NEW TECHNOLOGIES IN THE RECRUITMENT PROCESS

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Abstract. Well-conducted recruitment and selection process is extremely important for the organization, permitting in-depth and objective verification of candidates in terms of meeting employer's expectations and leads to their employment. Up to now, there has been little research on the impact of e-recruitment on the recruitment process as a whole. The present study fills part of this gap by investigating the effect of e-recruitment on the design of the recruitment process. Therefore, the main purpose of the paper is to analyze how new technology has influenced the recruitment process as a whole. The recruitment process will be presented on the example of ItutorGroup. The paper considers the possibilities of including modern technologies in the recruitment and selection strategies of the organization based on a case study method. The case study describes the project of cooperation of the Work Service personnel consultancy with the international organization ItutorGroup. Its selection and recruitment strategy was based on video-recruitment. The findings indicate that e-recruitment transforms the traditional recruitment process into a time- and space-independent, collaborative hiring process. The most significant changes are recorded in the sequence and increased divisibility of main recruitment tasks. For management, the main task is now that of communicating with candidates. Recruitment and selection strategy based on modern technologies requires an experienced and competent team, two unquestionable benefits are: limiting the length of the process in time and possibility to decrease the costs.

Keywords: Recruitment; selection process; internet based technologies

JEL Classification: M12, M15

Introduction

Recruitment and selection, like every other aspect of business today depends on speed and accuracy. With increasing numbers of qualified applicants chasing a decreasing pool of jobs, HR professionals need to find ways to sort through applications quickly, while accurately selecting the best candidates. The help may come through the use of new technologies, which may speed up the process.

One can risk a statement that the area of new technologies and personnel policy are trying to keep up with new trends change at a surprising and convergent pace (Wiernek 2006, p. 76). Changing the role of human resource management in an organization requires adjusting the whole enterprise strategy to it (Jabłoński 2011, p.157).

Personnel selection includes three key steps: recruitment, selection and implementation for work (Listwan 2010, p.80). Well-conducted recruitment and selection process is extremely important for the organization, because it permits for in-depth and objective verification of candidates in terms of meeting their employer's expectations and leads to their employment. The main task and purpose of the personnel selection team is not the process itself, but the final choice of a person who meets all criteria and is unambiguously suitable for a given position.

An increasing number of practitioners from the HR area recognize that their hard and often repetitive work can be supported or even completely replaced by tools from the area of modern technologies. A lot of companies use online knowledge management systems to hire employees, exploiting the advantages of the World Wide Web. These are termed as e-recruitment systems and automate the process of publishing positions and receiving CVs (Faliagka, 2012, p. 523).

E-recruitment systems have seen an explosive expansion in the past few years (De Meo et al., 2007), allowing HR agencies and HR departments to target a very wide audience at a small cost. Several e-

recruitment systems have been proposed with an objective to automate and speed-up the recruitment process, leading to a better overall user experience and increasing efficiency.

Up to now, there has been little research on the impact of e-recruitment on the recruitment process as a whole. Moreover, much of the research tend to focus on the design of corporate recruitment websites (Selden & Orenstein, 2011). Moreover, little attention has been given to the impact of technology on the recruitment process as a whole (Parry & Tyson, 2009). Despite the apparently widespread use of e-recruitment, however, a gap seems to have emerged between research and practice (García-Izquierdo, Aguinis, & Ramos-Villagrasa, 2010), possibly because scholars are struggling to keep up with the sheer pace of change (Anderson, 2003).

Therefore the main purpose of the paper is to analyze how new technology influenced the recruitment process as whole. The case study method will be utilized. The case study analysis will be based on one company called I-tutor group. The reason to select this company can be explained by the fact that Itutor project was the first one on the Polish market that involved employing 1500 potential employees through e-recruitment process.

The research problem constitute two main questions: (1) How does the introduction and use of e-recruitment affect the design of the traditional recruitment process? and (2) What are the advantages and disadvantages of e-recruitment versus traditional recruitment?

The paper is structured as follows: the first part deals with the literature review related to recruitment and selection with a detailed description of video-recruitment. Then, the methodology is explained. Findings are presented that relate to presenting the changes in the design of the recruitment process followed by advantages and disadvantages of e-recruitment. Finally, the conclusions are drawn.

