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Recruitment Methods Used by Software Industry in Pakistan: Issues and Concerns

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Abstract:

The research aims to examine the relationship between the organization size and the recruitment methods used. It also examines the differences in recruitment methods for filling the managerial and non managerial positions and exploring possible reasons for switching between these methods among IT organizations. We found that there is a significant relationship between the organization size and the frequency of recruitment. The smaller organizations tend to recruit more frequently as compared to larger organizations. The results also show that there is significant positive relationship between the size of organization and the choice of methods for recruitment of professionals. Most software houses find it difficult to recruit individuals with adequate professional training, skills and experience. Most professionals in the industry are fresh graduates with a sound theoretical base but with inadequate practical experience and skills. Software houses can help in developing these fresh graduates in more mature professionals by offering extensive internship programs.

Keywords:

Recruitment methods, IT industry Pakistan.

1. Introduction

The IT sector of Pakistan is growing at a very rapid rate since 1990's. IT sector is comprised of small companies where 46% companies have an average of 12 employees or less and only 10% companies employ 200 or more professionals on average (IT HR report, 2006). With a potential growth of 60% in global export sales and 33% in domestic sales, IT revenue is over 1% of GNP (Hussain, 2006). IT sector employs about 110,000 IT professionals and create nearly 38% new jobs each year in the industry (PSEB IT industry review report, 2007). Government took initiative, by setting up Pakistan Software Export Board (PSEB) in 1995, to gear the growth of IT sector to keep pace with the growth of and competition in the regional IT industry. At the moment, all the

initiatives taken in the filed of IT to supplement its growth depend on the availability of IT human resource (IT HR report, 2006) in the job market. And currently, the recruitment, and retention of human resource are some of the important challenges faced by these small companies (Mathis and Jackson, 1991).

Effective recruitment plays a vital role in the organization's success. These strategies, if efficiently and thoughtfully planned and implemented, enable companies to have high-performing employees who contribute in the success of organization positively. On the other hand, poorly recruited employees always remain a misfit in the organization and always hinder its success in achieving its objectives (Heraty and Morley, 1998).

A considerable quantity of literature on recruitment is available to help managers to increase the chances of finding the right person for the job. Most of this advice, however, seems to be aimed at large organizations (Carroll et al., 1999). Recruitment is described as the set of activities and processes used to provide the organization with a sufficient pool of potentially qualified job candidates from which selection can be made to fill vacant positions. Employer's choice of recruitment methods depends on the talent available within and outside the organization, and the anticipated resources that can be expended to attract the talent. Although, all organizations, at one time or another, are engaged in recruitment, some organizations do these activities more frequently (Decenzo and Robbins, 2007). A number of organizational factors are expected to play a role in the effective recruitment. An important factor in this respect is the perceived difficulties of organizations in finding suitable candidates to fill their job vacancies. The greater the perceived difficulties in recruiting suitable candidates, the greater the likelihood that organizations will frequently recruit more employees by making use of active and informal recruitment methods (Henkens et al., 2005). Size is also a factor. Since, smaller organizations recruit more frequently and high turnover also influence the need for future recruiting (Decenzo and Robbins, 2007).

The recruitment literature differentiates between formal and informal recruitment methods. Formal recruitment methods include newspaper advertisements, Job centers, employment and executive search agencies, whereas, informal methods include word of mouth, employer's network and employee referrals (Watson, 1989; Henken et al., 2005). Word-of-mouth methods are advantageous for a number of reasons. Besides the obvious advantages of efficiency and low cost for recruiting, the new recruit is not only a known person for employer but is also likely to have more information about the firm and the job (Watson, 1989).

Organizations HRM practices are directed to support and develop managerial behaviors. As, the role of managers is different from the roles of lower level (non-managerial) employees, it is reasonable to expect that organizations may use different recruitment methods for the two groups of employees (Jackson and Schuler, 1992; Atkinson and Meager, 1994; Heraty and Morley, 1998). Atkinson and Meager (1994) found association between the organizational size and the practice of formal recruitment procedures. Similar findings are reported by Heraty and Morley (1998). Heraty and Morley (1998), using the data on Irish organizations, found that recruitment practices vary between small

and large organizations. Where, larger organizations used internal recruitment more than smaller organizations, newspaper advertisement method is used equally by small and large organizations. Also, they found that smaller organizations used the services of recruitment consultants equally as large organizations for senior management positions but not for lower management positions (Heraty and Morley, 1998).

