Krestyanpol L., Ph.D. in Engineering

Lutsk National Technical University / Ukraine

AUTOMATION OF THE INFORMATION COLLECTING AND SUBMITTING PROCESS THROUGH THE CONTACT FORMS

Abstract: In the age of modern information technologies, the concept of "automation" is used in all spheres of public life. The collection and processing of scientific materials is not an exception. Nowadays, at least every scientific edition exists not only in paper form but also in digital. Digitization of the scientific periodicals provides informational support for scientific and educational activity.

The main purpose of digitization of information is mass spreading of the results of scientific research. Also, the digitization of scientific information is important for creation and support of repositories for High School libraries, and also as cloud oriented services for storing and access for scientific resources.

Keywords: automation, website, contact form, automated control system.

INTRODUCTION, PROBLEM STATEMENT

Scientific editions are identified in the world of information through their own information resources - web sites. The website is a set of interrelated online informational resources for viewing through a computer network using special programs - browsers.

Depending on purpose, the websites can be a set of static pages, or more complex structures, however, any site should use the web content management system for its functioning.

This is, to certain extent, an automated control system (ACS). And its main purpose is to automate the processes of collecting and transmitting of information about the object of management, its processing and issuing of guiding actions on the object of management [1].

The ACS, like any modern informational system that has a complex multidimensional structure, can be divided into two parts - functional and applied

The functional part solves the tasks for which each separately taken system is created. These tasks are transformed into corresponding ACS functions.

Any ACS in the process of its work should perform the following functions:

• collection, processing and analysis of information (signals, messages, documents, etc.) about the the control object status;

• creation of controlling actions (programs, plans, etc);

• transmission of managing impacts (signals, instructions, documents) for implementation and control of their transmission;

• perfomance and control of the guiding impacts implementation;

• information exchange (documents,massages,etc) with other related automated systems [2].

The set of the ACS automated functions and the degree of their automation are determined in accordance with the technical and economic indicators, as well as taking into account the necessity to cancel repetitive actions

The application part of the ACS includes the following support:
• program-mathematical;
• informative;
• technical;
• methodical-organizational;
• linguistic;
• personnel [3].

The process of automation can be carried out in various ways. In one case, an organization can install and use computer information processing means only to simplify some routine operations of the process of working with documents. In another case, the approach is to create complex management automation systems.

MAIN ARTICLE

Structure of the scientific edition site and the basic requirements to it

Today, the search for the necessary information is reduced to the use of search resources such as Google, Yandex, Yahoo, Bing, Baidu. Entering a query in the search line, the user receives a list of sites with the information that most closely matches the search query.

According to Net Applications company data [4], in April 2016, the applying of search resources by users was distributed as follows:
- Google — 86,30 %;
- Yahoo — 5,30 %;
- Bing — 3,13 %;
- Baidu — 3,02 %;
- Yandex — 1,7 %.

Therefore, the main task for any site today is "visibility" for searching resources. This "visibility" is called indexing - the process of adding the necessary information from the site page to the searching resource database. Through indexing, the user finds the necessary information on the first pages of the search query.

