Abstract

In today's rapidly changing workplace, it's becoming more and more difficult for recruiters to find employees that are right for their business. Consideration of cultural fit, experience, ability to adapt to the company's marketplace and ability to grow with the organisation all weigh heavily on the minds of most human resource professionals. This paper describes the development and progress of a solution with the ability to aid employers with these issues and at the same time to provide job seekers with an attractive and friendly environment for finding jobs. The Internet provides the medium for conducting the recruitment and selection process in an online environment. The proposed solution is to develop an integrated Electronic Job Marketplace offering a new service in the Internet job market: Online Interviewing for screening candidate employees. More specifically, in order to meet hiring objectives and control the increasing cost of recruiting, the conclusions of this project suggest that organisations should implement an online recruiting and selection process. The critical requirements of the new model are: eliminating paperwork, improving time-to-hire, reducing turnover, creating a resume and position-centric environment as well as using the Internet as a recruitment and selection tool.

1. Introduction

Finding talented individuals to recruit, has always been one of the most difficult and challenging tasks for organisations. In the pre-information era, the options were rather limited to either (i) hire a recruiter at commission to find the needed new talent, or (ii) place expensive display ads in local or national newspapers [SCHREYER & McCARTER, 1998]. Unfortunately, both types of recruiting services can be very expensive and time-consuming. The Internet is now regarded as a third, even more attractive, option and it is emerging as the definitive way to match job seekers with employment opportunities worldwide. Its costs are minimal, the response is nearly instantaneous, and could prove as the recruiting tool of the future. Currently, the Internet is utilised in human resource recruiting in three major modes. First is the placement of online job ads in various Internet based venues, and related promotion of corporate career opportunities with the organisations. Recruiting web sites are examples of such an approach. A second, often neglected, mode is resume research. The hundreds of thousands of resumes available on the Internet can be utilised, but it requires a managed rather than an ad hoc process. The third mode is Internet research. The vast quantity of raw data about companies, staff, skills, processes, and transactions on the Internet is an underdeveloped resource for recruiting.

Current research aims to investigate the technology requirements needed to implement interviews in an online environment, such as the Internet, in order to facilitate the candidates’ pre-selection process. One of the main goals is developing an integrated web application that operates as an Electronic Job Marketplace. Based on the Electronic Job Marketplace requirements, an outline of the system design is presented using UML; the Use Case summary and Class diagrams provide a basic understanding of the system structure and operation. A discussion of the implementation covers the system architecture and the model upon which the prototype system is based. The principal services of the system are briefly discussed and the main operations of the system are illustrated and the results from the initial evaluation are presented.

2. Internet recruitment and employment interviews

Since the inception of the Internet, the job market has been moved towards this medium of communication and networking, where thousands of employment agencies operate, hundreds of thousands of employers advertise on their home pages, and an estimated 5 million job seekers (in 1999) place their resumes on the Internet [TURBAN, 2000]. The Internet offers a perfect environment for job seekers and companies searching for hard-to-find employees. The job market is especially effective for software engineering jobs. However, there are thousands of companies, specialised in other disciplines, which advertise available positions, accept resumes, and take applications over the Internet.

The Internet Job Market is mainly used by people that try to find a job or companies that try to find employees. However, there are people that use the Internet Job
Market because it helps them to do their business or is part of their business. Generally, the job market is used by job seekers, job offers, recruiting firms and government agencies and institutions [TURBAN, 2000]. The major services available on the Internet are finding jobs, writing and posting resumes, career planning, and newsgroups. For job seekers, keyword searches take the mystery and the misery out of finding job opportunities online. This technology is also important to employers because it dramatically enlarges the variety and depth of positions that can be effectively marketed online. Beyond using a Windows-type interface that leads job candidates to the keyword-searchable database, the only skill they need to find an appropriate job opportunity is the ability to think of a few words that describe the positions they want.

