

SMEs Portfolio of e-Recruitment: Malaysian Perspective

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Abstract—The purpose of this study is the analysis of the possibilities and difficulties of e-recruitment practices for SMEs in Malaysia, elaborating their effectiveness, and explaining some practical and managerial implications concerning these actions. Statistical analyses and empirical findings expressed here show that the attitudes and opinions of SME executives towards e-recruitment are considered a sub-function of an integrated e-HRM and can be seen as a valued technological improvement in the main critical activities of human resource management. However, findings show that the ability to communicate and deal with a multilingual organizational and working environment is the most important operational benefit of a web-based e-HRM and e-recruiting system. This technology is seen as a pathway to improving external and internal interactions and communication between jobseekers, firms, employees, and other stakeholders, as well as to build data bases to store and recall data. These are the main strategic advantages of a recruitment system for SMEs in Malaysia. The findings of this study also show that e-recruitment in Malaysia is still in-progress work and even the big recruiting firms have not fully implemented this technology.

Index Terms—e-Business, e-HRM, e-Recruitment, SMEs

I. INTRODUCTION

As organizations are meant to be competitive, and to be successful in any competition depends upon available resources, especially human resources, and all global organizations have to hire the best competent and skilled employees in their catchment or resources area. Recruitment is considered a sub-process within the field of human resource management, while selection and staffing are the key processes of human capital development. Mondy and Noe (2008)[20] state that recruitment is the process of identifying and attracting potential employees, whereas selection is the process of making decisions to select these employees though recruitment is considered the critical part of organizational human resource development. E-recruitment is a means of using information technology (IT) to perform, speed up or improves this process (Tong and Sivanand, 2005).[36] E-recruitment also falls under e-HRM which is an organization's e-business system that uses web-based technologies for human resource management practices and policies (Ruel et al. 2007).[27] E-HRM system and its subsystems, such as e-recruitment, produce a higher level of service delivery and a better strategic contribution. E-recruitment emerges as a handy and advantageous method over traditional methods of recruitment (Tong and Sivanand 2005) [36], as it brings all benefits of an e-business into the

human resource field and improves the efficiencies of the recruitment process.

II. LITERATURE REVIEW

Development of human resources is an important role of any company toward achievement of a competitive position upon rivals (Noe et al 2006). [22] Among the main tasks of human resource management department, recruitment poses more important role because it technically deals with acquiring new human resources and these recourses must be acquired effectively and competitively in a systematic way (Ivancevich and Lee 2002 [13] Anthony et al 2002 [1], Bratton and Jeffrey 2007). [3] Besides, information revolution, technologies and systems have changed the face of business; this information revolution changes the world of business and the conditions of competition (Porter and Miller 1985). [25] Accordingly, companies have begun to utilize information systems and technologies for optimizing human resource activities, this fact can be proven by systems like e-HRM and e-recruitment that are being widely deployed internationally. To comprehend e-recruitment it is necessary to have an overview on e-business and e-HRM.

E-business has been defined as the transformation of key business processes by internet technologies (Huber et al 2007) [11]. E-HR or e-HRM were developed and used when e-commerce and e-business systems were sweeping the business world (Olivas-Lujan et al 2003) [23], therefore E-HRM and E-recruitment are e-business systems. E-HRM is the overlap between information technology and human resource management and is considered as the use of web-based technologies for human resource management practice and policies, this e-business system is maturing within organizational life at a growing speed (Ruel et al. 2007) [27]. Then, E-HRM is a concept dealing with the way of “doing” HRM and performing its function like recruitment and staffing electronically or internet-based and thus e-recruitment falls conceptually and practically under e-HRM (Ruel et al., 2002, 2004) [28, 29].

