Online Branding of Scientific Medical Conference and its Economic Expediency

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Abstract. This paper deals with the process of online branding of scientific medical conference. The use of scientific-metric databases and modern capabilities that provide social networks for communication between scientists is, in combination, an effective method for promoting scientific publications, events and scholars. The popularizations of scientific results, the publications in which these results are published, play an important role in shaping the brand of a modern successful scientist, which in turn is a component of the brand of higher education. Successful scientific activity of a scientist is impossible without the publication of the results of research in reputable international publications. The development of the concept of popularization of periodicals through scientometric international databases is a current and in-demand research. The results of the implementation of the stages of the proposed algorithmic complex are the creation of conference accounts and the formation rating and brabding the medical conference be online scientific services. The practical implementation of the proposed method has shown significant results in the popularization of the scientific publication. The economic expediency of online branding of scientific medical conference is proposed.

Keywords: PR-campaign, Medical Conference, Google Scholar, Online Branding, Electronic Archive, ResearchGate, Popularization, Online Communication.

1 Introduction

Conducting scientific conferences during which scientists present topical results of their research is a significant contribution to the development of science in Ukraine and the world. The popularizations of scientific results, the publications in which these results are published, play an important role in shaping the brand of a modern successful scientist, which in turn is a component of the brand of higher education.

Successful scientific activity of a scientist is impossible without the publication of the results of research in reputable international publications. The development of the concept of popularization of periodicals through scientometric international databases is a current and in-demand research. Often, the search for such publications brings many problems for Ukrainian scholars.

1.1 State-of-art

The process of branding the scientific conference is a complex task. The use of scientific-metric databases and modern capabilities that provide social networks for communication between scientists is, in combination, an effective method for promoting scientific publications, events and scholars.

The purpose of the study is to prepare and implement a universal integrated strategy for the promotion of periodicals in the virtual space of communication, paying particular attention to the means of scientometric databases and online communication services of scientists.

Research methods. The research conducted is based on web content analysis, analysis of electronic resources, modern methods of information search on the Internet and methods of information consolidation. The method of comparative analysis of virtual services, social networks and scientometric databases was chosen to choose the optimal technical solution. For the development of functional and information models the method of theory of algorithms and using structural modeling diagrams was used. In general, the research is based on modern web technologies. The data visualization method was used to demonstrate the results.

The scientific novelty of the results. The scientific novelty obtained is to develop a comprehensive approach for the formation of a high ranking in Google Scholar scientific publications of a particular edition. It is not enough to download or list the posts in the Google Scholar account to index the posts in the Google Scholar database, which is a difficult task. The author has developed an algorithm for the steps you need to take to succeed in a complex task - forming a high-h-indexed Google Scholar edition account. A high h-index score for a collection account will lead to the popularity of the collection materials and, in turn, increase the h-indexes of authors in the Google Scholar Science Database, which will lead to hassle-free recruitment, high quality and competitive materials for each issue of the collection and increase and conference organization.

The practical significance of the obtained results is the introduction of an effective concept of popularization of the periodical scientific publication, formed on the basis of the materials of the conference on the basis of the developed algorithmic complex. The results of the implementation of the stages of the proposed algorithmic complex are the creation of conference accounts and the formation of high h-index scores in the Google Scholar Scientometric Database. This indicator is formed by posting conference materials on the social networks of Academia.edu and ResearchGate, as well as in the University's Electronic Archive of Scientific Materials, Publons, Fscebook

and websites. The practical implementation of the proposed method has shown significant results in the popularization of the scientific publication.

2 Analysis of the structure of the medical conference

The basis for conducting scientific and scientific-technical events is the order of the rector, which approves the timing of the event, the composition of the program and organizational committees, the plan of preparation and holding of the event.

The organizing committee should determine the specific topic to be covered by the scientific convention, the name, as well as the participants of the conference, the choice of the venue for the scientific conference, and then agree with the chairman of the conference and the chairman of the program committee. The chairman of the organizing committee is responsible for advertising the scientific conference, through which the participants will be notified of the scientific conference. Attendees are notified of the conference from a newsletter or booth containing information about the conference, as well as social networks, directories, and more.