One of the initial challenges that the authors faced is concerned with the structure of employment interviews and the potential use of conventional interviewing methodologies for providing a realistic service for the Internet job market. From the interviewer’s perspective, the prime objective is to identify and select the most suitable candidate. The interview allows the selector (employer) to assess the candidate’s knowledge, skills, experience and personality. The employer can then evaluate these qualities and decide whether the applicant can do the job, and fits into the organisation. Compatibility with prospective colleagues is crucial when working relations are to run smoothly. Essentially, the interviewer feels able to assess the candidate’s personality. From the candidate’s point of view, interviews offer the opportunity to convince the selector of personal suitability. They are also a two-way exchange of information. The interviewer’s provision of details about the job and organisation can facilitate the candidate’s decision making, as can answers to candidate questions.

Interview duration, varies from five minutes up to two hours and applicants may have from one to five interviews [TORRINGTON, 1987]. Many interviews are on a one-person basis while others involve two or three interviewers. Panel interviews may consist of 4-10 interviewers and appear more reliable and valid [ARVEY and CAMPION, 1982]. An employment interview should have a well-defined structure [WALLEY, 1998]. Structured interviews focus on job related characteristics rather than candidates personality. Structure permeates the interview and its components (questions), systematic recording and scoring of answers, and evaluations. Differences in focus have created contrasting approaches, especially in the situational interview [LATHAM and SAARI, 1980] and patterned behaviour interview [JANZ, 1989]. There are a number of important reasons why the employment interview should be structured [TORRINGTON, 1987]:

- The candidate expects the proceedings to be decided and controlled by the interviewer and anticipates a structure within which to operate.
- It helps the interviewer to make sure that all relevant areas are covered and avoid irrelevant ones.
- It looks professional. Structure can be used to guide the interview and make it make sense.
- It assists the interviewer in using the time available in the most effective way.
- It can be used as a memory aid making notes directly after the interview.
- It can make it easier to compare candidates.

There are a number of different ways in which the interview may be structured. Among the helpful outlines developed in recent years is the WASP method of Sidney, Brown and Argyle (1973) where the interaction is set in the four stages of Welcome, Acquiring information, Supplying information and Parting. A structure that Torrington recommends divides activities and objectives into three interview stages: (i) beginning, (ii) middle (collect and give information, maintain rapport) and (iii) end. While there are few, if any, alternative satisfactory ways for conducting the beginning and the end of the interview, the middle can be approached from a number of different angles, depending on the circumstances [TORRINGTON, 1987]. This initial investigation on Internet recruitment procedures and employment interviewing methodologies provides the foundation for an emerging set of ‘new’ e-services in the Internet job market.

3. A new service in the Internet job market: pre-selection through online interviews

Pre-selection is an extremely important phase of the selection procedure. During this phase, employers have to check that applicants have all the necessary qualifications for the specific job position. However, this task cannot simply be that of screening out those candidates without certain necessary qualifications. There are usually too many applicants and selection criteria for such a strategy. Pre-selectors therefore have to choose from among many well-qualified applicants those who will pass on to the next stage of the selection process. At present job markets, the selection ratio at the pre-selection stage can be very low [SIDNEY, 1988]. Mainly because vast numbers of application forms are received relative to the number of applicants it is feasible to interview. Hence a high proportion of applicants are rejected on the basis of their application forms alone. A rejection, however, is likely to be irretrievable. Therefore, organisations, which are especially concerned not to miss out on applicants of high potential, have to pay particular attention to their pre-selection procedure. According to Sidney, the answer
seems to lie in the overall perspective the organisation holds of its selection procedure [SIDNEY, 1988]. The currently dominant view is to see the selection procedure as assessment of each applicant based on the organisation’s criteria. Having established a person specification based on a job analysis, the organisation uses each of the stages of the selection process as an assessment tool. It may use each stage to assess all the attributes expected of the applicant, or it may use one stage to assess certain attributes. Organisations may believe that application forms are suitable sources of information for assessing academic and intellectual aptitude and degree of appropriate work experience, but unsuitable for interpersonal skills or motivation. On the other hand, more than half of the applicants are often rejected immediately after their application form has been read [SIDNEY, 1988]. Hence there is a dilemma – whether to try to make a comprehensive assessment on the basis of information, which may only properly evidence a few attributes; or to reject on the basis of only a partial set of the selection criteria.

