Internship Platforms for Work-Based Learning

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Abstract—The enterprise internship and the acquisition of practical skills while studying at the university are the realities of a modern student around the world. The quality of internship is beneficial for all the stakeholders involved into this process: for students it is a transition from school to professional life; for universities it increases brand value; for employers it is the opportunity to get them motivated and capable students. The problem is: how among the hundreds of internship proposals find the right one? What are the criteria by which the employers and specialized organizations offer internships and students choose them? what to expect from the internship? Therefore, the issue of choosing the criteria for searching and implementing internships is very relevant. The purpose of the article is to focus on online internship platforms for student-employer interaction and to formulate the criteria of choice and distinctive features of the platforms. The research paper based on methods of quantitative and qualitative analysis, Benchmarking techniques. Studying the best practices of 6 countries with 62 online resources (platforms) and classifying them into 4 groups (Specialized Internship Platforms; Universities Websites; Specialized Websites for Jobs; Corporate Websites), the authors determined the peculiarities of each group and the functional purpose of each resource within the group, its capabilities and limitations. Some recommendations on the development of specialized internship platforms in Russia are introduced. Research has practical relevance adds value for all stakeholders in a process of internship organization and quality improvement.

Keywords: internship, online-platform, student, employer

I. INTRODUCTION

Today, just three years after the Davos forum in 2016, the concept of the "fourth industrial revolution" has come to be used everywhere. Industry 4.0. Changes the company beyond recognition, dramatically changing the expectations of employees. HR services face incredibly complex tasks in creating new jobs - the "new world of work" [1] carries unpredictability: skills that were valuable five years ago are not in demand today; the list of skills, knowledge and roles is not known exactly to anyone for tomorrow. Employers begin to hunt "for their heads" at the earliest stages, establishing contacts with schools and hiring promising young people. On the other hand, young people should more and more meaningfully relate to the formation of their competencies and understanding of their trajectory in professional life.

Workplace education is not a new trend. However, WBL is a serious basis for the formation of competencies during the period of study at the university, strengthening the links between theoretical training and real practice in companies.

The most common form of WBL is internships, which the authors took as the subject of their research. According to statistics, internships often take place formally [2]. They do not fully provide the opportunity to form practical skills. Frequently the tasks of an internship for a student are only indirectly related to his future profession, rather to perform routine, low-skilled operations.

The success of internships depends on many factors. An essential factor is where and how the student and the employer can find each other in order to meet better their needs and interests. This process of "the connecting the parties" can take place offline and online. Certainly universities play the crucial role in organization of students' internship, providing new model of partnerships between students and employers. The object of our research is online platforms and the organization process of "connecting the parties" through online platforms, as they allow at the beginning stage of internship to make communication and interaction between student and employer easier and faster, providing other additional benefits. To increase the effectiveness of digital interaction between students and employers, national projects are being implemented in Russia with government support. An example is the project "Professional training 2.0" [2] (the platform "Profstagirovki.RF"). Combining the mechanisms of a practice-oriented approach, the project provides opportunities for professional and career growth. Therefore, this issue for Russia is very relevant and important today.

II. THEORETICAL BACKGROUND

A. Work-based Learning and Internship

Work-based learning (WBL) is an educational strategy that provides students with real-life work experiences where they can apply academic and technical skills and develop their employability [3]. Most WBL programs are generally university accredited courses, aiming at a win-win situation where both the learner's needs and the industries requirements for skilled and talented employees are met. Work-based learning strategies provide career awareness, career exploration opportunities, career planning activities and help students attain competencies such as positive work attitudes and other employable skills.

Among the many strategies of work-based learning, such as job shadowing, business or industry field trips, entrepreneurial experience, others [3], we focused on the study of the most common form – student internship. According to definition of National Association of Colleges and Employers (NACE) "An internship is a form of experiential learning that integrates knowledge and theory

learned in the classroom with practical application and skills development in a professional setting. Internships give students the opportunity to gain valuable applied experience and make connections in professional fields they are considering for career paths; and give employers the opportunity to guide and evaluate talent" [4].

The internship at the enterprise and the acquisition of practical skills while studying at the university are the realities of a modern student around the world. The quality of internship is beneficial for all the stakeholders involved into this process [5]:

- for students it is a transition from school to professional life;

- for universities it increases brand value;

- for employers it is the opportunity to get them motivated and capable students [6].

The problems, barriers and ways to increase the effectiveness of internships, ensuring the satisfaction of students and employers, increase labor productivity during WBL internships, including the certain areas of knowledge are actively discussed in many countries [8, 9].

