

# Using the Crowdsourcing Online-Platform as IT Tool for Gender Equality Plan Development

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**Abstract:** The paper is devoted to summarizing the experience of using the crowdsourcing online-platform as an IT tool to support the gender audit process and Gender Equality Plan development at universities on the example of Simon Kuznets Kharkiv National University of Economics (KhNUE). The paper considers the stages of the platform development, the strategy of attracting users, the results of the platform operation at KhNUE.

**Keywords:** crowdsourcing online-platform, gender audit, gender equality, Gender Equality Plan.

## I. INTRODUCTION

Gender equality policy today has become one of the most important trends in the development of the European higher education system. The issue of gender equality, that is, the parity of participation of both men and women in education, research, career development, university management and decision-making, is an important strategic task for modern European Universities, since ensuring gender equality in all spheres of social relations is one of the most important priorities of the development of the European Union (EU) [1], [2]. Ukraine, proclaiming a course on European integration, should make the best efforts to overcome the problem of gender discrimination and develop real mechanisms and tools for implementation of the gender equality strategy. Ukraine has ratified a number of international conventions on gender issues and has undertaken to guarantee equal rights and opportunities for women and men. That is why the issues of gender monitoring, analysis and audit are becoming more and more relevant for Ukrainian educational institutions. This led to the choice of the topic of this study, which aims to summarize the experience of using the online platform as an IT tool for the gender audit process support at higher education institutions in general and at IT departments, in particular.

## II. CROWDSOURCING PLATFORM AS A TOOL FOR SUPPORTING THE GENDER AUDIT PROCESS

The gender audit is a powerful and effective tool for forming a gender-sensitive environment at the university. The gender audit, based on the principle of active participation, is a modern monitoring tool for advancing gender equality policies, where not only quantitative but also qualitative indicators play a significant role. The peculiarity of such an audit is that self-assessment and democratic involvement is used, when all interested employees

voluntarily have the opportunity to speak on issues related to the gender perspective. The main purpose of the gender audit is to facilitate training, increase employee awareness and integrate gender perspectives into policy and current activities of the organization.

Consider the experience of conducting a gender audit of the university in general and the IT faculty in particular on the example of the Kharkov National Economic University named after Semen Kuznets.

At KhNUE gender audit was conducted with the financial and methodological support of the European Union (EU) as an integral part of the EQUAL-IST project " Gender Equality Plans for Information Sciences and Technology Research Institutions" [3] funded by the EU within the framework of the HORIZON2020 program.

The main objective of the three-year EQUAL-IST project is to implement structural changes to increase gender equality and positive changes in three main areas: first, in the processes of internal university management, including in personnel management processes, and secondly, in the processes of research design and delivery, thirdly, in the process of learning and interaction with students and in internal communications.

The methodology of gender audit used in the project was based on the International Labor Organization (ILO) methodology [4], but was substantially adapted to the needs of IT faculties of universities. It should be noted that the experience of adapting the ILO methodology to the needs of universities is not new for Ukraine, such work was carried out by the Network of Gender Centers of the universities of Ukraine, and the experience of adapting the methodology to the needs of IT departments is innovative not only for Ukraine, but also for Europe.

During the gender audit work was carried out in three main areas: firstly, personal interviews with university staff, and secondly, seminars with students, faculty members, representatives and heads of functional units (4 seminars in total). The third stage of work was related to the quantitative analysis of indicators of gender parity. In addition, a survey was conducted among participants of seminars. Main purpose of it was to identify gender inequalities and discrimination. All these measures allowed not only to identify problems with the implementation of equal opportunities for women and men, but also to identify the slots for their solution.

In order to receive more information from different sources in one place it was reasonable to use on-line

collaboration platform. As a collaborative workspace for gathering opinions of the different people from different countries within the Horizon 2020 EQUAL-IST project was suggested to develop and use crowdsourcing on-line platform CrowdEquality [5].

CrowdEquality is an interconnected environment in which all the participants in dispersed locations can access and interact with each other just as inside a single entity. The environment is supported by electronic communications and groupware, which enable participants to overcome space and time differentials.

The main goal of development of the crowdsourcing platform is to collect ideas and triggering discussions about promising initiatives for promoting gender equality and diversity and improving work-family balance in research institutions. CrowdEquality strives to be an inclusive community that empowers men and women all over the world to freely discuss the issues of gender equality in research institutions. CrowdEquality is designed to connect academic and non-academic staff members working at research institutions, policy makers, gender experts, members of relevant Non-Governmental Organisations (NGOs) and national/international networks, as well as all individuals interested in the design and implementation of Gender Equality Plans (GEPs).

