

HOW HUMAN RESOURCE CAPABILITIES AFFECT THE ORGANISATIONS' PERFORMANCE? THE CASE OF ELECTRONIC INDUSTRY IN THE UK

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Session H-2

Abstract

The impact of the Human Resource (HR) capability on the firm's performance and its involvement in developing business strategies are becoming increasingly important particularly in high tech Small and Medium-sized Enterprises (SMEs). Not surprisingly, the main debate in HRM, particularly in SMEs, is nowadays concerned with the relationship between HR capabilities and the firm's overall performance. This paper is exploring the above relationship in the Electronic Manufacturing industry in the UK. The findings are based on an empirical survey of Chief Executive Officers' (CEOs) and their perception of the HR involvement in strategy development in high tech SMEs. The important conclusion reached is that increasing the core competencies of the firm, in particular HR, is the key element to the success of the firm. Moreover, it is posed that the growing involvement of the HR in the development and implementation of business strategy will lead to the increased effectiveness of the organisation and the industry as a whole.

Keywords: HR Capabilities, Perception, Small and Medium Sized Enterprises (SMEs), Firm Performance, Chief Executive Officers (CEO's), HR Involvement in Strategy, UK.

**How Human Resource Capabilities Affect the organisations' Performance? The
case of Electronic Industry in the UK**

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*The Fifth European Conference on Organizational Knowledge, Learning and Capabilities,
Centre of Strategic Management & Leadership, University of Innsbruck, April 1-3,
Innsbruck, Austria*

Track:

Leadership and HRM in knowledge-based organisation

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HR Capabilities,

Perception

Small and Medium Sized Enterprises (SMEs)

Firm Performance

Chief Executive Officers (CEO's)

HR Involvement in Strategy

UK

INTRODUCTION

In recent years, much concern has been shown for the strategic involvement of the Human Resource (HR) and its effect on firm's performance (Lahteenmaki et al, 1998; Rangone, 1999; Analoui, 2000). The debate has led to the creation of a resource-based model of HRM (Boxall, 1996), identifying HR as being responsible for increasing organisational success (Kakabadse and Kakabadse, 2000) and a realistic indicator for the improved organisational effectiveness (Analoui, 1999a; Analoui, 2002). The resource-based approach to strategic management considers HR as a unique source of competitive advantages of the firm (Lorange and Murphy, 1984; Boxall, 1991; Lundy, 1994; Story, 1998). It has been even suggested that there is a link between a firms' performance and the utilisation of its human resources (Lahteenmaki et al, 1998; Baird and Meshoulan, 1998).

The notion surrounding the importance of HR in its distinctive sense derives from the view that people management is a key source for ensuring sustained competitive advantage (Mabey et al, 1998; Kakabadse et al, 1998). The four necessary prerequisites are: human's capability and commitment (Analoui, 1998a); strategic importance of human resources (Kakabadse et al, 1998), managing human resources by specialists, and finally, integration of human resource management in the business strategy (Boxall, 1992). In this full-blown sense the importance of managing HR emerges and is regarded as being synonymous with strategic human resource management (Mabey, et al, 1998).

It is deemed necessary to clarify strategic HRM because of the troublesome intellectual terrain that it occupies. Fombrun et al (1984) defines strategic HRM as a set of techniques which enables necessary interventions within the business in order to improve performance. Dyer (1984) refers to HR strategy as the pattern that emerges from a stream of important decisions about the management of human resources, especially those decisions that indicate management's major goals and the means that are (or will be) used to pursue them. Accordingly, Schuler and Jackson (1987) regarded HR strategy in a much broader sense to embrace three levels of activities - philosophies, policies, and practices. Tyson (1995) too, defines HR strategy as the intentions of the corporation both explicit and covert, towards the management of its employees, expressed through philosophies, policies, and practices.

Strategic human resources management (SHRM) is therefore an approach to decision making on the premise that organisation and its people form the most essential component of the business strategy (Hendry and Pettigrew, 1990; Kakabadse et al, 1995; Boxall, 1996; Armstrong, 1996; Analoui, 1997; Wright et al, 1998). The relationship between the two not surprisingly highlights the overall direction of the business and its intent to pursue the achievement of its objectives through people (Hendry and Pettigrew, 1990; Peck, 1994; Tyson, 1995; Boxall and Steeneveld, 1999). Since, Chief Executive Officers (CEOs) are intensively involved in the strategic formulation of the policies and practices of the firm, this paper seeks to explore the CEOs perceptions and attitudes towards human resources as strategic assets in the firm. It reports on findings of an empirical study into the present state of strategic HRM in the small and medium sized enterprises within the electronic industry in the UK. The focuss will be on whether or not SMEs' managing directors, as strategists, perceive the human resource capability as a competitive advantage of their firms? Following a brief review of the debate on SHRM and the application of the resource-based view of the firm, the theoretical framework and the hypotheses developed will be addressed. The principle research methods employed including the sample and variable measurements, and data analysis will be introduced to provide the context for the discussion of the empirical findings concerning the CEOs' perceptions of the SHRM and firm performance in the industry. Finally, in a discussion, based on the above, relevant conclusions will be reached.