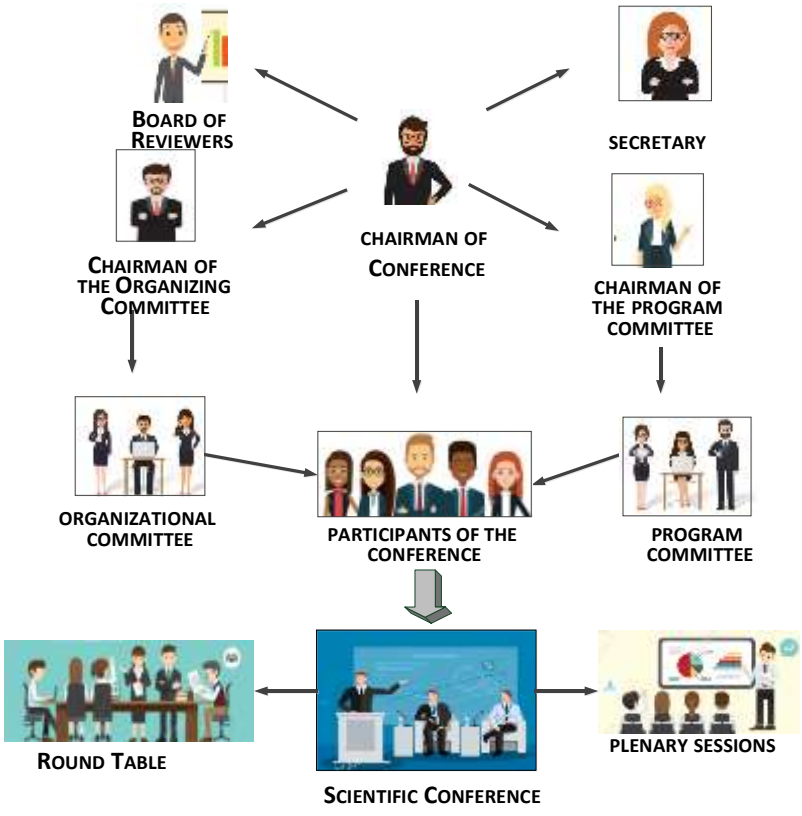

Fig. 1. Structure of medical scientific conference

Conducting scientific and methodological conferences is carried out with the involvement of teachers, graduate students and associate professors, and other staff of universities for the presentation and distribution of new methodological textbooks, developments and training programs.

The structure of the scientific conference consists of appointed specialists for positions that organize, regulate and control the holding of the scientific conference (Fig. 1). To organize a scientific conference appoints qualified specialists to the positions responsible for organizing this scientific conference. The scientific conference includes: Program Committee Chair, Conference Secretary, Program Committee Members, Organizing Committee Chair, and Organizing Committee Members. Scientific conferences can be held in the form of plenary meetings and round tables. Participants of scientific conferences during plenary sessions are acquainted with reports of conference speakers from the hall, speakers report from the podium to the participants. During the round tables, all participants take seats at the table; each participant speaks on a particular issue.

3 Modeling the concept of medical conference promotion

Modeling the concept of popularization of a periodical scientific publication by means of scientometric international databases consists in the developed information model of the process.