A number of recent studies have suggested that some recruitment methods preferably influence the quality of new recruits. Employees recruited by word of mouth or through employees' referrals allow small companies to reduce both voluntary and involuntary turnover rates (Kirnan et al., 1989; Farnham and Pimlott, 1995; Heraty and Morley, 1998). Informal recruiting methods have been found to be associated with higher productivity, performance and longer tenure with the organizations (Roper 1988; Simon and Warner 1992; Van Ours and Ridder 1992; Gorter et al., 1996). Terpstra (1996), using a sample of 201 HR executives from US companies, found employee referrals, college recruiting and executive search firms as three top ranked recruitment methods resulting in motivated, multi-skilled and experienced employees. Anderson and Shackleton (1986) argued that the quality of recruitment activities influence the quality of selection decision as well. Employers' recruitment choices, therefore, depend on the position (managerial vs. non managerial); skill type; cost of the recruitment; and time available to recruit (Rees and Schultz, 1970). Organizations can retain their key employees by building long-term strategies (Fisher and Dowling, 1999) through: adopting accurate recruitment and selection procedures; greater investment in training and development; and viewing employees as assets rather than costs (Fruin, 2000).

In both developed and developing countries small firms comprise a significant share of employers; however, small firms are overlooked in the research on recruitment procedures followed (Tanova, 2003; Henkens et al., 2005). Differences are frequently identified in the recruitment methods used by small and large organizations (Carroll et al., 1999; Tanova, 2003). Where, large organizations usually adopt more formal methods of recruitment, small organizations prefer to use informal recruitment methods for being cheaper (Tanova, 2003). Ng and Maki (1993), using a sample of Canadian firms, found that recruitment and job analysis procedures vary between large and small firms. Of external recruitment, small companies used advertising more, whereas, large companies relied more on resumes' on file and walk-ins. Of internal recruitment procedures, 93% large companies used internal recruitment, whereas, half of small companies used this method. Also word of mouth was more frequently used in small companies (Ng and Maki, 1993). Both small and large companies draw their labor force from the same labor market but workforce requirements for small firms are tighter (Golhar and Deshpande, 1997) for their inability to invest more in training. Therefore, these firms prefer to recruit individuals already possessing necessary training and experience (Holliday, 1995).

It is important to know whether recruitment practices of small and large IT companies differ in Pakistan. Ng and Maki (1993) have argued that the recruitment practices of small firms may be different from large ones either because of different workforce requirements or from a lack of understanding of management issues by small business owners. Also, because the employment practices of large firms are under more scrutiny,

large firms are more likely to hire HRM professionals for these specialized jobs (Ng and Maki, 1993). Thus, we expect recruitment practices of small and large IT companies to be different. Also, it is important to know if organizations are satisfied with the quality of recruitment methods used by them to create a pool of potential applicants. An important problem faced by small companies is their inability to attract quality employees (Tanova, 2003). The majority of firms surveyed by Scott et al. (1989) in Carroll et al. (1999) were not satisfied by the results of the recruitment methods used by them. The companies using formal methods were even less satisfied with recruitment procedures than those using informal methods. The authors (Scott et al., 1989) suggested that the dissatisfaction was not mainly from the recruitment procedures used by the companies, but stemmed mainly from unrealistic expectations of the quality of recruits available in the local labor market. In summary, this empirical study compares recruitment practices in large and small IT companies. In particular, the following aspects of the issue are examined: (1) sources of recruitment used i.e., single or multi methods; (2) recruitment methods preferred by different sized organizations; (3) recruitment methods used for different position levels and (4) difficulties with existing recruitment practices. Such an investigation will be useful to both practitioners and researchers.