Literature review – recruitment and selection

Personnel recruitment includes practices and activities carried out by an organization for the purpose of identifying, attracting, and influencing the job choices of competent candidates (Ployhart, 2006).

For an outsider who is not involved in the employee's employment process, lack of knowledge of the industry and its peculiarities, recruitment and selection seem to be two convergent concepts; while on the basis of human resource management, they should be distinguished from each other.

It is worth mentioning that amongst theorists and practitioners of human resource management, there is not always agreement in this field, because the selection of employees is often very ambiguous. Very often, selection is regarded as one of the stages of recruitment, where it is understood as carrying out a full personal selection. Others treat it as a completely independent process, which follows the recruitment activities and embraces selecting the best candidate for the given position from among those presented (Pocztowski 2007, p. 142). The following paper takes the second solution, that is, treating the selection and recruitment process as two separate, though interpenetrating each other at the level of the results obtained.

Among various HRM activities, recruitment is one of the human resource (HR) functions that has changed dramatically, from traditional paper-based process to digital or electronic recruitment process, commonly referred to as e-recruitment. A popular form of e-recruitment is video recruitment. It is a tool that gathers all the candidates obtained, permitting to systematize the project. However, the most important factor is time saving, which for the business side plays a significant role in planning the recruitment and selection strategies.

Video recruitment influenced the standard recruitment through the possibility to create and present employers with CVs of job applicants in the form of a video. It is currently a very popular method in Western Europe, and also in Poland, because unconventional approaches are increasingly appreciated (Puls HR, Video CV 2017).

Video recruitment is to help the human resource management team in less time-consuming but reliable verification of incoming applications. There are two types of video recruitment: an automatic (asynchronous) form and a live form (Kluza, 2015, p. 88). The live form is much more popular because companies have been using it for a long time, mainly involving a tool like Skype. It is associated with a

direct interview and few aspects distinguish it from the same. The most important of them is the possibility to organize it without the need to visit a candidate in the recruiter's office. It can take place independent of the place where both parties are staying.

Whilst Skype was and is being used to interview candidates, particularly for international recruitment, very few HR teams were familiar with "one-way" video interviews, where candidates record their answers to the questions asked and the employers reviews them at a later time. Today, the term "video interviewing" is a hot topic amongst many innovations in HR technology and whilst the term encompasses "live" video interview, there is a growing demand for the asynchronous model (Rupert, 2014). It involves building a platform on which incoming applications are collected. Interview questions are generated by the system, the answers are recorded, archived and sent to the person responsible for the selection.

One-way pre-recorded interviews save considerable time and are more convenient. As there is scheduling required, candidates can record their interviews when it suits them – without any disruption to their working day (Rupert, 2014).

Video recruitment is still a controversial and relatively new way of personnel recruitment. Nevertheless, its development is inevitable and probably in the future, it is forecasted that all phases of the selection process will be transferred to the online environment. It is worth emphasizing that the use of this tool does not mean saving time and costs by lowering the efficiency and quality of the recruitment project. On the contrary, it is more transparent, generates wider pool of candidates and helps to select better candidates (Buckley et al. 2004). Video recruitment has many supporters in Western Europe, is very dynamic in the United States and although it is only taking its first steps in the Polish market, it has great potential to remain a key determinant of most recruitment and selection processes.

Methodology

Qualitative research design was considered the most suitable for the purpose of investigation, since it permits the use of multiple data sources (Creswell, 2009), which could provide the necessary insights into a new area of research. One of the authors of this paper has participated as a recruitment specialist in the project of recruiting English teachers for ItutorGroup, which allowed access to many valuable insights of the project. We used the recruitment process as the unit of analysis and focused only on the business process. We were thus looking for possible changes in the tasks, subtasks and activities of the business process of recruiting, which could be attributed to the use of electronic recruitment, compared with the process presented. The data collection process was therefore designed to capture the entire recruitment process in the case organizations in as much detail as possible, which would permit comparative analysis for each step of the recruitment process. Thus, a mix of qualitative methods, techniques, and data sources available at the time of the research was utilized during the study. A short presentation of I-tutor is followed to give an overview of the studied company. The following paper is based on a case study method.