### III. CATEGORIES OF USERS OF THE PLATFORM

The crowdsourcing online platform was used as an IT tool to support the gender audit process and ensure gender parity. This collaborative platform, developed and implemented by the EQUAL-IST project consortium, is the first European online platform that collects problems in achieving gender equality at universities, ideas for overcoming them and creating conditions for discussion. Platform users are able to:

- become acquainted with the problems of achieving gender equality existing at universities in European countries;

- express their own vision of gender inequality in various fields at universities;

- share thoughts and influence the internal policies of universities and research institutions in Europe.

When developing the platform, the following categories of users were implemented: internal users (representatives / representatives of the university community - those used to register the address in the university domain); external users (experts / experts on gender issues); guest (unregistered user); platform administrator; administrator from the university.

For internal users, the platform provides the following basic functionality:

- register on the platform;

- to place information on the existing problems in the field of gender equality at the university;

- express their ideas on overcoming gender equality issues;
- get acquainted with other proposed problems and ideas, comment on them;

- express your preferences for the most addictive ideas by pushing "Like"; vote for best ideas (available only at the voting stage).

Basic features for external users: register on the platform; comment on the problem; comment on ideas.

At the stage of designing the platform, the project team generated a list of functional requirements for the platform, which became the basis of the development process of the IT product. Since the platform is actually a tool for ensuring the development of gender equality plans, at different stages of the platform's operation, its functionality has changed: ideation phase - April 2017; reviewing phase - May 2017; voting phase - June 2017; development of gender equality policy.

At the initial stages of the platform it was possible to put problems and ideas to overcome them. Then at the "voting" stage these functions were blocked, instead, users had the opportunity to vote for the best ideas. At the stage of developing a gender equality policy (the final stage), users could use the accumulated data (problems, ideas, the number of votes for each idea), but all other platform features were not available.

After the platform was created and launched, the key task was to engage users (external and internal) to visit the platform in order to gather information about gender issues in a particular institution.

In order to involve external experts KhNUE team conducted the following activities:

- presentation of the project and the platform at a meeting of the University's Academic Council;

- presentation of the platform at workshops;

- presentation of the platform at the meeting of the Information Systems Department and faculty meetings;

- promotion through the personal contacts;

- presentation of the platform for students at the meetings of student groups and during breaks between classes;

- promotion through the internal mailing lists;

- promotion through the university's web-resources (web-site and social media).

In order to involve external experts the following activities were conducted:

- presentation of the platform at several scientific conferences;

- presentation at the meeting of Kharkiv branch of All-Ukrainian Network of Gender Education Centers and promotion through the mailing list of this network;

- presentation at the meeting of Kharkiv Platform "Culture of Equality";

- presentation of the platform in the frame of TV interview about gender equality perspectives in Ukraine.

### IV. RESULTS OF THE USE OF THE PLATFORM AT KHNUE

As a result of the gender audit and the use of the crowdsourcing online- platform, the main problems in the field of gender parity were identified and ranked as in the KhNUE and at other universities of the EQUAL-IST project consortium (Table 1). In addition, more than 30 ideas have been collected to overcome the problems found at KhNUE.

TABLE 1. RANKING OF PROBLEMS IN THE FIELD OF GENDER PARITY AT KHNU

Challenges	Rank of the challenge
“Work-life balance” problem	1
No opportunities for students and academic staff who became parents	2
“Glass ceiling” problem (men are mainly at the decision-making level, women - at the operational level)	3
Lack of resources – no budget for gender issues, no personnel, no committee responsible for gender equality	4
Lack of gender culture and tolerance	4
The gender issue is consequently not a part of any decision making process	5
No courses on gender issues	5
Absence of the Gender Education Center at the University	6
No gender expertise of teaching materials	7
Low share of girls at computer sciences and boys at economy sciences; Very low number of initiatives to attract girls to computer sciences and boys – to economy sciences	7
The concentration of women in certain women's sectors of employment, primarily in the humanities and economic departments	8
Gender stereotypes and lack of awareness about gender equality issues	8
Gender insensitive communications; Gender-insensitive language adaptation is at the start phase	8

At the stage of the gender equality policy development, the best ideas proposed on the platform were used by universities in developing gender equality plans. All ideas were divided into four categories according to the sections of the GEPs: HR and Management Processes; Research Design and Delivery; Teaching and Student Services; Institutional Communication.

As a result of the audit and the crowdsourcing online-platform it was found that, with a commitment to the principles of gender equality in general, the staff and students did not have a clear understanding of gender concepts and an integrated gender approach. Gender is still considered an additional, not a basic concept. It is necessary to make the gender approach "visual", "concrete", "clear" and "integrated".

In this sense, a particularly important is an information campaign aimed at the promotion of gender equality. The most often expressed opinion is that staff members and students do not feel the problem of gender inequality at the University or do not consider gender imbalance an important problem requiring special measures to address. Very popular was the opinion among users that the University has more

pressing problems that require urgent solutions as well as resources. Much more staff and students were concerned about “Work-life” balance problem, especially those who had young children and those who worked or studied at the second shift.

