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E-recruitment and its effect on firm performance: the mediating role of HRM capabilities in the context of Saudi Arabia

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Abstract

Researchers and practitioners regard e-recruitment as a competitive tool. However, current knowledge on e-recruitment mechanisms that affect firm performance remains unclear. Based on the dynamic capability's perspective and the view of a hierarchy of capabilities, this article proposes a model to examine how e-recruitment affects firm performance through HRM capabilities in the Saudi Arabia context. SEM was used to analyse the data collected from 860 respondents. Survey data show that HRM capabilities fully mediate the influences of e-recruitment on firm performance. In addition to the direct effects, e-recruitment also has indirect effects on firm performance. The paper concludes with implications and suggestions for future research.

Keywords: E-recruitment; HRM capabilities; Firm performance, SEM, Saudi Arabia Received; 18 Feb. 2019, Revised form; 20 Mar. 2019, Accepted; 20 Mar. 2019, Available online 1 April 2019

1. Introduction:

The rapid development of modern information and communication technologies in the past few years and their introduction into people's daily lives has greatly increased the amount of information available at all levels of their social environment [1]. People have been steadily turning to the web to improve their knowledge and skills [2], as well as for career development. What is more, job seekers are increasingly using Web 2.0 services like LinkedIn and job search sites [3]. On the other hand, a lot of companies use online knowledge management systems to hire employees, exploiting the advantages of the World Wide Web. These are termed e-recruitment systems and automate the process of publishing positions and receiving CVs. The online recruitment problem is two sided: it can be seeker oriented or company oriented. In the first case the e-recruitment system recommends to the candidate a list of job positions that better fit his profile. In the second case recruiters publish the specifications of available job positions and the candidates can apply.

The increased role of Internet and the number of individuals using it has developed new markets and in line with this, businesses have moved to the online environment [4]. In accordance with this, Internet has brought radical changes in the recruitment industry where individuals are increasingly turning to the Internet when seeking jobs. At the same time, companies use commercial recruiting websites seeking for qualified applicants to conduct their recruiting procedure online [5]. This phenomenon is called e-recruitment, which is defined as a hiring process that employs a diversity of electronic tools and technologies with the main aim of recognising, attracting, and choosing potential employees [6]. The increased use of e-recruitment is partly because it is considered to be the most effective way to reach the target group of applicants, and partly because of the cost savings and competitive pressure in the market [10]. Firms that manage to recruit the most qualified individuals have higher potential to get a better position in the market [10]. Accordingly, research shows that erecruitment websites can play a crucial role in determining if companies attract qualified applicants (Allen et al., 2007). In line with the advance of the technology within the erecruitment business, new features and modern systems has been created to achieve strategic advantage within the market [6].

Although organisations and HR professionals have been increasingly using technologies as a part of their recruitment strategy, such use is not well understood by academic researchers. Several scholars have highlighted a large asymmetry between organisational practice and scholarly research on the use of technologies [e.g. 7, 8, 9]. A review of literature shows only a handful of studies examining different aspects of organisations' use of technologies. This has predominantly centred on: the applicants' reactions towards the use of technologies [11].

In view of the positive inclination towards the adoption of technologies among organisations, it is expected that rigorous research be conducted to examine the process of adoption e-recruitment, particularly from an organisational perspective. As [12] noted, the organisational adoption of e-recruitment is an important topic that needs to be empirically investigated since these technologies can be a 'game changer' for the future success of the organisation in employing and retaining quality hires. Understanding the process of adoption becomes more important in the context of Saudi Arabia given the existing gap in technologies' penetration rates between Saudi Arabia companies and those in other developed countries, such as United States and Eurozone. In 2012, LinkedIn reported that 3 only 20 cent of the top ASX200 companies were using recruiting solutions offered by this company, whereas the same report

showed more than 98 cent of adoption rate for the US firms listed in Fortune500. Similarly, a study of corporate LinkedIn practices amongst Eurozone firms revealed that that more than 79 per cent of 306 companies listed in the STOXX Europe 6002 were using LinkedIn as a recruiting tool [13]. The adoption rate of e-recruitment is even less encouraging when it comes to Saudi Arabia Enterprises.

Clearly, Saudi Arabia organisations are lagging behind their American and European counterparts in adopting erecruitment for reasons that are so far unknown. Thus, the primary purpose of this study is to provide a solid theoretical foundation to better understand how organisations make the decision to adopt e-recruitment. More specifically, a theoretical model outlining key determinants of the organisational decision to adopt erecruitment will be developed and empirically validated. Second, the research in the area of e-recruitment outcomes remains very limited and largely pertinent to their post-hire outcomes, such as future job performance [e.g., 14], employee commitment or turnover intentions [15], and Person-Job/Organisation fit [16]. Despite that numerous non-academic sources have reported on several possible benefits of using e-recruitment (such as timeliness, quality of hire, and cost efficiency), the empirical evidence on the relevance of these technologies in terms of their outcomes is almost non-existent. The outcomes of the recruitment process are considered as a primary interest to organisations when deciding on the recruitment channel to be adopted [17]. Therefore, it is the aim of the current research to fill up this gap in order to inform organisational decision makers about the implications of using e-recruitment and its effect on firm performance.

