



THE LINKAGE BETWEEN MANUFACTURING STRATEGIES AND STRATEGIC HUMAN RESOURCE MANAGEMENT PRACTICES IN MALAYSIA

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ABSTRACT

Rapid development and changes brought about by the global business environment should be accompanied by human resource management (HRM) practices which are progressive and forward looking to avoid failure for firms due to inability to properly manage their human capital. This study was undertaken in an attempt to identify which manufacturing strategies are significantly related to strategic HRM practices in Malaysia. This is based on the contingency theory which holds that certain HRM practices are implemented in accordance with type of competitive strategy adopted by the firms. The results of the study show that quality and flexibility based strategy is still a dominant concern for manufacturing firms. Through this study, the information gathered is useful for strategy formulation and how it leads to improved strategic HRM, specifically among Malaysian organizations and other parts of the world in general. Moreover the study is unique as it took place in a heterogeneous socio-political, cultural and economic environment.

JEL Classification: L60, M12

Keywords: Manufacturing Strategies, Human resource Management, Malaysia.

1. INTRODUCTION

Firms competing in the global environment face a multitude of new demands, in forms of external and internal pressures, on their organization and people, often being pushed simultaneously into several contradictory directions. In response, the new global organizing paradigm is centered on complementarities and management process. Firms must be able to transform into a global organization with a fluid and evolving dynamic network, which moves away from traditional and static structural solutions to global business challenges. Firms must embrace global integration and coordination to survive and prosper in the new global competition, but at the same time, strive for local flexibility and speed. Firms have to nurture global organizational learning by stimulating creativity, innovation and free flow of ideas but also advocate a disciplined and methodical approach to continuous improvement. Succeeding in a global economy requires an open and empowered organizational climate, besides a tightly focused competitive culture (Freeman, Edwards and Schroder, 2006; Pucik, 1996).

Causation aside, the globalization trend is changing the dynamics of traditional HRM by stressing on the aspects of commitment, flexibility, quality and strategic alignment (Perkins, 2003). Therefore human resource professionals are challenged to develop a global mindset inside the organizations' human resources, that is the understanding of the new global competitive environment and how it affects organizations; the alignment of human resource practices and processes with the strategic needs of the firm; and enhancement of competencies and capabilities within the human resources function (Griffith, 2006; Pucik, 1996). It could be that the aim of strategic HRM is to extract the maximum value out of human potential and other organizational resources through perfectly designed work systems that prompt a focused approach and boost employees' motivation. Simply put, strategic HRM practices are human resource practices that have been theoretically or empirically proven to result in positive organizational outcomes, whether on its own as a set of best practices, or human resource practices which are contingent on the firm's strategic positions (Delery and Doty, 1996; Kotha and Swamidass, 2000).

The capacity of various strategies in helping firms to face the competitive threats posed by the global business environment has been widely debated on. The premise of this article is that human resources

are one of the most important factors providing flexibility and adaptability to organizations. As noted by Rundle (1997) people are the adaptive mechanism in determining how organizations respond to the competitive environment. Khatri (2000) opined that strategic human resource management has emerged mainly in recognition of the fact that human resources need to be managed strategically for the firm to enjoy sustainable competitive advantage over competition.

Researchers have typically focused on three primary manufacturing strategies: cost, quality and flexibility (Droge, Vickery and Markland, 1995; Leong, Snyder and Ward, 1990; Noble, 1995; Santos, 2000; Youndt et al., 1996). Speed strategy or turnaround time has been added as the fourth variable to reflect the current trend among manufacturing firms. This categorization is also known as the content approach, the competitive priorities of the firm: cost, quality, flexibility and speed that will determine the operational aspect of the manufacturing processes (Dangayach and Deshmukh, 2001). Past research supported the view that a firm's strategy will determine the type of role behaviours elicited from the employees. These behaviours and attitudes are elicited and reinforced through HRM policies (Wan, Ong and Kok, 2002). Santos (2000) stated that the coherence between manufacturing strategy and HRM practices will enable the firms to have heterogeneous human resources that are highly skilled and flexible in the light of the current business environment. This forms the basis for the hypothesis that there is a significant relationship between manufacturing strategy and strategic HRM practices. However, a search of the literature showed limited empirical evidence on the relationship between these two constructs: manufacturing strategy and strategic HRM practices. Indeed to the researchers knowledge, no research findings have been reported in the Malaysian context. Thus this study was initiated to explore the relationship between manufacturing strategy and strategic HRM practices among manufacturing firms in Malaysia.

