New technologies in the recruitment and selection process

Nowe technologie wykorzystywane w procesie rekrutacji i selekcji

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Abstract. Well-conducted recruitment process is extremely important for the organization, permitting in-depth and objective verification of candidates in terms of meeting employer's expectations and finally leads to their employment. 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 two examples: namely ITutorGroup and a chain of luxury clothing saloons. The recruitment in ITutorGroup was solely based on new technology with a limited interference of human factor. Its selection and recruitment strategy was based on video-recruitment. The second case study describes the cooperation between a personnel consulting agency and a luxury retail chain with the purpose to recruit and employ salespersons in Poland by introducing Big Data activities in social media and scouting. 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. On the other hand, in some recruitment projects we can not solely depend on new technologies in recruiting in some professions. Direct recruitment in the form of face to face contacts with potential candidates extended the process in time but it allowed to obtain "tailored made" candidates ready to undertake work straightaway. 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, new technologies.

Abstrakt. Dobrze przeprowadzony proces rekrutacji jest niezwykle ważny dla organizacji, pozwala na dogłębną i obiektywną weryfikację kandydatów pod kątem spełnienia oczekiwań pracodawcy i ostatecznie prowadzi do ich zatrudnienia. Głównym celem artykułu jest analiza, w jaki sposób nowe technologie wpłynęły na proces rekrutacji. Proces rekrutacji zostanie przedstawiony na dwóch przykładach: mianowicie ITutorGroup i sieci luksusowych salonów odzieżowych. Rekrutacja w grupie ITutor opierała się wyłącznie na nowych technologiach z ograniczoną ingerencją czynnika ludzkiego. Strategia rekrutacji opierała się na rekrutacji wideo. Drugie studium przypadku opisuje współpracę między agencją doradztwa personalnego a luksusową siecią sprzedaży detalicznej, mającą na celu rekrutację i zatrudnianie sprzedawców w Polsce poprzez wprowadzenie działań Big Data w mediach społecznościowych oraz proces scoutingu. Wyniki wskazują, że e-rekrutacja przekształca tradycyjny proces rekrutacji w proces niezależny od czasu, oparty na współpracy. Najważniejsze zmiany są rejestrowane, istnieje zwiększona podzielność głównych zadań rekrutacyjnych. Głównym zadaniem rekrutera staje się komunikacja z kandydatami. Z drugiej strony w niektórych projektach rekrutacyjnych nie można polegać wyłącznie na nowych technologiach. Rekrutacja w postaci bezpośrednich kontaktów z potencjalnymi kandydatami wydłużyła proces w czasie, ale pozwoliła na uzyskanie „skrojonych na miarę" kandydatów, przygotowanych i sprawdzonych w miejscu pracy. Strategia rekrutacji i selekcji oparta na nowoczesnych technologiach wymaga doświadczonego i kompetentnego zespołu, dwie niewątpliwe korzyści to: ograniczenie długości procesu w czasie i możliwość obniżenia kosztów.

Słowa kluczowe: rekrutacja, proces selekcji, nowe technologie.

Introduction

Recruitment and selection, like every other aspect of business today depends on speed and accuracy. With increasing pool 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. New technology also have entered the area of human resources management and particularly this paper discusses the impact on new technologies on recruitment and selection processes.

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 e-recruitment systems and automate the process of publishing positions and receiving CVs (Faliagka, 2012, p. 523)

Up to now, there has been little research on the impact of new technologies use 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). The question arises whether all recruitment process should incorporate in the same extent the use of new technologies.

Therefore the main purpose of the paper is to analyse how new technology influenced the recruitment process as whole. The case study method will be utilised. The case study analysis will be based on two companies: I-tutor group and a chain of luxury boutiques[1]. The reason to select two companies can be explained by the fact that Itutor project was solely based on new technology and the second example used in limited extent new technology.

The research problem constitute two main questions:

1. *How does the introduction and use of new technology in recruitment affect the design of the traditional recruitment process?*
2. *Does new technology eliminate completely human factor in recruitment process?*

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

1. Literature review – Video recruitment and scouting

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)

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 CV of job applicants in the form of video. It is

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[1]   Due to data confidentiality the name of the chain of luxury boutique may not be revealed.

currently a very popular method in Western Europe, but also in Poland, because unconventional approach is increasingly appreciated (Puls HR, Video CV 2017).

Today, the term "video interviewing" is a hot topic amongst many innovations in HR technology and whilst the term encompass "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.

