Current Practices of Human Resource Management (HRM) in Thai Construction Industry: A Risk and Opportunity Perspective

Review of Integrative Business & Economics Research

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ABSTRACT

Construction industry accounts for a significant portion of world economic activities, especially in emerging economies where infrastructure developments are much needed. Construction industry is typically characterized as a labor-intensive and low-tech sector. Meanwhile, it is also the sector consistently found the least productive. Commonly cited reasons for such poor performance in this sector are fragmentation, project-based culture, and temporary teams. These factors have something in common; they pointed to the difficulty in managing human resources. Therefore, one way to increase the performance of this sector is to leverage more on human capital through the use of human resource management (HRM). In this paper, we provide an overview of previous research on HRM, especially in construction industry. We also investigate into the effect of HR policies and practices on three critical success factors of a construction project: *time*, *cost*, and *quality*. To this end, we develop a model comparing and contrasting the current HR practices (1) between construction industry and other industries and (2) between companies in construction sector and those in other sectors in Thailand. Finally, we provide the critical analysis of the risks and opportunities of the current HRM practices adopted by Thai construction companies in domestic and international markets.

Keywords: Construction industry, human resource management (HRM), performance, risks and opportunities.

1. INTRODUCTION

Construction industry plays a significant role in helping stimulate economic growth, especially in emerging economies like Thailand. It also provides work for a large proportion of the labor market and accounts for a significant contribution to the world gross domestic product (Loosemore, 2003). Historically, there exists a highly positive correlation between the growth in this sector and the overall growth measuring in terms of gross domestic product or GDP. For instance, before the 1997 Asian financial crisis, Thailand had an average GDP growth of around 5.83%, with the growth rate of about 14% in the construction sector. Shortly after the crisis, Thailand's GDP plummeted into a negative territory (-10.50%), and the construction

sector experienced a huge contraction of more than -38% (Department of Business Development, 2010).

Several years after the 1997 Asian financial crisis, Thailand's economy in the early 2000s began to see a sign of modest recovery, thanks to the government who at the time adopted the Keynesian approach to stimulate economic activities through public investment in infrastructure projects, which meaningfully helped offset the declining spending in the private sector. Currently, the outlook for Thai construction industry is quite optimistic, according to a report by Research and Markets (2011).

In the domestic construction market, construction will continue to grow for some years, especially in 2012, which is expected to see a significant increase in construction activities from the reconstruction after the devastating 2011 Thai flood. Tourism also plays a significant role in stimulating the demand for new resorts and hotels, which requires more construction. Also, the development of the mass transit in Bangkok, such as the BTS skytrain and the MRT subway, provides the developers an opportunity to construct more residential buildings along the mass transit route, particularly high rise condominiums. Thai construction industry in its domestic market will continue to grow mainly because of its low cost advantage and reasonable infrastructure that ensure its status as the fastest growing industrial construction market over the coming decade (Thai news service, 2011).

As for international markets, Thai construction companies are considered highly competitive mainly because they have a long experience in construction technology for high-rise buildings, infrastructure, and housing with attractive designs and decorations. For instance, some of the high-profile projects currently being undertaking are the US$3.8 billion Xayaburi dam project in the Lao PDR and the Dawei deep sea port in Myanmar. A recent report by Research and Markets, a consultancy, predicted that the Thai construction industry, with increased support from the government, is estimated to grow during the forecast period of 2011 to 2015. The increase is expected to be driven by significant levels of investment in the energy and infrastructure sectors, particularly in terms of transport.

The growth of construction industry is, however, not without concerns. For example, several studies on productivity of the construction sector saw below average performance of the sector (Zhang and Liu, 2006; Liu *et al*., 2006). Moreover, construction activity is often characterized as very diverse, complex and risky, which makes it less attractive for young people to enter into the construction workforce, thereby increasing the problem of lack of skill workers. This problem is also aggravated by the perception that construction work is an insecure job (Tressell, 1957). As pointed out by many, construction sector is a labor-intensive, and cost of labor account for a significant portion of the total construction cost (Loosemore *et al*., 2003). It is therefore tempting to assume that if construction companies can reduce the labor costs without compromise or sacrifice the lucrative of the construction work, there is a significant chance that construction companies may improve its productivity through more effective human resource utilization.