ItutorGroup

ItutorGroup is a global leader in the provision of educational services, mainly focused on learning English through online mechanisms, which began its activity in 1998. The company specializes in an individualized and personalized way of reaching and learning users spread around the world – this applies to both teachers and students. The company operates very dynamically on the American market, from where it officially originates, while recently the management board recognized the potential on the Chinese market, which is more open for cooperation with the Western countries and, consequently, speaking English seems to be a must. Itutor group platform also serves as a vibrant recruitment and HR tool. The creation of application was possible due to the use of Big Data methods and implementation of advanced algorithms connecting students, teachers, co-workers and available content remotely to deepen knowledge in the field of a foreign language. Itutor group strongly believes that they managed to bring about a revolution in the teaching sector by introducing a platform and service from which users can use any available device (including mobile) 24 hours a day, seven days a week.

The project aimed to recruit English teachers for a Chinese market. The recruitment of English teachers by Itutor group was facilitated by Work Service Group- an intermediary on the Polish market. The management board of Itutor decided to contact the Polish company due to the fact that among European countries Poland is one of the leaders, when it comes to the number of people who speak English very well. In addition, it still remains a country with significantly lower costs of human capital than the rest of Europe, yet it still has a well-qualified and willing workforce (Kubisiak, 2016).

Results

The project commissioned by the Itutor Group was based on the support of recruiting and selecting 1500 English language lecturers living in Poland and ready to take on the challenge of working remotely with a client from China. Recruitment agents were not looking for potential candidates with teaching background (although it was beneficial) but for English fluency.

Due to strategic transformations, the project was suspended in June 2017 and until that time, about 700 English teachers were recruited. Work Service has established a specially dedicated team of consultants headed by the HR Manager, who were responsible for recruiting English teachers for ITutor. The group consisted of 7 people: 2 Project Managers, 2 Consultants and 3 Recruitment Assistants.

The recruitment process consisted of five stages presented in Figure 1. Although it seems that the activities are sequential, at a later stage a difference in comparison with traditional recruitment will be presented.
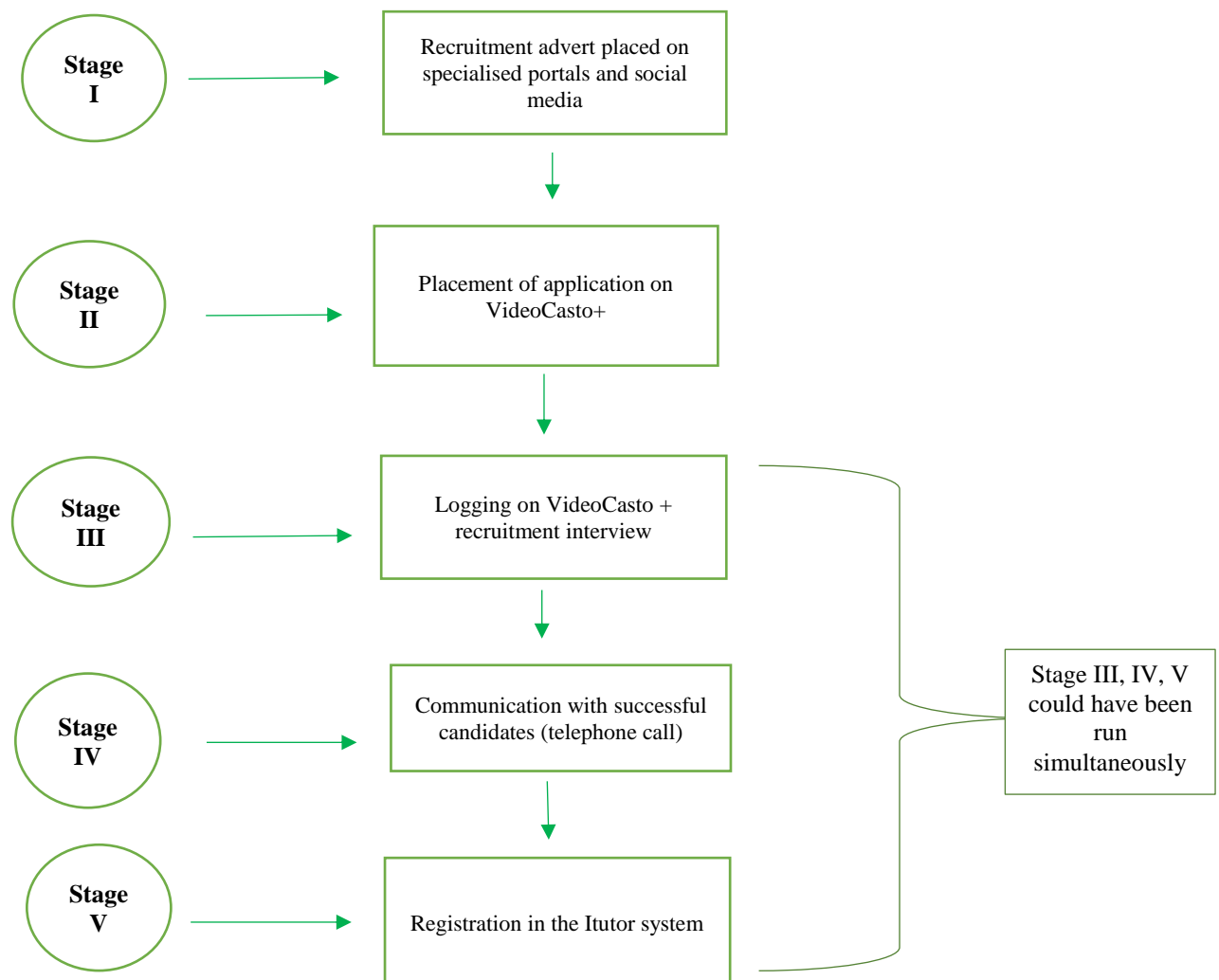