Recruiters have always tried to make direct contact with potential candidates to learn about their natural behaviors and to see personality traits that would coincide with the organizational culture where the recruitment and selection process takes place. The recruitment solution that allows establishing direct relationships and getting to know the personality and behavioral traits of the candidate is named: scouting. Scouting is about finding potential employees in their natural environment, so-called the comfort zone, i.e. simplifying the observation. It is performed in a place of relaxation in which the candidate feels best, typical of his social group or connected with his interest (e.g. restaurants, universities, shopping centers, entertainment centers) or in the workplace, which allows recruiter immediately verify their competence without being aware that they are being evaluated (Gazeta Prawna, 2015). The behavior of the candidates is therefore spontaneous, real, and the person does not try to present themselves in the best light.

Scouting is the right tool for creating close relationships while building a relaxed atmosphere that seems to be completely unlike rigid, standard recruitment interviews. Paradoxically, when applying such activities, enterprises can get to know their potential employees better, as well to present the values that a company is guided by and check whether they correspond to given individuals. This helps unambiguously identify the needs of both parties and adapt the way of communication and employment conditions to the situation (Leary-Joyce J., 2007, pp. 128-132).

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, theorists, but also practitioners emphasize that the phenomenon of "candidate experience" market will play an increasingly important role. 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).

2. Methodology

Qualitative research design was considered the most suitable for the purpose of the investigation, since it permits the use of multiple data sources (Creswell, 2009), which could provide the necessary insights into new area of research. One of the author of this paper has participated as a recruitment specialist for two presented projects which allowed to have access to insights of these projects where new technology has been used in different scopes. We used the recruitment process as the unit of analysis and focused only on the business process itself. 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 organisations 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 utilised during the study. A short presentation of I-tutor and a chain of luxury saloons is followed to give an overview of the two studied companies.

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 Western countries and, consequently, speaking English seems to be a must. ITutorGroup 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. ITutorGroup 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 ITutorGroup was facilitated by Work Service Group – an intermediary on the Polish market.

Chain of luxury boutiques

The clothing company was established in the early nineties and currently holds 24 stores located all over Poland in the most prestigious shopping centres due to the type of produced and sold assortment – high quality brands popular on the market, such as Hugo Boss, Versace Collection, Brunello, Seventy, Jacobson. In its strategy, the organization is based on two schemes: it runs multi-brand stores and mono-brand stores in selected locations. The company's offer is addressed mainly to affluent, returning clients who focus on the highest quality of service. Due to numerous complaints from consumers about personnel working in the showrooms and after taking a look at the employees' actions, mainly using the mysterious customer method, managers decided to employ new sales staff. Some employees received a contract termination and at the same time, external recruitment agency was asked to help to recruit 34 sales personnel.

3. Findings

Changes in the recruitment process design

The project commissioned by ITutorGroup 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 until that time, about 700 English teachers were recruited. Work Service has established a specially dedicated team of consultants headed by 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 Fig. 1.

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 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.
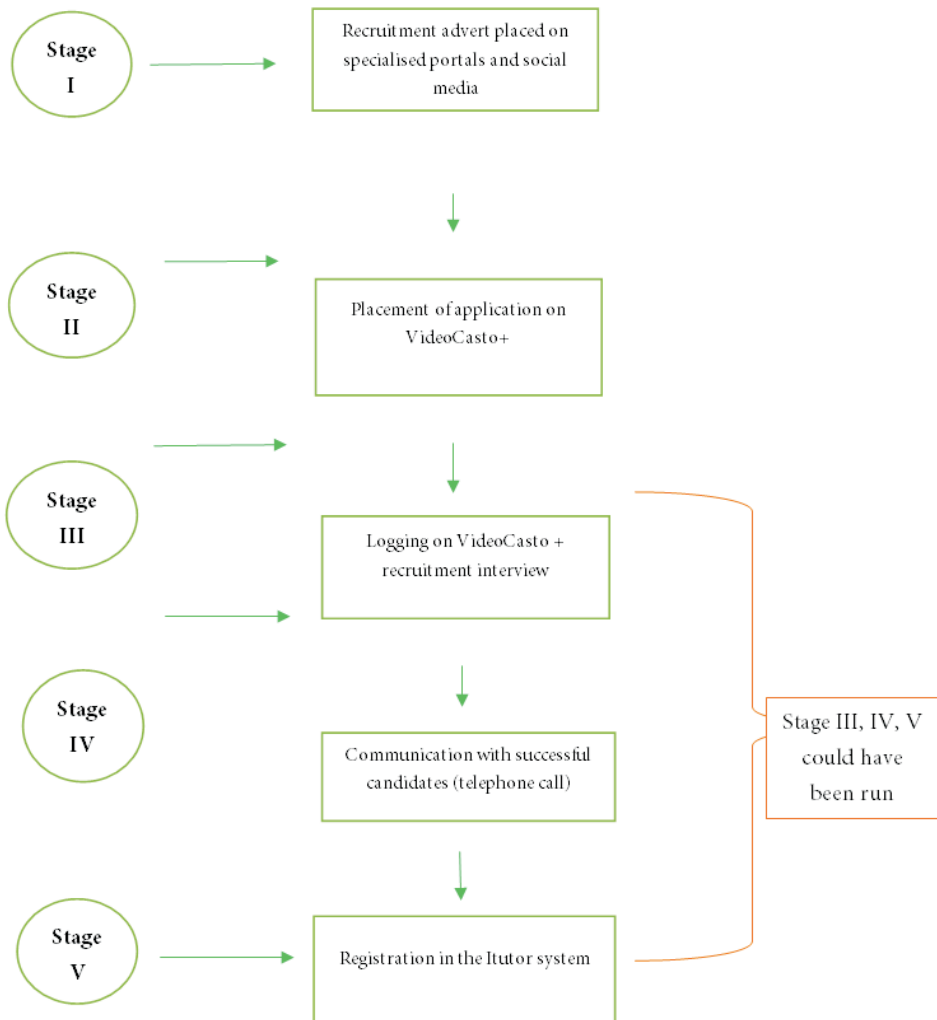