Our study is organized as follows: the next section represents literature pertaining to the study variables and theories as well as the hypotheses development. Then we demonstrate our data collection and measures operationalization. Finally, study results, discussion, and managerial implications have been explained as well as demonstrating the limitations and future research.

2. Background:

2.1. Resource Based Theory (RBT)

The RBT traces its intellectual roots to [18], who focused on the role of resources in enabling or constraining organizational growth. She defined resources as "the physical things a firm buy, leases, or produces for its own use, and the people hired on terms that make them effectively part of the firm" ([18]. Over more than 50 years, researchers have built on Penrose's insights, and as the RBT evolved, researchers have focused more specifically on "strategic resources" [19]. Strategic resources are those resources that (1) have value, such that they can be leveraged to increase customer value or cut costs; (2) are rare, such that competitors do not have access to the same or a very similar resource to compete away the value; and (3) are difficult to substitute and/or imitate, which allows the organization to stay ahead of competitors [20]. The central assertion within the RBT is that organizational advantages are enhanced to the extent that an organization possesses strategic resources [20], and a recent metaanalysis of the available empirical evidence supports this assertion [21].

The RBV developed initially in the field of strategic management. Though there is considerable overlap between strategic management and entrepreneurship, the underlying domains are distinctive. A consensus definition of strategic management developed by [22] states that "strategic management deals with the major intended and emergent initiatives taken by general managers on behalf of owners, involving utilization of resources to enhance the performance of firms in their external environment." Thus, though strategic management deals with people, acting independently, or as part of a corporate system, who create new organizations, or instigate renewal within an existing firm [23].

The RBT is characterized by tracing the potential to create and appropriate more value than the competition to the resource endowments of firms, and the characteristics of these resources. The crowning achievement of the high church RBT has been the formulation of criteria that must be jointly met for resources to give rise to sustained competitive advantage [20,23]. The seminal contribution in this regard is Jay B. [20] article, "Firm resources and sustained competitive advantage", one of the most influential strategic management texts ever. [20] explains that a firm is said to have a competitive advantage when it implementing a value creating strategy is not simultaneously being implemented by any current or potential competitors. A firm is said to have a sustained competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy.

Early work on resource-based theory (RBT) acknowledged that entrepreneurship is an intricate part of the resource-based framework [23, 21]. However, while RBT has become a dominant paradigm for strategic management research [24], the interface between RBT and entrepreneurship has amounted to little more than providing a "research setting" for empirical work (e.g., Chandler & Hanks, 1994). Because of the lack of consideration given to entrepreneurship by most resource-based research, current RBT largely fails to integrate creativity and the entrepreneurial act [20].

2.2. Firm Performance

Empirical SHRM research examining the HRM-firm performance relationship is divided into two perspectives: a macro focus on the overall or standard set of HRM practices and firm performance [25] a strategic perspective on HRM that emphasises the particular 'fit' between various HRM practices and a firm's competitive advantage. The former view is related to a system view of HRM and considers the overall configuration or aggregation of HRM practices and policies rather than investigating the effects of individual HRM practices on employee or firm performance [26]. The latter view emphasises the alignment of various HRM practices towards their strategic goal and stresses that HR practices must complement one another if the firm's business strategy is to be achieved [27]. Such HRM-firm performance research has mainly applied two different approaches of SHRM: the universalistic or bestpractices approach and the contingency approach. Both perspectives stress that HR can provide a sustainable competitive advantage for firms. The best-practice perspective, which dominated the early HRM research in the late 1990s, emphasises the additive and positive impact of different best practices: the more such policies and practices are used, the better the business performance. In other words, regardless of context, the organisational performance is said to be enhanced when firms adopt bestpractice. Recently the work of [28], Appelbaum et al. known as the Ability, Motivation and Opportunity (AMO) model. Integrated, complementary HPWS are designed not only to improve the knowledge, skills and abilities (KSAs) of employees, but also to encourage and motivate them to invest additional, discretionary, time and effort.

Generally, KSAs are advanced through practices such as training and personal development, job design and compensation (i.e. ability-enhancing practices); while practices associated with incentive payment, performancerelated reward, flexible work schedules, participation programs, information sharing and discretion and authority on the job are deployed to aid motivation (i.e. motivationenhancing and opportunity to participate practices) [31]. In addition to this, HRM practices may also affect organisational performance by increasing flexibility and efficiency through their impact on firms' internal social structure [29]. However, this universalistic approach has been constantly debated and criticised. First, there is very little consensus about the structure of HRM systems and the practices therein. Second, HRM strategy can be potentially imitated by rival organisations. Third, it may restrict organisational creativity and innovation, as well as the ability to develop new practice corresponding to organisational culture. Fourth, this approach rarely considers the interaction between HRM and organisational variables.

3. Research Model and Hypotheses

HRM's capability and its ability to provide a competitive advantage to the organisation are possible when HR performs its strategic role through involvement at a strategic level within the organisation [32]. It clarifies the impression that HR gives policy direction to the organisation to effectively utilise its human resources ability to achieve organisational goals. Furthermore, to make the HR presence at a strategic level indispensable, HR system focus should be customer-oriented, cost-efficient, innovative, and flexible to identify priorities and adapt to the organisation's need [33].