The fact remains that a high proportion of applicants has to be rejected on the basis of the application form alone, and therefore the primary task is to decide how likely the applicant is to prove suitable. Thus, there is a need for facilitating the whole process so that applicants can be assessed in a right and complete way. This paper proposes a new practice in the way that companies conduct the pre-selection process of candidate employees. More specifically, it proposes the facilitation of the whole process through the use of Online Interviews. As mentioned previously, the large number of candidates leads employers either to screen out some of them by using subjective measurements (e.g. by examining application forms alone), or conduct a great number of face-to-face interviews in order to select the most appropriate of them. It is therefore clear enough that the whole process is both inadequate when subjective measures are used and time-consuming when done face-to-face. Consequently, there is a great need for Human Resource Managers to facilitate the pre-selection process and save their business time by using the advanced services of an electronic intermediary company that conducts online interviews for screening candidate employees.

Admittedly, nothing can completely replace face-to-face interviews, but there is a way to help recruiters and hiring managers with interviewing challenges. This paper proposes ‘Online Interviewing’ as a tool that allows recruiters to gather structured interview information and assess cultural fit, while streamlining the interview process and reducing interview biases. Online interviews cannot replace recruiters and hiring managers, but they are designed to improve the face-to-face interview process and help evaluate candidates for position and cultural fit.

Recruiters themselves still provide the strategic emphasis and feedback vital to the recruitment process. The interviewer can then go into the face-to-face interview armed with a wealth of information about a candidate’s character, personality and work style. The face-to-face interview is now focused on strengths, inconsistencies or areas of concern.

In general, an online interview process is conducted on the Internet and consists of a number of questions that the interviewee has to answer. Each candidate for a specific job position must undergo the same interview procedure. The format of the interview questions is structured to provide consistency, legal compliance and thoroughness. Although subjective and personal factors can still affect judgment, they are decreased in the structured interview. The answers have also a structured format (e.g. a pop-down list, checkboxes, multiple-choices) prompting the applicant to choose the appropriate one. The questions become more detailed and specific as the user proceeds from stage to stage. Also, each question concentrates on certain aspects of the applicant’s background such as experience, education, skills and hobbies. All the answers and information given by the interviewee are stored to the system’s database for further analysis by the Human Resource Manager of the company. Therefore, employers can make use of this information, having an additional source for assessing the job applicant.

4. Required operations for Online Interviews in an Electronic Job Marketplace

The major goal of this project is developing an integrated web application that operates as an Electronic Job Marketplace. The prototype application offers several services to both employers and job seekers. Conducting Online Interviews to facilitate the pre-selection process of candidates constitutes the major service that this system provides and on which this dissertation project is focused. More specifically, the system provides applicants with the ability to give Online Interviews for specific job positions and employers with the ability to review candidates’ responses. In addition, the candidates are able to search for jobs, apply and express interest for a job position and upload their resumes. On the other hand, employers are able to post job ads and search for job seekers’ resumes. Generally speaking, the Web Site of the prototype application constitutes an electronic intermediary (or electronic job agent) that brings employers and job seekers to a common area of interest, like a Virtual Community does.

The Online Interview can be thought as an online questionnaire that reveals some dynamic characteristics. More specifically, a simple software agent can be used in order to manipulate the interview questions. According to
the candidate’s profile and the answers of the candidate to previous questions, the software agent can choose which the next most appropriate question for the candidate is. In other words, the software agent is used to build “the path of interview questions” for each candidate separately. Table 1 includes the main required operations for the proposed Electronic Job Marketplace (EJM) system.

