

EFFECTIVENESS OF E-RECRUITMENT IN SMALL AND MEDIUM ENTERPRISES OF IT INDUSTRY OF LAHORE (PAKISTAN)

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Abstract. Usage of technology brings robust improvement in every aspect of human life. Paramount research reveals that Internet is being used in employment sector globally. Recruitment through electronic sources brings phenomenal success in a very short time. This study is an attempt to explore the effectiveness of e-recruitment in small and medium enterprises of IT based companies of Pakistan through descriptive analysis. Effectiveness of e-recruitment is measured through the attributes of advantages and disadvantages. This study provides an insight of how companies' recruiters perceive the value of online recruitment. Four advantages of e-recruitment, considered in this study, are: (i) quality of applicants, (ii) wider pool of applicants, (iii) time and cost saving, and (iv) brand image development. Major disadvantages of e-recruitment, assessed in this study, are: (i) overloading of irrelevant applicants, (ii) higher numbers of unqualified applicants, (iii) established brand name, (iv) privacy issue of applicants, (v) lack of personal touch, (vi) discrimination between applicants, (vii) not the first choice to apply, (viii) unfriendly user tool, and (ix) extra time and cost subsequently. The study recommends for HR managers of IT SMEs to focus more on online recruitment in Pakistan to get large return on investment in long term perspective.

Keywords: Human resource management, Human resource information system, Information Technology, Electronic human resource management, Electronic recruitment, Virtual human resource management, Lahore Chamber of Commerce and Industry, Business to employee

JEL classification: M12, M51

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I. INTRODUCTION

Increasing usage of Internet in every walk of life serves as a necessity for meeting many personal and most professional tasks. Technology serves for an easy connectivity of the people across the world by making the world as a global village. The Internet technology in Pakistan has been available since early 1990s. Pakistan stands as the second highest growing Internet user in SAARC countries on the basis of population. Pakistan Internet usage growth estimates show that in 2013 the Internet users hit up to 22 million out of which 4.3 million users are using broadband Internet (Attaa, 2009).

All the facts indicate that the use of technology is growing rapidly in Pakistan. Organizations are searching for the ways to be more flexible, innovative, efficient and strategic to perform functions in an effective manner. Globalization, customer driven culture and specialization moved organizations emphasis from financing to recruiting, sustaining and growing qualified employees. In reality human resources of any organization serve as a driving force or like a “steering in car” that moves the whole organization on the right path.

According to Armstrong (2010, p. 8), “HRM is concerned with all aspects of how people are employed and managed in organizations.” Compton *et al.* (2009, p. 2) perceive HRM as “Employees are similar to other resources such as finance and technology as it must be managed effectively to ensure the best performance for the entire company.” Digital revolution in the field of human resource management is used as a tool to reshape or enhance the human skills that are necessary for the achievement of organizational goals (De Alwis, 2010a). Adoption of Internet technology in the human resource functions is named as Human Resource Information System (HRIS), Virtual Human Resource Management (V-HRM) and Electronic Human Resource Management (e-HRM). DeSanctis (1986, p. 16) considers HRIS as a “Specialized information system within the traditional functional areas of the organization, designed to support the planning, administration, decision-making, and control activities of human resource management.” V-HRM is considered by Lepak and Snell (1998, p. 216) as a “Network-based structure built on partnerships and mediated by information technologies to help the organization acquire, develop, and deploy intellectual capital.” E-HRM is defined by Strohmeier (2007, p. 20) as “The planning, implementation and application of information technology for both networking and supporting at least two individual or collective actors in their shared performing of HR activities.” E-HRM is “A way of implementing HRM strategies, policies, and practices in organizations through the

conscious and direct support of web-technologies” (Ruël *et al.*, 2004). Information Technology competencies of the organizations lead to HR competencies and efficient job performance (Suen and Yang, 2012, p. 615). Zafar *et al.* (2010, p. 26) present that the “application of e-HRM sweeps the strategic benefits of HR from the traditional HR role of administration.”