Fig. 1. Recruitment process of Itutor project
Source: Own development

Application placement

2. The second phase included placement the application form with necessary details by using the application prepared by VideoCasto. After placement 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 everyday 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.

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 which demanded a lot of work was the one concerned with communicating applicants became and became focal task.

New technology use in scouting

A chain of luxury boutiques decided to cooperate with the external recruitment agency as being unsuccessful with traditional recruitment. The team responsible for the successful recruitment and selection process consisted of four people: Manager who was primarily responsible for contact with the client and three consultants fulfilling the assigned duties: preparation and placement message on a larger number of professional advertising portals, conducting non-standard ways of reaching candidates, final selection interviews and decisions regarding the recommendation of a potential candidate.

The project was divided into two stages: internet based recruitment focused mainly on social portals and non standard recruitment which included scouting. Our aim is to present non standard recruitment that is: scouting. The three steps in scouting method are presented in Figure 2.
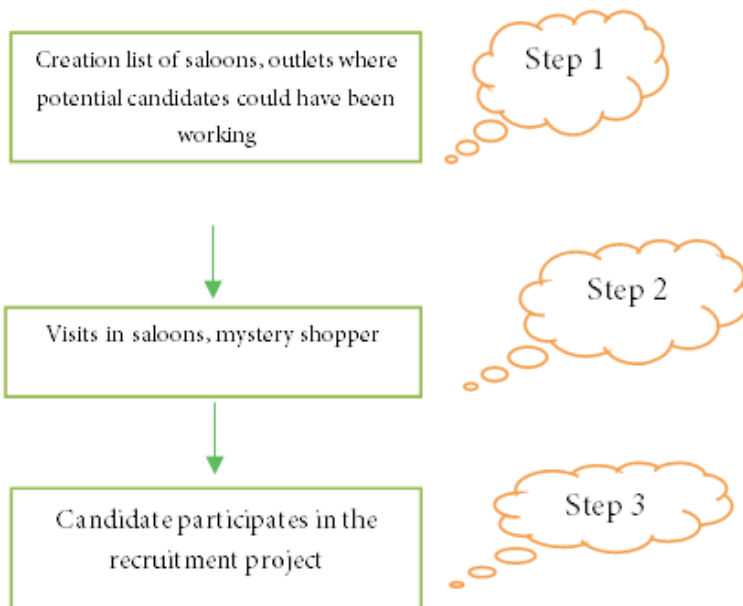

Fig. 2. Scouting method
Source: Own development

Step 1. Creation list of saloons

The first step in scouting method included creation list of saloons, outlets where potential candidates could have been working. At the beginning, recruitment agents focused only on luxury boutiques or small stores offering top-shelf products. Later on, recruitment agents extended the scope of operations to standard clothing or footwear chains, concluding that potential candidate may work in any place.

The main and the most revolutionary idea in scouting as a recruitment method was the use of a solution consisting of some elements of field selection, that is in the natural environment of potential employees. The whole undertaking started with the design of a consultant's business card with his contact details (name and surname, telephone number, e-mail address, name of the personnel consulting company and client) and a QR code which, after scanning, sent to the company's website with information about the process and the possibility of direct application. In case of any doubts, the potential candidate also had all the necessary data to contact the person responsible for the first preliminary stages and could get a satisfactory answer faster than if he contonued a standard way of contact. Then, the Consultants, based on the prepared reports on the target group, created lists of outlets where potential candidates could have been working.