2. MANUFACTURING STRATEGY AND ITS IMPLICATION ON HUMAN RESOURCES

2.1 IMPLICATIONS OF COST BASED STRATEGY ON HUMAN RESOURCES

Cost based strategy is characterized by tight controls, overhead minimizations and pursuit of economies of scale. The prime concern of this strategy is to increase productivity or output per person (Wan, Ong

and Kok, 2002). Cost reduction strategy involves enhancing competitiveness by lowering the prices of products and services. This method enhances production efficiency and reduces expenditures by adopting new technology, enlarging the scale of production, or re-engineering production processes, so that a firm can sell its product and services at a lower price in the market (Tung, 2001). The competitive priority of cost is frequently considered either as a cost reduction or operational excellence strategy. The cost strategy implies a systematic improvement of company operations without the accomplishment of radical innovations. As an organization following an operational excellence strategy attempts to be a low price provider, it must build operational systems that continually reduce cost, while offering a product that consistently adds value to its customers.

Pursuit of cost reduction will require these role behaviours: relatively repetitive and predictable behaviours, short term focus, autonomous or individual activity, modest concern for quality, high concern for quantity of output, primary concern for results, low risk taking activity and high degree of comfort with stability. Santos (2000) stated that HRM practices which correspond to cost based strategy should consist of a relatively fixed job description void of any ambiguities, a highly focused job design and career definition to encourage specialization and efficiency, performance appraisals guided by short-term results, minimum level of training and monitoring of market pay level for its compensation program. In this context, it must be emphasized that human resources maximize efficiency by providing the means for management to monitor and control the activities of employees (Schuler, 1992).

Production systems are purposely designed to minimize the impact of individual differences, the most consistent approach to human resource (HR) would be one based on notions of command and control. In such settings, the use of elaborate recruitment systems, such as comprehensive employment testing, would have a negligible impact on performance. Furthermore, as work is routinized to the point that labour is essentially a commodity, an elaborate training system would rarely be justified since their utility tends to be diminished. Therefore, training efforts would only need to focus on general information, such as company policies and procedures, or be used as a remedial activity aimed at correcting skill deficiencies. Performance appraisal would need to concentrate on areas such as error reduction and process standardization in order to reduce costs and improve efficiency. At the extreme, appraisal systems would exist merely as perfunctory methods for detecting and

correcting errors. Compensation used in conjunction with cost strategy would focus on individual performance since contributions can easily be measured and attributed to specific individuals in standardized production settings (Gomez-Meija and Balkin, 1992). In short, HR systems consistent with the requirements of a cost strategy would be one that is focused on standardizing processes, reducing errors and maximizing production efficiency (Youndt et al. 1996).

Cost strategy has always been associated with traditional HR practices, where there is high level of control from the management on employees' activities as was indicated in a study by Youndt et al. (1996). It was found that cost strategy is consistent with administrative HR practices that are concerned with standardizing process, reducing errors and maximizing production efficiency. However Youndt et al (1996), were of the opinion that if the relationship between cost strategy and HR practices is positive, it means the practices could be considered as strategic since the practices are perfectly aligned with the strategic need of the firm. Kotha and Nair (1995) in a survey of 25 publicly listed firms in Japan found that cost-based strategy was positively related to financial performance. These authors also stated that the result reflected the empirical evidence found in the U.S. context where cost efficiency is positively related to ROI in both consumer and industrial settings (Hambrick and Lei, 1985). This is further substantiated by Helms, Dibrell and Wright (1997) in a survey of 120 firms which found that cost strategy was positively related to the financial performance of the firm. However this did not translate into significantly high profitability compared to firms implementing innovation strategy.

Bayo-Moriones and de Cerio (2002) reported that HR practices that were aligned with cost reduction strategy resulted in better efficiency performance of the firm. Paul and Anantharaman (2002) in their study of 45 software firms in India found that defender firms which are highly cost efficient firms do not rate highly in the implementation of Strategic HR practices compared to analyzer, reactor and prospector firms and their cost strategy were more consistent with traditional HRM practices.