IT specialists have developed a number of softwares that convert HR activities from maintenance function to more strategic function computerized systems and open new avenue called e-HRM (Lengnick-Hall and Moritz, 2003). Bondarouk and Ruël (2009) define e-HRM as “An umbrella term covering all possible integration mechanisms and contents between HRM and information technologies aiming at creating value within and across organizations for targeted employees and management.” “E-HRM is a way of implementing HR strategies, policies, and practices in organizations with the full use of web-technology-based channels” (Davoudi and Fartash, 2012, p. 76). E-HRM transforms the role of HR from operational, administrative, and functional oriented towards the role of more reactive, strategic, consultative, business oriented and proactive (Ulrich, 1997). Lepak and Snell (1998, pp. 219-220) describe comprehensively three types of e-HRM:

- **Operational e-HRM** mainly represents the administrative tasks of HRM.
- **Relational e-HRM** supports the more advanced HRM activities which include recruitment, selection, training, performance appraisals and rewards of employees.
- **Transformational e-HRM** is strategic in nature which includes organization change processes, knowledge management and competence management by utilizing web-based tools.

Breaugh and Starke (2000, p. 407) define recruitment as “Practices and activities carried out by the organization with the primary purpose of identifying and attracting potential employees.” Job hunting and hiring are revolutionized by the adoption of Internet in the recruitment function. Different terms for e-recruitment are used interchangeably including Internet recruiting, cyber recruiting, online recruiting, web-based recruiting and e-recruiting. “E-recruitment is the use of technology to assist recruitment function” (Kapse *et al.*, 2012, p. 82). Organizations are facing problems in attracting competent applicants as a major part of the company’s survival lies in the hands of their labour force. Research work on the area of electronic recruitment is still lacking in Pakistan. A list of work can be found on traditional ways of recruitment but the research gap on electronically

supported recruitment is still there. This study measures the effectiveness of e-recruitment in small and medium enterprises of IT industry of Lahore (Pakistan).

Research Objectives

The present study focuses on the attainment of the following objectives:

- Identify the sources mostly used for e-recruitment by SMEs of IT industry of Pakistan.
- Identify the level of management positions for which e-recruitment is preferred by IT SMEs of Pakistan.
- Evaluate the e-recruitment outcomes in terms of advantages mostly enjoyed by IT industry SMEs of Pakistan.
- Compare the views of male and female recruiters of IT industry SMEs about the e-recruitment outcomes in Pakistan.
- Compare the difference in the outcomes of different e-recruitment sources in IT industry SMEs of Pakistan.
- Identify the e-recruitment disadvantages mostly faced by IT industry SMEs of Pakistan.

II. LITERATURE REVIEW

Companies realize the fact that human resources moved from a cost factor to a success factor (Biesalski, 2003). People are the key asset that is capable for growth and development of organizations (De Alwis, 2010b). The term e-HR was first used in 1990 when e-commerce was sweeping the business world, and e-HR referred to conducting HR transactions by using Internet (Lengnick-Hall and Moritz, 2003, p. 365). Voermans and van Veldhoven (2007, p. 997) define e-HRM as the administrative support of the HR function in organization by using technology. One of the functions of human resource management is recruitment which creates an applicant pool for the organization's vacant positions. This pool can be generated through both the traditional and the electronic ways. The traditional way of recruiting is the posting or attracting of applicants through the newspaper, referral and walk-ins, recruiting agencies and on campus recruiting (Nel *et al.*, 2011). The e-way includes the commercial job boards/portals, corporate websites and emails (Dhamija, 2012). Kapse *et al.* (2012) say that e-recruitment makes the process two-way for organizations and for job seekers. The endogenous research all around the world assimilates the findings in a contradictory

pattern as some researchers present the positive aspects of e-recruitment while others highlight some of its drawbacks.

Faliagka *et al.* (2012) say that online recruitment performs the prescreening which comes in interview step in traditional method of recruitment. Cappelli (2001) explores that online recruiting leads to saving cost, wide open market, uncontrolled by individual companies, unconstrained by geographical boundaries, speed up the process of tracking and contacting applicants and creates image of relationship marketing as product marketing. According to Verhoeven and Williams (2008), e-recruitment provides quicker turn-around time, increased number of suitable applicants and it makes recruitment process easy and cost saving. Elgin and Clapham (2004) perceive paper resume applicants as more friendly whereas the electronic resume applicants are viewed more technologically advanced and more intelligent. Galanki (2002) understands that Internet based agencies provide cost effectiveness fewer but quality applicants than traditional recruiting agencies and provides the access to passive job seeker and company image building. Chapman and Webster (2003) opine that technology based recruitment tools improve efficiency, new assessment tools reduce cost, standardize systems and expand applicants' pool. E-recruitment allows companies to reach a greater number of job seekers in less time and with low cost (Matta and Sardana, 2012; Depardieu and Islam, 2008; Smith and Rupp, 2004). Access to the people on the wider geographical context, reduce the number of undesired candidates by providing reach to better passive job seekers (Prasad, 2011). Rebecca (2008) comments that online recruitment has enhanced the employer brand by improving the application experience. Cho *et al.* (2011) perceive enjoyment, usefulness, ease of use, technology self-efficacy and attitude towards websites, corporate image and intention to apply in e-recruitment.