2. Methodology

The study is based on a survey leading to findings and conclusions serving the objectives of the study and consists of implications for recruitment managers as well. The target population consists of IT companies registered with PSEB. The total number of such companies is 350. A list of their location and addresses was obtained from PSEB. A sample of 100 IT companies was taken randomly. The data was collected from the HR/Personnel managers or persons responsible for recruitment activities for the organizations as whole. Questionnaire was used as an instrument to collect information in a precise and efficient manner. Main variables for which the data was collected were the size of organization (i.e, number of employees), job types (permanent or contractual), frequency of recruitment (how often they recruit), methods used for recruitment at managerial and non-managerial positions, and problems faced by organization in recruitment. Besides the questions pertaining to the objectives of the study, several other questions were included e.g., the name (optional), contact number and designation of the respondent to contact them in the future for further inquiries if needed. Respondents were assured of the confidentiality of the data and the identities of the individual respondents. Questionnaires were sent in soft copy format using emails. Later to keep a constant follow up emails and telephones were used extensively. Correlation matrix was developed to see if size of organization has any relation with the choice of recruitment method. Apart from using questionnaires as mode of collecting data, interviews of 12 IT professionals at the leading positions in their organizations were also held. These interviews proved helpful in taking the feedback on the quality of fresh IT graduates coming in the market and they were also helpful in assessing the potential problems for creating a pool of applicants for job openings. The total response rate was 64% in all.

3. Analysis

The success of a recruitment process within an organization depends on the strategies adopted to identify and select the best candidates for new or vacant job positions. The analysis was undertaken with respect to the specific objectives of the study and the focus remained on the identification of recruitment methods used and potential problems faced in recruitment by these companies. Our analysis of questionnaires revealed that 25 (39%) questionnaires were filled by respective HR managers in the organizations, 8 (12.5 %) were replied by CEO's and 31 (48.5%) questionnaires were replied by other designations including business development managers, chief technical officers, business relations managers and technical consultants etc. Of the respondents 16 (25%) were females and 48 (75%) were male (Table 1). Of the HR managers 56% were females and 44% were male. 12.5% of the organizations participated in the study were categorized small in size (1_20 employees), 50% were medium sized (between 21 _ 99 employees), and 37.5% were considered large (100 or more employees). The definition of small, medium and large IT companies is consistent with the definitions provided by PSEB.

Research findings have revealed that organization use more than one method to recruit potential employees on the vacant job positions. Here we found that almost all the organizations were using Resumes and CV's, Advertisement in the newspapers, internal recruitment and online recruitment methods. 36 (56%) of the organizations used word of mouth method, 38 (59%) use college recruitment, 11 (17%) used the services of employment agencies and another 14 (22%) use job fair with these methods to recruit individuals (table 1).

| | Size of Organization | | | |
	1_20	21_99	100 or more	Total
N	8	32	24	64
Female	0	3	13	16
Male	8	29	11	48
Respondents				
CEOs	8	0	0	8
HR/Personnel Managers	0	2	23	25
Others	0	30	1	31
Recruitment Methods				
Resume and CV	8	32	24	64
Newspaper Ad	8	32	24	64
Word of mouth	8	25	3	36
Online	8	32	24	64
Employment agency	0	0	11	11
Internal recruitment	8	32	24	64
College recruitment	1	13	24	38
Job fair	0	1	13	14
Recruitment Methods for Managers				
Resume and CV	8	32	24	64
Newspaper Ad	8	32	24	64

Word of mouth	0	6	0	6
Online	8	32	24	64
Employment agency	0	0	11	11
Internal recruitment	8	32	24	64
College recruitment	1	3	24	28
Job fair	0	0	0	0
Recruitment Methods for Non-Managers				
Resume and CV	8	32	24	64
Newspaper Ad	8	32	24	64
Word of mouth	8	19	3	30
Online	8	32	24	64
Employment agency	0	0	0	0
Internal recruitment	8	32	24	64
College recruitment	1	13	24	38
Job fair	0	1	13	14
Recruitment difficulties				
Finding people with required training	6	18	9	33
Finding people with necessary experience	5	10	3	18
Shortage of candidates	6	1	2	9
Finding people with minimum qualification	0	4	0	4
Recruitment frequency				
Annually	0	0	5	5
Twice a year	1	3	3	7
Need arise due to new job position	2	16	4	22
Vacancy due to retirement/death/resignation	0	7	11	18
Always constantly	5	6	1	12

Table 1: Descriptive statistics for sample.