The purpose of creating a scientific edition site is, first of all, the digitization of information contained in printed form (printed editions), or the performance and providing of general access to scientific information in the Internet (electronic editions). Depending on the type of publication, sites can be created for printed scientific editions, that exist only in printed form, and the archives of the edition or separate metadata are posted on the site. Sites for electronic editions contain all the necessary information for users and the archive of the editions. In general, the requirements to the structure of the site in these two categories of scientific editions are the same, so it is not necessary to separate them specially, as they have the same goal of creation.
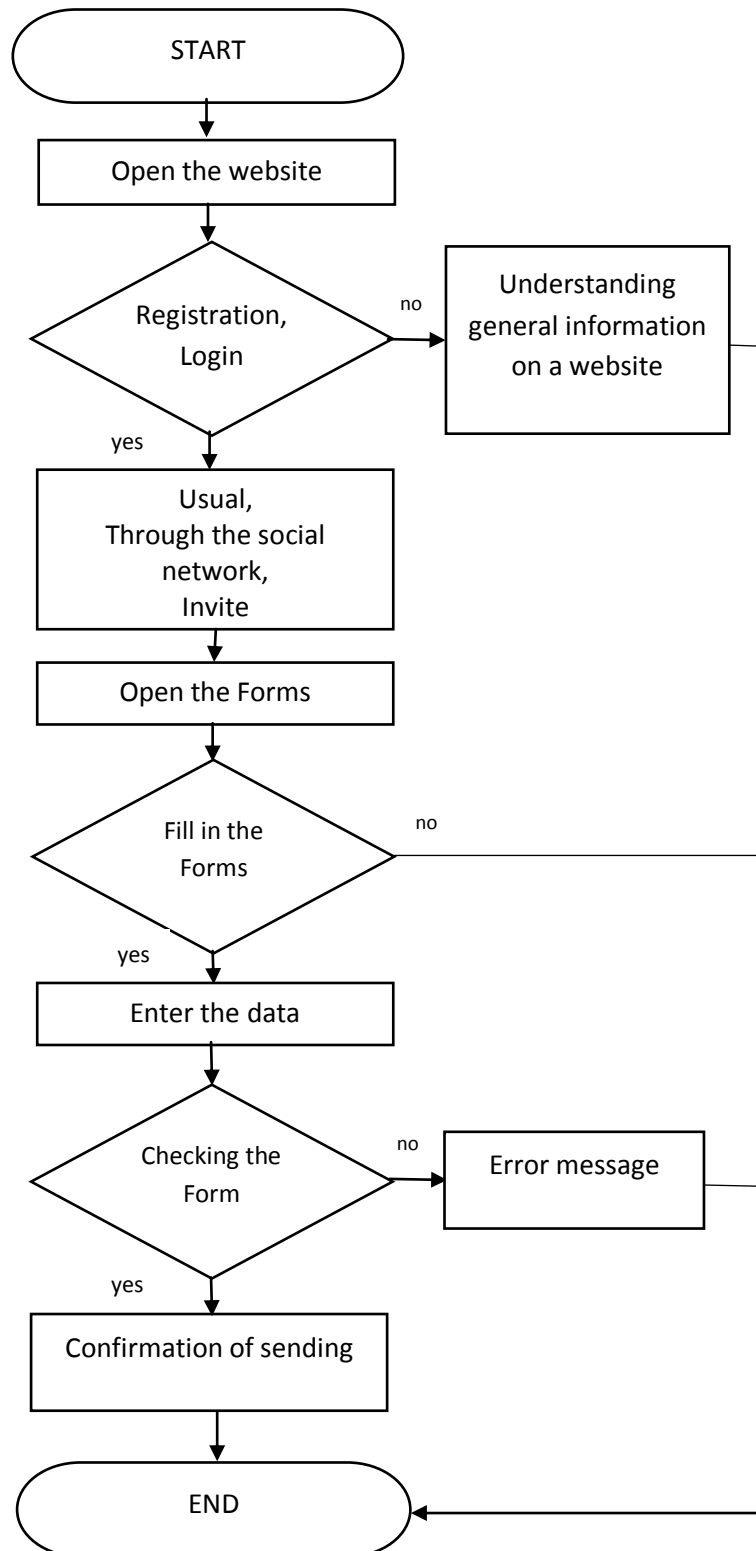
Fig.1. *Block diagram of the algorithm for filing a scientific article through the contact form authors'*

Any user of Internet resources got used to the fact that the site is a system of cross-references and transfers to other resources. Therefore, it is not surprising that the structure for the site of the scientific edition will also be formed of these elements

This structure can be called a site infrastructure [5,6,7,8], which provides convenient and comfortable use of the site. In this infrastructure, the structural units should be considered a "home page", "journal or edition," "information for authors," "contacts" (Fig. 1).

The structural unit "journal" ("archive of numbers", "edition", "archive") is common to all sites of scientific editions. The journal consists of issues that are usually classified by years and by numbers. Depending on the structure of the scientific edition, «the journal» may include the following structural elements:
- Journal;
- Year of publication;
- Issue;
- Section;
- Article;
- Author.