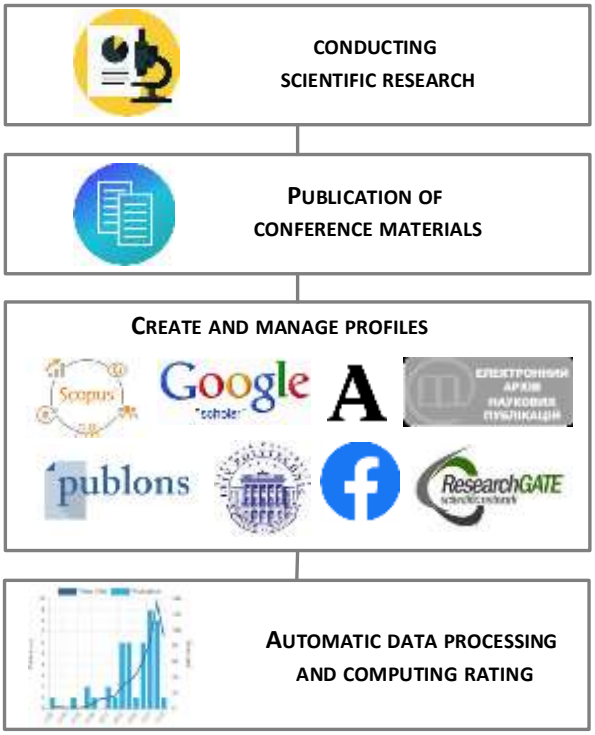

Fig. 2. Model of creating branding in online scientific services

The model developed of creating branding in online scientific services is shoem in see Figure 2, the process of posting conference articles in online scientific services, and generating citation statistics.

The conference proceedings should be electronically divided into separate materials, then upload them to profiles created and configured on the Academia.edu and ResearchGate social networks, as well as in the Electronic Archive of Scientific Materials, leaving these materials open to the public on the Internet.

The materials are automatically processed by Google Scholar and added to the Google Scholar Conference profile. Based on this data, statistics are cited for material citation and indexes.

The created Publos page of IDDM conference is shown in Fig. 3.

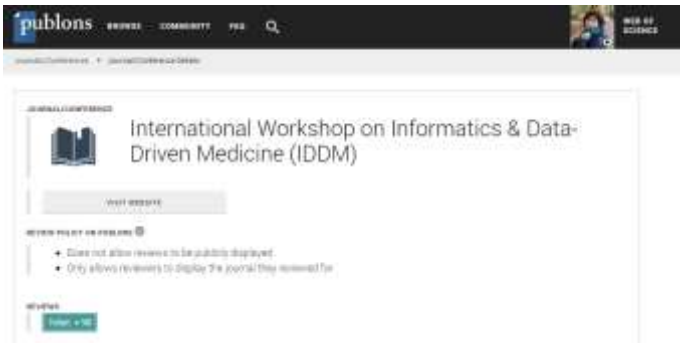

Fig. 3. Publos page of IDDM conference

Also created Facebook page of IDDM conference is shown in Fig.4.

Fig. 4. Facebook page of IDDM conference

The created website of IDDM conference is shown in Fig. 5.

Fig. 5. Website of IDDM conference

3.1 Functional model for solving the problem

In the functional model of the task, a set of algorithms was developed to solve the tasks. The created algorithm for logging in and setting up an account in the Google Scholar Search Engine [13] solves the task of registering in the Google Scholar Search Engine Database, specifying what steps to take to create a new account and set it up. An algorithm for adding articles to a Google Scholar account has been created, solving the problem of finding articles in Google and adding these articles in an automated way, which increases the h-index of the conference account. To register and set up an account with Google Scholar, you must follow the steps in the flowchart (Figure 6). The main steps of this algorithm are:

- ***Logging into Google Scholar and logging into your account.*** Checking the availability of an account that is needed to avoid duplication of similar accounts. If an account exists then you need to switch to your own profile, if you do not need to create a new account.
- ***Account Creation.*** Complete registration forms such as name, affiliation, verification email, field of interest, and homepage. Receiving email confirmation. Go to profile to see the features and benefits of creating a Google Scholar account. Read the list of downloaded articles on Google Scholar.

- ***Check articles*** for Google Scholar Search. If there are articles, then include the articles found in your account. If there are no articles in the database, then manually add the articles to the open access service. Include articles found in the account to improve metrics and enable other scientists to review the added scientific articles. You can manually add articles using the Add button, then fill in the required fields and download the document.
- ***Forming a list of articles in Google Scholar.*** Determining automatic profile updates for adding Google Scholar personal articles to scientific accounts that are hosted on other social networks and science databases, and manually setting up a profile for ease of use for a scientist.