Analysis by the size of organization shows that word of mouth recruiting method is most frequently used by the small (100%) and medium sized (79%) organizations. Job fairs and employment agencies are used as recruitment means by large organizations only, whereas, college recruitment is used by both medium and large sized organizations. This pattern is reflected in figure 1 below.

Figure 1: Preference of Recruitment Methods by Organizations.

From Table 1, it is evident that all organizations use CV, advertisement, online and internal recruitment methods for both managerial and non-managerial positions. A comparison of recruitment methods for managers and non-managers is presented in Figure 2. Word of mouth method is used by small and large organizations for recruiting non-managerial staff, whereas, mid sized companies used this method for recruiting managers as well. Large organizations seek the services of employment agencies and that too for recruiting individuals for managerial positions. Mid and large sized organizations also use job fairs for recruiting non-managers, where it doesn't seem a popular method of recruitment among small sized companies.
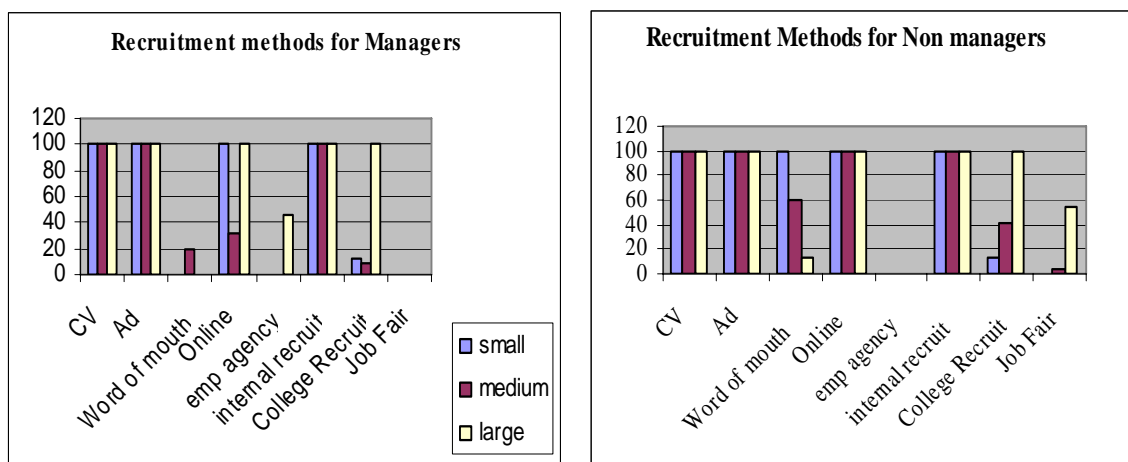

Figure 2: Recruitment methods for Managers and Non managers.

Chi square test was used to find the relationship between organization size and recruitment frequency. The relationship was proved to be significant (Table 2). This shows that larger organizations recruit less frequently than small organizations. This pattern was evident from table 1 as well where most of the small organizations recruit

constantly and large organizations recruit only when a vacancy occurs due to resignation, retirement or death.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.402* (a)	8	.000
Likelihood Ratio	31.134*	8	.000
N of Valid Cases	64		

Table 2: Result of Chi-Square between Organization Size and Recruitment Frequency.

Correlation matrix (table 3) revealed that there exist a significant relationship between the size of organization and the recruitment method used by them to attract qualified IT professionals for vacant positions. The matrix reveled that smaller organizations use more of word of mouth method along with resumes and CV, Newspaper advertisement method, online recruitment method, and internal recruitment method. Whereas, larger organizations make use of employment agencies, college recruitment and job fairs besides traditional recruitment methods comprising resumes and CV, Newspaper advertisement method, online recruitment method, and internal recruitment method. In this matrix the correlation between organization size and recruitment methods including resumes and CV, Newspaper advertisement method, online recruitment method, and internal recruitment, could not be computed as all the organizations irrespective of their sizes are using them.