<table>
<thead>
<tr>
<th>Operation</th>
<th>Description</th>
<th>Privilege</th>
<th>User</th>
</tr>
</thead>
<tbody>
<tr>
<td>Register to the system</td>
<td>New users of the system provide personal information in order to become members of the system.</td>
<td>Guests</td>
<td>Both</td>
</tr>
<tr>
<td>Login to the system</td>
<td>Members of the system login to the system by providing username and password.</td>
<td>Members</td>
<td>Both</td>
</tr>
<tr>
<td>View / Update Personal Info</td>
<td>Members of the system are able to view and update their personal information.</td>
<td>Members</td>
<td>Both</td>
</tr>
<tr>
<td>Post Job Ad</td>
<td>Employers can post a new job ad by providing details for the specific job position.</td>
<td>Members</td>
<td>Employers</td>
</tr>
<tr>
<td>Find Job Position</td>
<td>Job seekers can search the system’s database for specific job positions by providing their search criteria (e.g. by location, by job classification.).</td>
<td>Guests Members</td>
<td>Job seekers</td>
</tr>
<tr>
<td>Upload Resume</td>
<td>Job seekers can upload their resume to the system. The resumes are stored to the system’s database for further use.</td>
<td>Members</td>
<td>Job seekers</td>
</tr>
<tr>
<td>Find Resumes</td>
<td>Employers can search the system’s database for resumes by providing their search criteria (e.g. by job classification, by employee type.).</td>
<td>Members</td>
<td>Employers</td>
</tr>
<tr>
<td>Apply for a Job</td>
<td>Job seekers can apply for a specific job, if its description satisfies them. This is done through an online form that job seekers have to complete by providing some personal information and attach their resume.</td>
<td>Members</td>
<td>Job seekers</td>
</tr>
<tr>
<td>Give an Online Interview</td>
<td>Job seekers can give online interviews in order to participate to the pre-screening process for specific job positions.</td>
<td>Members</td>
<td>Job seekers</td>
</tr>
<tr>
<td>Check interview status &amp; review interviewee’s answers</td>
<td>Employers can check the status of their online interviews (e.g. number of participated persons) and review the answers of interviewees.</td>
<td>Members</td>
<td>Employers</td>
</tr>
<tr>
<td>Provide feedback to the interviewee</td>
<td>Employers are able to provide interviewees with feedback about the online interview they have participated in (e.g. explain the reasons for rejection).</td>
<td>Members</td>
<td>Employers</td>
</tr>
<tr>
<td>Take feedback and review own interviews</td>
<td>Job seekers that have participated in an online interview can take feedback from the employers about the interview results (e.g. whether they have been chosen to continue to the next stage of the selection process). In addition, they can review their previous interviews.</td>
<td>Members</td>
<td>Job seekers</td>
</tr>
<tr>
<td>Check status of job ads</td>
<td>Employers can check the status of their job ads (e.g. check the number of job seekers that have expressed interest for the job or applied for the job).</td>
<td>Members</td>
<td>Employers</td>
</tr>
</tbody>
</table>

Table 1: Required operations of an EJM system

5. Design Issues for Online Interviews

The Unified Modelling Language was selected as the best representation methodology for the proposed system. The main operations and business processes of the prototype system are expressed in Use Cases and illustrated by a Use Case diagram. As discussed in the previous section, two major actors interact with the system:

- **Job seekers**: They search for advertised job positions, upload resumes and express interest for a specific job ad. In addition, they may participate in one or more online interviews for specific job positions. Last, they take feedback for all the interviews they have given in the past.
**Employers:** They post job ads and they monitor the interest that job seekers express for their advertised job positions. Also, employers search for resumes based on several search criteria. In addition, they are responsible for the online interviews that are conducted for their advertised positions. They have the responsibility to review and analyse candidates’ answers in order to decide the most appropriate ones for the job.

In figure 1, a use case diagram represents the main interactions between the two actors and the system. Special attention should be drawn at two use cases, namely ‘Give Online Interview’ and ‘Check Job Seekers Interest for Job Ad’.