2.2 IMPLICATIONS OF QUALITY BASED STRATEGY ON HUMAN RESOURCES

Mabey and Salaman (1995) have pointed out several characteristics of an organization that embark on quality based strategy. They contended that role behaviours of such organizations are relatively repetitive and

predictable, a more long term and intermediate focus, moderate level of interdependency, high concern for quality, modest concern for quantity, high concern for process, risk avoidance and highly committed to organizational goals. Coherence of HRM practices and quality based strategy can be achieved by relatively fixed and explicit job descriptions, high levels of employee participation in decisions relevant to immediate work conditions and the job itself, a mix of individual and group criteria for performance appraisal that is short term and result oriented and extensive and continuous training and development of employees (Santos, 2000).

Collard (1993) stated that the formulation of policies and processes that support a quality program requires:

- a) The review of the compensation system in order to ensure that it supports the strategic objectives of the quality program. If the compensation system is essentially based on the individual and driven toward productivity, it will probably conflict with the quality driven team approach.
- b) The evaluation of performance appraisal in order to ensure its objective reflect the quality program
- c) The review of competencies and abilities of all areas and hierarchical levels of organization in order to ensure recruitment, training and development reflect the probable needs of new competencies abilities of the quality strategy.
- d) The change of managerial development toward a learning culture, self development and continuous improvement.

Specifically, employees in such environments are required to make transition from touch labour, where their responsibilities are limited to only physical execution of work, to knowledge work, where their responsibilities expand to include a richer array of activities such as planning, troubleshooting, problem solving, quality assurance, scheduling and maintenance (Snell and Dean, 1992). Deming (1993) argued that skill acquisition and development lie at the heart of a successful quality strategy. Reflecting this relationship, selective recruitment and comprehensive training programs that emphasize attracting and developing individuals with superior technical, problem solving and interpersonal skills should be instrumental for increasing productivity and ensuring conformance to customer requirements. In summary, human- capital enhancing HR systems- those that feature selective

recruitment process, comprehensive training, developmental and behaviour-based performance appraisal, group incentives and salaried compensation that focus on skill acquisition and development, are consistent with the performance requirements underlying a quality strategy (Youndt et al. 1996).

Roth and Miller (1990) in a study which consisted of 193 manufacturing firms in USA found that firms implementing quality did not fare well in terms of their financial performance. Youndt et al., (1996) reported significant relationship between human-capital enhancing HR practices, quality strategy and firm performance. Hoque (1999) found that the best performing hotels were those that practiced high-commitment HR practices coupled with a quality strategy. Chang and Huang (2005) found that the relationship between SHRM practices, quality strategy and firm performance to be highly significant.

2.3 IMPLICATIONS OF FLEXIBILITY BASED STRATEGY ON HUMAN RESOURCES

Role behaviour required for flexible manufacturing strategy are: high degree of creative behaviour, longer-term focus, high level of cooperative and interdependent behaviour, high degree of concern for quality, moderate concern for quantity, equal degree of concern for process and results, a greater degree of risk taking and high tolerance for ambiguity and unpredictability (Wan, Ong and Kok et al. 2000). HRM practices that will fit with flexibility strategy are job descriptions that enhance interactional coordination among group of individuals, performance appraisal that reflect long-term and group-based achievements, compensation systems that emphasize internal equity rather than external market based equity and career path development that reinforce a broad range of skills (Santos, 2000).

Flexibility refers to a firm's agility, adaptability and responsiveness to outdistance their competition. However, flexibility remains an elusive concept and manufacturers conjure up different meaning to define flexibility (Dean and Snell, 1996). Some firms view flexibility as the ability to scale production up and down quickly in an effort to increase delivery performance and others see it as the ability to quickly expand the scope of their product offerings by producing small lots and accommodating nonstandard orders (De Meyer et al., 1989; Leong et al., 1990). Upton (1995) noted that manufacturing flexibility depends much more on people than on technical factors, consequently firms pursuing a flexibility strategy must develop and maintain a highly skilled,

technologically competent and adaptable workforce that are able to deal with non-routine and exceptional circumstances that require creativity and initiative.

Flexibility strategies would likely be complemented by comprehensive recruitment systems aimed at acquiring talented employees who possess high levels of problem-solving and technical skills that allow them to understand an entire production process, thereby facilitating quick production line and product changes. Similarly, comprehensive training programs focusing on problem-solving and technical skills would be advantageous in such an environment. Continuous employee feedback and developmental performance appraisal would be appropriate for manufacturers pursuing flexibility strategy due to unpredictable environments that require mutual adjustment for coordination. Compensation systems should be able to support a multi-skilled and adaptable workforce, as skill-based pay tends to work best in circumstances requiring adaptability, where technology and organizational structure experience frequent changes and where employee exchanges are common. Additionally, since flexible production environments are characterized by a high degree of employee interdependence and require group problem-solving, group-based performance incentives are likely to be appropriate. Much like quality strategy, flexibility strategy requires HR systems that focus on skill acquisition and development in an effort to facilitate adaptability and responsiveness (Gomez-Meija and Balkin, 1992; Youndt et al., 1996).

