



ASSESSING THE INFLUENCE OF THE MEDIATOR VARIABLE ON THE EFFICIENCY OF KNOWLEDGE MANAGEMENT IN HUMAN RESOURCE MANAGEMENT

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ABSTRACT

In today's extremely competitive economic climate, organisational innovation has long been seen as a competitive advantage. The development of new goods and processes, as well as services, is especially vital for Malaysian manufacturing enterprises striving to change from a labour-intensive to a knowledge-intensive business model. Implementing strong HRM practises and knowledge management techniques can increase organisational creativity. Organizational innovation was examined to determine whether any correlations could be found between various HRM practises (such as performance evaluation, career management, training, incentive system design, and recruitment) (product innovation, process innovation, and administrative innovation). Additionally, the study examined the mediating influence that successful KM played in the connection under consideration, as well. The study's data came from a sample of 171 major Malaysian manufacturing firms. Human resource management approaches generally have a positive impact on organisational creativity, according to a regression study. Training is connected to three different types of organisational innovation (product innovation, process innovation, and administrative innovation). Performance evaluation has a good impact on administrative innovation, too. In their study, the researchers discovered a link between the effectiveness of knowledge management training and performance evaluation. Because knowledge management is so adept at mediating these connections, performance evaluation and administrative innovation are inextricably linked.

Keywords: Human resource management practices, product innovation, process innovation, administrative innovation, knowledge management effectiveness, Malaysian manufacturing firms.



1. Introduction: With the hasty advancement of high-tech, ICT, many organisations compelled to actively seek out new ways to improve their current products, processes, systems, and technology through new ideas, experiments, and creative solutions, which is commonly known as organisational innovation. Post-industrial Malaysia has seen a lot of competition amongst its neighbours. Malaysia has introduced its new economic model, which intends to shift manufacturing enterprises from a product-based to a knowledge-based one in order to stay competitive. In line with this, organisations must grasp the basic drivers driving their ability to develop successful new goods, ideas, practises, and systems if they want to remain competitive in this dynamic market.[1]. Effective human resource management (HRM) techniques are widely recognised as being important in extracting excellent employee work behaviours that contribute to subsequent corporate innovation. Human resource management strategies can boost employee's knowledge, and enthusiasm, resulting in a long-term competitive advantage for the company[2]. However, there is no connection between HRM practises and corporate outcomes, such as innovation. When it comes to knowledge management, HRM practises have been shown to have a significant and beneficial impact on organisational innovation because of their ability to influence an individual's attitude and behaviour.[3]

The research on innovation in Malaysia is still in its infancy compared to established nations like the United States and Europe. [4]Malaysia has placed a high value on innovation in all areas of the economy as part of its drive to become a knowledge-based economy. Many studies have attempted to study the pertinent precursors to innovation, such as individual variables, because of how important it is to a company's competitive position to be innovative. both the external



environment and the organisational structure play a role[5] However, there is still research to be done on specific organisational practises that may promote organisational innovation. The way a company approaches HRM processes has a big impact on how innovative the firm is.[6]. As long as HRM procedures are effectively implemented, they may make a substantial contribution to organisational knowledge, and innovation will be made possible by using the information to uncover and explore prospects. This is based on the premise that effective knowledge management enables employees to produce information within their scope of effect and the degree of shared knowledge encourages organisational creativity. Accordingly, the study's goal was to look into HRM policies and practices (performance evaluation, career administration, and training), organisational modernization (product development, process improvement, and administrative development), and the efficiency of knowledge management in Malaysia's manufacturing industry.

2. Administrativemodernization

The creation of new ideas and new behaviours for the organisation has been commonly defined as organisational innovation. Organizing for organisational innovation has many facets that can be examined from two perspectives: (1) Innovation breadth, including policies, systems, procedures, processes, goods, and services; (2) Innovation depth, including importance, degree of influence, and outcome on best productivity, among other things.[7] Technological innovation and administrative innovation are the two main categories of organisational innovation. Administrative innovation is separate from the other two secondary elements, namely product