![Figure 1: EJM Use Case Diagram](image)

The ‘Give Online Interview’ use case begins when job seekers wish to give an online interview for a specific job position. The system presents a form with instructions for the interviewing procedure. Job seekers read the instructions and, when they are ready to start the interview, click on the appropriate link. The system poses the first question and displays the alternative answers to this question. Job seekers choose the answer that matches to their preferences and click on the “Submit” button. The system stores the user’s response into the database and poses the next question according to the user’s previous answer. The use case continues until job seekers have answered all interview questions. If the job seeker has already given an online interview for the same job position, an error message is generated advising the user to give an interview for another job. Before this use case starts, the job seeker must have completed either the Simple Search Job Ads or the Advanced Search Job Ads use case.

The ‘Check Job Seekers Interest for Job Ad’ use case begins when employers wish to check how many job seekers have applied for their job ads. The system returns to employers a list of their job ads. The employer chooses one of the returned job ads by clicking on its title. The system returns a list of job seekers that have applied for the specific job ad. The employer can either view a job seeker’s resume or see more details about the job seeker. In addition, the employer can contact the job seeker by email. After this, the use case ends. In case that an interview is given by no job seeker, an appropriate message is presented to employers.

Figure 2 illustrates the class diagram of the prototype Electronic Job Marketplace. It should be emphasised that each ‘Interview Questionnaire’ class consists of one or more ‘Interview Sections’ which in turn contain one or more ‘Interview Questions’. Some more clarification should be given with respect to:

- **‘Question Category’:** It concerns the category of questions that an Interview Section contains. More specifically, it refers to a set of questions assessing the Job Seeker under a specific criterion e.g. Software Engineering Experience.
- **‘Possible Answer to Interview Question’:** It refers to a set of possible answers to a specific Interview Question. These answers have been defined by the Employer. Job Seekers have to choose only one of them in order to give response to the Interview Question.
- **‘Supplementary Question’:** It refers to an additional question posed to Job Seekers when they give a specific answer to an Interview Question. The ultimate purpose of the supplementary questions is to ask Job Seekers more detailed questions, so that Employers receive additional information for specific aspects of them.

![Figure 2: EJM Class Diagram](image)

6. **Electronic Job Marketplace Architecture**

For the development of the system’s architecture, the “client-server” model [KALAKOTA, 1997] and the model of the “multi-tier” architecture [EELES, 1998]
[KIRTLAND, 1999] were followed. The Client-Server model is based on the general concept that a client makes requests to the server and the server processes them. For example, in the Electronic Job Marketplace the algorithm that implements the Online Interviewing process resides on the server so that the reliable and efficient operation of the system is assured. The major advantage of the Client-Server model is the quick and easy management of the whole system since the application is centrally located.

The prototype Electronic Job Marketplace has all the features that characterise a Web application: worldwide use and a mixed audience from different countries with different cultures. This means that potential users of the system must have a Web browser, through which they will have access to the application. In addition, the application must be located in a Web server through which it will be accessible to all users.

The architecture of the prototype application is based on the concept of the “three-tier” model [EELES, 1998] [KIRTLAND, 1999], which separates its functionality in terms of the services it provides to the users. As Figure 3 illustrates, there are three layers that can be distinguished. In each of these layers, software components that perform specific tasks reside. More specifically, there are two types of users (Job Seekers and Employers), who have access to the system through a Web browser. The system consists of the Web server, the Electronic Job Marketplace application and the Database Management System (DBMS). Through the Web Server, the application is accessible to the Internet users, while the DBMS holds all the information required for the reliable operation of the system. The communication between the layers is achieved through the ColdFusion Server. Running as a multithreaded process, ColdFusion Server provides a run time environment for application logic and dynamic page generation. The server includes a number of different services that handle page processing, security, state management, connection management and a variety of other functions.