LITERATURE REVIEW

The changing patterns of managing HR from traditional and static state to a more strategic form are much emphasised (Percell, 1995; Tyson, 1997; Analoui, 1999b; Analoui, 2002). When highlighting the difference between the two, the question often posed is: what makes SHRM "more strategic"? (Hendry and Pettigrew, 1986; Lahteenmaki et al, 1998; Karami, 2001a). According to Henry and Pettigrew (1986), the strategic aspect of human resource management refers to matching HR policies and activities to some explicit business strategies. The key differences therefore between traditional and strategic concepts is the extent to which management of HR is integrated into the strategic decision processes that direct organisational efforts towards coping with the environment (Guest, 1990; Lahteenmaki et al, 1998; Karami, 2001a). Thus, arguably competition, globalisation, and continuous change in the market and technology form the

principal reasons for the transformation of human resource management to a new strategic role (Beer, 1997; Kouzmin et al, 1999; Analoui, 2002). It is aptly noted that whilst '...traditional human resource ideas emphasise solely on physical skills [...] concern for individual efficiency and quality and finally workforce as management adversary.[...] the emerging strategic human resource management ideas emphasises the total contribution on the firm; innovative and creative behaviour; overall effectiveness; and cross-functional integration; investment on people and finally workforce as management partner" (Pearce and Robinson 1997, p. 319).

The traditional perspective on management pays more attention to 'task' at the expense of people and their development as strategic resources of the organisation (Analoui, 1998a). Becker et al, (1997), go further to contend that HR not only must focus on business level outcomes but also it must transform itself into a strategic core competency rather than a market follower. Accordingly, focus is shifted on to strategic instead of functional competencies, emphasising on the most important missing element in the HR functional expertise- a system perspective.

The HRM system that develops and maintains a firm's strategic infrastructure should be considered an investment. HR therefore, constitutes an essential element of the infrastructure that supports this value creation process, and one which acts as a potential strategic lever for the organisation (Analoui, 1999b). This system level focus is consistent with the development of a conceptual rationale for the creation of a strategic impact and as such has been referred to as a high performance work system. Moreover, it has been suggest that a SHRM system produces employee behaviour that focuses on key business priorities, which in turn drive profits, growth and ultimately market value (Becker et al, (1977). It is hardly surprising to learn that how changing market conditions have rendered many of the traditional sources of competitive advantage, such as patents, economies of scales, access to capital and market regulations, less important in the current economic environment than they had been in the recent past (Pfeffer, 1994).

Unlike conventional assets, strategic human resources, as an intellectual or organisational capital, is largely invisible and, can not appear on the firm's balance sheet (Tomer, 1987; Analoui, 1998b). Such assets could only be found in a skilled, motivated and adaptable workforce, and in the HRM system that strategically develops and sustains

it. Indeed, as intellectual capital has come to represent an increasing fraction of many firms' total assets, the strategic role of the HRM system has also become more critical (Kakabadse and Myers, 1995), a source of organisational capabilities that allow firms to learn and capitalise on new opportunities (Ulrich and Lake, 1990). This approach emphasises the need for integration of human resources with the rest of the business and its environment (Lahteenmaki et al, 1998). In a nutshell, 'strategic human resource management encompasses those decisions and actions which are concerned with the management of employees at all levels in the business and which are directed towards creating and sustaining competitive advantage' (Miller, 1989, P. 114).

The mainstream concept of SHRM is characterised by the importance which it places on, first, the critical role played by the senior management and, secondly, the importance of the role of strategic HR policy and planning activities (Armstrong and Spellman, 1993; Mabey, et al, 1998). Consequently, as Fombrun et al (1984), concludes, that the presence of three core elements namely; mission and strategy, organisation structure, and human resource management is necessary for firms to function effectively. Thus, employees are regarded as strategic a resource which, in turn, implies that people are a critical investment in a firm's performance (Boxall, 1992; Purcell, 1993; Bennett et al, 1998).