Unlike other economic sectors, the workforce in the construction industry is often characterized by non-standard employment practices, particularly self-employment which is believed to account for around half of the industry's total employment

(Loosemore *et al*., 2003), although many self-employed are in fact thinly disguised employees (Rainbird, 1991). Furthermore, it is often assumed that productive groups need little attention and project managers traditionally focus on structuring and planning operations, with relatively little attention paid to human resources (Belout, 1998). The specialized and temporal nature of project-based working also inevitably leads to fragmentation in the production process and to competing demands for those working within them. Therefore, many argued that effective use of HRM in construction can increase the competitive advantage of construction companies and can help improve their overall performance (Paauwe, 2004; Paauwe and Boselie, 2003; Schuler and Jackson, 1987).

However, if HRM is considered to be a good thing for productivity improvement as believed by many, why do construction companies rarely adopt such practice? We also want to know which HRM practices are currently used by most Thai construction companies. We then compare the acquired model of HRM used by most Thai construction companies with that adopted by most industries. This results in an insight into the factors affecting the HRM model used in Thai construction industry. Looking forward as the ASEAN economic community or AEC is becoming close to reality, we investigate into risk and opportunity faced by Thai construction companies if they continue to operate using the same HRM policies and practices under this new and changing economic conditions of the AEC.

2. FUNDAMENTALS OF HUMAN RESOURCE MANAGEMENT (HRM)

Human resource management (HRM) is arguably one of the oldest management concepts. It provides an organization with competitive edge over its competitors. Broadly, HRM can be defined as a coherent approach to the management of an organization's most valued assets; the people working there who individually and collectively contribute to the achievement of its objectives (Armstrong, 2006). In essence, it is the people practices and ranges from hiring new employees to developing them into successful organizational members to managing their separation from the company. Also, HRM is often used to change the attitude and behavior of employees toward the organization, which could result in better organization's performance. Human resource (HR) professionals administer these programs and can be generalists or specialists. Generalists have some knowledge about each HR function, while specialists are experts in one particular function such as recruitment, labor relations, or training (Armstrong, 2006).

In order to maximize the effectiveness of human resource management, there should have the following aligned activities: (1) strategic human resource management, (2) job analysis, (3) recruitment and selection, (4) training and development, (5) career development, (6) performance management, (7) compensation and benefits, (8) discipline, and (9) safety and health. Also, Pfeffer (1998) described that HRM activities that promote a sustainable path to competitiveness should involve the following: (1) employment security, (2) selective recruiting, (3) high wages, (4) incentive pay, (5) employee ownership, (6) information sharing, (7) participation and empowerment, (8) teams and job redesign, (9) training as skill development, (10) cross-utilization and cross-training, (11) symbolic egalitarianism, (12) wage compression, (13) promotion from within, (14) long-term perspective, (15) measurement of practices, (16) overarching philosophy. To successfully implement

these HRM activities, there must be the alignment between the HRM processes and organization's strategies.

3. HRM PRACTICES IN THAILAND

As Hofstede (2007) put it, if Western management principles don't work somewhere, this is not the fault of the principles but of the people. There are several researchers conducting a study on HR practices in Thailand. Often, they group the companies to be studied into several classes according to the size (Gullaprawit, 2002; Lawler et al., 1989; Tan and Torrington, 2004). For example, a study by Lawler (1989) found that the American multinational corporations (MNCs) in Thailand have the highest use of HRM (about 96% of the corporations in the study), compared with 74%, 60% and 40% for European MNCs, Thai-owned large corporations, and family enterprises, respectively. This result confirmed that HRM, mostly developed and brought into practices in the U.S., is extensively employed not only in the U.S. but also in aboard by the subsidiaries of American MNCs.

Kamoche (2000) categorized HRM practices found in Thailand into three models: *traditional*, *progressive*, and *transitional*. In the traditional model, the focus is mainly on administrative concerns, managerial control and cost, and cost–consciousness. In terms of planning, managers appeared to work in short-term period like one year, and were not prepared to contemplate decision beyond that. This was evident in the push to achieve targets and account for action within the "current financial year". The second model, the progressive one, comprises practices now commonly associated with strategic human resource management (SHRM) like sustaining specific human resource policies which explicitly support organizational goals and strategies, and creating an organizational climate in which the claim that "people are our most important asset" is more than just a platitude. There was also evidence of coherence between the various HR aspects, e.g., selection, performance management and career management. The third model, the transition model, lies between the two previous models. The firms using this model appeared to retain many of the aspects of the "traditional", in particular cost–consciousness and high emphasis on managerial control. However, they were also beginning to recognize that the traditional model was not fully achieving the strategic objectives or addressing crucial HR questions. The resulted in a deliberate effort to achieve change including culture change, to standardize procedures, and introduce a developmental element in training and career development.