Youndt et al. (1996) reported that the relationship between human capital enhancing practices, flexibility and firm performance were not significant but attributed the result to the complexities of what constitutes a flexible strategy. Bae and Lawler (2000) found in their study of 138 firms in Korea that there was only a weak support for the relationship between differentiation (flexible) strategy and high involvement HRM strategy but found that the relationship between differentiation and firm performance to be significant. Wan, Ong and Kok (2000) found in their study of 191 firms in Singapore that there was a significant relationship between flexible strategy and "make-organic" HRM strategies and these firms tend to perform better than firms practicing cost-based traditional HR practices.

2.4. IMPLICATIONS OF SPEED STRATEGY ON HUMAN RESOURCES

Time-based organizations approached work differently, where the employees think of themselves as part of an integrated system, a linked

chain of operations and decision-making points that continuously deliver to customers. In such organizations, individuals understand how their own activities relate to the rest of the firm and to the customer. They understand how work is supposed to flow and how time is supposed to be used. Work that is not critical to delivery of value in real time is taken off-line so it does not slow down delivery. According to Bae and Lawler (2000) production systems that pursue quality, variety and speed, demand workers with considerable intellectual preparations. This means that the employees should be properly trained and empowered (Hammer and Champy, 1993; Pferrer, 1998). Bae and Lawler (2000) in their survey of 138 firms in Korea found that there was no significant relationship between speed strategy and high-involvement HRM strategies. Bayo-Moriones and de Cerio (2002) found that there was significant relationship between time-based strategy, high-commitment HR practices and firm performance.

3. METHOD

A structured questionnaire was employed to gather data for the present study. The questionnaire consisted of two sections. The first section contained 37 items to measure manufacturing strategies (cost, quality, flexibility and speed). Items measuring both cost and quality, 9 items each, were adapted from the measures developed by Deane, Gargeya and MacDougall (1990) and Noble (1995). Flexibility was measured using 10 items developed by Swamidass and Newell (1987). Speed strategy was measured using 9 items developed by Bae and Lawler (2000). A five point Likert scale, ranging from 1= no emphasis to 5= extreme emphasis, was employed to obtain responses for manufacturing strategies. The second section of the questionnaire contained 40 items to measure strategic HRM practices which were adapted from Delery and Doty (1996); Huselid, Jackson and Schuler (1997); and Bae and Lawler (2000). This measure requires the HR manager to state the extent these HRM practices were being implemented in the firm. Responses were measured on a five point Likert scale ranging from 1= never to 5= always. The Cronbach's coefficient alpha for this study ranged from 0.85 to 0.89 for the elements. The results put forward a reasonable level of consistency in the responses since it met the Cronbach's coefficient alpha requirement of at least 0.70 as recommended by Nunnally (1978).

In order to meet the representativeness criteria of a good sample collection, the questionnaires for the study were posted to all 700 companies in the electrical and electronics manufacturing sector. The database for the population was derived from the Federation of Malaysian Manufacturers-MATRADE Electrical and Electronics Industry Directory. This study is conducted in a single industry and the database was based on the MATRADE directory, specifically because it has the most comprehensive industry coverage and an updated list. Out of the 700 firms that had been sent the surveys, only 121 responses were received. Thus, the response rate was 17.2 percent. This response rate is not different from other surveys in Malaysia, which tend to obtain a response rate of 15-25 percent (Sarachek and Aziz, 1983; Rozhan, 1998; Hazman, 1998; Kanapathy & Jabnoun, 1998; Rozhan, Rohayu and Rasidah, 2001).

4. FINDINGS AND DISCUSSION

The multiple regression using SPSS software was performed to determine the relationship between manufacturing strategy and strategic HRM. Among the four predictors, only two predictor variables were found to be of significance in explaining strategic HRM. The variables are quality ($t = 2.1088, p = 0.037$) and flexibility ($t = 3.862, p = 0.000$). The R^2 from the model summary showed (0.364) for the relationship between cost, quality, flexibility, speed and strategic HRM practices, meaning the predictors explained 36.4 percent of the variance in strategic HRM practices.