innovation and process innovation. It was decided that organisational innovation encompassed all three types of innovation: product, process, and administration. The current research categorised organisational innovation into three basic dimensions: product innovation, process innovation, and administrative innovation, based on the most common types previously reported in literature. For the sake of providing value and meeting the demands of the target market or end user, the definition of product innovation is as previously stated: developing and marketing new products to meet those needs. Product innovation is a rigorous procedure that relies on earlier study and practical experience to generate new materials, objects, and devices, including prototypes. In other words, it's a never-ending cycle that never comes to an end. Instead, process innovation is defined as the creation of a new process or the enhancement of an already existing process.[8] It is possible to implement an improved production or delivery method by altering processes, equipment, and/or software in the process of process innovation. Changes in organisational structure and administrative processes such as remuneration and information systems lead to improved performance, and this includes core work activities within the organisation that are directly tied to management. Administrative innovation cannot emerge until organisations have well-established routines and procedures for product development, manufacturing, distribution, service, and support that can be independently confirmed. Product innovation, process innovation, and administrative modernization are all important sources of competitive advantage for manufacturing organisations because they operate in such a complicated environment.



3. Human Resource Management (HRM)

HRM practises are becoming increasingly important as the global economy grows more competitive and uncertain. The practise of human resources management (HRM) was broken down into several components.. When it comes to managing human resources, organisations utilise HRM to help firms establish firm-specific capabilities, create complex social interactions, and generate knowledge about their business in order to stay competitive. HRM practises relate to specific procedures, formal norms and philosophical approaches aimed to recruit, develop, motivate and retain employees who assure the organization's efficient operation and survival. There were a number of key approaches to developing HRM that focused on strategic HRM practises connected to organisational innovation, particularly on a *universal* or *best practise* approach. Research shows that creativity is linked to everything from performance evaluations and career management to reward systems and training.

4. Human Resource Management practices and administrative modernisation

Human resources are among the organization's assets, a subset of which allows the company to gain an advantage in the marketplace and another subset of which results in greater long-term performance. According to the AMO idea, when employees are motivated, they do a better job, which results in superior business performance. As a result, new products and services will be easier to develop and market. Innovative and creative personnel who are open to take risks as well as those who tolerate ambiguity as a result of new product or process introductions are required by companies looking to implement new practises. These individuals are well-known in



the manufacturing industry because of their contributions to the firm's market responsiveness, product and process innovation. They are highly valued. Performance appraisals, for example, boost employee engagement and happiness since they provide employees a chance to talk about their work performance. As a result, they'll be more productive when engaged in creative endeavours. Similarly, career management aids people in achieving their professional objectives and ambitions. People are more likely to participate in creative activities when they are satisfied with their career management.[9]When employees receive training, they learn new skills and abilities that can spur innovation in everything from products and procedures to management techniques in day-to-day operations. As a result, training improves employees' knowledge, skills, and abilities so that they can be more innovative in the workplace.

6. Knowledge management success as a moderator

Black box is evident when there is disconnect between HRM procedures and organisational outcomes. There is an unknown equipment which appears to be invisible when it comes to fostering organisational creativity, according to the *black box* approach.[10]. Knowledge management is a pre-cursor to organisational innovation and a link between organisational factors and organisational outcomes. Other scholars have studied knowledge management in the past as a mediator. As a link between company culture and structure and organisational effectiveness, knowledge management serves as a vital component of any organisation.

7. Methodology

7.1 Samples



According to the National Survey of Innovation, 2002-2004, Malaysia's innovative firms were spread between the states of “Selangor, Pulau Pinang, Johor, Kedah, Kuala Lumpur, and Perak.” The samples used in this study were from the FMM Directory 2007, which listed 674 significant manufacturing companies in Malaysia's six states. As a result, the 647 big manufacturing enterprises spread throughout six states were chosen as the study's sample. The surveys had a deadline of two months for the prospective manufacturing companies to complete them. “A total of 171 usable questionnaires were returned and examined, resulting in a response rate of 25.4%.”

7.2 Method of analysis

Performance appraisal, career management, training, reward systems, and recruitment are all part of the HRM practises measurement, which includes 28 categories (6 items). Product innovation (4 things), process innovation (4 items), and administrative innovation were all used to gauge an organization's level of innovation (5 items). The materials were repurposed from earlier studies' findings. Respondents were asked to rate each statement on a seven-point likert scale, with one representing *strong disagreement* and the other representing *strong agreement*. The profiles of the participating firms were compiled, including information on their geographic location, industry type, and who owned them. Furthermore, hierarchical regression was used to assess the study's hypotheses[11] According to prior research, the size of the company and the number of years in operation has an impact on organisational innovation. As a result, the regression analyses took these two variables into consideration. “The study variables' reliability coefficients are as follows: career management (0,91), training (0,89), performance evaluation (0,87), reward

system (0,87), recruitment (0,82), effectiveness of knowledge management (0,96), product innovation (0,89), process innovation (0,88), and administrative innovation (0,89). (0.85) these numbers were higher above the permissible limit of 0.60.”