Figure 3: The Generic System Architecture based on the “three-tier” model

7. Main Electronic Job Marketplace Services

The main functions/services of the Electronic Job Marketplace are compiled in the following list, according to the required operations discussed in a previous section of this paper:
- Update Profile
- Post Job Ads
- Quick Search for Job Ads
- Advanced Search of Job Ads
- Upload Resumes
- Search Resumes
- Apply for a Job
- Give Online Interviews
- Review Job Interviews
- Take Interview Feedback
- Check Status of Job Ads

When a user attempts to connect to the Web site, the first page that is loaded on the client’s browser is displayed in Figure 4. As illustrated, the system services are presented at the left of the page. The services are categorised according to the system members (Job Seekers or Employers). In addition, some services – common for both employers and job seekers – are displayed at the top of the page. All these options appear in all pages of the site. However, the appearing choices “Login as Job Seeker” and “Login as Employer” disappear once the user logs in the site. This page’s functionality is that it offers users the possibility to select a service at any time, in whatever page they are in. By clicking on one of the appearing choices either at the left or at the top of the page, users are driven to the corresponding Web page. In addition, this page includes the “Quick Search of Job Ads” service mentioned in the previous section. This means that users are able to search for advertised job positions by providing their search criteria. Alternatively, users can use the “Advanced Search of Job Ads” service by clicking to the appropriate link at the bottom of the page.
As illustrated in figure 5, employers have to enter detailed information about an advertised job position and then press the “Post Job” button to submit their input to the server. When employers press the “Post Job” button, the contents of all fields are sent to the server in order to be checked for their validity. In case that the provided information is not valid, a message is displayed asking users to re-enter the incorrect data since they cannot be granted permission to continue. After the fields have been validated, the “JobAdInsertAction.cfm” file takes the responsibility for inserting the posted information to the system’s database. Following, the CFML code of the “JobAdInsertAction.cfm” file that performs the action of posting a new job ad is presented.

Users can give an Online Interview for a specific job position by clicking on the “Give Online Interview for this Job …” option located at the top of the page. When users select to give the interview, a simple software agent that works in the background poses questions to them. The type of questions depends on the job description, while the sequence of questions depends on previous answers of the interviewees. More specifically, the agent extracts from the database the first question of the questionnaire, which is associated to the specific job ad. As soon as users have responded to the question, the agent checks the given answer, stores it to the database, and poses the next question that is associated to user’s previous response. This process continues till all the interview questions are posed. However, in case that an interviewee answers a number of questions in a more than satisfactory level, then the interview may end earlier. Figures 6 and 7 present screenshots of the Online Interviewing process and reviewing the results for specific interviews.
8. Evaluation and future work

Five task scenarios were developed exploiting the main services of the Electronic Job Marketplace. These scenarios are formatted in such a way that both employers and job seekers can follow them with minimal difficulty. The ultimate purpose of these scenarios is to test several aspects of the prototype application in order to (i) evaluate the system’s usability, (ii) discover potential problems and (iii) propose future improvements. Each of these scenarios is referred to a different operation of the system aiming at guiding users to evaluate its most important services. Users are asked to choose one of the five available task scenarios, based on the type of user they belong (Job Seeker or Employer), and follow the proposed steps. The two first scenarios concern job seekers, while the next three scenarios concern employers. In total eighteen (18) participants evaluated the proposed system and answered a questionnaire consisting of eight parts:

- Overall evaluation
- Clarity of purpose
- Ease-of-use and navigability
- System and layout consistency
- Efficiency of services and functions
- Communication quality
- System availability, accessibility and response time
- Recommendations and possible improvements

Due to the obvious limitations, this section briefly discusses some of the main findings from the evaluation and outlines some avenues for future research and further action.