THEORETICAL FRAMEWORK AND HYPOTHESES

The 'resource-based approach', a new paradigm in the field of strategic management, has emerged in response to ever-changing and globalised environment on one hand and the pressing need for ensuring competitive advantage. The competencies, capabilities, skills, or strategic assets of the firm are seen as the source of sustainable competitive advantage (Mabey et al, 1998). There is little evidence in the literature on the relevance of HRM for the performance of small businesses. This is largely due to unequal attention that has been paid to the role and importance of HRM for large organisations. Recently, however, there has been a move on the part of serious researchers to develop a resource-based approach to strategy in the organisation. As Boxall aptly asserts, 'it seems safe to suggest, however, that what the resource-based perspective has stimulated is a re-balancing of the literature on strategy in a way that stresses the strategic significance of internal resources and capabilities and their historical development' (1996, p.66). In short, a resource-based approach to strategic management

focuses on costly-to-copy attributes of the firm as the fundamental drivers for performance and competitive advantages (Prahalad and Hamel, 1990; Boxall, 1992).

Admittedly, there are various strengths associated with the adoption of a resource-based strategy in large firms however the application of this approach to small firms has been relatively neglected.

It is argued here that as Boxall (1996) asserts, the resource-based perspective implies the need to build strategic management processes. Therefore, the role of HR in increasing firm performance in large [and small] firms significantly relates to the perception of the top management team and their HR capabilities (Prahalad and Hamel, 1990; Kakabadse et al, 1995; Hunt, 1995). Moreover, it has been stressed that the integration of HR and strategy was greater when top managers viewed employees as strategic resources (Bennett et al, 1998).

Thus, since CEOs, especially owner managers of small businesses, play a similar if not a greater key role in developing business strategies in SMEs, primarily the study has focussed on the nature of the relationship between HR capabilities, and the performance of the firm. The paper, therefore, aims to explore the CEOs view (perception) of their firms' HR capabilities and how in their view this relates to the performance of their business. This concern formed the basis for formation of the following research hypotheses:

Hypothesis No 1. Increasing HR capacities of the firm will positively correlate with the increasing performance of the firm.

Exploring the nature of the HR involvement in developing business strategies, in both low and high performance SME firms, was the second aim of the study. Arguably, the desire to gain competitive advantage by integrating HRM with business strategy is the main rationale behind strategic HRM thinking (Lahteenmaki et al, 1998). Following the increasing interest in strategic analysis, in the face of mounting competition in industry, HRM has been identified as a potential source of competitive advantage (Analoui, 1998b). Some proponents of SHRM have even argued that, the management of human resource must fit within a suitable strategy (Kakabadse and Kakabadse, 1997; Mabey et al, 1998). The linkage between human resource as a strategic asset of a firm and strategy can be integrated in nature (Golden and Ramanujam, 1985), thus implying that

the linkage between HR and the processes involved in decision making such as formulation of business strategy play an internal role in the firm's competitive advantage (Wright et al, 1998). How about the SMEs? Does HR make any significant contribution to the strategic decision making process in these firms? To answer this, a fundamental question was posed: is HR involved in the development of the firm strategies in small businesses? And, if so, how does this involvement result in the firm's increased performance? These concerns formed the basis for the formulation of the second hypothesis:

Hypothesis No 2. In the high performance firms, human resources have been more involved in the process of formulating strategy than in low performance ones.

In larger firms, many cases have been reported where regarding people as strategic resources and their involvement in the strategic management process has led to the firm's improved performance (Hendry and Pettigrew, 1986; Wright et al, 1998).

METHODOLOGY

Sample

The population for this research was comprised of private small and medium sized enterprises in the electronic industry in the United Kingdom. Public sector and large companies were deliberately excluded from this study. The sample of 500 SMEs has been drawn from the population of study using the UK Standard Industrial Classification (SIC) based on two criteria: a) SME firms with less than 500 employees, and b) with less than £50 million turnover in their last financial year (2001). The main research instrument was survey questionnaire. Data was successfully collected via mail survey from 132 (27% response rate) CEOs of the SMEs of the electronics manufacturing industry in the UK. A personalised cover letter explained the purpose of the study and urged executives to personally participate in the survey. In order to minimise response bias, the respondents participants were provided with pre-addressed envelopes to improve the return rate and to ensure that completed questionnaires directly to the researchers.

Measurement

Following data collection, questionnaire responses can be qualified by assigning numbers to the responses according to a given set of results (Wilson, 1995). This is what is understood by measurement (Malhotra, 1999). The level of measurement describes the degree of accuracy and details in a variable's possible value. In this study the variables were measured mainly in ordinal level. Reliability analysis on measurements was carried out by calculating the alpha value. The coefficient alpha is the average of all possible split-half coefficients resulting from different ways of splitting the scale item (Malhotra, 1999). Churchill and Peter (1984) argued that, this coefficient varies from 0 to 1, and a value of 0.6 or less generally indicates unsatisfactory internal consistency reliability. In this research the value of alpha ranged from 0.65 to 0.89. This coefficient gave an indication of the internal consistency and therefore stability of measurement generated by research scales and indicated that, the data collected were quite reliable.