The guide to increase WBL effectiveness, supporting community to prepare for the future workforce has been published in North Carolina [3].

The European Training Foundation, has compiled a manual for stakeholders (politicians, social partners and educational institutions) in partner countries, especially those with medium and low incomes [10].

The National Center for vocational education research of Australia, analyzing two types of interaction between employers and students defined work-based and work-integrated learning as the most effective formation of practical skills [11].

The US Department of Education's National Center for Vocational and Technical Education Innovation Center (NCICTE) posted detailed information and recommended resources on WBL and its features: strategies, tools, mentoring approaches, industry information on youth employment laws, and the Myths vs. Facts for the states of Virginia, Colorado, Minnesota, Tennessee and others [12].

B. Internship platforms

In digital world with offline and online forms of interaction between students and employers the active development of digital platforms for the more effective organization of internships seems quite natural. After introduction the platform technology, innovative platform based business model arrived and have successfully entered various fields (more than 30% of the world's population use social networking platforms) - from sales to healthcare and education [13]. Modern digital platforms destroy the barriers of time and space, use software products, unite manufacturers more precisely, faster and easier, providing participants with fantastic results [14]. Based on the analysis of 96 sources: definitions, characteristics with Conceptualization View - Technical (e.g., software development & production) and Non-technical (e.g., B2B & B2C transactions); developers, owners, transactions between platform participants and others in monography by

Asadullah et.al [15] the results of the current state of information on digital platforms are presented.

Today there are a fairly large number of online internship platforms for students. Each has its own qualitative characteristics, advantages and limitations. The issues of improving the quality of internships are discussed by the European University Foundation. It is noticed, that Collective Awareness Platforms for Quality Internships appropriate to consider in the following four categories: 1) increasing global awareness, 2) informing stakeholders and political innovations, 3) promoting quality internship mobility and financial support, and 4) promoting employment & developing skills [16]. Global Intern Coalition (GIC) - the platform brings together different countries to improve the effectiveness of student internships [17].

The problems of adjusting the behavior of internship managers and students in the field of public relations organization of internships and communicating trough platforms are examined by Daugherty [18]. A segmental approach to the selection of employers for internships in the tourism and hotel industry is presented in the research work by [19]. The role of internships in increasing professional identity and increasing opportunities for better employment in the field of hygiene and labor protection discussed by Madigan et al [20]. In a broader sense, the results of internships are widely covered to determine their future prospects [21].

An important stage that affects the satisfaction of the internship both for the student and the employer, bringing the success of its organization and development is the initial stage – so called "connecting the parties". However, there is a lack of publications and open discussions on this topic. There is still a lack of knowledge about the peculiarities of different platforms, as well as a lack of qualitative analysis of the employers, universities and students' interaction within the digital internship platforms. It makes difficulties for students to choose the right one and for the employers and specialized organization to find the appropriate students. In this regard, the purpose of the article is to explore the existing online platforms for the interaction of students and employers; to determine how the process of obtaining internships on various platforms differs for a student; what opportunities are available for employers on platforms to increase the effectiveness of internships.

III. METHODOLOGY

The research paper based on methods of quantitative and qualitative analysis, benchmarking techniques, interview method of data collection and questionnaires. Six countries were taken for quantitative analysis: Czech Republic, USA, Russia, Germany, England, Holland. The educational technologies are at a progressive level in these countries, studies are regularly published on the interaction of universities and employers, as well as on methods for developing students' applied skills.

A total of 6 countries have identified 62 online platforms that allow students and employers to interact on internship issues. The database was compiled using desk research.

Qualitative analysis allowed us to divide 62 platforms into 4 groups and determine the specific features of each group. About 432 Russian and Czech students receiving a

bachelor's degree were surveyed. According to the criteria - the experience of searching for an internship through online platform and correctness of filling out the questionnaire 331 students' answers were actually taken. Students were asked to rate 4 groups of platforms on a 5-point Likert scale according to the criteria:

1. Availability of online tools for the development and preparation of the student for the selection process in the

in the company;

2. Speed of passing the competitive selection process;

3. Variety of internship offers;

4. Possibility of selecting an internship to the potential career settings for the student's personal parameters.

Google Form was sent also to 239 companies with the following selection criteria:

- number of employees more than 500 people;

- attracting at least 20 intern students per year;

- the use of online platforms to attract students for internships. 182 companies responded to the questionnaire. Correctly filled 167 companies, answering all questions. Employers rated 4 groups of platforms according to four criteria, using a 5-point Likert scale:

1. Number of student responses to the announcement of the internship;

2. Speed of attracting students to the internship using the platform;

3. Availability of online tools for selecting students;

4. Availability of information support for the organization of the internship.

IV. RESULTS AND DISCUSSION

Due to using qualitative content analysis while focusing on students' internship, the authors structured the diversity of internship platforms according to the criteria of specific services provision for students and employers and combined the platforms into four groups. We named them: Specialized Internship Platforms; Universities Websites; Specialized Websites for Jobs; Corporate Websites. Platforms examples within the four classification groups are shown in Fig 1.
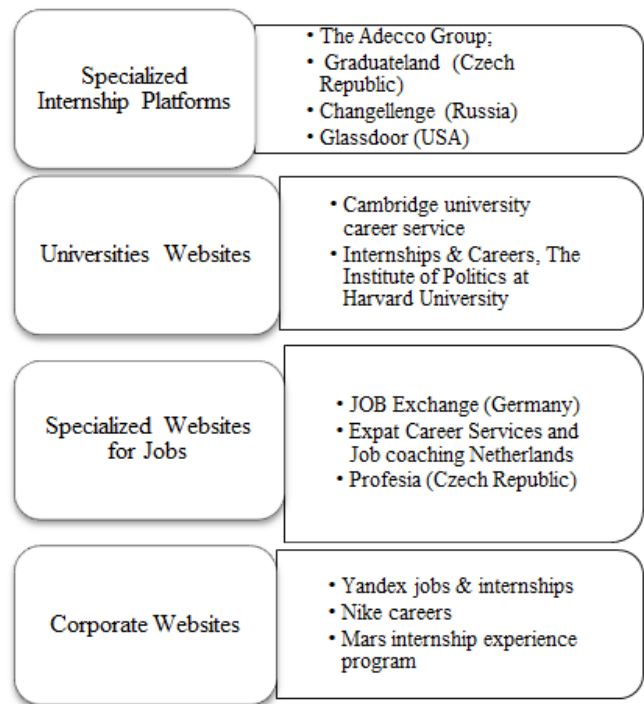

Fig. 1. Four classification groups of online internship programs (Source: Authors' elaboration)

The focus of attention was the criteria of accessibility, functionality, the students' perspectives on their future career as a well as the benefits to employers.

TABLE 1 summarizes the characteristics of specialized internship platforms from student and employer perspectives.

TABLE I.   PARTICULARITIES OF THE SPECIALIZED INTERNSHIP PLATFORMS

For Student	For Employer
- Educational content, student support options - Large selection of internships - Mostly free of charge - Possibility to use according to various criteria while searching internship - Digital option to search according to the student's personal profile - The longest competitive selection period	- A wide range of online and offline student selection methods - Large student enrollment in selection process (within the country) - Competitive selection procedure could be a subject of payment

^{a.} Source: *Authors' elaboration*

TABLES II, III, IV disclose platform's features of the other groups.

TABLE II.   PARTICULARITIES OF THE UNIVERSITIES WEBSITES

For Student	For Employer
- Internships are available only on the sites of large branded universities - Small selection of internships - Very few support options teaching students how to get the internship - No search filter option	- A narrow segment of students - by university profiles - CV selection - Free of charge Intern. - University enrollment - Is not available for all employers, but mostly for university partners

^{b.} Source: *Authors' elaboration*

TABLE III. PARTICULARITIES OF THE SPECIALIZED WEBSITES FOR JOBS

For Student	For Employer
• Internships are not a priority product; vacancies prevail • Mostly paid internships • The shortest selection period • Have not support options for student • Mostly job offers for students • Ability to filter by different criteria when searching for internships	• The widest audience of potential candidates • The most affordable way to search for employers • Mostly paid internship • Have not online selection tools
	c. Source: *Authors' elaboration*

TABLE IV. PARTICULARITIES OF THE CORPORATE WEBSITES

For Student	For Employer
• Opportunity in detailed to study the specifics of company • Timing process to chose right internship, as each company has its own website • Not all companies offer Intern for students • Have not the additional and supporting options	• More motivated students, as they purposefully enter the company • Free of charge • Students are the priority audience among all candidates
	d. Source: *Authors' elaboration*

Performance comparison of 4 groups of platforms allowed to formulate a hypothesis: "Specialized internship platforms are the most popular and effective online resource for both parties (students and employers) in terms of "connecting the parties". The basis for the hypothesis was to identify two distinctive features (characteristics) of all types of platforms, which would be considered as an undeniable competitive advantages for them. The first type of platforms characteristics is the benefits for students. Providing a wide range of options, train and support, these platforms encourage students for better internship preparation. We called them the Development Tools for Students. The second type of platforms characteristics is the opportunities and benefits of the employers. It consists of various tools for selecting and evaluating internship candidates. We called them the Student Selection Tools for Employers. Using a survey of students and employers in the Google Form we tested our hypothesis.