Each issue consists of the contents and title of the article. In its turn, the article includes information about the author, annotation, keywords and text of scientific work. An article on a site page can be placed in the of HTML or PDF format. When downloading it is necessary to split all the separate articles and not download the whole copy of journal.

The home page of the site or "Home" should contain the title of the scientific edition, the cover, the ISSN print / ISSN online, the publisher, the purpose and scope of the scientific edition, the indication of the edition periodicity and the target audience, the languages in which manuscripts are accepted and articles are published, unique journal logo and/or publisher logo, copyright protection, information about the chief editor and the editorial board.

The home page of the site should be clear, simple, comprehensible, concise, convenient

The page for authors should contain information about the execution of the "Requirements for the execution" of the article, bibliographic references, accompanying documents for publication of the article, description of the review procedure, ethics of the journal, rights and responsibilities of the author. Also,   in this structural unit could contain an item "Editorial Board". If necessary, the "Payment Terms" element could be entered. The algorithm of payment, cost and currency should be described in this element. In the element «Document Template», the access to samples of articles, reviews, accompanying documents, questionnaires, and applications should be given to the author.

The "Contacts" structural unit usually consists of an address, an e-mail address, a contact telephone, that will help user to submit an article to the edition. However, an automated way of presenting material is more convenient for the user. This usually proceeds through the contact forms.

Algorithmization of materials submission to the scientific editions

More often, the submission of materials to scientific publications is carried out by sending archived documents to the edition or the editor e-mail. Most part of magazines even with their websites use such an approach. However, such a method is problematic for both the editor and the user for the following reasons:

- the probability of a sender's letter falling into spam and ignoring it;
- sending forms filled in with false or wrong information;
- processing by the editor (secretary) of a large number of questionnaires, and checking containing information.

Scientific publications that have their own websites can use contact forms that facilitate the process of communicating with the site user, and simplify the procedure for submitting materials.

To create forms it is possible to use program codes, Google forms, plug-ins. However, first of all it is necessary to work out an algorithm for submitting materials.

The first action performed by a user when accessing the scientific edition Website – is to get acquainted with the general information about the edition (scientific directions, sections, indexing in science metrics bases, review process, cost and payment terms). If the information is taken well, the use does the next step - searching for requirements to the materials or examples that could be viewed or downloaded. The final step of user is searching for contact information for sending materials. This step is the most important, because of its correctness depends the receipt of materials and additional personal information. Therefore, the stage of filling the automated contact form should be considered in detail.

To submit materials, you should first register on the site, or log in with the login and password you created.

At the first registration, the user should enter the email address and his / her name (login). To protect an account or personal virtual office, a user should create a password that will later be used to login to the website. Це є звичайний спосіб реєстрації. You can also log in to the site through social networks (Facebook, VK, Twitter). In this case, you do not fill the fields with personal information, but the social network gives permission to transfer personal data to the site.

The third way to register is to invite. It looks like a password and consists of letters and numbers. It is required to register on the site where such a registration method is applied.

After registration with an invite, user will receive an access to the closed section on the site or some other additional possibilities only for registered.

After successful registration, the user opens a submission form. Depending on the form type, the user need to enter the following information:

Personal Information:
- Surname, name, patronymic, author and co-authors;
- E-mail address;
- Authors Idetifications (ORCID, Authors ID);
- Place of work;
- Scientific degree, academic rank;
- Country of origin

Information about the scientific article:
- Language of publication;
- Section or chapter of the magazine;
- Title of the article;
- Sponsorship in writing (if necessary);
- Attached files with scientific materials, reviews

After entering all the data, the form is being checked for correct filling. In case of incorrect filling the user is informed in which part a mistake is. But it does not apply to the Full name, the title of the article, because the program can not verify spelling of names and surnames.

After sending a form, the user receives a message about the success of the operation.

CONCLUSIONS

The use of an automated form of information submission in scientific editions simplifies the work of the administrator (editor, secretary) of the publication, by reducing the amount of filling of the required query materials and the creation of databases

For site users, the contact form facilitates the process of submitting materials to the edition and minimizes errors that may occur in the process of form filling.

The creation of a user's actions algorithm for submitting materials through automated forms, will help to understand the structure of the form, and optimize it for effective filling.

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