Company performance (alpha = 0.76): Although firm performance plays a key role in strategy research (Karami, 2001b), there is considerable debate on the appropriateness of various approaches to the conceptualisation and measurement of organizational performance. There is a general agreement among scholars that, objective measures of performance are preferable to those used on manager's perceptions (Beal, 2000). However, objective data on the performance of small firms is usually not available because most small firms are privately held and the owners are neither required by law to publish financial results nor are they usually willing to reveal such information voluntarily to outsiders. The self-reporting rating of performance is widely used in HR strategy research (Golden, 1992; Lahteenmaki et al, 1998; Rangone, 1999). Supporting this notion, different studies have shown a strong correlation between subjective responses and objective measures (Robinson and Pearce, 1988; Lahteenmaki et al, 1998). The present study therefore relies on perceptual measures of the firms' performance.

As for measuring of financial performance, Beal's (2000) approach was adopted. This variable was measured by self-reported ratings of the respondents concerning the indicators of financial performance, profitability (returns on sales, assets and investment), growth (growth of sales and profit), achievement of the intended outcomes, and successfully implementing the business plans within the expected time and predicted cost. A Likert type scale ranging from 1 (low extent of success) to 5 (high extent of

success) was also employed. Moreover, the CEOs were asked to indicate the extent of their satisfaction with their firms' performance along each of the performance indicators. Then the satisfaction scores were multiplied by their respective importance ratings. The resulting scales were averaged to construct a composite measure of firm performance. It is important to note that, all of the calculations and measurements have been carried out by employing a statistical package for social sciences (SPSS).

Core competencies (alpha = 0.87): Core competencies deal with the internal resources or capabilities of a firm that are competitively unique thus they tend to add value to the firm (Wright et al, 1998). Two potential core competencies were examined as factors determining competitive advantages. First, the HR capability describes the extent to which the firms viewed skilled and innovative human resources, training competent employees, and human resources commitment as their source of competitive advantage. Second, the perception of the CEOs concerning product quality was considered. The latter in this case, describes the extent of the efficiency of the production process which provides a competitive advantage.

Strategic involvement of HR (alpha = 0.89): The involvement of HR in strategy formulation denotes the extent to which human resources are engaged in or contribute to the process of formulation and implementation of the business strategies (Miller, 1991; Analoui, 1995). This variable was measured in ordinal level, by rating the respondents' views and attitudes towards the involvement of HR and their contribution to the crafting and implementation of the business strategies of their firm. In this regard, based on the work of Wright et al, (1998), the strategic involvement of human resources was characterised as the extent to which the top HR executive in the firm are engaged in activities such as providing input into the long range strategy, revising existing HR systems to support the firms strategies. Also, to develop relevant HR systems to implement the firm's strategy.

HR development and effectiveness (alpha = 0.65): HR development was measured by rating the effect of developing new plans on organisational performance, and employees' satisfaction. To achieve these CEOs were asked to rate human resource utilisation on a Likert scale of low to highly efficient. Consequently respondents were asked to rate the importance of HR as one of the key resources for increasing organisational effectiveness (Analoui, 2001).

FINDINGS AND RESULTS

Descriptive Analysis

In order to analyse the data and consequently test the hypothesis, the collected data was summarised using statistical graphs such as, bar charts and histograms. In addition, various descriptive statistics including means, medians, modes, standard deviations, coefficient of skewness and kurtosis were calculated. The main reason for such analysis was to get a clear picture of how the different variables were distributed. The general picture which has emerged indicated the presence of skewed and non-normal distributions. In order to cross check these observations regarding the distributions the Kolmogorove-Smirnove goodness-of-fit test on the data to check for normality has been performed. The result of the test confirmed that the majority of variables were not normally distributed. Accordingly, the finding had a big influence on the choice of statistical techniques used for testing the hypotheses. In addition the variables were measured in ordinal scale. This finding led the researchers to choose non-parametric statistical techniques.

Of the 500 distributed questionnaires, 132 were returned from CEOs, a response rate of 27 percent for analysis. Descriptive data analysis shows that the majority of the respondents (N=116, 88%) were male, while only 12% of respondents (N=16) were female. The respondents' minimum number of total years of work experience was 8 years and the maximum was 42 years. Also, 73% of respondents reported that they have had formal management training. The number of employees of the firms varied from minimum (N=16) to maximum (N=492). As noted earlier, we measured the firm size using the number of employees and annual turnover of the firms. Accordingly, the amount of turnover of the firms in the last financial year was calculated to be between £1.25 million up to £50 million.