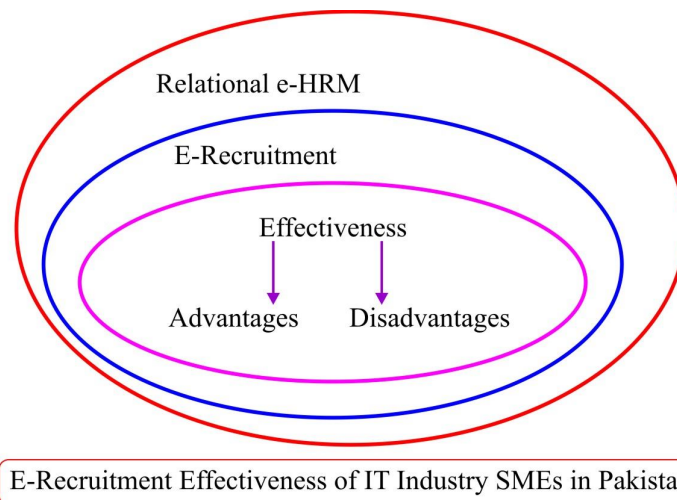
Beside the positive outcomes the drawbacks elaborated by researchers are multiple and show different outcomes. Risk of overload applicants, applicants data privacy, extra effort required discrimination of applicants, not the first choice for job search along with this it is beneficial for already known companies (Pin *et al.*, 2001; Prasad, 2011; Cappelli, 2001; Galanki, 2002).

Parry and Tyson (2008) and Verhoeven and Williams (2008) indicate higher number of unqualified applicants, relocation expenses and discriminate applicants who do not have Internet access. Online recruitment is not suitable for small organizations and mutual use of traditional and

online recruitment is appropriate through corporate websites. Organizations cannot solely depend on online recruitment (Kapse *et al.*, 2012).

III. THEORETICAL FRAMEWORK

On the basis of theoretical background of e-recruitment it is evident that importance of e-recruitment has been focused by many previous studies. This study follows the following thematic framework adapted from Ruël *et al.* (2004) to measure the effectiveness of e-recruitment specifically towards the IT SMEs of Pakistan. However, small changes are made in certain areas but the basic theme of the model is adopted from Ruël *et al.* (2004).



In this framework it is shown that the technology used in performing all human resource management functions is known as e-HRM. These e-HRM functions are further classified into three types: operational, relational and transformational. This study puts focus on the relational type of e-HRM which is further divided into three dimensions: e-recruitment, e-selection and e-learning. The present study is confined to only one relational e-HRM dimension which is e-recruitment. E-recruitment is said to be independent variable whereas its outcomes showing its real effectiveness are the dependent variables of the study.

IV. RESEARCH METHODOLOGY

A descriptive study design and survey research method are selected to investigate the perception of IT SMEs human resource managers or the persons liable for recruitment in the organization about the e-recruitment effectiveness. The population of the study consists of all small and medium enterprises of IT industry who are currently involved in e-recruitment

activities. Target population includes the organizations listed as a registered member in Lahore Chamber of Commerce and Industry (LCCI) under the service category of computer and software which are more than seventy in number according to the LCCI members' directory 2012. Under the probability sampling a stratified sampling design is selected on the ground that some strata's are too large or too small and disproportionate stratified random sampling procedure is used which results in 62 respondents which are approached through self-administered survey from the computer and software sub category of software developing organizations. Structured Questionnaire is adapted on the basis of objectives similarity from the study of De Alwis (2010a) "online recruitment practices in mid size businesses conducted in Sri Lanka" to explore the respondents perception about the effectiveness of e-recruitment practices. The permission for the use of questionnaire was taken through e-mail and factor analysis run on the variables and pilot testing showed the heterogeneity in the results. The questionnaire is divided into two portions: first portion is based on 12 demographic questions and the second portion focuses on the study variables through 47 questions.