The previous studies show that a successful e-recruitment model has multiple success indicators, which are understood as e-recruitment productivity, e-recruitment quality and e-recruitment appropriation [34, 35]. In addition, e-recruitment determinants consist of two components, defined as strengths of the e-recruitment system and management support concerning e-recruitment implementation. In turn, the components consist of several factors. Because of the lack of available explicit knowledge regarding e-recruitment implementation, the desire exists to explore this phenomenon. This was done by exploring this phenomenon at KLM using the research framework [36].

The intense competition arising from globalization demands innovation, speed, adaptability, and low cost. It has also brought about the need to manage HR strategically so that they become a source of competitive advantage. The traditional the effects of culture and HRM practices 563 downloaded by EKB Data Center at 14:13 13 August 2016 (PT) sources of competitive advantage such as patents and economies of scale [37] are no longer the assets that differentiate the firm. Instead people management practices are the drivers [38], core competencies [39], and capabilities [40] that help to develop new products, provide world-class customer service, and implement appropriate organizational strategy.

A chief executive officer (CEO) of a big company in Asia, tapping the many new opportunities in the growth corridor of the Asia-Pacific region, or even the world, noted that it is the human matrix that determines the success of ventures. Further, one needs to bear in mind that people, not the firm, are the adaptive mechanisms in determining how the firm will respond to the competitive environment [41]. As such, recent decades have seen the HR becoming a unique and differentiating asset and playing an increasingly important role in organizations. For example, in a majority of the Fortune 500 companies, the head of the HRM is an officer (usually a vice-president) who answers directly to the CEO. In many companies, the head of HRM sits on the board of directors, or the planning committee or both. A 1992 survey of the top HR executives in 151 Fortune 500 companies found that a majority of the top HR executives have significant input in corporate decision-making. Seventy-one per cent of the same executives reported that their current HR functions were more involved in implementing business strategies than in past years. Several recent large samples, cross-industry studies have reported that firms using innovative HR practices financially outperform firms that do not use such practices. One study found that HR strategy drives 15 per cent of profit performance for the average company [42]. As a direct result of increasingly available computing power, numerous strategies can be used to help the HR department contribute to the bottom line. The basic idea behind these strategies is to translate knowledge of HR into terms that have tangible and recognizable economic benefits, especially to the operating managers.

In order to gather details about the implementation of erecruitment impacts on firm performance, in-depth study was necessary. This was done by investigating this phenomenon in its real-life context. This provides a rich understanding regarding the context of the research and its process [43]. Investigation was carried out based on the opinions and meanings of firm performance [34, 35, 30] Base on the previous arguments, the research proposed the following hypotheses:

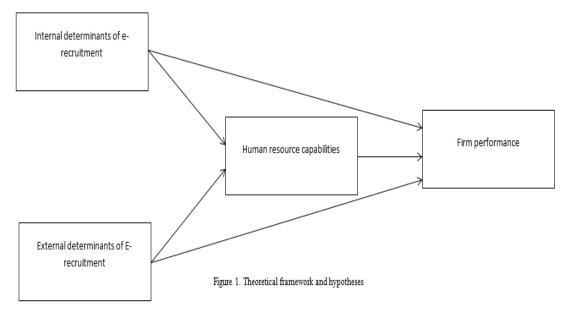
Hypothesis 1. Internal determinants of e-commerce have a positive impact on human resources capabilities.

Hypothesis 2. Internal determinants of e-commerce have a positive impact on firm performance.

Hypothesis 3. External determinants of e-commerce have a positive impact on human resources capabilities.

Hypothesis 5. Human resources capabilities have a positive impact on firm performance.

Hypothesis 4. External determinants of e-commerce have a positive impact on firm performance.



4. Methodology:

A positivist research philosophy was utilized with a quantitative approach to validate the proposed framework, and quantitative data were collected using survey questionnaires to address different levels of the study. The target population of the current study comprises all employees and managers in SMEs in Saudi Arabia. The sample was drawn randomly from the national registry of enterprises in Sadia Arabia and consisted of 860 firms to whom specific surveys were addressed.

Almost half of the firms (46%) operated in the service sector, and the percentage of firms involved in production or informational and intellectual activities was distributed equally (27%). On average, the demand growth for products/services in a firm's main industry was 13.5%. The average performance growth rate was 28.74 %. Finnish firms represented 61% of the sample.

5. Results

5.1. Model Assessment

The evaluation of a conceptual framework using PLS analysis contains two steps. The first step includes the evaluation of the measurement (outer) model. The second step involves the evaluation of the structural (inner). Measurement Model Tests of normality were conducted to satisfy the criterion of multivariate normality, namely, skewness, kurtosis, and Mahalanobis distance statistics [44], for all the constructs. These indicated no departure from normality. The Cronbach's alpha reliability coefficient was calculated in order to assess the psychometric properties of the constructs [45].