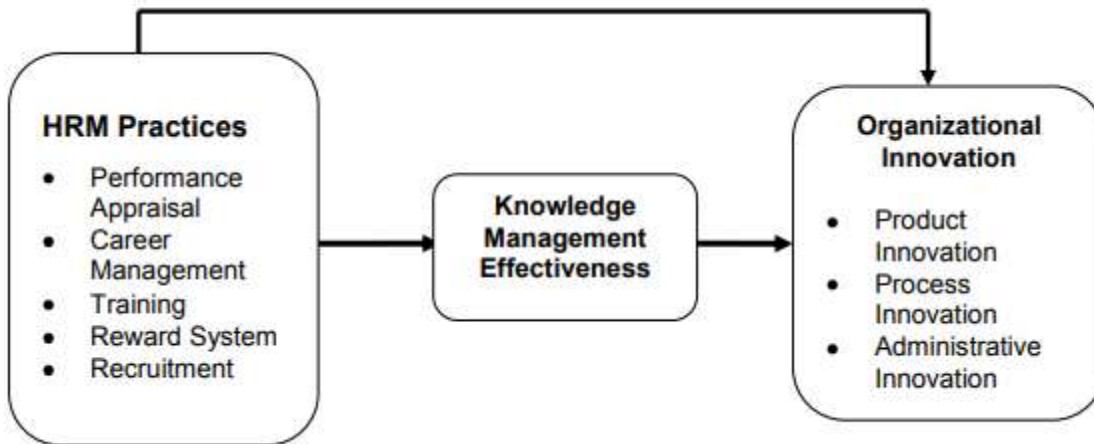


Figure 1: Research framework

8. Results

8.1 Companies profile

Table 1 lists the firms that took part in the survey. In Pulau Pinang, 78% of the 171 major manufacturing firms participating are located, followed by Selangor (26.7 percent) and Johor (13.5 percent). The remaining enterprises were from Perak, Kedah, and Kuala Lumpur, with combined shares of 11.1 percent, 6.4 percent, and 4.1 percent. In terms of industry, the majority of responding firms are in the electronics/electrical sector (26.9%), followed by other industries



(25.7%), fabricated metal goods (10.5%) and rubber and plastics products (8.8 percent) Textile (5.9%), food and beverage (4.7%), motor vehicles (4.7%), paper and paper products (4.1%), chemicals and chemical products (2.9%), medical and precision (2.3%), recycling (0.6%), and machineries are the other industries that responded (0.6 percent). Only 49.1% of the firms responding are 100% local, with foreign corporations (38.6%) and joint ventures (49.1%) following as the most common forms of ownership (12.3 percent). According to the findings of this study, the average firm size is 1,162.4 (SD = 1779.68), with firm sizes ranging from 150 to 11,000 employees. This investigation used two types of control variables. The average number of years in business is 23.1 (standard deviation = 10.15), with a range of 4 to 51 years.



Variable	Frequency	%
Location of Factory		
Kedah	11	6.4
Perak	19	11.1
Pulau Pinang	65	38.0
Selangor	46	26.9
Kuala Lumpur	7	4.1
Johor	23	13.5
Type of Industry		
Electronics / Electrical	46	26.9
Chemicals & Chemical products	5	2.9
Textile	10	5.9
Rubber & plastic products	15	8.8
Food & beverages	8	4.7
Fabricated metal products	18	10.5
Motor vehicles	8	4.7
Basic metal	4	2.3
Recycling	1	0.6
Paper & paper products	7	4.1
Medical & precision	4	2.3
Machineries	1	0.6
Others	44	25.7
Ownership of Company		
100% foreign company	66	38.6
100% local company	84	49.1
Joint venture company	21	12.3

Table 1: Profile of participating companies[12]

8.2 Descriptive data

Descriptive data including mean values, standard deviations, reliabilities, and intercorrelations are shown in these tables for the study variables. Table 2 demonstrates that statistically 34 of 36 intercorrelations are significant. All correlations between HRM practises are statistically significant, with correlation coefficients between zero and one as high as 0.66. Although there are significant links between HR practises and organisational creativity, the correlations between



the reward system and product innovation range from “ $r = 0.06$ ($p > 0.05$) to $r = 0.11$ ($p > 0.05$).”