Study Variables	Variables Description
Advantages	
Quality of Applicants	<i>Experienced</i> More experience to deal with technological demands.
	<i>Qualified</i> Applicants have required knowledge, skills and abilities.
	<i>Adjustable</i> Applicants match with the job characteristics and easily absorb the organization culture.
Wider Pool of Applicants	<i>Passive job seekers</i> Attract individuals who are not actively seeking employment.
	<i>Diverse Workforce</i> Age, gender, geographical location based dispersed potential candidates.
	<i>No geographical limits</i> No distance, cultural or time constraints that will narrow the job applications for prospective candidates.
Brand Image Development	<i>Positive Image</i> Applicants view that the organization gives prompt responses and provides complete information about the company and specific job opportunity.

Time and Cost Reduction	Resume search time Time involved in getting the response of potential applicants.
	Screening Time Extract the best resume by comparing the candidates' qualifications and credentials compared with the others resumes.
	Time to Fill Vacancy Average number of days it takes for an organization to fill the vacant job.
	Cost of package Deals Enable organizations for unlimited job posting on various interfaces.
	Advertising Cost Announcing job vacancies on a number of website for a long time period at a very reasonable cost.
	Average cost per recruiting campaign Total number of hires divided by amount spent to hire new employees is average cost per recruitment.
	Annual recruitment expenditure Recruitment budget allocated to attract the potential applicants for the organization announced positions.
Disadvantages	
Higher Unqualified Applicants	Large number of applicants having Irrelevant qualification and skills apply.
Discriminate Applicants	Companies cannot reach job seekers who are not on the Web.
Overloading of Applicants	Hard to limit the number of applicants, often organizations flooded with applications from incompetent candidates.
Extra Time and Cost	Fake resumes and high access fees to job portal.
Established Brand Name	Renowned organizations only succeed in finding the right applicants due to the goodwill.
First Choice	Not the first choice of majority job seekers to apply.
Privacy of Applicants	Applicants hesitant to share personal information due to data confidentiality and security issue.
Unfriendly User Tool	Low Internet penetration, no access and lack of awareness of internet in many locations.
Lack of Personal Touch	No human contact and incidents like sites crash can cause lost of emails, and details being out of date.

V. DATA ANALYSIS

Self-administered survey method is adopted for data collection for the present study. Every questionnaire is checked for omissions, legibility and consistency before entering into the computer for tabulation. Questionnaire with the respondents category having more than 250 employees, having more than 30 million paid-up capital and those members who are not using e-recruitment were eliminated from the study before entering the data into SPSS (Statistical Package for the Social Sciences) 19th version. Data analysis is carried out through SPSS as frequency tables, descriptive figures, mean and standard deviation are then interpreted.

TABLE 1
Demographic Characteristics

Variables		Respondents	Percentage
Gender	Male	43	84.3
	Female	7	13.7
Qualification	Graduation	16	31.4
	Masters	28	54.9
	M. Phil.	6	11.8
Years	Less than one year	21	41.2
	1-3 years	13	25.5
	4-6 Years	4	7.8
	More than 6 years	12	23.5
Number of Employees	Less than 50	32	62.7
	50-100	7	13.7
	101-150	1	2.0
	151-200	1	2.0
	201-250	9	17.6
Sources of e-Recruitment	Own website	3	5.9
	Commercial jobsites	9	17.6
	Social Networking sites	1	2.0
	Own website and social networking sites	3	5.9
	Commercial jobsites and social networking sites	13	25.5
	All the three sources	21	41.2

Variables		Respondents	Percentage
Departments Preferring e-recruitment	Accounts	1	2.0
	IT	3	5.9
	Accounts and IT	1	2.0
	Marketing and IT	23	45.1
	Marketing and Operations	1	2.0
	Accounts, Marketing and IT	1	2.0
	Marketing, IT and Operations	4	7.8
	All of the departments	16	31.4
Way of Recruitment	E-Recruitment	16	31.4
	Traditional and e-recruitment	34	66.7
Designation	Human Resource Manager	18	35.3
	Administrator	18	35.3
	Others	14	27.5
Years of Doing e-Recruitment	Less than one year	6	11.8
	1-3 years	21	41.2
	4-6 years	15	29.4
	More than 6 years	8	15.7
Paid up Capital (millions)	05 - 09.9	26	51.0
	10 - 19.9	14	27.5
	20 - 29.9	10	19.6
Position Filled Through Traditional Recruiting Source	Top Level	4	7.8
	Middle Level	7	13.7
	Lower Level	5	9.8
	Top and Middle Level	2	3.9
	Middle and Lower Level	4	7.8
	All the Three Levels	12	23.5
	Not Using	16	31.4
Position Filled Through e-Recruiting	Top Level	1	2.0
	Middle Level	9	17.6
	Lower Level	4	7.8
	Top and Middle Level	2	3.9
	Middle and Lower Level	3	5.9
	All the Three Levels	31	60.8