The responses from the vast majority of participants [NIKOLAOU, 2001] [PATELI, 2001], clearly showed that most users found the concept of Online Interviews innovative and helpful. The majority of participants agreed that the Online Interviewing service addresses efficiently the pre-screening process of candidate employees. However, it is stated that Online Interviews can only facilitate the recruitment and selection process and not replace it. More specifically, some users claimed that the candidates’ selection process has to be made in conjunction with experienced Human Resource Managers. Furthermore, it was quite clear that the Online Interviewing service facilitates employers in screening their candidates but there is a demanding need to improve the whole process with more effective methods of communication between employers and job seekers (e.g. Video Conference). The evaluation participants made several suggestions on how the prototype application could be enhanced. First, the integration of the Electronic Job Marketplace with relevant systems was suggested. For the Online Interviewing service, it was proposed that some additional facilities to employers should be provided (e.g. monitoring the Online Interviewing process and posing questions to interviewees online). Another suggestion was focused on conducting Online Interviews through video-conferencing. Introducing multimedia technology into the prototype was also suggested, like using audio and video to accompany certain events such as sending a new mail, posting a Job Ad, giving Online Interviews etc. Concluding, the majority of participants agreed that the prototype system has a very good potential on the Internet Job Market but some improvements must be made, especially for the Online Interviewing Service. Following these remarks, a significant number of options for further work are identified. The following four (4) are regarded as the most challenging and hopefully the most rewarding:

- **Enhancement of the Electronic Job Marketplace with innovative services.** Work may be focused on developing tools with the following abilities: (i) automatically ranking and prioritising candidates who meet the recruiters’ criteria for each job, (ii) scoring interviewees against the job requirements by cross-referencing the required skills with the candidates’ work experience, (iii) automatically notifying recruiters and hiring managers when a qualified candidate has applied for a job.

- **Implementation and integration of multiple selection methods for the Internet Job Market.** Investigations may be made on integrating multiple facilities that automate diverse selection methods (interviews, resumes, application forms, psychological tests), so that managers are provided with an integrated capability to make selection decisions. The ultimate purpose of such an implementation is eliminating the need for face-to-face meetings in the selection process. This can be achieved if the candidate employees are passed through a series of electronically implemented selection methods that assess diverse aspects of them. A possible scenario of a fully-automated selection process is: (i) candidate employees upload their resume, (ii) the system asks them to give an online interview, (iii) if the candidates are approved, then they can go on giving a psychological test, and (iv) if they pass the test, then the selection process ends up at an online discussion between the candidate and the employer.

- **Application of Online interviews in distributed organisations and virtual teams.** Future research may be directed on how online interviews can be used by distributed organisations and virtual teams that need making hiring decisions quickly and efficiently. In this case, their special needs for evaluating and selecting candidates from distance have to be assessed. Future development of tools or
Enabling Online Interviewing for Global Software Teams. The prototype of Electronic Job Marketplace has been developed to automate a typical interview session between a job seeker and an employer. Further research can be focused on studying the requirements of online interviewing for global software teams. In this case, advanced online facilities that allow for customising the structure of interviews to the special features and requirements of a software team have to be implemented.

9. Conclusions

Although thousands of individuals have been hired using Internet recruitment methods and organisations worldwide are opening up to the possibilities of this resource, most human resource professionals are still at the borders of online technology. According to Schreyer and McCarter [SCHREYER & McCARTER, 1998], the rate of change is so rapid that the following prediction about the future of Internet assisted recruitment can be made: “It will dramatically affect how companies worldwide source, attract, and assess talent”. The above prediction seems quite logical. The integrated solution of online recruitment and selection can manage and automate the hiring process - from sourcing candidates, evaluating prospects, managing relationships, submitting job offers, performing background checks - to moving applicant data into the company’s HR management system. In addition, this approach helps locate the best-qualified candidates more effectively than traditional recruiting services, since it automates the tasks needed to identify the right people and get them into the right jobs. Concluding, Internet has the power and flexibility to become an effective tool for both recruiters who act as generalists, specialists, head-hunters or hiring managers and individuals who act as job seekers and candidate employees. This paper presented part of an ongoing research attempting the first step towards this approach. However, future research and implementation is certainly required so that the opportunities offered by Internet get transformed into successful practices used by enterprises and practitioners.

10. References