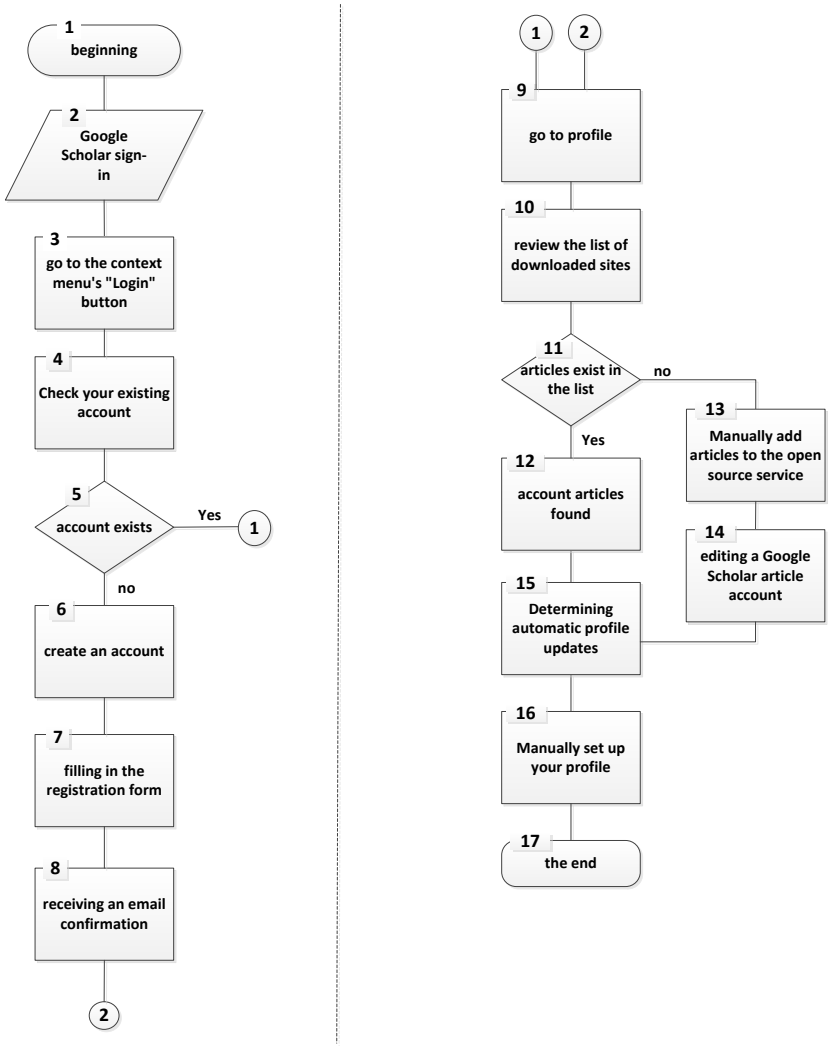

Fig. 6. Google Scholar sign-in and set-up flowchart

The created Google scholar profile of IDDM Conference is shown in Fig. 7.

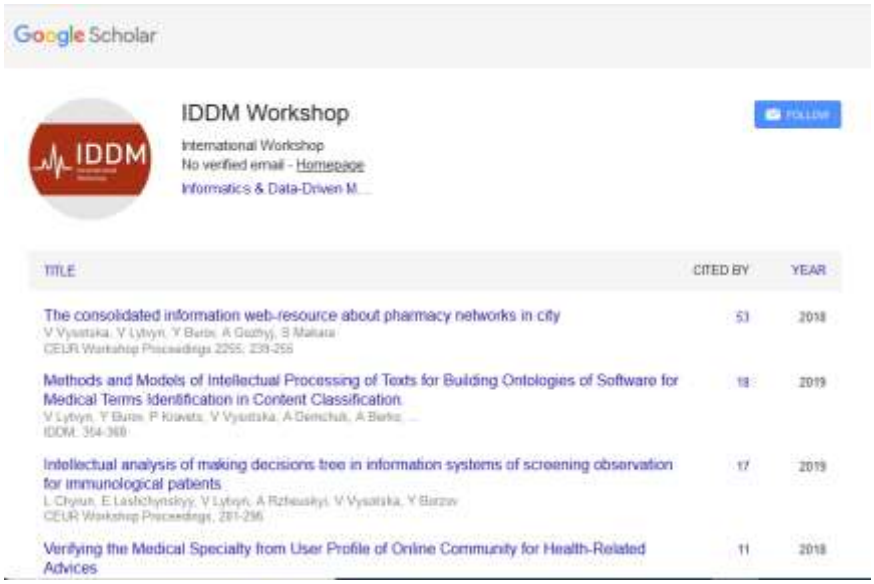

Fig. 7. Profile of IDDM Conference in Google Scholar

Citation chart of IDDM Conference in Google Scholar is shown in Fig..8.