Table 1 shows the descriptive analysis of the demographic variables. The results show that total number of respondents under study is 50; out of which 43 (84.3%) respondents are male and the qualification of a majority of the respondents (54.9%) is masters' degree. According to the designation, 35.3% respondents are human resource managers followed by 35.3% administrators having the recruitment authority in their organizations responded to the questionnaire. A majority of the respondents (41.2%) is working in the organizations for less than one year. The 62.7% respondents' organization is having less than 50 employees; 51.0% of responded organizations are operating with the paid up capital of 0.5-9.9 million; 66.7% IT SMEs do recruiting through both the electronic and traditional sources; 41.2% responding organizations are doing recruitment only through electronic means for the last 1-3 years; 41.2% responded organizations are using all three e-recruitment sources (own websites, commercial jobsites, social networking sites) for the recruitment function; 60.8% organizations are using electronic sources to recruit the positions announced at all management levels; and 45% respondents do recruitment through electronic means especially for the department of marketing and IT related announced positions.

FIGURE 1

Mean Score Responses of the Respondents
to the e-Recruitment Advantages

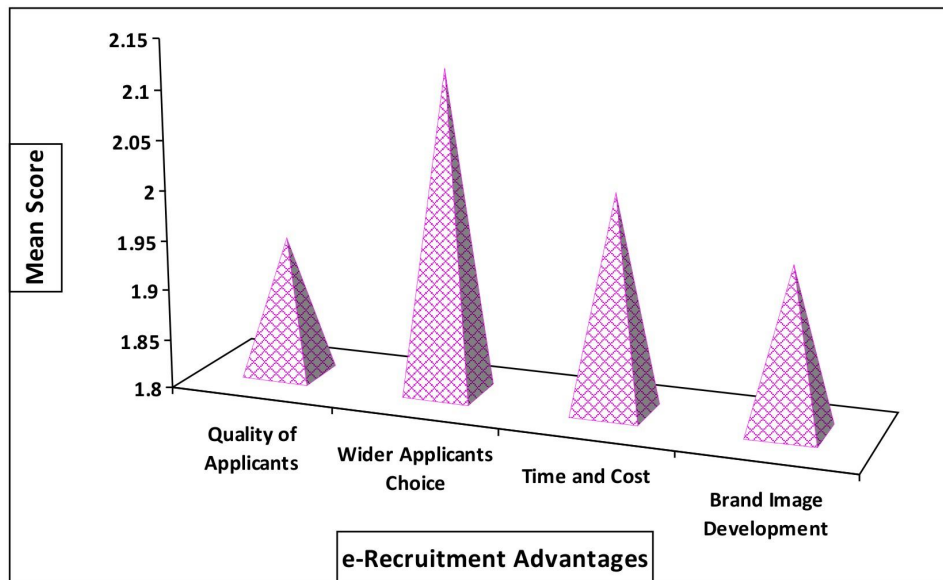


Figure 1 depicts the mean distribution of responses towards the major advantages enjoyed by organizations while doing e-recruitment. Wider applicants' choice advantage shows the highest mean score (2.12), while the second highest mean score (2.02) according to the respondents' responses is towards the time and cost reduction, third ranked mean score of 1.96 shows the respondents agreement with the brand image development. Lastly quality of applicants shows the mean score 1.94. Result of the overall analysis presents that the wider applicants choice is the most enjoyed e-recruitment advantage as per the responses.