Olivas-Lujan [23] described e-HRM as “Using information and communication technologies to deliver human resource services” and added that nowadays e-HRM has become an important strategy for firms seeking to achieve a competitive advantage. They add that use of information and communication technologies (ICTs) in human resource management department (HRMD) is becoming an increasingly important phenomenon. Other authors assert that the expectation from digitalized and computerized HRM system is link with more need and focus on developing intellectual capital, social capital, and managing knowledge to improve an organization's competitive advantage (Lengnick-Hall and Moritz, 2003).[16]

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Additionally, the study of Strohmeier (2006) [34] shows that using information technology for modernizing HRM and enhancing HR activities may have different results, such as centralization or decentralization, efficiency and effectiveness. Therefore, the concepts of culture and structure have added to the effectiveness of e-recruitment systems.

Numerous studies argue that technology developments and adaptation, and information systems and technologies have an undeniable potential to generate a more strategic role rather than an administrative ones for the HR department (Cedar, 2004 [5]; Cober et al., 2004 [6]; Jones, 1998 [14]; Kettley and Reilly, 2003 [15]; Lengnick-Hall and Moritz, 2003 [16]; Mercer HR Consulting, 2002 [18]; Strohmeier, 2007 [35]; Watson Wyatt, 2002 [38]; Wright and Dyer, 2000). [40] Lengnick-Hall and Moritz (2003) [16] mention that e-HRM and e-recruitment provide the HR function with the opportunity to create new avenues for contributing to organizational effectiveness through such means as knowledge management and the creation of intellectual and social capital; therefore e-recruitment provides a two-way passage of value between job-seekers and employers.

Furthermore, due to improvements in ICTs e-business systems are more effective and cheaper in contrast to the past (Olivas-Lujan and Florkowski, n.d. cited in Olivas-Lujan et al 2006).[24] These improvements increase the degree and extent of utilizing e-HRM systems internationally not only for large organization but also for SMEs. Information technology improvement has made it possible to automate any sub-function of HR including staffing (recruitment), training and development, compensation, benefits, performance, career and compliance management (Olivas-Lujan, 2003[23]; Guetal and Stone, 2005). [9]

Traditionally recruitment means hiring and selecting staff for filling job vacancies, basically recruitment refers to the process of sourcing, screening, and selecting people for a job at an organization or firm, or for a vacancy in a volunteer-based organization or community group. In human resource management, the concept of recruitment comes with staffing and selection (Gatewood and Field 2001). [8] Traditionally, Mangum (1982)[17] described recruitment as a process of formal and informal tactics performed by job seekers and agencies starting from findings vacancies to hiring and helping new comers to start working in a new environment; but this simple system is no longer valid for today's complex business environment. The existing literature defines recruitment as the activity to identify and attract potential employees with skills, talents and competitive abilities, and defines selection as the process of making decisions about who will or will not join the organization, and defines staffing as the process of acquiring, deploying and retaining a workforce of sufficient quantity and quality to create positive impacts on the organization's effectiveness. (Heneman & Judge, 2009).[10] Thus, e-recruitment, as a general process, is job-specific and offers computer-assisted screening interviews and statistical prediction to aid in reducing recruiting costs, time-to-hire and employee turnover. Then it can be concluded that e-recruitment is a strategic way to increase firm in competitiveness via utilizing computer-mediated techniques

in human resource management, moreover, this competitive weapon is more demand in today's market, uncertainties and changes that necessitate organizational ability to adapt and cope with market dynamism, in addition, e-recruitment has facilitated recruitment decision-making and creation of value for HRM. Development of a recruitment parallel with competitive strategies necessitates an integrated framework consists of IT manager, HR manager and strategy makers (Smith and Rupp 2004). [33]