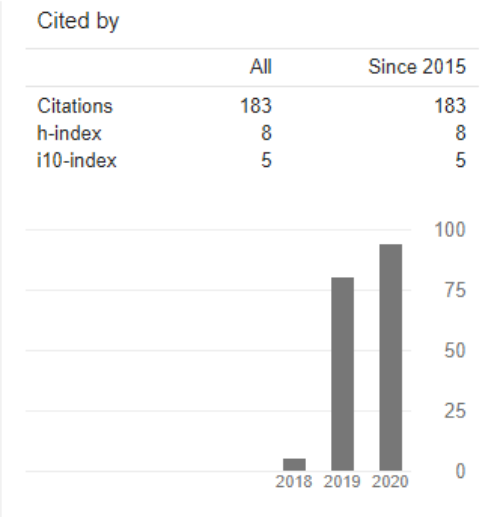

Fig. 8. Citation chart of IDDM Conference in Google Scholar

In order to submit an article in Academia.edu, you must follow the steps described in the flowchart (Fig. 9):

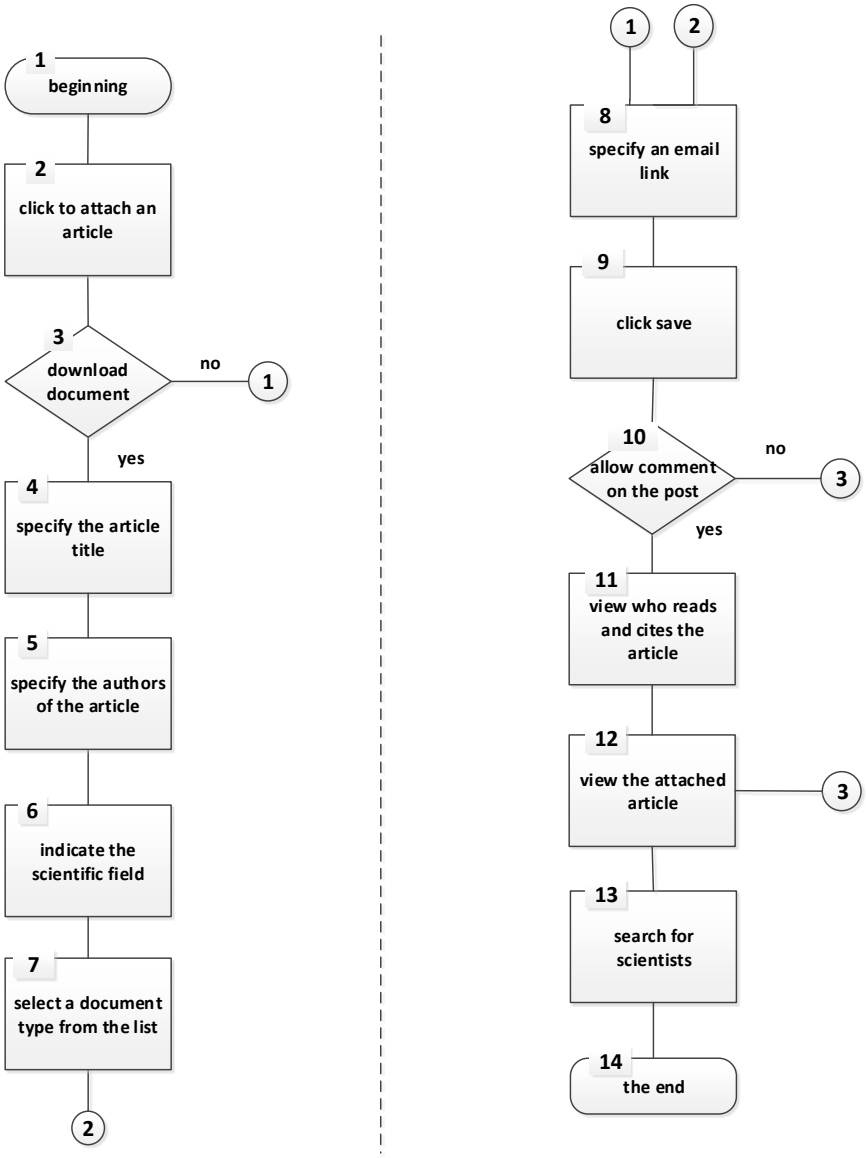

Fig. 9. The block system of the algorithm for adding a scientific article in Academia.edu