The first step in evaluating a research model is to present the measurement model results to examine the indicators of internal consistency reliability, convergent validity, and discriminant validity [46]. As shown in Table 4, Cronbach's alpha for all measures exceeds the recommended threshold value of 0.70 [46]. Therefore, all measures are robust in terms of their reliability. [47] pointed out that composite reliability is more suitable for PLS-SEM. In our study, the composite reliabilities range from 0.84 to 0.98, which are above the 0.70 cut-off point [44]. Finally, all indicator loadings exceed the recommended threshold value of 0.60 [47].

To assess convergent validity, according to [48], AVE was calculated for each construct in our proposed model (see Table 4). Since all constructs' AVE are above the 0.50 cut-off. the results support convergent validity. Discriminant validity is considered in two steps. First, the [48] criterion is used to test whether the square root of a construct's AVE is higher than the correlations between it and any other construct within the model. As shown in Table 5, each construct shares more variance with its own block of indicators than with another latent variable. Second, the factor loading of an item on its associated construct should be greater than the loading of another nonconstruct item on that construct. The results, presented in Table 6, indicate that all indicators loaded on their own construct more highly than on any other, supporting that the constructs are distinct.

In order to assess potential nonresponse bias, following the method proposed by [49], we tested whether there were significant differences among the early and late respondents. A total of 550 respondents completed the survey during the early stage and 438 completed the survey during the late stage. The chi-square test did not reveal any significant differences between early and late respondents at the 5% significance level. Therefore, the possibility of nonresponse bias was excluded. A principal component's factor analysis was conducted, and the results excluded the potential threat of common methods bias. The first (largest) factor accounted for 36.42% (the variances explained ranges from 18.05% to 36.42%), and no general factor accounted for more than 50% of variance, indicating that common method bias may not be a serious problem in the data set. In addition, following the method proposed by [50], the results indicate that the substantive variance of indicators is 0.7, the average method–based variance is 0.006, and all the method factor loadings are not significant.

Therefore, we may contend that common method bias may not be a serious problem in the data set. Multicollinearity tests were performed because of the relatively high correlations among some of the constructs. All constructs had variance inflation factor (VIF) values less than 2.1, which is within the cut-off level of 3.0 [46]. Structural Model Assessment Since the measurement model evaluation provided evidence of reliability and validity, the structural model was examined to evaluate the hypothesized relationships among the constructs in the research model [46]. According to [47] recommendations, the structural model proposed in the current study was evaluated with several measures (see Table 1 and 2).

The model explains 78% of variance for HRM capabilities and 69% of variance for firm performance. To test hypotheses, the structural equation model was tested. The global fit indicators were acceptable, APC = 0.182 (P < 0.001), ARS = 0.784 (P < 0.001), AARS = 0.719 (P < 0.001), AVIF = 2.629, and GOF = 0.708.

Table (1): Discriminant Validity of the Constructs

Correlations and	l Square Roots of A	AVEs				
Construct	TQ	SQ	SA	EMP	HRM	PER
TQ	(0.816)					
SQ	0.487	(0.820)				
SA	0.242	0.346	(0.720)			
EMP	0.505	0.531	0.558	(0.805)		
HRM	0.435	0.527	0.464	0.500	(0.810)	
PER	0.449	0.494	0.420	0.691	0.598	(0.784)
Construct Coeff	icient					
AVE	0.610	0.715	0.647	0.549	0.608	0.620
VIFs	1.454	1.635	1.449	1.480	2.038	1.794
CA	0.895	0.912	0.917	0.899	0.898	0.891
CR	0.765	0.854	0.819	0.832	0.848	0.846

Table ((2)	Loadings a	and	Cross-I	oadings	of N	Measurement Items
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Items	TQ	SQ	SA	EMP	HM	PER	P Value
TQ1	(0.794)	0.321	0.304	0.103	0.318	0.029	< 0.001
TQ2	(0.836)	0.409	0.602	0.411	0.347	0.384	< 0.001
TQ3	(0.892)	0.031	0.429	0.303	0.198	0.473	< 0.001
TQ4	(0.833)	0.311	0.133	0.092	0.429	0.372	< 0.001
SQ1	0.309	(0.833)	0.221	0.403	0.281	0.182	< 0.001
SQ2	0.235	(0.890)	0.320	0.229	0.491	0.491	< 0.001
SQ3	0.264	(0.884)	0.119	0.323	0.118	0.218	< 0.001
SQ4	0.123	(0.906)	0.221	0.103	0.382	0.291	< 0.001
SQ5	0.088	(0.832)	0.201	0.263	0.384	0.028	< 0.001
SA1	0.223	0.421	(0.831)	0.231	0.172	0.481	< 0.001
SA2	0.187	0.239	(0.901)	0.099	0.431	0.102	< 0.001
SA3	0.304	0.027	(0.901)	0.212	0.329	0.028	< 0.001
SA4	0.045	0.333	(0.893)	0.521	0.129	0.002	< 0.001
EMP1	0.121	0.480	0.303	(0.898)	0.382	0.347	< 0.001
EMP2	0.132	0.210	0.013	(0.803)	0.557	0.127	< 0.001
EMP3	0.231	0.494	0.211	(0.778)	0.349	0.487	< 0.001
EMP4	0.409	0.402	0.354	(0.811)	0.175	0.321	< 0.001
HRM1	0.043	0.221	0.245	0.532	(0.874)	0.472	< 0.001
HRM2	0.328	0.290	0.328	0.039	(0.904)	0.227	< 0.001
HRM3	0.128	0.022	0.128	0.232	(0.796)	0.102	< 0.001
HRM4	0.238	0.492	0.003	0.428	(0.788)	0.348	< 0.001
PER1	0.190	0.478	0.473	0.239	0.378	(0.859)	< 0.001
PER2	0.027	0.297	0.282	0.003	0.039	(0.863)	< 0.001
PER3	0.328	0.281	0.047	0.239	0.239	(0.870)	< 0.001
PER4	0.199	0.418	0.238	0.118	0.473	(0.871)	< 0.001
PER5	0.028	0.239	0.344	0.472	0.217	(0.932)	< 0.001
PER6	0.172	0.328	0.349	0.029	0.119	(0.869)	< 0.001
PER7	0.418	0.021	0.032	0.182	0.092	(0.856)	< 0.001