Different studies have been done in the domain of e-recruitment; Cappelli, (2001) [4] and Feldman and Klaas (2002) [7] studied online-recruiting systems, Mohamed et al. (2001) [19] studied personnel selection and Mooney (2002) [20] discovered the field of online pre-employment testing. The internet has dramatically changed the whole pathway of recruitment process for both job seekers and organizations in employment practices. For example, CVs have sent through the internet and then have scanned for keywords identifying the required knowledge, skills, competencies and experience. This information can then be stored in the information system for immediate or future use. Therefore, it is easy to understand that, online recruitment systems optimized the process of recruitment and selection from the beginning to the end, not only for companies but also for job seekers. This optimization reduces costs and increase HR effectiveness. Smith and Rupp (2004) [33] assert that recruitment offers a wide range of efficiencies for both job seekers and employers and specific abilities of e-recruitment system include variety of features as: (1) the ability to initiate interview requests and order background check, (2) unlimited cost information tracking for all activities associated with hiring procedure, (3) customized e-mail notifications for both active and passive candidates, (4) improved integration of communication activities, (5) dynamic creation of employers' job page and informing job seekers, (6) multiple language support for multilingual and multicultural societies, (7) extensive abilities to personalize skills and experiences, and (8) tailoring job offerings. Apart from these values in case of outsourcing, overall costs can be reduced but competitiveness and efficiency decrease; therefore in the other taking alliance, merger and acquisition into strategic considerations need more capital and technical capabilities. It is argued that this paradigm can also be used by SME's executives in development of their recruiting policies and formulating their human resource strategies, particularly in Malaysia where SMEs suffer from financial problems and technological limitations (Saleh and Ndubsi 2006). [30] In order to clarify this notion in the context of Malaysian SMEs, next section briefly reviews SMEs in Malaysia.

According to world bank report (2007) [39] and Bank Negara (cited in UNDP2007) [37] on Malaysia SMEs can be defined and classified based on their number of employees and annual financial turnover. It is said that SMEs are playing crucial role in economic and industrial development and wealth. It also discussed that the growth and development of Malaysia's SMEs have markedly contributed to employment creation, and through it, poverty reduction and social welfare (SDMIDEC 2002, UNDP 2007). [32, 37]

Over the years, SMEs in Malaysia have evolved to become key suppliers and service providers to large corporations,

inclusive of multinational and transnational corporations. Principally, they have contributed to: (1) expanding output, (2) providing value-added activities in the manufacturing sector, (3) creating employment opportunities especially in the services sector, and (4) contributing to broadening Malaysia's export base ((UNDP 2007, Saleh and Ndubisi 2006). [37, 30]

In the contest of Malaysian SMEs, many studies over past years have shown that, Malaysian SMEs have been severely suffering from competitive challenges, because they do not have proper human resources, managerial skills, financial abilities and technology utilization(UNDP 2006; SMIDEC 2000,2001 and 20007). [37, 32] Some researchers studied these weaknesses and asserted that globalization, competition from big firms and also competitive products and services offered by other SMEs form neighbouring counties like Singapore and China, also are adding fuel to this flame (Saleh and Ndubisi2006). [30] Therefore, Malaysian SMEs strategically are facing below competitive challenges as (1) intensified global competition, (2) competition from other producers, (3) limited capability to meet the challenges of market liberalization and globalization, (4) limited capacity for technology management and knowledge acquisition, (5) low productivity and quality output, (6) a shortage of skills for the new business environment, (7) limited access to finance and capital, (8) the high cost of infrastructure, (9) a general lack of knowledge and information, (10) lack of managerial skills and talented employees, (11) inability to develop superior human capital (APEC 1994, SMIDEC 2001, 202, 2007, Saleh and Ndubisi 2006). [2, 32, 30]

Literature review and theoretical findings show that, e-recruitment can strategically assist SMEs to deal with these competitive challenges and develop some competitive advantages. Literature shows that, SMEs face a paradox in implementing e-business systems like e-recruitment. This paradox comes from this issue that, SMEs are normally more adaptable to change therefore, e-business systems particularly related to HRM can implemented faster and utilized more effectively, but in the other hand, these systems consume more capital.

No one doubts that, one of the most crucial and critical role of HR department is to recruit appropriate persons to fulfil organizational objectives according to plans and programs varying over different durations of organization's performance. In line with the penetration of information technologies into all most all dimensions of organizational activities, recruitment itself also can be plan and organize through computerize systems. Recruitment is a complex task brings many responsibilities, commitments and risks. The main objective of recruitment practice is to hire suitable person to fill vacancy and performs better than others before.

All organizations scaling from small to large, performing in service sector or manufacturing have to devote considerable time, effort and capital to their recruitment policies in order to optimize them.