TABLE 2

Two Independent Samples – Mann-Whitney U Test for Comparisons of e-Recruitment Advantages by Gender (Respondents: recruiters)

e-recruitment Dimensions	Gender	N	Mean	Mann-Whitney U	Z-values	Sig.
Quality of Applicants	Male	43	26.84	93.0	-1.613	0.112
	Female	7	17.29			
Wider applicants choice	Male	43	25.40	146.0	-126	0.913
	Female	7	26.14			
Time and cost saving	Male	43	25.42	147.0	-098	0.935
	Female	7	26.00			
Brand image development	Male	43	27.13	80.5	-1.963	0.049*
	Female	7	15.50			

* $p < 0.05$

Table 2 indicates the difference of opinion among the male and female respondents about the advantages of e-recruitment. The significance level for quality of applicants is 0.112, wider applicants' choice is 0.913 and time and cost saving is 0.935 which show that there is no significant difference of opinion in terms of gender of SMEs recruiters about the three e-recruitment outcomes. Whereas significant difference of opinion is found between male and female software houses SMEs recruiters regarding e-recruitment outcome of brand image development because the significance level is less than p -value which is 0.049.

TABLE 3

Test for Several Independent Factors to Assess the Respondents' Responses
for e-Recruitment Sources and its Outcomes

e-Recruitment Outcomes	e-Recruitment Sources	N	Mean	Df	Chi-square	Sig.
Quality of Applicants	Own website	3	21.0	5	4.471	0.484
	Commercial job sites	9	22.17			
	Social networking sites	1	46.0			
	Own web and social networking sites	3	18.50			
	Commercial and social networking sites	13	29.54			
	All the three sources	21	25.10			
Wider Applicants Choice	Own website	3	19.67	5	3.991	0.551
	Commercial job sites	9	26.28			
	Social networking sites	1	46.50			
	Own web and social networking sites	3	16.33			
	Commercial and social networking sites	13	24.69			
	All the three sources	21	26.81			
Time and Cost Saving	Own website	3	21.17	5	4.777	0.444
	Commercial job sites	9	31.72			
	Social networking sites	1	41.0			
	Own web and social networking sites	3	31.83			
	Commercial and social networking sites	13	21.42			
	All the three sources	21	24.33			
Brand Image Development	Own website	3	25.50	5	3.370	0.643
	Commercial job sites	9	23.94			
	Social networking sites	1	43.0			
	Own web and social networking sites	3	33.33			
	Commercial and social networking sites	13	27.62			
	All the three sources	21	22.90			

* $p < 0.05$

Table 3 indicates through Kruskal Wallis Significant Difference test for several independent samples that there is no significant difference of opinion between recruiters about the e-recruiting source and its outcomes. The p -values of e-recruitment advantages through all e-recruitment sources show the significance level more than 0.05, so it is concluded that all SMEs recruiters perceive the same advantages of e-recruitment regardless which e-recruiting source is used for recruitment function by their organization.