NOTE: TQ = Technology Quality; SQ = Service Quality; SA = Security Assurance; EMP = Empowered manager and members team; HRM = HRM and IT collaboration in e-recruitment; PER = Firm Performance.6. Discussion:

The use of electronic recruitment, also called erecruitment is rapidly becoming one of the fastest-growing recruitment techniques. Despite the apparently widespread use of e-recruitment, however, a gap seems to have emerged between research and practice [5], possibly because scholars are struggling to keep up with the sheer pace of change [51]. Organisational recruitment plays a crucial role in the development of human capital and strategic human resource management [52]. The increasing number of research contributions tends to focus on the design of corporate recruitment websites (Selden & Orenstein, 2011), applicants' perceptions of career websites [53], and erecruitment system design. So far, however, there has been little academic research on the subject from an organisational, i.e. recruiters', perspective [54]. Moreover, little attention has been given to the impact of e-recruitment on firm performance as a whole, or to how the e-recruitment process is integrated in practice [6]. In this respect, the study has adopted a comprehensive approach simultaneously exploring the effects of e-recruitment on firm performance in the context of Saudi Arabia. Moreover, this study investigates the mediating role of HR capability in the relationship between e-recruitment and firm performance.

This study adopted a positivist philosophy. A deduction approach and quantitative method were also suitable for this study. A questionnaire was delivered to some companies in Saudi Arabia. A total of 500 questionnaires were sent, but only 418 were received; for 84.0 percent response rates. This study used PLS to test the research hypotheses. The measurement model has confirmed that the measure indicates accepted reliability and validity. Based on the research results, most hypotheses are accepted. This means that the e-recruitment play a crucial role in improving firm performance.

The findings of this study support the argument that erecruitment plays an important role in improving firm performance. Therefore, firms that use e-recruitment to attract new job seekers will improve their performance. These findings extend prior literature by showing, for the first time, how e-recruitment and HR capability influence firm performance. This study has confirmed that erecruitment has a positive and significant effect on firm performance. These variables account for 43% and 78% of the variety in HR capability and firm performance, respectively, whereas 57% and 22% are related to other variables. This finding is consistent with the argument that if firm use e-recruitment, they are more likely to improve firm performance. Moreover, high HR capability enhances firm performance. Overall, this research reviews erecruitment from the perspective of employees. While a number of studies have addressed e-recruitment [55]. Yet. little research has been conducted on the determinants of erecruitment and the effects of e-recruitment on firm performance throw HR capability. This study, in turn, was an attempt to fill this gap in e-recruitment literature by investigating the indirect effect of e-recruitment on firm performance.

This chapter highlights the main empirical findings, which are contained in the previous chapter and in detail presents the results of analysis conducted to test the research hypotheses. These discussions relate to findings based on previous studies and the context of the study. In the first section of this chapter, a brief overview of the study is provided. The second section provides a detailed discussion of each set of variables with their related effects. Finally, this chapter discusses the contributions and implications of the study, the limitations of the study, and the future research.

Internet recruiting also extends to more interactive recruitment tools, creating an avenue to build relationships (potentially long-term) between job seekers and organisations. Some of the key features of e-recruitment include the ability for organisations to initiate background checks, undertake interviews, create customised e-mail notification of recruiters for passive and active candidates, provide multiple language support, psychometric testing, interactive application forms and other assessment tools [56]. The use of such web based interactive screening tools is currently only utilised by approximately one-third of organisations [57], however sophisticated internet recruitment tools are gaining popularity with companies in an attempt to reduce the size of applicant pools efficiently.