Fig. 1. Recruitment process of Itutor project (Source: Own development)

Attracting applicants

1. The first phase included recruitment activities, that is, creating an appropriate message addressed to potentially interested candidates and placing it on professional advertising portals like: Pracuj.pl, Infopraca.pl, Praca, pl, Gazetapraca.pl or Goldenline.pl, Gratka.pl and OLX.pl. The process of attracting applicants was by far the most reliant on e-recruitment sources. It must be stated that very good English teachers, who were not Internet users, were excluded from this project. A marketing recruitment campaign worked extensively in social media by preparing the sponsored posts or searching for a target group based on relevant algorithms and defining the place where potential candidates could be found. Social portals were regarded as an auxiliary channel.

Application placement

2. The second phase included the placement of the application form with necessary details by using the application prepared by VideoCasto. After the placement of the application on the platform, each person received an automatically sent e-mail with information about the project, registration in the VideoCasto application and the method for the first login enabling participation in the project. Time was already saved at this stage, because with many received applications (the project aroused great interest), even contacting with selected persons would probably last several months.

Video recruitment

3. The potential candidate logged on VideoCasto platform to take part in the automated recruitment interview. The third stage started, assessed by the Work Service team was regarded as the most crucial one. The potential candidate recorded a video interview in English, during which he answered five questions. He had about two minutes for each of them and only one approach. The questions were recorded beforehand by one of the Work Service team members. Interview questions verified mainly the knowledge of English, but also the freedom to work in front of the camera, the ability to use every day work tools and personality traits. The candidate had three days from the date of receiving the e-mail to record a video call.

Communication with successful candidates

4. Telephone call to successful potential candidates. During the call, the recruitment consultant, facilitated registration in the Itutor system. Then, with the support of the Work Service team, the user refined his profile, uploaded a language certificate, passed the equipment test and signed the contract online. For each hiring cycle, the task of communicating with applicants started at the same time as that of attracting applicants. Due to the automation features of the e-recruitment systems, candidates were often notified immediately that their job application had been received. Rejected candidates were also informed promptly about the result of the pre-screening even before the vacancies were formally filled. ITutor considered this to be an advantage for the applicants, since it meant that recruiters did not have to keep them waiting unnecessarily just to hear that they had not been selected for further assessment.