In accordance with this fact, recently many organizations have planned to execute recruiting practices through websites either internally or externally. This newly trend is calling "electronic recruitment" or e-recruitment. E-recruitment needs advanced internet infrastructure and acceptable

internet penetration for the people outside of the entity, in order to prove an equal opportunity for everyone to apply and access vacancies. From another side, to develop and utilize computer-base systems to perform recruitment practices means to have different policies strategies, not only at the HR level but also across all organizational level.

In this regard, SMEs as an important element of nation economic development, requires some modifies policies and attitudes toward e-recruitment. In the other hand, Malaysia's government has been involving in developing new grounds for SME's growth by allocating huge amount of capital to SMEs, and developing some specialized centre for SME's development national wide. Launching of www.jobstreet.com and imposing many rules and regulations to cope with market and industry's workforce needs, prove these movements. Therefore, we can say that, implementation of e-recruitment practices and analysis of these policies in Malaysia, while putting the focus and emphasis on SMEs development and growth is a worthwhile field of study. Based on justifications, this research specialized in human resource management follows these objectives:

- 1) To analyze the possibilities and difficulties of e-recruitment practices for SMEs in Malaysia;
- 2) To elaborate the effectiveness of e-recruitment practices for SMEs in Malaysia; and
- 3) To explain some practical and managerial implications about e-recruitment policies in Malaysia.

III. CONCEPTUAL MODEL AND RESEARCH HYPOTHESES

After reviewing literature on e-business, HRM and e-RHM, researcher developed a conceptual framework entailing all-important notes that should be taken into account, when analyzing the significance and effectiveness of an e-recruitment system particularly for small and medium enterprises. According to this framework, e-recruitment as an activity belonging to e-HRM falls under e-business domain. Knowledge management, the rising wave of intellectual capital and the need for knowledge workers are all intertwined with information technologies and systems; therefore, because of these trends companies are increasingly paying attention to e-business strategies and developments.

Understanding the relationship with these elements and challenges will definitely assist executives and practitioners to impose and execute e-recruitment policies more effectively and competitively. According to these, finding from literature review a conceptual model can be graphed as figure 1.

In this paper a set of hypotheses were developed to cover the concept of e-recruitment from an e-business and human resource management view. These hypotheses are as following:

- 1) Hypotheses one, e-recruitment as an e-business system helps enterprise to reduce costs of traditional recruiting
- 2) Hypotheses two, e-recruitment is a more effective way to develop competitive human capital
- 3) Hypotheses three, SME's executives in Malaysia are aware of the strategic importance of knowledge-workers for their performance

- 4) Hypotheses four, e-recruitment system improves enterprise operational effectiveness
- 5) Hypotheses five, e-recruitment system improves enterprise knowledge management
- 6) Hypotheses six, e-recruitment system enables enterprises to develop intellectual capital more effectively
- 7) Hypotheses seven, e-recruitment system assists SME executives to deal with challenge in human resource management regarding skills of job-seekers
- 8) Hypotheses eight, Malaysian SMEs do not have enough capacity and ability to adapt e-business systems like e-HRM
- 9) Hypotheses nine, Malaysian SME executives prefer to outsource their e-recruitment to e-recruiters because of financial and technical constraints.

study of a close-ended type and includes 17 questions. Some responses are based on five value Likert scale to indicate attitudinal aspects of SME executives toward e-recruitment systems, and the remaining are simple multiple choice questions which have been organized into a seven page questionnaire. The responses of the sampled SME executives were evaluated using SPSS software and a set of variables were identified and evaluated to form a statistical picture of the responses to the questionnaire. For data collection method, In order to minimize the costs of data collection and also to cope with time constrains (Sekaran, 2006) [31] it was decided to use an e-mail approach, as this seemed an effective, quick, and easy way to access SME executives. The sampling method in choosing the participants for this study was a simple random sample. In addition, in this study, a sample of 60 SMEs was selected across the three economic sectors examined agriculture, service and manufacturing.