There are statistically significant relationships between features of organisational innovation “($r = 0.47$; $p = 0.01$) and ($r = 0.55$; $p = 0.01$).” Organizational innovation and HRM practises have a strong and positive relationship. These P-values ranged from zero to ten percent for the relationship between HRM practises and K-management effectiveness. In addition, the correlation between knowledge management efficiency and organisational creativity ranged from “ $r = 0.42$ ($p 0.01$) to $r = 0.63$. ($p 0.1$)”

		PDI	PCI	ADI	PA	CM	TR	RS	RC	KME
1.	PDI	1.00								
2.	PCI	0.471**	1.00							
3.	ADI	0.535**	0.552**	1.00						
4.	PA	0.283**	0.264**	0.466**	1.00					
5.	CM	0.265**	0.297**	0.455**	0.648**	1.00				
6.	TR	0.352**	0.362**	0.487**	0.585**	0.660**	1.00			
7.	RS	0.060	0.240**	0.345**	0.603**	0.570**	0.555**	1.00		
8.	RC	0.140*	0.112	0.316**	0.444**	0.628**	0.468**	0.480**	1.00	
9.	KME	0.417**	0.443**	0.625**	0.563**	0.652**	0.663**	0.445**	0.514**	1.00
**. Correlation is significant at the 0.01 level (1-tailed).										
*. Correlation is significant at the 0.05 level (1-tailed).										

Table 2: Intercorrelations matrix[12]



Note:PCI stands for process innovation, while PDI stands for product innovation. ADI stands for administrative innovation. PA stands for performance assessment, while CM stands for career management. TR stands for training, while RS stands for reward system

9. Discussion and conclusion

To determine whether there was a direct link between HRM practises and organisational innovation, along with an indirect link due to the effectiveness of knowledge management, HRM practises were compared to each other. This study's findings showed that HRM practises had important beneficial influence on organisational modernization. Knowledge management serves as a link between HR management practises and organisational innovation, which it mediates. Only one of five HRM practises, training, had an impact on three aspects of organisational creativity. The results showed that companies with advanced levels of training execution increase the required skills of their employees and their capacity to learn more quickly. Employees have the power to develop new understandings and ideas that benefit corporate innovation. Because of this, manufacturing firms will reap the benefits of efforts to enhance knowledge management effectiveness through increased organisational innovation performance. A number of recommendations are made by the study's findings for Malaysian industrial enterprises as well, including an emphasis on employee training. Participants in training programmes are expected to put their newly acquired skills and knowledge to work on the tasks and occupations they are given. The more training that is implemented, the more information and knowledge that is transferred and flows, which increases the learning of the organisation and instils new ideas, resulting in product, process, and administrative modernization.. An



explanation for this is that administrative innovation is often completed more quickly is that administrative processes and systems can be tailored to meet the needs of the company. As a result, feedback from performance evaluations, which are normally conducted at least once a year, can be used to improve administrative systems. Product and process actualization, however, encounters technological restrictions, causing innovation to take longer to deliver results, sometimes over several years.. This shows that the more fair performance assessment system is implemented, the more motivated employees are towards their tasks. Employees who are highly driven are more likely to give innovative ideas to the organisation. While some HRM techniques have been shown to be associated to organisational innovation others have not Career management, the incentive system, and recruitment (M = 4.21) are all ranked lower in importance in Malaysia than performance appraisal (M = 5.20) and training (M = 5.00). As a result, it's likely that these connections are meaningless. One probable explanation is that the companies in the sample are a mix of foreign-owned (35.1 percent), locally-owned (44.7 percent), and joint-venture (20.2 percent) organisations.. An effective training programme for product technological knowledge can help managers get started in improving product innovation. An effective training programme should be developed by management that allows employees to learn from both internal and external business partners, and from the company's training programmes. A manager should build a paper trail to make sharing and transferring information easier. It is possible to trace the paper trail all the way back to the organisation. If proper facilitation is in place, employees will be better able to use and apply their knowledge. Organizational creativity would be enhanced as a result of increasing knowledge management



efficacy through adequate and appropriate training. Second, manufacturing organisations must provide their employees with honest and accurate performance reviews. Due to fair performance reviews, employee enthusiasm was bolstered, which in turn led to an increase in administrative innovation. It is important for managers to encourage their employees to learn, share, and put their new knowledge to good use in order to accomplish the goals of their performance evaluations, which can lead to more innovative administrative policies and procedures.

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