Using the Spearman rank order correlation technique, the correlation between variables has been calculated. The descriptive statistics and correlation matrix of the variables are reported in Table 1.

Suggested position for Table 1.

Regarding the first objectives of the research, we examined the correlation between the HR capabilities and the performance of the firms. As illustrated in Table 1, generally,

there is a significant correlation between HR capabilities and company performance ($\gamma=0.64$; $p<0.01$). However, supporting the above result, the correlation between firm performance and the indicators of the HR capabilities such as HR skills ($\gamma=0.68$; $p<0.01$); innovative HR ($\gamma=0.59$; $p<0.01$); HR effectiveness ($\gamma=0.66$; $p<0.01$); training competent HR ($\gamma=0.83$; $p<0.01$) were positive and stronger. The second objective of the research was examining the correlation between HR involvement in strategy formulation and firm performance in the studied firms. Accordingly, the correlation between HR involvement in business strategy, and firm performance confirms a positive relationship ($\gamma=0.70$; $p<0.01$) between these variables. In other words, human resources are more involved in the planning and implementation of business strategies in high performance firms than in low performance ones. This finding is supported by the positive and significant relation between firm performance and HR involvement in long range planning ($\gamma=0.79$; $p<0.01$); and HR involvement in developing HR systems ($\gamma=0.62$; $p<0.01$).

It has also been found that, human resources are more involved in the strategic management process of the firm when the executives perceive HR as an important factor for determining competitive advantage. Moreover, it will be contended that, organisational effectiveness is positively related to HR involvement in the strategic management process.

HR capabilities

The findings of the research show that, the majority of executives rated HR capabilities as the key resources (N = 94, 71.2% as very important and essential) within the studied firms (See Figure 1). Accordingly, it can be safely assumed that if CEOs perceive HR as a key resource they would place more emphasis on increasing the HR capabilities of their firms.

Suggested position for Figure 1.

Consequently, increasing HR capabilities will lead to increased firm performance. To test this, the CEOs were asked to rate the effects of the HR capabilities on the firm's performance.

The results in Table 2 confirm that the majority of CEOs believe that human resource capabilities namely, skilled workforce (N = 91, 69%); innovative human resource (N = 78, 59%); effective human resources (N = 102, 78%); HR commitment (N = 82, 62%); and

training competent employees (N = 108, 81%) have high impact on increasing the firm's performance.

Suggested position for Table 2

This result has been confirmed by spearman correlation coefficient of the HR capabilities and firm performance ($\gamma = 0.64$: $p < 0.01$). More specifically, in order to verify this result statistically and to see whether or not any relationship exists between the HR capabilities and a firm's performance, we tested hypothesis 1. In this regard, in a non-parametric ANOVA (Kruskal-Wallis) test we found a significant relationship between HR capabilities and the performance of the firms ($\chi^2 = 181.837$: $df = 16$: $p < 0.01$).

Table 3 illustrates the result of Kruskal-Wallis test on firm performance and each of the HR capabilities indicators. Supporting this result we found that the relationship between firm performance and skilled HR ($\chi^2 = 234.115$: $df = 16$: $p < 0.01$), innovative HR ($\chi^2 = 201.732$: $df = 16$: $p < 0.05$), effective HR ($\chi^2 = 119.272$: $df = 16$: $p < 0.01$), training competent HR ($\chi^2 = 172.233$: $df = 16$: $p < 0.01$), HR commitment ($\chi^2 = 166.152$: $df = 16$: $p < 0.01$), were positive and significant. Subsequently, since a strong and positive relationship was discovered between a firm's performance and the HR capabilities, these results have led us to reject the null- hypothesis and respectively accept the alternative hypothesis 1.

Suggested position for Table 3

HR involvement

As discussed earlier, HR involvement in the development and implementation of business strategies in small as well as large firms is one of the critical issues in studying HRM. To examine this thesis in context of UK manufacturing SMEs, in this study the CEOs were asked to rate the level of HR involvement in the process of formulation and implementation of strategy within their firms. The analysis of the data shows that, human resources are more involved in strategy activities in high performance SMEs rather than low performance SMEs (See Table 4). For instance in the high performance firms human resources were highly involved in strategy formulation (94%), long range planning (82%), revising HR systems (78%), and developing HR systems (91%). Supporting the findings of Wright et al (1998), we also found a positive and significant correlation between HR involvement and firm performance in general ($\gamma = 0.70$: $p < 0.01$) in the studied SMEs.