5. Registration in the I-Tutor system. 2 hours online training. Formal employment of candidates.

It is worth to compare the traditional and e-recruitment process, as presented in Figure 2.
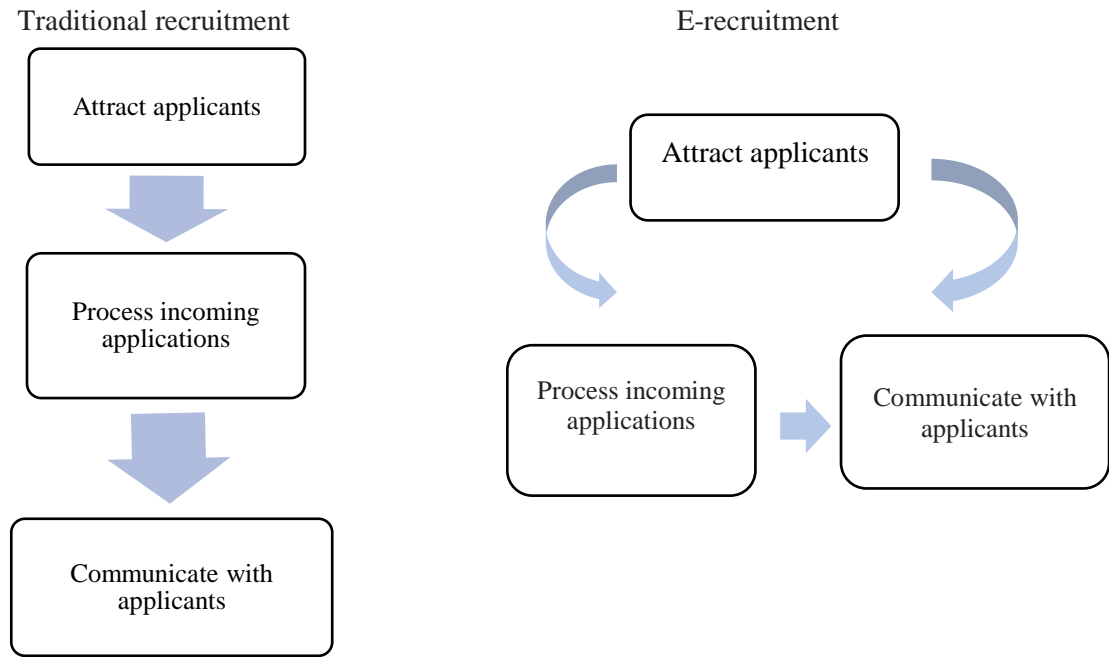
Traditional recruitment

Attract applicants

↓

Process incoming applications

↓

Communicate with applicants

E-recruitment

Attract applicants

Process incoming applications → Communicate with applicants

Fig. 2. The design and sequence of tasks in traditional paper-based recruitment versus e-recruitment
(Source: Own development)

The main changes in the recruitment process design using e-recruitment versus traditional paper based recruitment process were in the sequence of the process tasks. Unlike in the traditional recruitment process, the task of communicating with applicants and processing incoming applications was performed simultaneously with the task of attracting applicants suggesting a major change in the traditional recruitment. The process that demanded a lot of work was the one concerned with communicating with applicants and became a focal task.

The evaluation of the method and tools used regarding ItutorGroup is not unequivocal and depends on many factors. Although the Work Service team and the Itutor organization define the project completion as unquestionable success, it is worth taking a closer look at the advantages and disadvantages of the method used.

Time, so extremely important nowadays in every business process, has been largely saved due to internet based recruitment. At each stage, the possibility of implementing individual elements at the same time for a dozen or several dozen candidates would not be the case with standard solutions. Additionally, the quality of the recruitment process was maintained throughout the whole duration of the project. Candidates felt cared for, regardless of the time in the recruitment process. Despite the lack of direct meetings, they did not have the impression of being left alone.

The added value, often emphasized by the client's side, was lack of chaos due to the VideoCasto platform, which verified the status of not only the entire project, but also individual groups or individual candidates. Reporting took place regularly and did not require long and tedious preparations from Work Service.

The least tangible, but equally important factor was the opportunity to strengthen the image – a company that copes well with new challenges in the HR environment using modern technologies both for ItutorGroup and Work Service. So far, not a single company on the Polish market from the HR industry has used such advanced technology with limited interference of the human factor. The project ended with success and caused interest from other companies that were impressed with the solution and wondered to what extent it could have been introduced and adapted to their requirements.