TABLE 1: SYNOPSIS OF HYPOTHESIS TESTING

Hypothesis	Description	Status	Technique
H1	e-recruitment system as a way to reduce costs of traditional recruitment	accepted	Count-procedure Frequency analysis Non-parametric chi-square
H2	e-recruitment system as an e-business system is an effective way to develop superior and competitive human capital	rejected	Count-procedure Frequency analysis Non-parametric chi-square
H3	Malaysian SMEs executives are aware of the importance and criticality of knowledge-workers	accepted	Count-procedure Frequency analysis Non-parametric chi-square
H4	e-recruitment system improves operational effectiveness of human resource management system in a SME	rejected	Count-procedure Frequency analysis Non-parametric chi-square
H5	SME's need knowledge workers and today's competition is based on managing knowledge resources	rejected	Count-procedure Frequency analysis Non-parametric chi-square
H6	links enterprise's e-recruitment system to creation of intellectual capital as a source of competitive advantage for Malaysian SMEs	Rejected not clearly	Count-procedure Frequency analysis Non-parametric chi-square
H7	e-recruitment system helps human resource managers to deal with skills of job-seekers more effectively	rejected	Count-procedure Frequency analysis Non-parametric chi-square
H8	lack of supportive infrastructure for e-business systems like e-recruitment	accepted	Frequency analysis Non-parametric chi-square
H9	outsourcing e-recruitment	accepted not strongly	Frequency analysis Non-parametric chi-square

IV. RESEARCH METHOD

To test these hypotheses, an empirical study was carried out, using a questionnaire. The questionnaire used for this

V. RESULTS AND DISCUSSION

In this section, the findings of this study will be discussed. The following table shows the results of study nine research hypotheses.

Statistical results of this study show that in Malaysian SMEs recruitment policies are made mainly by top management (entrepreneur, CEO or owner). It also has shown that manufacturing systems, quality control and automation are main domains of SMEs operations to be equipped with an e-business system, but HRM and recruitment are in near future planning. In Malaysian SME E-HRM is mainly intended to speed up traditional human resource management and e-recruitment is considered as a system to enable SMEs to deal with multi-cultural and multi-lingual working contexts and that improves communication and interaction with employees and job seekers. Executives of Malaysian SMEs believe that e-recruitment can lead them to a new competitive position mainly in Malaysia labor market due to the importance of knowledge workers and resource-based competition. Statistical and empirical findings of the study also shows that Malaysian labor market faces complexities and difficulties in matching skills with job requirements, and e-recruitment systems alone seem to not be able to overcome these challenges and therefore more advance systems, and managerial approaches are required. Also it was seen that for Malaysian SMEs, outsourcing can be a reliable option to take advantages of e-recruitment in presence of financial and technological restrictions. The statistical analysis and empirical findings of this study show that, the overall attitudes and opinions of SME executives towards e-recruitment as a sub-function of an integrated e-HRM can speed up the main critical activities of human resource management as the main trigger for utilizing and adopting an e-HRM system and for e-recruitment. However, findings show that the ability to communicate and manage a multilingual organizational and working environment is the most important operational benefit of a web-based computerized e-HRM and e-recruiting system. This leads to improving external and internal interactions and communications between jobseekers, firms, employees and

other stakeholders as well as the ability to use data bases to store and retrieve data. These are the main strategic advantages of a recruitment system for SMEs in Malaysia. The findings of this study also show that e-recruitment in Malaysia is still progressing and even big firms are not using such systems for their HRM procedures. More attention needs to be committed by executives, academicians, and practitioners to e-recruitment as an effective e-business system for all firms. Since e-recruitment and an integrated e-HRM system requires financial and technological resources for SMEs and SMEs normally generally lack these resources, outsourcing to some specialized firms such as jobstreet.com and jobsdb.com are valuable options.

VI. LIMITATIONS

The process of this study can be restricted both from theoretical and practical sides. From theoretical side, the lack of study in e-recruitment and human resource management, in the field of SMEs hinders the stage of gathering secondary data and literature analysis. Few studies have been conducted in the development and implementation of e-recruitment polices and strategies for small and medium size enterprises internationally. From e-business side also e-recruitment has not scrutinized enough from scholars and practitioners.