FIGURE 2

Percentage of Respondent's Responses Towards
e-Recruitment Disadvantages

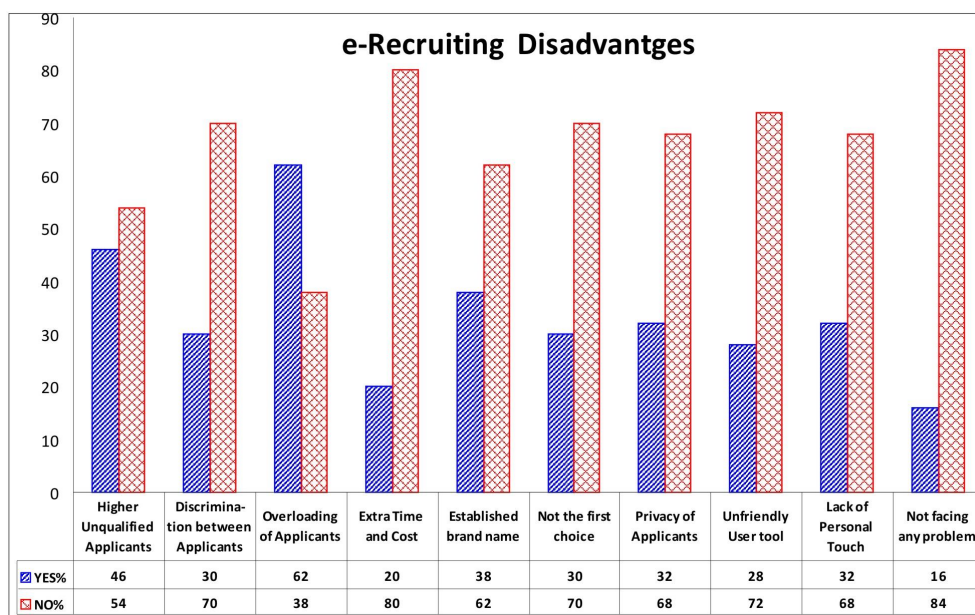


Figure 2 delineates the percentage responses towards e-recruitment problems. From the total number of respondents, 62% agreed that overloading of irrelevant applicants is the first biggest problem faced while e-recruiting, moreover 46% rank as second e-recruiting problem to the higher number of unqualified applicants applied for the opened position, while 32% rank the established brand name, privacy issue of applicants and lack of personal touch as a third e-recruiting problem. 30% recruiters consider that e-recruiting discriminates between applicants and not the first choice to apply; 28% consider e-recruiting as unfriendly recruitment tool; and 20% bear extra time and cost while e-recruiting. Only 16% respondents put their response in a way which can be concluded that recruitment through electronic means does not create any problem for their organizations.

VI. DISCUSSION

This study is conducted to identify the sources mostly used for e-recruitment, level of management positions for which e-recruitment is preferred, measure the e-recruitment outcomes in terms of its advantages and disadvantages which are mostly faced by IT industry SMEs, identify the difference of opinion on the basis of gender for e-recruitment outcomes and relate the e-recruitment sources and e-recruitment outcomes to find the differences result due to the use of different e-recruitment sources. To achieve these objectives five research questions are to be answered through the results of this study.

- Which electronic source of recruitment is mostly used by Small and Medium Enterprises of IT industry?

The results of this study show that most of the organizations are currently using both e-recruitment and traditional recruitment sources for their recruitment function in Pakistan. This finding is supported by Parry and Tyson (2008) that some organizations are still not willing to fully accept online recruitment, while some are not prepared to discard more traditional methods such as print media and employment agencies. The suggestions for the success of online recruitment presented the mix use of traditional and online recruitment, appropriate applicant management system and proper information help to promote the employer brand through corporate website (Parry and Tyson, 2008). So this finding shows that in Pakistan the IT based organizations are still reluctant to fully rely on the electronic recruitment.

- What level of management positions and which department positions are preferred to be filled through e-recruitment by Small and Medium Enterprises of IT industry?

A significant finding of the study reveals that majority of respondent organizations do e-recruitment to fill all the top, middle and lower level positions by using all the three sources (own websites, commercial jobsites and social networking sites). Further analysis presents that the mostly respondent organization prefer to recruit electronically for the positions announced in the IT and marketing departments. This finding is in line with Prasad (2011) who also confirms that online recruitment serves as a best source to attract the IT graduates.

- What e-recruitment advantages are enjoyed by Small and Medium Enterprises of IT industry?

Findings of the study related to e-recruitment outcomes presented that advantages which respondent organization enjoys were the quality of applicants, wider applicant's choice, time and cost reduction and brand image development respectively. Moreover, while doing recruitment electronically respondents rated wider applicants' choice as the most enjoyed advantage from which they could easily select the best one. Results of the study are confirmed by Ganalaki (2002) stating that corporate websites serve as effective tool for reaching the global targets as the Internet does not necessarily have any boundaries. Cappelli (2001) also conforms the study results that e-recruitment has the potential to reach a larger audience. The second advantage study assessed is the reduction in time and the cost involved in attracting the applicants towards the organizations announced positions. Matta and Sardana (2012) validate the study results that the reduction in time and cost is the advantage of recruiting electronically. du Plessis and Frederick (2012) study also corroborates that e-recruitment speeds up the process which saves the time. Study findings ranked the brand image development as third most enjoyed advantage as it creates a positive organizational image. Gravili (2003) endorses the results that the use of Internet recruitment is effective for the firms in terms of giving competitive advantage and also enhances the company reputation and increases the quality of candidates. The advantage of attracting the more qualified applicants is codified at the fourth because most of the respondents give the remarks that e-recruitment sources attract the quality applicants. Elgin and Clapham (2004) authenticate the results that e-recruitment attracts applicants possessing better qualification. Thus, if the organizations want a wider talent choice in a short time and with a minimum cost the e-recruitment best helps to achieve all these objectives.

