link is given in all pages except in the main page. FAQ page, site map page, communication page, forum pages, search page, International Language link (English, French, etc.), user login link, questionnaire link, and online donation link are located in the pages in order to provide some additional ease of use.

The web site will be opened primarily to the employment of NGOs operating in the areas listed below:

Health: First aid, hospitals/clinics, public health campaigns, health education, etc.

Natural Disasters: Search and rescue organizations, civilian defense trainings, etc.

Research: Universities, institutes, etc.

Natural Resources: Protecting the environment, water resource usage, protecting the wild life, etc.

Industry and Energy: Alternative energy resources, etc.

Human Resources: Education, requirement/potential planning, etc.

Social Duty Associations: Women's rights, etc.

V. CONCLUSIONS

This study aimed to establish a web portal model designed for the NGOs considering the operational, managerial, technical, and organizational needs of them. The model was built by using MS FrontPage and some visual design programs such as Paint and Photoshop. Then, this model was applied and tested by using a real data.

Some features of the web portal model were not appropriate for all NGOs, because NGOs have their specific mission, goals, and activities. Therefore, some special features may be added according to demands of the NGO.

In the next step of this project, an interface for adding, removing, updating, and changing the menu options may be designed in order to provide NGOs a flexible web portal module which can be adapted when needed.

REFERENCES

- [Gordenker, L. and T.G. Weiss, "Pluralising global governance: analytical approaches and dimensions", *Third World Quarterly*, 16, pp. 358-387\(1995\).](#)
- [Simmons, P. J., "Learning to Live with NGOs", *Foreign Policy*, 112, pp. 82-96 \(1998\).](#)
- Cetin, O. and M. Onal, "A Portal Design of a Non-Governmental Organization", unpublished project report, pp. 46 (2004).