The algorithm is to perform the following basic steps:

- Add the article and download the paper containing the scientific article and provide the basic information: the title of the article and the authors of the article, after that the added authors will be notified about the assignment of the scientific article, after confirmation of the article it will be automatically added to the authors profile;

the scientific field so that scientists can easily find a research article by pre-search help; type of document, namely to indicate that it is a scientific article; an electronic link, if there is no paper with a scientific article, it is possible to indicate the electronic link that contains the scientific article, after completing all forms of the article will be added to the profile.

- Save, after saving the article will be added to the profile.
- Allow commenting on the publication by other scientists, view and cite the article by scientists.
- View the attached article.
- Search for scientists and engage them in your own profile.

Adding articles to your account at Academia.edu must be done by uploading a document containing the article or providing an email link.

The created algorithmic complex is implemented with the purpose of solving the problem - application of the developed concept of popularization of periodicals with scientific-metric international databases.

4 The Economic Feasibility of Online Branding of Scientific Medical Conference

Economic feasibility is a kind of cost-benefit analysis of the examined project, namely online branding of scientific medical conference. During the economic feasibility analyzis of the project, it is important to consider the following facts:

– the design decision depends on marketing research.
– if the market is unfavorable or funding is not received, or the implementation of the project is too expensive, the expert may abandon the project.

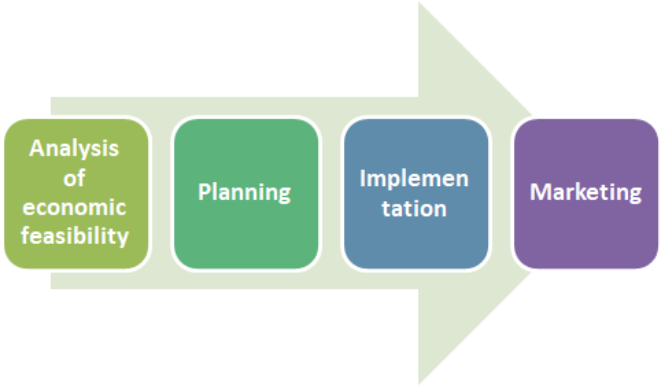

Fig. 10. Scheme of the stages of the online branding campaign of scientific medical conference

However, experts need to have enough information to make the right decisions at every stage. Stages of the online branding campaign of scientific medical conference: 1) Analysis of economic feasibility, 2) Planning, 3) Implementation and 4) Marketing/

In order to finally confirm the economic feasibility of the proposed campaign of online branding of scientific medical conference, we calculate the profitability of the project according to the following formula:

$$\mathrm{Pr} = \frac{\mathrm{P}_{\mathrm{total}}}{\sum_{\mathrm{conf}} \mathrm{Brand}} \times 100\% \qquad (1)$$

where $\mathrm{P}_{\mathrm{total}}$ is the total profit from the project; $\sum_{\mathrm{conf}} \mathrm{Brand}$ is the total cost of organizing, holding the conference and its branding online research services.

The economic feasibility is evidenced by the large number of participants from many organizations.