Video recruitment doesn't offer only positive benefits. The peculiarity of the process, its remote character and the lack of direct contacts (face to face) meant that the relationship with the candidate was

very poorly built. Currently, HR practitioners emphasize the need to focus on the recruitment as a business partner in order to be sure not only to complete the process successfully, but also to build employer branding associated with positive experience.

Due to the peculiarity of the project, but also the position and the workplace, the employees did not feel any integration with the future employer. Very often, after completing the recruitment the process, people emphasized that they treat their duties as additional tasks, an additional source of income for what they do on a daily basis. Very few employees finally decided to devote all their time and effort to teaching through the Itutor system.

Ultimately, e-recruitment bears a threat of data infringement. Any attempt to break into or access to them by undesirable persons could have adverse effects.

Table 1. Advantages and disadvantages of e-recruitment (Source: Own development)

Advantages	Disadvantages
Savings (considering time and money)	Poorly build relationship with candidates
Strengthening the image of company introducing new challenges	Lack of integration of candidates with future employees
Reaching a broader audience of potential candidates	A threat of data infringement

Using new technology, Itutor was able to employ 1500 English teachers with the help of seven recruitment specialists. Our research is in line with Maurer and Liu (2007) who confirmed that digital recruitment reduces hiring costs by about 87 per cent as compared to the traditional recruiting through newspapers and magazines.

An extremely important aspect of the recruitment and selection processes highlighted by HR specialists is the process of building a relationship with the candidate and ultimately a potential employee. Very often, not only theorists, but also practitioners emphasize that the phenomenon of "candidate experience" in the time of development of the HR market will play an increasingly important role and the use of modern solutions will certainly have a great impact on it, but it is very difficult to clearly assess whether positive or negative. Research in this area is relatively at an early stage and none of the researchers has yet dared to make a decisive voice (Morgan J. 2017, pp. 30–43). In case of Itutor project, building a relationship with a candidate – potential employee was not implemented sufficiently. Due to remote contact and limited interference of the human factor and lack of direct meetings. Employees of Itutor did not feel part of the company, they treated the job as a form of additional income.

Conclusions

It has been shown that companies can increase the efficiency of the recruitment process and significantly cut costs, by integrating e-recruitment systems in their HR management infrastructure.

On the basis of the conducted research, we can conclude that the use of modern technologies in the recruitment and selection process is not only a guarantee of completion with the intended effect of a given project, but also causes a real improvement in the recruitment process, which allows, in particular for the business sector to reduce costs and time.

The results suggest that the typical paper-based recruitment process is no longer present in its original form and design. The most significant differences identified were attributed to changes in the sequence of tasks and the nature of the related activities. E-recruitment techniques and related technology were observed to be used, in the tasks of attracting applicants, processing incoming applications and communicating with candidates.

Introducing a new technology in the recruitment process can have many benefits for organizations in the recruitment process but research about this is scarce. The possible benefits include time savings, cost reduction, reaching a broader audience and more accurate and detailed information about applicants.

Benefits of e-recruiting can differ between organizations, because every organization has its own strategy, and recruitment objectives should support that strategy.

Finally, we can follow the statement of Ford (2015, p. 83) that the use of modern technologies in the recruitment and selection processes is not just another trend in the changing environment, but it will permanently appear in the area of human resources. Admittedly, this will not involve complete resignation from the recruiters' work, but any actions that can be supported by algorithms, solutions from the borderline of artificial intelligence will be most welcomed (in this case, the most frequently mentioned is the analysis and verification of the applications received, providing feedback to candidates or even replacing first contacts with the purpose of basic selection) (Ford 2015, pp. 83–86). Though it sounds like a vision of the future filled with solutions that will significantly simplify the work of human resource management teams; however, quite a large percentage of specialists are still wary of entrusting the decision-making process to machines. The significant potential in the field of artificial intelligence and machine learning has been proven many times, but there is still a long way to go for the HR industry to fully use them or just to convince them to be used in an appropriate way (Morgan J. 2014, p. 6–10).

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