Step 2. Visit in saloons

The task of consultants was to visit the salons and to attract potential candidates. While visiting the stores, consultants use the method of mystery shopper (they became a potential customer). The significant amount of work was executed at that stage and it took some time. Consultants had the opportunity to assess personal traits like: motivation, approach to work, team cooperation, commercial potential, ease of establishing interpersonal contacts, focus on achieving result, goal, energy, ambition, own initiative, efficiency, self-confidence, flexibility in thinking, as well as interest in their own work. A visit to such a store, the embodiment of a mysterious client permitted to know a potential candidate in their natural environment and verify skills from every angle that otherwise would not be possible during the standard recruitment interview even if we have used new technologies.

The last stage of the field operation was the handover of a previously prepared business card to the candidate who fully met the requirements set by the potential employer and whom the consultant would be happy to see at further stages of the selection process.

Step 3. Application sent by the potential candidate

What is worth to mention that sending an application by a potential candidate was already an agreement (willingness) to be accepted in potential job.

The main and the most revolutionary approach utilised in the recruitment project for retail chain was a field selection in the natural environment of potential employees. The novelty of the project was consultant's business card with QR code which, after scanning, directed to the company's website with information about the process and the possibility of direct application. So the use of new technologies have been used in limited extent, what confirms that the new technology may not replace completely some functions of the recruitment process.

The success of recruitment consultants in scouting method can be measured by the number of applications sent by potential candidates. Due to the scouting method, the trail day has been abandoned as the potential candidate has been thoroughly checked during the recruiter's visit in the saloon.

The recruitment project using scouting method lasted four months. The project report showed that the majority of target employees (about 70%) came from recruitment and selection by scouting. Business partners participating in the implementation of the project using the scouting method underlined that it achieved its intended success. Nevertheless, during its implementation and application, it was often voiced that perhaps this is not the best tool for obtaining and selecting suitable candidates as the way to reach them is controversial.

It is worth to indicate two significant advantages whilst using scouting: possibility to observe candidates in their work place, outside their comfort zone and finally verification of their customer service skills. As a result we are finding a candidate perfectly fitting the profile which is the most comfortable situation for the employer.

One of the most important disadvantages of scouting is the lack of repeatability of this solution in the short term. The peculiarity of this method does not allow to make repetitive visit again in a particular store, or saloon.

Scouting, is one-off approach, that is why it is so important to prepare a trusted and experienced team of specialists who will not lose valuable contacts and professionally conduct a full process respecting the privacy of participants.

To answer the second research question it is important to highlight that new technology will not eliminate completely human factor but it will be used in different scope depending on type of recruitment projects. Building a relationship with a candidate so called "candidate's experience" – potential employee in case of ITutor project 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. Whilst employees recruited with the use of scouting method highlighted positive candidate's experience. The process of establishing relationships in the scouting

project looked completely different. The relationship was established at the initial stage and, due to the peculiarity of the process and lasted until the very end. Both sides were able to get to know each other well, and the candidate, regardless of the result of the selection, often felt obliged to support the project. A significant help in this case were the algorithms used by the team during the determination of the target group, which made it possible to better understand potential employees, relationships between staff and thus allowed to assess their qualifications and suitability to work in a large commercial network. New technology will never replace face to face contact and it makes almost impossible to build positive candidate's experience based solely on it.

Conclusions

There is a growing recognition of the impact of the internet information and communication technologies (ICTs) on organizations' recruitment practices (Bartram, 2000; Lee, 2005). 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 of standard methods and techniques, which allows, in particular for the business sector to reduce costs and time. On the contrary is some recruitment projects where we want to build positive candidate's experience based soley on new technology it is almost impossible. Using new technology ITutor was able to employ 1500 English teachers with the help of seven recruitment specialists, luxury chain network employed 34 employees with the help of four 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 traditional recruiting through newspapers and magazines.

The Internet can have many benefits for organizations in the recruitment process but research about this is scarce. The possible benefits that were identified were categorized as benefits for effective and efficient recruiting. Possible benefits for efficient recruiting include time savings, cost reduction, and minimizing resources; possible benefits for effective recruiting include reaching a broader audience and more accurate and detailed information about applicants. Benefits of Internet recruiting can differ between organizations, because every organization has its own strategy, and recruitment objectives should support that strategy. Therefore on the basis of two investigated companies we may not conclude that the benefits will be spread to every entity in the same extent.

We can strongly state that internet based solutions offer many benefits but offer some threats, lack of direct contact will make almost impossible to build candidate's

experience. The presented two case studies, have proven that new technologies can be used up to a different level of advancement dependent on the company 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 frequent 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).

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