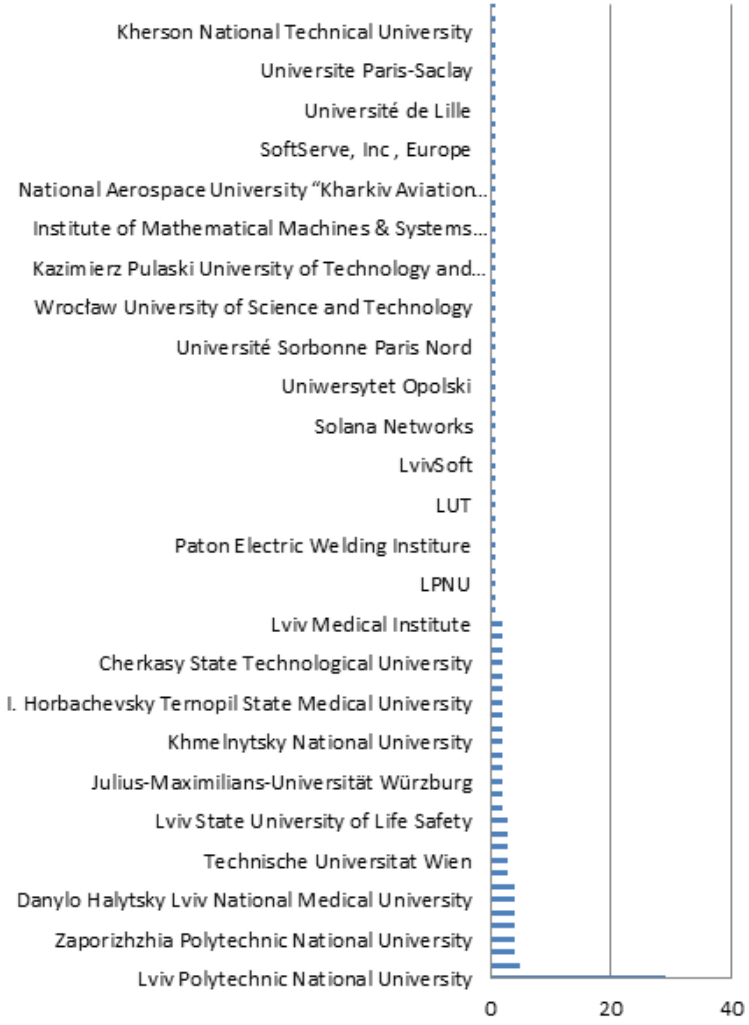

Fig. 11. Diagram of organizations of participants of IDDM Conference in Scopus

In 2018-2019, the largest number of publications was submitted by scientists Lviv Poly-technic National University -5 papers, scientists Ternopil National Economic Univer-sity submitted 5 papers, scientists from Comenius University, Zaporizhzhia Polytechnic National University, National Aviation University, Univer-sitat Wien , Danylo Halytsky Lviv National Medical University, Ukrainian National Forestry University submitted to the conference 4 publications from each university. And also 3 publications were submitted from Ternopil Ivan Puluj National Technical Universi-ty, Technische Universitat Wien, Uzhgorod National University, Ivan Franko Nation-al University of L'viv, Lviv State University of Life Safety. Of the other institutions, fewer scientific papers were submitted to the IDDM Conference.

Also Participants of IDDM Conference represent 17 countries.

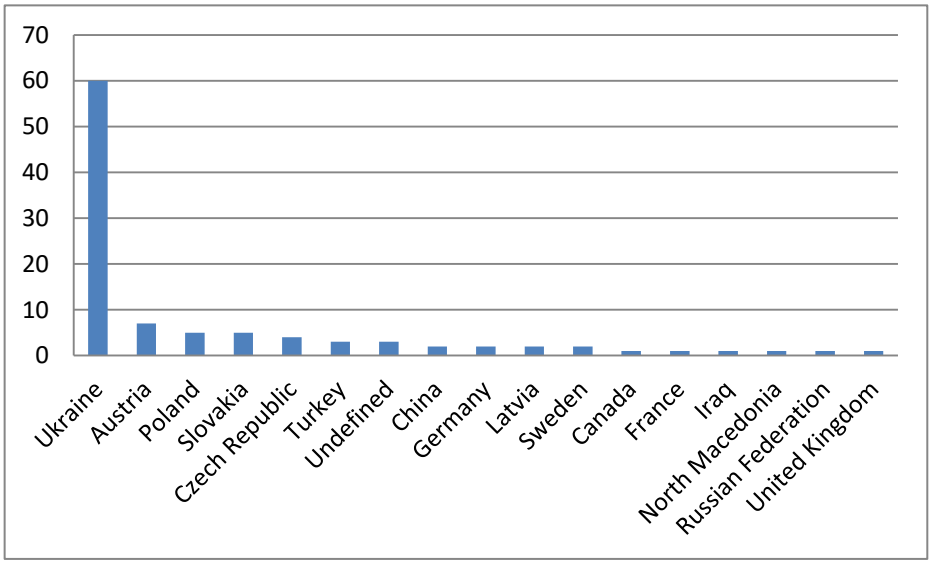

Fig. 12. Diagram of countries of participants of IDDM Conference in Scopus

Diagram of countries of participants and diagram participant organizations of IDDM Conference are shown significant popularity of the conference and show the effectiveness of the campaign to create a brand of medical scientific conference among medical and scientific organizations.