From practical side, poor communication facilities of SMEs, responsiveness of SMEs’ executives during interview and participation in surveys have resulted in many difficulties in gathering and interpreting primary data. Weak English

proficiency of SMEs’ staffs and executives, improper documentation and also underdeveloped information technologies like emailing system, all together extended the scheduled time of collecting primary data, and also in some cases resulted in insufficient data. Time and cost are two inseparable factors limiting every study. Time of gathering data and analyzing data as well as cost incurred during this study also will add limitations to this study.

VII. SUGGESTIONS FOR FUTURE STUDIES

Findings of this study draw attention towards some directions for further studies to be adventured by other researchers in this field. As Malaysia literature lacks studies based on behavior of users towards e-systems using technology acceptance model, researchers are recommended to study and investigate behavior of job-seekers towards e-recruitment websites from TAM perspective. Also researchers can focus on investigating the role of e-recruitment in different industrial sectors by conducting cross-sectional studies across different industries form manufacturing and service sector. In addition, investigators can work on performing transnational studies amongst SMEs from ASEAN countries and international e-recruiters to enable executives to understand and analyze the role of international labor movements and also international competition of firms based on labor makers across a broader geographical scope.

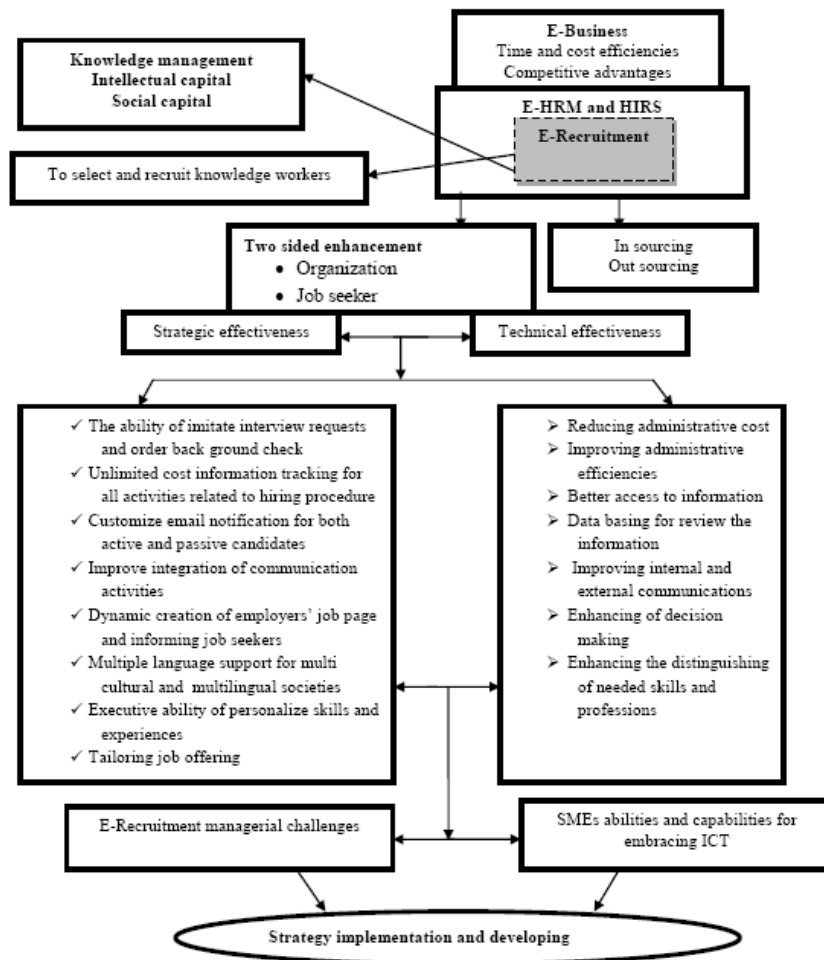


Fig. 1. Conceptual Model

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