It is recognised that, through the application of approaches such as e-recruitment, which, as outlined above, encompass a number of different factors that facilitate the well-considered and productive hiring of staff on an internal basis, employee relations can be improved. This can be seen when taking into account, for example, one of the key features of e-recruitment, which includes the potential of firms to conduct background checks on their staff. For instance, so doing would allow the human resources management to ensure the candidate is a sound fit for the role whilst also opening up channels of communication. By carrying out background checks, conducting in-depth and comprehensive interviews, providing the support required by candidates and employees, i.e. language support, ensuring candidates complete psychometric testing to ensure a good fit, and also providing interactive application forms, which further enable the suitability of the candidate to be outlined in relation to the job role under examination, the employee is then found to be a valuable and suitable individual for the post. This has a number of implications in regards employee relations, as the process is far more comprehensive and wide-ranging, opening up channels of communication and helping to safeguard the employee and employer from hiring an unqualified or otherwise inadequate person for the role needing to be filled. This helps to make sure the role is carried out as required, which in turn means there are no unnecessary pressures or expectations, with the employee feeling that they are carrying out the role they signed up for without additional

stresses, and the employer happy the individual is doing their job.

Importantly, the above further emphasises that there has much increasing inclination been towards the implementation of e-recruitment, despite the fact that the adoption of such has, in many arenas, centred on the graduate labour market. Nonetheless, there is some agreement in regards the recognised advantages to be garnered by those businesses adopting e-recruitment, although the drawbacks and limitations of adoption are similarly identified. One of the key attractions when compared with more conventional hiring methods, however, is clear in the implementation of e-recruitment, with correspondingly noting that candidate relationship management is facilitated, with e-recruitment making changes in the way in which the recruitment process is conducted.

E-recruitment management support determinants for erecruitment are the most important components of erecruitment, as the relevant management support activities refer to the electronic recruitment strategy formulation, the activities definition, and in which areas the adopted information technology application is introduced [58]. [59] found a positive relationship between the degree of IT support of HR activities and HR manager perceptions of the organization's HR strategic effectiveness.

When considering whether or not an organization's recruitment website can change viewers' impressions of the organization, it is important to consider the psychological processes utilized by the viewer of the website. Signaling theory [60] provides a theoretical underpinning for why an organization's recruitment website may affect a viewer's perception of the organization. According to this theory, when an individual does not have complete data, or is uncertain of the position he or she should take on a matter, he or she typically draws inferences based on cues from available information. Job seekers are often limited in their knowledge about a potential hiring organization [61]; thus, signaling theory suggests that any information that a job seeker views will guide his or her impressions of the hiring organization. As a result, variables that do not seem to have a strong direct connection to a job or organization (e.g., a recruiter's attire or knowledge) can become cues for what it would be like to work for that organization and may also influence individuals' attraction to hiring organizations. In the context of Internet recruiting, signaling theory suggests that in the absence of other information about an organization, applicants will draw inferences about the organization based on peripheral cues gained from its website. This primarily occurs because applicants assume that these cues or characteristics are representative of the entire organization [61]. For example, if an organization maintains a website that is difficult to navigate, job seekers

References:

[1] F. Teymouri, M.H. Meimandi, & A.Z. Shahabadi. A Study of Social Factors Associated with the Use of Information and Communication Technology: A Case Study of High School Female Students in Yazd. *International Journal of School Health*, (In Press). may use this information about the organizational website to form a general negative impression of the organization because they assume that is indicative of how other practices and policies at the organization are implemented. Or, they may form a specific conclusion that like its website, the organization is disorganized or that the entire recruitment process will be too cumbersome to complete.

Nowadays, it is a known fact that using internet for recruitment is an upward trend. This study has empirical reviewed the findings of the employed jobseekers' perceptions and experiences on e-recruitment and its effects on HR capability and firm performance. Based on the findings of the final model, this study has identified few key indicators to e-recruitment, thus contributing to the existing knowledge in the human resources literature, particularly in recruitment.

As a further point for recognition, this study also wishes to highlight that, through the adoption of e-recruitment, which is seen to be more time- and cost-efficient than more traditional methods, eradicating the costs associated with interviewing non-qualified candidates-predominantly owing to the fact that e-recruitment facilitates the identification of more qualified and criteria-satisfying potential employees over the internet rather than in person-organisations are then in a position to direct more of their budget towards maintaining employees through retention methods; this further improves employee relations as staff then feel appreciated and valued by their employers. Employee relations are of critical importance to any organisation, and it would appear that e-recruitment is valuable when it comes to improving the relationships between the employer and the employee, and so presents a further advantage and rationale in line with its use. With this taken into account, it may be stated that this study provides valuable implications in line with employee relations, and is therefore a point to be considered by hiring firms when looking at the advantages of e-recruitment over the conventional recruitment strategies employed by HR departments.

7. Limitations and Future Research Directions

Like any other study, ours is bound by certain limitations that also provide fertile grounds for further research. First, this study employed a convenience sample. Although being a strong sample in terms of diversity and size, generalizations of the results must be made with caution.

Second, this study did not consider cross-cultural issues; any comparative study of developed and developing countries would make a worthwhile contribution to the body of knowledge. Finally, the data on e-recruitment and firm performance were collected at one point in time which may pose difficulties to assess causality between the two variables.

[2] A. BrckaLorenz, H. Haeger, J. Nailos, K. Rabourn, "Student perspectives on the importance and use of technology in learning" In Annual Forum of the Association for Institutional Research. Retrieved on May (Vol. 31, 2013). [3] E. Faliagka, A. Tsakalidis, G. Tzimas, "An integrated e-recruitment system for automated personality mining and applicant ranking". Internet research, 22(2012), 551-568.