The gender audit and the use of the crowdsourcing platform allowed, among other things, to identify problems that were not related to gender in themselves, but caused problems in team relationships (for example, work-life balance problems), to change the perceptions of gender equality, to become aware of this subject matter. In the future, this will create the effect of the chain reaction, when the acquired knowledge, representations are transmitted to those communicating with the carrier of such information.

In addition, gender audit, as an effective tool for improving socially-oriented policies, and the crowd-sourcing platform as a powerful and modern IT tool, will enhance the attractiveness of the university as an employer and as a place for learning, since advancing gender equality policies is, among other things, imaginative component.

Thus, the crowdsourcing platform and gender audit at the university proved to be an effective means for performing a number of important tasks: assessment, monitoring, communication, gender sensitive work methods, and education. Analysis of the ideas and comments placed on the crowdsourcing platform, the results of the electronic voting of the university communities allowed project team to develop the Gender Equality Plan for KhNUE for 2017 – 2019 (Table 2).

The actions envisaged by this plan are extended to two levels of intervention: University level or level of Information Systems Department.

TABLE 2. GENDER EQUALITY PLAN FOR KHNU

Challenge 1: “Work-life balance” problem and lack of facilities for the balance support	
Goal 1: Improve work-life balance of staff and students	
Action 1	Implement provisions for ensuring priority when drawing up the schedule of classes for academic staff having young children, children with disabilities, large families, for pregnant women
Action 2	Carry out research on determining the need and resources for opening a children's room on campus
Action 3	Implement provisions for ensuring teleworking for academic staff having young children, children with disabilities, large families, for pregnant women
Action 4	Promote a culture of equal family responsibilities among students and staff
Action 5	Create and support section on the University website (and / or Intranet) with information on gender equality issues, work-life balance rights, provisions and regulations
Challenge 2: “Glass ceiling” problem (vertical segregation)	
Goal 2: Encourage the achievement of gender equality (vertical principle) through information and awareness	

raising activities	
Action 6	Conduct seminars and round tables on gender equality for administrative staff
Action 7.	Make recruitment procedures and selection criteria transparent
Challenge 3: Concentration of female staff in certain women's sectors of employment (horizontal segregation) Goal 3: Encourage the achievement of gender equality (horizontal principle) through information and awareness raising activities	
Action 8	Conduct information and awareness raising activities on gender equality issues for staff
Challenge 4: Lack of gender equality machineries Goal 4: Ensure sustainability of GEP's actions by establishing gender equality machineries	
Action 9	Establish a Commission on Gender Equality Issues and develop mechanisms for its functioning
Challenge 4: Lack of gender equality machineries Goal 5: Ensure sustainability of GEP's actions by including gender equality goals and measures in the University strategic documents	
Action 10	Ensure the support of certain provisions of European Charter for Researchers by university staff
Action 11	Propose and implement changes to existing Collective Agreement of University Administration and Trade Union Committee in order to insure the implementation of GEP
Challenge 5: Gender issue is not in focus in decision-making process Goal 6: Make decision-making bodies informed and committed to the principles of gender equality	
Action 12	Collect, analyse and publish gender disaggregated statistics of the University
Challenge 6: Lack of gender culture and awareness about gender equality issues Goal 7: Raise awareness about gender equality issues, develop gender culture of academic staff and students	
Action 13	Conduct information and awareness raising activities on gender equality issues for students and academic staff
Action 14	Develop and disseminate printed and electronic awareness raising materials on gender equality
Challenge 6: Lack of gender culture and awareness about gender equality issues Challenge 6: Lack of gender culture and awareness about gender equality issues Goal 8: Adopt a gender approach in specific teaching materials	
Action 15	Perform pilot anti-discriminatory expert

	assessment of teaching materials
Challenge 7: Gender imbalance among students of computer sciences and economy sciences Goal 9: Improve gender balance among students of computer and economy sciences	
Action 16	Conduct awareness raising events to spread information about women in IT industry and women's career opportunities in IT
Action 17	Establish special nominations for women / female teams in existing IT championships and competitions
Action 18	Perform pilot anti-discriminatory expert assessment of marketing and advertising materials for IT Bachelor's and Master's programs
Challenge 8: Gender insensitive communications Goal 10: Raise awareness about the value of gender sensitive / gender neutral communication	
Action 19	Provide language and visual support for gender equality in the media content of the University

### III. CONCLUSION

The further work of the EQUAL-IST project team will be related to the implementation of GEP and the dissemination of experience among other universities. The issues and ideas proposed on the platform will continue to serve as a basis for developing gender equality plans for universities and for disseminating the best practices of European higher education institutions.

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