	Size of Org.	Resume and CV	News paper Ad	word of mouth	Online	Emp. agency	Internal Recruit	College Recruit	Job Fair
Size of Org.	1								
Resume and CV	.(a)	.(a)							
News paper Ad	.(a)	.(a)	.(a)						
word of mouth	.667(**)	.(a)	.(a)	1					
Online recruitment	.(a)	.(a)	.(a)	.(a)	.(a)				
Employment agency	-.517(**)	.(a)	.(a)	-.266(*)	.(a)	1			
Internal Recruit	.(a)	.(a)	.(a)	.(a)	.(a)	.(a)	.(a)		
College Recruit	-.649(**)	.(a)	.(a)	-.281(*)	.(a)	.377(**)	.(a)	1	
Job Fair	-.543(**)	.(a)	.(a)	-.295(*)	.(a)	.661(**)	.(a)	.438(**)	1

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
a Cannot be computed because at least one of the variables is constant.

Table 3: Correlation between Organization size and Recruitment Methods.

Responding to the question to identify problems faced by organization to recruit individuals on vacant job positions 57% indicated that they face problem in finding people with adequate training, 23% indicated that they had difficulty in finding people with necessary skills and experience, 14% faced shortage of candidates and another 6% found it difficult to attract people with minimum qualification. Most of the organizations (33 out of 64), irrespective of their size, faced the problem of finding people with adequate training which appears to be the problem of the industry as a whole. Along with the problem of difficulty of finding people with adequate training, the problem of the shortage of candidates was more with smaller organizations. 10 out of 32 (31%) mid sized organizations find it difficult to recruit people with necessary experience.

Table 1 shows that organizations with smaller size recruit always constantly which reflects that retention is an issue for small IT companies as well. The medium sized organizations recruit mostly when the need arises due to new job positions or when a vacancy arises due to resignation, retirement or death or sometimes constantly. The situation for large organizations is a bit stable as they recruit mostly when a vacancy occurs due to retirement, resignation or death.

Although each year more and more fresh IT graduates are entering the industry, the IT companies are not satisfied with the quality of training of fresh graduates. The interview of personnel at key positions of leading software houses reveal that excess supply of IT graduates is not generating any competition among job seekers. Even the entry level job openings in IT industry are very technical; need special expertise; and are highly demanding and challenging. The applicants, fresh university or college graduates, usually lack technical training and therefore, remain unable to qualify for these jobs. At the middle levels and senior administrative levels, positions are often filled internally or through the executive search firms. The theoretical knowledge base of these graduates is, no doubt, very strong but they lack the skills to apply the acquired knowledge to practical environments. Even if these organizations hire them they have to train them in order to groom them to acquire market standards. After successful completion of on the job training, skilled employees become most attractive human resource for any needing organization that are prepared to offer them a lucrative package to subvert their loyalty to the other institution. Hence, retention of these employees becomes an issue particularly for small organizations. Besides, the training process is so time consuming and expensive that small to mid sized organizations are not willing to invest in it.

4. Conclusion

There is a significant relationship between the organization size and the frequency of recruitment. The smaller organizations tend to recruit more frequently as compared to larger organizations. Hence, retention is an issue for small sized organizations because professionals leave smaller software houses for larger software houses in search of career growth opportunities and for exploring new avenues in their careers.

There also exists a significant positive relationship between the size of organization and the choice of methods for recruitment of professionals. Small organizations due to their budgetary constraints use more traditional methods of recruitment including word of

mouth, Resumes and CVs, Newspaper advertisements, internal recruitment and online recruitment. Whereas, larger organizations opt for employment agencies, college recruitment and job fairs. This way they not only build their image but also have an influence on the decision of individuals to join their organization as an employee. Job fairs and college recruitment provide organizations and individuals an opportunity to interact with each other in a manner that is beneficial for both organization and individuals.

Most software houses find it difficult to recruit individuals with adequate professional training, skills and experience. Most professionals in the industry are fresh graduates with a sound theoretical base but with inadequate practical experience and skills. Software houses can help in developing these fresh graduates in more mature professionals by offering extensive internship programs.

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