Suggested position for Table 4

Accordingly, it has been assumed that there is a positive relationship between the HR involvement in the process of strategy and firm performance. In this regard, the second hypothesis (No. 2) indicates that, human resources are more involved in the process of formulating strategy in the high performance firms than low performance ones. As it has been shown in Table 3, in a non-parametric analysis of variance test (Kruskal-Wallis) a significant relationship was found between firm performance and HR involvement in strategy ($\chi^2 = 282.720$: $df=16$: $p < 0.01$). The result of Chi-square test between firm performance and HR involvement in LRP ($\chi^2 = 171.912$: $df=17$: $p < 0.01$), HR involvement in revising HR systems ($\chi^2 = 227.830$: $df=16$: $p < 0.01$), and developing HR systems ($\chi^2 = 246.121$: $df=16$: $p < 0.01$) were significant. Therefore, the null hypothesis was rejected and consequently alternative hypothesis 2 has been accepted.

DISCUSSION

We tested the hypothesised relationships among variables using non-parametric statistical techniques namely spearman rank order correlation and non-parametric ANOVA (Kruskal-Wallis test). These analytical techniques allowed us to identify the relative magnitudes of the relationships between HR capabilities, HR involvement in strategy and firm's performance. This includes a) firm performance versus, HR capabilities in general, skilled HR, innovative HR, HR effectiveness, training competent employees and HR commitment; and b) firm performance versus, HR involvement in the strategic management process of the firm in general; and finally, HR involvement in long range planning, revising the existing and developing new HR systems.

The paper has focused on identifying the nature and impact of human resource capabilities and involvement on the firm's performance. In this regard as Boxall (1996) aptly argues by defining firms as unique bundles of resources, the resource-based perspective emphasises the inevitable imperfection of –factor- markets. Thus, the HR capability of the firm is a considerable resource that determines the competitive advantages of the firm. Wright et al, (1998) also defines the skilled workforce as the HR capabilities. Accordingly, Analoui (1999b) defines managerial skills namely, task, people and self-development and analytical categories as HR capabilities of the firm. In the light of a resource-based view, we assumed that, HR capabilities including skilled human resources, innovative human resources, human resource effectiveness, HR commitment, and training competent HR are factors that determine the competitive advantages of the

firm. Supported by the results of previous works (for example, Lahteenmaki et al, 1998) it is stated that the first hypothesis is mainly concerned with a positive relationship between the HR capabilities and the performance of the firm. In other words, as identified earlier it addresses the question: Do CEOs perceive HR capabilities as factors that can determine the competitive advantage of their firm? And if they do, to what extent this factor has had impact on the company's performance? The findings of the research illustrate that, the majority of executives rated HR capabilities as a key resource within the organisation. Thus, confirming the previous researchers' view (Dyer and Reeves, 1995; Analoui, 1999a).

It was also found that, utilisation of the firm's resources, particularly; its human resources could be related to the CEOs' perception of the importance of HR as a key resource of the firm. More specifically, a strong and positive relationship was discovered between a firm's performance and the HR capabilities in the studied firms. This thesis confirms the result of previous researches (Wright et al, 1998; Rangone, 1999) indicating that, the firm's performance tends to positively relate to the core competencies of the organisation. Additionally, this result shows that one of the key competitive advantages of the firm is its human resources capabilities, which enable the generation of organisational effectiveness, and high performance of the firm. Thus, any investment in increasing human resource capabilities must be considered as a crucial factor, which in turn will increase the firm's performance. It can be, therefore, safely concluded that, increasing the HR competencies and capabilities of a firm will lead to a firm's success in achieving its goals and objectives in a competitive landscape. The pre-requisite for this happening is of course the correct perception of the CEOs of their firms.

An increasing number of studies have attempted to assess the HR involvement in the process of formulating strategy (Golden and Ramanujam, 1985; Buller, 1988; Huselid, 1995; Martell and Carroll, 1995; Anderson, 1997; Wright et al, 1998; Karami, 2001b). Indeed, numerous writers (for example, Bennet et al, 1998; Wright et al, 1998; Analoui, 1999b) have called for an increased involvement of the HR in the strategic management of the firm, yet very little data exists to confirm the effectiveness of it. Anderson (1997) has contended that, HR specialists ought to assist the management to realise the full value obtainable from HR function in support of business objectives. This could serve two fundamental and specific purposes. The first is linking people strategies to the

company's strategic management process. The second is developing HR strategy to support the corporation strategies (Anderson, 1997).