[4] Q.A. Rafiq, K.M. Brosnan, K. Coopman, A.W. Nienow, C.J. Hewitt, "Culture of human mesenchymal stem cells on microcarriers in a 51 stirred-tank bioreactor", Biotechnology letters, 35(2013), 1233-1245.

[5] H. Sylva, S.T. Mol, "E-recruitment: A study into applicant perceptions of an online application system. International Journal of Selection and Assessment", 17,(2013) 311-323.

[6] C.Y. Fong, K.B. Ooi, B.I. Tan, V.H. Lee, A. Yee-Loong Chong, "HRM practices and knowledge sharing: an empirical study" *International Journal of Manpower*, *32*(2011), 704-723.

[7] S.L. Black, A.F. Johnson, "Employers' use of social networking sites in the selection process". The Journal Of Social Media In Society, 1(2012), 7-28.

[8] D.H. Kluemper, "Social network screening: Pitfalls, possibilities, and parallels in employment selection. Bondarouk & M. R. Olivas-luján (Eds.)" Social Media in Human Resources Management (Advanced Series in Management, 12,(2013)1-21.

[9] P.L. Roth , P. Bobko, C.H. Van Iddekinge, "Social media in employee-selectionrelated related decisions: A research agenda for uncharted territory" Journal of Management (2013).

[10] M.T. Thielsch, G. Hirschfeld, "Spatial frequencies in aesthetic website evaluations-explaining how ultra-rapid evaluations are formed", *Ergonomics*, 55(2012), 731-742.
[11] J.W. Stoughton, L.F. Thompson, A.W. Meade, "Examining applicant reactions to the use of social networking websites in pre-employment screening", Journal of Business and Psychology, (2013),1-16.

[12] S. Nah, G.D. Saxton, "Modeling the adoption and use of social media by nonprofit organizations". New media & society, 15(2013), 294-313.

[13] E. Bonsón, M. Bednárová, "Corporate LinkedIn practices of Eurozone companies" *Online Information Review*, *37*(2013), 969-984.

[14] C.H. Van Iddekinge, S.E. Lanivic, P.L. Roth, "Social media for selection? Validityand adverse impact potential of a Facebook-based assessment". Journal of Management.

[15] A. McCarthy, J.N. Cleveland, S. Hunter, C. Darcy, G. Grady, "Employee work–life balance outcomes in Ireland: A multilevel investigation of supervisory support and perceived organizational support". The International Journal of Human Resource Management, 24(2013), 1257-1276.

[16] N. Roulin, A. Bangerter, "Students' use of extracurricular activities for positional advantage in competitive job markets". Journal of Education and Work, 26(2013), 21-47.

[17] E. Parry, S. Tyson, "An analysis of the use and success of online recruitment methods in the UK". Human Resource Management Journal, 18(2008), 257-274.

[18] E. Penrose, "The theory of the growth of the firm". JohnWiley& Sons, New York (1995).

[19] R. Amit, P.J. Schoemaker, "Strategic assets and organizational rent". *Strategic management journal*, *14*(1993), 33-46.

[20] J. Barney, "Firm resources and sustained competitive advantage". *Journal of management*, *17*(1991), 99-120.

[21] S.c. Lonial, R.E. Carter, "The impact of organizational orientations on medium and small firm performance: A resource-based perspective". *Journal of Small Business Management*, *53*(2015), 94-113.

[22] R. Nag, D.C. Hambrick, M.J. Chen, "What is strategic management, really? Inductive derivation of a consensus definition of the field". Strategic management journal, 28(2007), 935-955.

[23] F. Kellermanns, J. Walter, T.R. Crook, B. Kemmerer, V. Narayanan, "The resource-based view in entrepreneurship: A content-analytical comparison of researchers' and entrepreneurs' views". *Journal of Small Business Management*, *54*(2016), 26-48.

[24] C.E. Helfat, M.A. Peteraf, "Managerial cognitive capabilities and the microfoundations of dynamic capabilities". Strategic Management Journal, advance online publication April (2014). doi: 10.1002/smj.2247.

[26] D.E. Bowen, C. Ostroff, "Understanding HRM-firm performance linkages: The role of the "strength" of the HRM system. Academy of management review", 29(2004), 203-221.

[28] A.M. Elbaz, M.Y. Haddoud, "The role of wisdom leadership in increasing job performance: Evidence from the Egyptian tourism sector". Tourism management, 63(2017), 66-76.

[29] A.M. Elbaz, G.M. Agag, N.A. Alkathiri, "How ability, motivation and opportunity influence travel agents performance: the moderating role of absorptive capacity". Journal of Knowledge Management, 22(2018), 119-141.

[30] A.M. Elbaz, M.Y. Haddoud, Y.M. Shehawy, "Nepotism, employees' competencies and firm performance in the tourism sector: a dual multivariate and qualitative comparative analysis approach". *Tourism Management*, 67(2018), 3-16.