- Is there a significance difference of opinion among the male and female recruiters about the e-recruitment outcomes in terms of advantages enjoyed by Small and Medium Enterprises of IT industry?

The study results reveal the answer of the above question that no significant difference is found among the male and female respondents perception that e-recruitment brings quality of applicants, wider applicants' choice, time and cost reduction but for the brand image development a significant difference is found in their opinions.

- Is there a significance difference between the e-recruitment sources and e-recruitment outcomes in terms of advantages enjoyed by Small and Medium Enterprises of IT industry?

The results reveal that there is no significant difference of e-recruitment advantages whatever the e-recruitment source was used by respondents for recruitment. So it is concluded that respondents perceive that whether they use company own website, commercial job sites or the social networking sites they get the same outcome but mostly respondents use the three recruitment sources simultaneously for recruitment.

- What e-recruitment disadvantages are mostly faced by Small and Medium Enterprises of IT industry?

Along with advantages the objective of the study is to probe the disadvantages that come through e-recruitment from the respondents' perspective and the result of the study uncover that most respondents are agreed that the overloading of applicants is the biggest drawback while doing recruitment electronically. The second disadvantage on which respondents are in consensus is the higher number of unqualified applicants and the third is the established brand name requirement for attracting applicants through e-recruitment due to severe competition in labour market. The least disadvantage which is faced by study respondents is the extra time and cost, lack of personal touch, discrimination between applicants, user unfriendly and the applicants data privacy issues subsequently. The result of the study of e-recruiting problems was ratified by Galanaki (2002), Cappelli (2001), Kapse *et al.* (2012), Pin *et al.* (2001), Prasad (2011), and Verhoeven and Williams (2008).

VII. CONCLUSION

The key objective of this study is to contribute in the knowledge specifically about the e-recruitment in the field of human resource management. In order to achieve the study objectives, self-administered survey was conducted in HR department of IT based organizations to gain their perspective about the e-recruitment. The results show that majority of the respondents is male, having the qualification of master degree level and majority of the respondents is on the designation of human resource managers and administrators performing the duties as a recruiter for their organizations. Majority of the respondents is working for the current organization for less than 1 year, majorly retort organizations are working with less than 50 employees, using both traditional and electronic sources for recruitment and involved in recruiting electronically for the last 1-3 years. Majority of the responding organizations is doing recruitment through own websites, commercial job sites and social networking. Only 16 respondent organizations do not prefer

to use traditional recruitment sources for filling the positions of any organizational level while majority of the respondent organizations prefer electronic recruitment for filling all the three top, middle and bottom level positions. Majority of the respondent organizations (23) prefers electronic recruitment for the announcement of positions of marketing and IT department. Gender-wise perceived difference concludes that there is no significant difference revealed about the e-recruitment advantages of quality of applicants, wider applicant's choice and time and cost reduction whereas gender wise significant difference was found for the brand image development of e-recruitment advantage. E-recruitment source wise perceived difference analysis shows that there is no significant difference between the sources and the e-recruitment outcomes. Descriptive assessment of respondents on e-recruitment problems is evident that overloading of applicants is considered as the biggest e-recruitment problem (disadvantage) by a majority of the respondents.

VIII. LIMITATIONS AND RECOMMENDATIONS

In the light of findings of the present study, discussion and conclusion, some recommendations are put for future researchers and professional recruiters.

There is limited academic literature on the area of e-recruitment in any Pakistani industry; therefore, this study has to gather relevant literature from a number of foreign researches. To alleviate this problem for future researches, more studies focusing on other sub-categories of LCCI registered members or large scale organizations may be conducted to expand the available literature and use the results to compare with and validate the present study. The sample of the present study is small and focuses on the one services category of organizations listed in LCCI so it may create generalization issue. Rapid change in technology induces organization to bring continuous improvements in the business processes to make the outcomes more effective.

Future studies may include a follow up study to investigate the electronic human resource management from its other dimensions which includes the operational and transformational aspects. Focus of the present study is only on the relational type of e-HRM on IT companies registered as a member in LCCI. Future researchers may compare industries with one another by including a large sample of organizations involved in the e-recruitment activities. Moreover, the results of the study were gathered at a

special point in time and thus it was necessary to conduct a longitudinal research in order to observe the change that occurred over the time period. Professional recruiters should take some steps and spread the awareness about the available technology and put emphasis how to employ technology in the recruitment functions and get the endless benefits.

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