As Wright et al (1998) correctly contends, although many researchers (for example, Schuler, 1992; Truss and Gratton, 1994, Brockbank, 1997) have called for the increased involvement of HR in strategic management, very little research has been carried out to examine the consequences of such HR involvement in the process of development and implementation of business strategies. In the present research, we found that, in high performance SMEs, HR is regarded as more involved in strategy development than low performance firms. This finding is not similar to the findings of certain previous studies. For instance, Bennet et al (1998) in their study, propose that there is a negative relationship between HR involvement and HR effectiveness. In contrast, the findings of this paper support the results of the main stream of HRM research. For instance, Wright et al (1998) in their recent study found a strong correlation between HR involvement and organisational effectiveness. In other words, they pointed to the fact that 'managers highly value the HR function when the HR executives are heavily involved in strategic decision making' (Wright et al 1998, p. 24).

The result of the data analysis reveals that, the contribution of the human resources in the development and implementation of strategies is very much related to the CEOs' perception of HR as an important factor in a firm's performance. Overall, these results indicate that, human resources are more involved in strategic activities such as developing HR systems, strategy formulation, long range planning and revising HR systems, in those firms where, their CEOs' perceive HR as a key source of competitive advantage. Therefore, human resources as a factor for creating knowledge, play an important role in increasing a firm's performance and its competitiveness in high performance SMEs.

CONCLUSION

Building on the sparse and scarce existing works in the field, this study has attempted to make a significant contribution to the topic of strategic HRM. Generally speaking, the main contribution of this first time study has been the attempt to explore the CEO's perception of HR, their capabilities and their degree of strategic involvement as significant determining factors to ensure competitive advantages for the firm in a highly changing

market. It is important to reiterate that the present study is solely concerned with small and medium sized enterprises in the electrical and electronic manufacturing sector. Moreover, the results reflect the thinking and perception of the CEOs, albeit the most important cadre of senior management in an organisation. Therefore, it will not be safe to offer a sweeping generalisation by unreservedly applying its main findings to other sectors of the industry. To get a comprehensive and more reliable overview of the situation, it is essential to extend the research to other sectors- a challenge which ought to be undertaken in future examination of the strategic involvement of the HR in the running of the firm. However, despite these limitations, this empirical study has achieved the set objectives and arguably has opened various avenues for future research.

Amongst other contributions, the present study has established an empirical basis for examining the impact of the human resource capabilities and their involvement on increasing firm performance. As shown earlier, increasing the core competencies of the firm, especially its HR capabilities, leads to a highly successful performance of the firm within the small and medium-sized electrical and electronics manufacturing enterprises. More specifically, the results support the claim that performance of firms in the SMEs is positively related to the HR competencies. Thus, any investment towards increasing human resource capabilities must be considered as a crucial and strategic factor, which in turn will increase the firm's performance. Hence, it can be recommended to practitioners and senior management of SMEs that the investment made in increasing HR competencies ought not to be regarded as 'cost' rather it ought to be seen as a critical investment decision which will form a considerable factor in developing their organisations' capacity in strategic management.

It can, therefore, be concluded that an investment to increase HR capabilities will result in successful achievement of its goals and objectives in a competitive landscape. There seems to be a strong and positive relationship present between the degree of HR involvement in the development and implementation of business strategy and that of the organisational performance in the SMEs. In high performance firms, HR is more involved in strategic activities such as long range planning, revising HR systems and developing new HR systems. Thus, in order to increase firm performance and to benefit from HR capabilities, it is recommended that practitioners and SMEs' managers increase the involvement of the HR specialists in the process strategic management of their firms.

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Figure 1. Managerial perception of HR as a key resource of the firm