The multiple R ($R = 0.603$) demonstrated significant high correlations between the independent variables (manufacturing strategy) and dependent variable (strategic HRM). The significant F -value is evidence that the model fit the data. Based on the results, it has been concluded that there is a linear relationship between the predictors and strategic HRM. Based on the collinearity statistics, none of the model's dimensions has condition index above the threshold value of 30.00, none of the tolerance value smaller than 0.10 and VIF statistics are less than 10.0. This indicated that there is no serious multicollinearity problem among the predictor variables of the model (SPSS Applications Guide, 1999). Table 1 presents the results of this analysis.

Based on the regression analysis, the prediction equation of strategic HRM practices is:

TABLE 1
Estimates of coefficients for the model

	B	Std. Error	Beta	t	Collinearity Statistics	
					Condition Index	Eigenvalue
Constant	1.379	0.299		4.614		
Cost	0.068	0.065	0.084	1.044	16.321	.019
Quality	0.163	0.078	0.207	2.108	17.905	.015
Flexibility	0.240	0.062	0.375	3.862	26.364	.007
Speed	0.069	0.060	0.096	1.164	28.388	.006

Note: $R = 0.603$; $R^2 = 0.364$; Adj. $R^2 = 0.342$; $F = 16.579$; $p = 0.0001$; $df = 4$

$$SHRM = 1.379 + 0.068X_1 + 0.163X_2 + 0.240X_3 + 0.069X_4 + e \tag{1}$$

Where:

- SHRM = strategic human resource management
- X_1 : cost strategy,
- X_2 : quality strategy,
- X_3 : flexibility strategy,
- X_4 : speed strategy,
- e : Error

The prediction equation shows the overall contribution of quality and flexibility based strategy in predicting strategic HRM practices of manufacturing firms in the electrical and electronic sector in Malaysia. In general, the equation explains a unit change in these variables was accompanied by a corresponding unit change in strategic HRM practices based on the value of the coefficients. Indeed, this estimated model equation can be used to predict the value of the dependent variable (strategic HRM practices) for new cases.

The results show that only Quality ($\hat{a} = 0.207$, $P < 0.05$) and Flexibility ($\hat{a} = 0.375$, $P < 0.01$) strategy were significantly related to strategic HRM practices which was the expected result, thereby

providing empirical support that implementing quality and flexibility strategies will likely result in the implementation of human resource practices that are geared towards the utilization of higher level of skills, knowledge and ability. This result is similar to the findings of Wan, Ong and Kok (2000) in Singapore and Chang and Huang (2005) in Taiwan, where, it was found that firms implementing strategies that focused on flexibility and quality were more likely to practice strategic HRM practices. This finding also provides empirical support for the statement made by Santos (2000) that quality and flexibility manufacturing practices were linked to strategic HRM practices. In addition, this result also lends credence to the behavioural theory that certain types of strategy are able to elicit and condition the desired employee attitudes and behaviour.

Cost based strategy was found to be not significantly related to strategic HRM practices. This implies that cost strategy are more concerned with high level of controlling and monitoring of employees' activities and the production activities are repetitive and short-term focus. Prior studies have shown that cost rarely made significant impact on a firm's strategic HRM practices especially in an industry that is characterized by rapid changes, highly competitive and highly innovative market environment (Santos, 2000; Huselid, 1995). The non- significant result in the relationship between speed strategy and strategic HRM practices was also expected as this was similar to the result found by Bae and Lawler (2000) in their study of Korean manufacturing firms. Furthermore this could indicate that the use of speed as a strategy is not widespread among manufacturers in Malaysia.

In general the present study provides evidence of the adoption of certain strategic HRM practices among manufacturing firms in the electrical and electronic industry. Among others, the adoption of strategic HRM practices by these firms can be attributed to institutional theory, where the rationale is that the more actors try to change their firms, the more they grow increasingly similar; this is known as homogenization of the firms through isomorphism where one unit in a population is forced to resemble other units that face the same set of environmental conditions (Paauwe and Boselie, 2002). The institutional isomorphism element which most likely affects the firms is possibly mimetic mechanism which refers to imitations of the strategies and practices of competitors as a result of uncertainty or the current trend in the field of management. It is however difficult to determine whether the adoption of these practices is the result of blind imitation (Boselie, Paauwe and

Jansen, 2000). In applying this theory to the firms, it is most likely that firms facing the threat of globalization and faced with shortening product life cycle, increasingly sophisticated customers, increasing labour cost and volatility in input prices, has to resort to copying or adopting these progressive HR practices from other firms regardless of their nationality, firm size and the firm age, although these are against the principles of inimitability of the resource-based theory.