[31] Y. Lai, G. Saridakis, R. Blackburn, "Job Stress in the United Kingdom: Are Small and Medium-Sized Enterprises and Large Enterprises Different?". Stress and Health, 31(2015), 222-235.

[32] A.K. Brooks, K. Edwards, "Allies in the workplace: Including LGBT in HRD". Advances in Developing Human Resources, 11(2009), 136-149.

[33] S.M. Kabene, C. Orchard, J.M. Howard, M.A. Soriano, R. Leduc, "The importance of human resources management in health care: a global context". Human resources for health, 4(2006), 20.

[34] J.F. Cohen, K. Olsen, "Knowledge management capabilities and firm performance: A test of universalistic, contingency and complementarity perspectives. *Expert Systems with Applications*, 42(2015), 1178-1188.

[36] S.J. UyBico, S. Pavel, C.P. Gross, Recruiting vulnerable populations into research: a systematic review of recruitment interventions. *Journal of general internal medicine*, 22(2007), 852-863.

[37] J. Pfeffer, F. Villeneuve, "Competitive advantage through people: Unleashing the power of the work force (Vol. 61). Boston, MA: Harvard Business School Press, (1994).

[38] P. Cappelli, A. Crocker-Hefter, "Distinctive human resources are firms' core competencies". *Organizational Dynamics*, 24(1996), 7-22.

[39] C.K. Prahalad G. Hamel, "Competing for the Future. Boston" Harvard Business School Press; 1994 Jul.

[40] G. Stalk, P. Evans, L.M. Shulman, "Competing on capabilities: The new rules of corporate strategy". *Harvard business review*, *70*(1992), 57-69.

[41] B. Rundle, "Mind in action". Clarendon Press; 1997 Oct 16.

[42] P.W. Roberts, G.R. Dowling, "Corporate reputation and sustained superior financial performance". *Strategic management journal*, 23(2002), 1077-1093.

[43] D.J. Teece, "Dynamic capabilities and strategic management: Organizing for innovation and growth (Vol. 4). Oxford: Oxford University Press, 2009.

[44] Bagozzi, P. Richard, Y. Youjae, "On the evaluation of structural equation models." *Journal of the academy of marketing science* 16, no. 1 (1988): 74-94.

[45] Nunnally, C. Jum C I. H. Bernstein. "Validity." *Psychometric theory* 3 (1994): 99-132.

[46] J.F.Hair , C.M. Ringle, M. Sarstedt, "PLS-SEM: Indeed a silver bullet". The Journal of Marketing Theory and Practice, 19(2011), 139-152.

[47] J. Henseler, C.M. Ringle, R.R. Sinkovics, "The use of partial least squares path modeling in international marketing". Advances in International Marketing, 20(2009), 277-319.

[48] Fornell, Claes, F.L. David, "Structural equation models with unobservable variables and measurement error: Algebra and statistics." (1981): 382-388.

[49] J.S. Armstrong, T.S. Overton, Estimating nonresponse bias in mail surveys. Journal of marketing research, 14(1977), 396-402.

[50] Liang, Huigang, Nilesh Saraf, Qing Hu, Yajiong Xue. "Assimilation of enterprise systems: the effect of institutional pressures and the mediating role of top management." MIS quarterly (2007): 59-87. [51] N. Anderson, "Applicant and recruiter reactions to new technology in selection: A critical review and agenda for future research". International Journal of Selection and Assessment, 11(2003), 121-136.

[52] F. Lievens, and D. Chapman, "Recruitment and selection." *The SAGE handbook of human resource management* (2010): 135-154.

[53] I.O. Williamson, J.E. King, D. Lepak, A. Sarma, A. Firm reputation, recruitment web sites, and attracting applicants. Human Resource Management, 49((2010), 669-687.

[54] J.F. Wolfswinkel, E. Furtmueller, C. Wilderom, "Reflecting on E-Recruiting Research Using Grounded Theory". InECIS 2010 Jun 7 (p. 52).

[55] A.M. Khashman, H.M. Al-Ryalat, "The Impact of Electronic Human Resource Management (E-HRM) Practices on Business Performance in Jordanian Telecommunications Sector:" The Employees Perspective. Journal of Management Research. 2015;7(3):115-29.

[56] A.D. Smith, W.T. Rupp, "Managerial challenges of e-recruiting: extending the life cycle of new economy employee"s. Online Information Review, 28(2004), 61-74.

[57] P.A. Hausdorf, D. Duncan, "Firm Size and Internet Recruiting in Canada: A Preliminary Investigation". Journal of Small Business Management, 42(2004), 325-334.

[58] C. Handlogten, "Implementation of E-recruitment. Unpublished MSc thesis. University of Twenty, Netherlands, 2009.

[59] V.Y. Haines, G. Lafleur, "Information technology usage and human resource roles and effectiveness'. Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management. 2008 Sep;47(3):525-40.

[60] M. Spence , D. Crick , "An investigation into UK firms' use of trade missions. Marketing Intelligence & Planning, 19(2001), 464-474.

[61] S.L. Rynes, H.E. Miller, "Recruiter and job influences on candidates for employment". Journal of Applied Psychology. 1983 Feb;68(1):147.