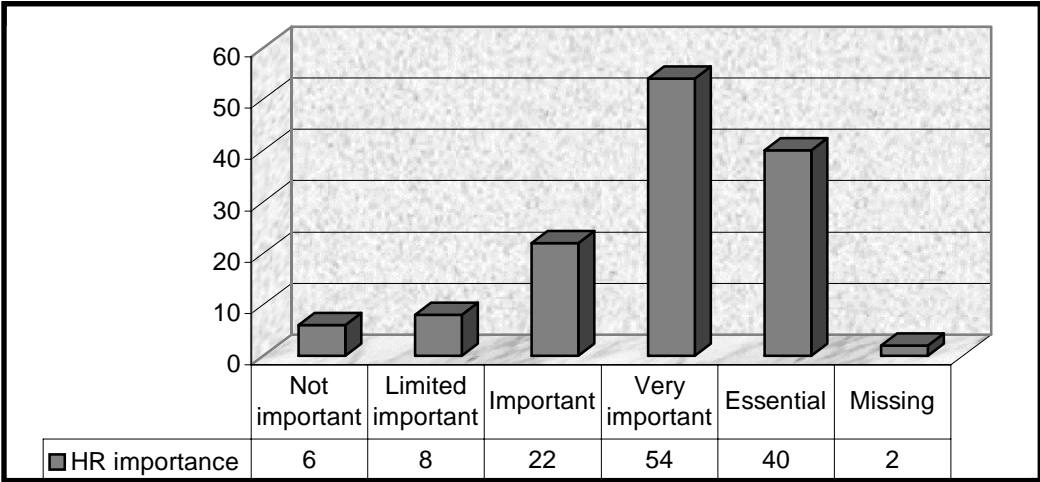


Table 1. Non-parametric spearman rank order correlation matrix

	M	SD	1	2	3	4	5	6	7	8	9	10	11
12													
13													
14													
15													
1. HR capabilities	3.8	1.1	1										
	9	8											
2. Skilled HR	4.1	1.0	.07	1									
	2	9											
3. Innovative HR	3.7	1.0	.15	.28	1								
	4	7											
4. HR effectiveness	3.5	1.0	.21	.41*	.52*	1							
	8	2											
5. Training HR	3.0	1.1	.36	.72**	.41*	.51*	1						
	1	4											
6. HR Commitment	2.8	.86	.01	.52*	.48*	.35	.29	1					
	2												
7. HR involvement in strategy	3.5	1.0	.54*	-.20	-.28	.18	.11	.31	1				
	8	5											
8. HR involvement in LRP	2.9	1.1	.49*	-.18	.31	.29	.18	.38	.41*	1			
	1	4											
9. Revising HR systems	2.6	.90	.38	.22	.37	-.18	.10	.22	.38	.12	1		
	1												
10. Developing HR systems	3.4	1.2	.20	.33	.42*	-.11	.23	.27	.43*	.18	.48	1	
	2	5									*		

11. Organizational effectiveness	3.80	1.08	.32	.47*	.49*	.58**	.54**	.56**	.55**	.13	.49*	.41*	1				
12. HR as a key source of the firm	3.83	1.11	.44*	.18	-.17	.14	.40*	.43*	.38	.23	.31	.19	.51*	1			
13. Linkage HR and strategy	3.62	1.20	.00	-.31	.09	-.23	.38	.33	.20	.34	.12	-.20	.32	.61**	1		
14. Product quality	4.05	1.09	.61**	.42*	.45*	.41*	.66**	.32	.39	.52*	.33	.30	.44*	.52*	.41*	1	
15. Firm performance	2.48	1.08	.64**	.68**	.59**	.66**	.83**	.29	.70**	.79**	.36	.62**	.42*	.58*	.11	.72**	1

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

1=low to 5 = high)

M : Means related a five point Likert scale (from 1=low to 5= high)

SD Standard deviations related a five point Likert scale (from

Table 2. Impacts of HR capabilities on firm performance

HR Capabilities	Low (1 or 2)	Medium (3)	High (4 to 5)	Total Number
Skilled HR	9 (7%)	32 (24%)	91 (69%)	132
Innovative HR	12 (9%)	40 (30%)	78 (59%)	130
Effective HR	7 (5%)	20 (15%)	102 (78%)	129
Training Competent Employees	3 (2%)	21 (16%)	108 (81%)	132
HR Commitment	14 (11%)	36 (27%)	82 (82%)	132

Table 3. Results of non-parametric ANOVA (Kruskal-Wallis test)

Measured Variables	χ^2 Value	d.f	Significant (2-sided)
Firm Performance V.			
a) HR Capabilities (general)			
Skilled HR	181.837	16	P<0.01
Innovative HR	234.115	16	P<0.01
Effective HR	201.732	16	P<0.05
Training Competent HR	119.272	18	P<0.01
HR Commitment	172.233	16	P<0.01
	166.152	16	P<0.01
b) HR Involvement in Strategy			
Long Range Planning	282.720	16	P<0.01
Revising HR Systems	171.912	17	P<0.01
Developing HR systems	227.830	16	P<0.01
	246.121	16	P<0.01

Table 4. HR involvement in strategy within high and low performance SMEs

Factors	Low Performance SMEs*	High Performance SMEs**
Strategy formulation	42	94
Long range planning	39	82
Revising HR systems	28	78
Developing HR systems	44	91

*A percentage value indicates the percentage of the low performance firms (N=39) which shows the level of HR involvement in strategy.

**A percentage value indicates the percentage of the high performance firms (N=52) which shows the level of HR involvement in strategy.