According to Boxall and Steeneveld (1999), while firms may copy these strategic practices, if they lack the quality of employee, talent they will not gain competitive advantage. Herein lays the strength of the resource-based theory, i.e. the firms' ability to manipulate human process advantage, which is a function difficult to imitate, consisting highly evolved processes within the firm such as co-operation and participation of and among the employees. The result proves that HRM policies, practices and the firm's human capital can be a source of sustained competitive advantage. Furthermore this research illustrates the relevance of the bundle concept; several strategic HRM practices are combined in order for them to have stronger impact on the firms' performance. This result stresses the importance of developing high involvement and commitment oriented HR policy that are synergistic in nature.

The behavioural theory received some support when HRM practices was found to be significantly related to Flexibility and Quality; further affirming that a firm's workforce could be conditioned through the implementation of specific HR practices to support the firm's strategy. In order for HR practices to succeed in influencing a firm's performance it needs to allied with the firm's strategy. Indirectly, this implies that understanding the firm's strategy is just as crucial as in trying to understand the type of HRM practices that are consistent and will cohere with the production strategy. Overall, the evidence supports the hypothesis that a firm with a set of HRM practices that is integrated with production/business strategy will outperform firms that fail to align their HR practices and strategy.

Schuler (1992) and Santos (2000) stated that matching HRM practices with a firm's competitive strategy is essential because employee's needed role behaviours that were supposed to deliver the expected level of technical skills, knowledge and ability to support the firm's strategy. In order to avoid role conflict and ambiguity, HRM practices that fit with each other and with the strategy are needed to align individual performance to obtain organizational effectiveness. The

significance of the relationship between Quality, Flexibility and strategic HRM practices proved that the HRM practices could be matched with the competitive strategies.

5. CONCLUSION

The study has shown the importance of managing the goals of the organization and its human resources. It is strongly believed that a set of synergistic HRM practices aligned to the manufacturing strategy in turn will affect the organizational performance. As noted by Bae and Lawler (2000) understanding the firms' strategy is crucial to the understanding of HRM practices, as it is difficult for a firm to pursue the appropriate firm strategy if the employees do not have the necessary skills and knowledge to implement it. In other words, the managing of human resources and strategy can no longer be done separately as the study has ascertained that it is important to incorporate human resource policies and practices into strategic considerations.

The evidence provided by this study may justify the need for firms to procure or develop the resources needed to implement the strategic HR practices. In order to obtain the resources needed to enhance their efficiency, firms must understand how these activities affect their workforce. Implementing these strategic HRM practices without the support of the employees may render them ineffective or these practices may be outsourced to external parties. The result underlines the value of creating challenging and enriched activities such as open communication and power sharing to change the firms' management style to improve the effectiveness of their HR practices and consequently performance (Guerrero and Barraud- Didier, 2004).

While the results indicated that many of the respondents may actually have strategic HRM practices, these practices might not have been effectively implemented. Richard and Johnson (2001) contributed this to half- hearted implementation by the managers simply because it represents the latest management fad and no because it is sincerely believed to work within the organizational context to improve workforce effectiveness. However, it is also important for firms to evaluate which practices may significantly contribute towards the firms' performance because in the end what actually matters is the quality or effectiveness of the practices and not the quantity.

6. LIMITATIONS AND RECOMMENDATIONS FOR FUTURE STUDIES

The study was conducted within a single sector of the manufacturing industry; while Pfeffer (1998) contended that a study in a single sector would add more value to the findings, generalization and applicability of the findings to other sectors in the industry needs equal consideration. Therefore, it would be better for future studies to obtain a cross-industry sample. This is even more relevant for firms competing in a globalized environment.

Strategic HRM measurement was measured based on the perspectives of a single respondent that is the HR manager. The problem with this is that it does not take into account the viewpoint of the employees. Therefore the result is open to potential bias. In the future it would be more objective to measure the concept from the viewpoint of multiple respondents, both the employees and the management.

Two perspectives-universal and contingency perspectives, in the study of HRM and strategy were identified and explored. Future research will need to explore empirically whether firms integrate HRM issues in their strategic process, how they do it and whether the more proactive approach improves organizational approach. Future studies should also analyze the configurational dimensions of HRM perspectives and its effect on firm performance.

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