5 Conclusions

In this scientific work an analytical review of literary sources is carried out, the concept and structure of a scientific conference are considered, the specifics of the organization and holding of a scientific conference are investigated. A thorough analysis of the presentation of scientific publications in the virtual space is made.

An information model for creating a Google Scholar profile and generating citation statistics has been developed, including the creation of a Google Scholar profile, the

process of posting conference articles to its Google Scholar profile, and generating citation statistics.

In the functional model of the task a set of algorithms has been developed, on the basis of which the tasks are solved: creation of accounts in Academia.edu and ResearchGate. The result is the citation statistics for the Google Scholar conference account.

References

1. Noruzi A. Google Scholar the new generation of citation indexes. International journal of libraries and information studies. p.170 (2005).
2. Jasco P. Google Scholar the pros and the cons. University of hawaii online information review. Manoa, Hawaii, USA. p.208 – 214 (2005).
3. Thelwall M. ResearchGate versus Google Scholar: Which finds more early citations? / M. Thelwall, K. Kousha. Scientometrics. 112, № 2. p. 1125-1131 (2017).
4. Orduna-Malea E. ResearchGate as a source for scientific evaluation: revealing its bibliometric applications / E. Orduna-Malea, A. Martin-Martin, E. Lopez-Cozar. Profesional De La Informacion. 25, № 2. p. 303-310 (2016).
5. Orduna-Malea E. Do ResearchGate Scores create ghost academic reputations? E. Orduna-Malea, A. Martin-Martin, M. Thelwall, E. Lopez-Cozar. Scientometrics. 112, № 1. – p. 443-460 (2017).
6. Institute of Innovative Education. http://novaosvita.com.
7. Scientometric database. http://library.tntu.edu.ua/resources/ naukometrychni-bazy-danyh/
8. Academia.edu. https://www.academia.edu/
9. ResearchGate. https://www.researchgate.net/
10. Електронний архів наукових матеріалів Національного університету «Львівська політехніка». http://ena.lp.edu.ua/
11. Google Scholar. https://scholar.google.com.ua/
12. Kiselev, V. M., S. V. Savinkov, and V. A. Terentyev. "Scientometric evaluation of visual solutions for branding." Globalization and its socio-economic consequences. Materials of the 16th International Scientific Conference. The 5th–6th of October. (2016).
13. Korobiichuk I., Syerov Y., Fedushko S. (2020) The Method of Semantic Structuring of Virtual Community Content. In: Szewczyk R., Krejsa J., Nowicki M., Ostaszewska-Liżewska A. (eds) Mechatronics 2019: Recent Advances Towards Industry 4.0. MECHATRONICS 2019. Advances in Intelligent Systems and Computing, vol 1044. Springer, Cham. pp 11-18. https://doi.org/10.1007/978-3-030-29993-4_2
14. Glinska, Ewa, and Ewelina Julita Tomaszewska. Main Areas of Place Branding Scientific Research–Bibliometric Analysis. Economic and Social Development, 24th International Scientific Conference on Economic and Social. Vol. 15. No. 1. (2017).
15. Manca, Stefania. An analysis of ResearchGate and Academia. edu as socio-technical systems for scholars' networked learning: a multilevel framework proposal." Italian Journal of Educational Technology 25.3: 20-34 (2017).
16. Komljenovic, Janja. Big data and new social relations in higher education: Academia. edu, Google Scholar and ResearchGate. 148-164 (2018).
17. Wilkinson, Joanna, and Penelope Down. "Publons: releasing the untapped power of peer review for universities." Insights 31 (2018).