The database with 331 student responses and 167 opinions of employing companies on internship platforms functionalities and accessibilities was created. The constraint in creating the database was the fact that for both target groups only about 20% of respondents had experience working with all four classification of internship platforms. Students, evaluating platforms according to the proposed four criteria and determined the following rating on average mark: Specialized Internship Platforms – 4,37; Specialized Websites for Jobs – 4,14; Universities Websites – 3,05; Corporate Websites – 1,25. Slightly different results gave the ranking according to the assessment of employers: Specialized Websites for Jobs – 4,6; Specialized Internship Platforms – 4,45; Corporate Websites – 2,16; Universities Websites – 2,05. As a result of a Google Form survey of students and employers by the amount of average points, Specialized internship platforms became leaders.

Due to the results of our comparative analysis we took Specialized Internship Platform as an object while studying the best practices of 6 countries.

A deeper study of specialized platforms allowed us to define typical and specific tools for students and for employers within the Development Tools for Students and the Student Selection Tools for Employers.

The Typical Development Tools for Students include the following:

- **Articles.** Educational articles that help students determine the place of the internship; descriptions of the selection tools and life hacks of passage the internship, for example: "Interview question insights, assessment process and interview tips from over 900 UK graduate employers"; "How to write a resume"; "Tips on how to behave in an interview"; "Intern rights in practice".

- **Blogs.** Educational notes, articles from various sources on the topics "How to dress for an interview to get an offer".

- **Online courses.** Educational video lectures that allow students to learn new skills in various fields, for example, "A basic level of Finance".

Among the *Specific or Unique Developments Tools for Students* the following were identified:

- **Researches.** Posting news from research centers, for example, "Superjob Recruiting Center", Russia; Global Change Research Center

- **Case Championships.** This is a competition in which teams offer their ideas to solve problems relevant to a particular company / customer. The most advanced platform based organizations are: RSM STAR Case Competition, USA or SBS Case Competition, as a non-profit and completely student-run global organization.

- **Employer rating.** Students who have completed internships at the company evaluate the employer to

The Typical Tools for Employer within the Student Selection Tools for Employers include the following:

- **CV.** A document containing information about skills, work experience, education, and other relevant information usually required when considering a person's candidacy for employment.

- **Interview.** Meeting with a potential intern. The purpose of the interview is to get acquainted firsthand, to understand how the employer and the applicant are suitable for each other, to understand the level of knowledge of the intern.

Among *the Specific or Unique Tools for Employers* the following were identified:

- **Case Solutions** are online solutions to the urgent problems of the customer, offering solutions to customer problems. such as Russian Case Centre.

- **Career Events** conducted by companies to attract students for internships for example, trainings, case championships.

- **In-tray exercise.** The main idea of the exercises is to place the trainee in a realistic, simulated work situation, and evaluate his behavior and attitude in the workplace in this context. For example: they will ask you to imagine that you are an employee of a fictitious company, and to study the contents of your input tray in this role.

- **Case studies.** Typically, students are provided with some information about the business scenario and will be asked to examine the evidence before presenting their findings and recommendations. Students can also receive additional information for assessment and response within the allotted time.

- **Psychometric online tests.** They are one of the most effective tools for an objective assessment of the abilities of candidates and employees, their trainability and suitability for a particular position.

The more such tools on the platform for both the student and the employer, the higher possibilities for students to find the right one and for the employer to find the" right" student what consequently increase the quality and effectiveness of the internship and the satisfy both connected parties.

V. CONCLUSION

The article fills the gaps in the knowledge about the peculiarities of different platforms. The results of the study, consisting in the classification of platforms and highlighting their special distinguishing features from the point of view of students and employers could be helpful for students to choose the right one and useful for the employers and specialized organization to find the appropriate students.

Based on the research questions it was proved that specialized platforms are the most effective in terms of accessibility and functionality and bring the benefits for students and employers. They allow to create additional tools for students and employers and conduct the process of "connecting the parties" more correctly and accurately, what is the key to a successful internship and higher satisfaction of both parties.

The results of the study, especially in terms of benchmarking will be applied to Russian specialized internship platforms. Certainly, attention should be paid to such countries as China, Spain, others, which could be the subjects of our further research. The authors convinced that studying and implementing the experience of internship platforms in other countries could increase the effectiveness of the Russian projects and give the positive results for students and employers nationwide.

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