Since corporations are operated within the society, it's therefore undeniable that cultural and social values play a critical role in determining organization behavior. A famous study by Hofstede (1993) found that the important factors influencing the HRM practices found in most Thai corporations are culture, education-human capital, economic system, and political-legal system, as illustrated in Figure 1.

In terms of culture categorized into five national dimensions by Hofstede (1980), i.e., (1) individualism versus collectivism, (2) power distance, (3) uncertainty avoidance, (4) masculinity versus femininity, and (5) long term versus short term orientation, Thai society was characterized by Hofstede (1993) as collectivism, having the strong relation between an individual and other individuals in a society. This characteristic affects the HRM practices in Thailand in the following ways. In terms of the relationship between employers and employees, it is perceived in moral terms, like a

family link. This type of relationship can influence the decisions to promote potential employees based on his or her relationship with the managers, rather than merit-based. In other words, Thai society is not *meritocracy* (meritocracy is a social system in which people have power because of their ability, not the other way around). The collectivism in Thai society also leads to the following working environment found in most Thai corporations: (1) hiring and promotion decisions take employees' in-group into account; (2) management is group management; (3) relationship prevails over task; (4) collective interest prevail over individual interests; (5) private life is invaded by group; and (6) opinions are predetermined by group membership.

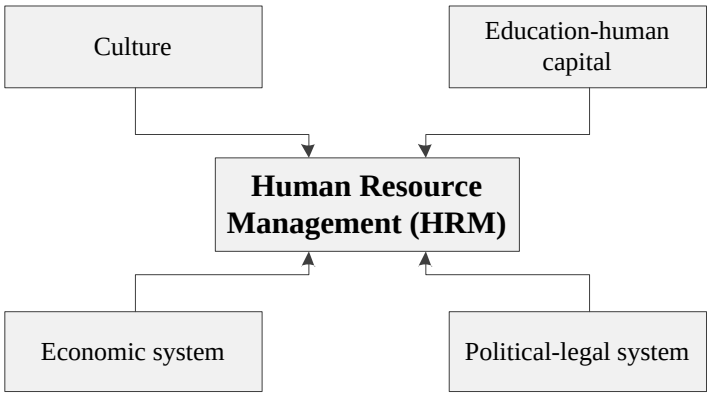

Figure 1 Key factors influencing HRM practices in Thailand (Noe *et al.*, 2010)

From the view point of power distance, which describes how a culture deals with hierarchical power relationships, it was found that Thai corporations are characterized as follows: (1) hierarchy in organizations somewhat reflects the existential inequality between higher-ups and lower-downs; (2) centralization is popular; (3) wide salary rage between top and bottom of organization is common; (4) subordinates expect to be told what to do; (5) the ideal boss is a benevolent autocrat or good father; and (6) privileges and status symbols for managers are both expected and popular.

As for the aspect relating to uncertainty avoidance, Thai people in general tend to avoid uncertainty. Accordingly, it is usually found that there is emotional need for rules, even if these rules will never work or are even redundant. Also, the suppression of deviant ideas and behavior and resistant to innovation is the result of the attempt to impede any uncertainty that might occur.

In the aspect of masculinity versus femininity, Thai culture is considered to be the latter one. One of the obvious consequences of this femininity leaning is the resolution of conflicts by compromise and negotiation, i.e., *mai pen rai* and *jai yen yen* culture. It also found that Thai managers use intuition and strive for consensus, rather analytic approaches. In the last category of culture classification, Thai people are inclined to the long term orientation. No doubt, religion has a strong influence as to how people should be living. As most Thai people are Buddhist who believes in the *karma* law (the cycle of cause and effect) and reincarnation or rebirth, it is a stark contrast with those religions believing in one life in which people seem to believe to make the most out of his or her life.

According to a model by Noe *et. al* (2010), educational-human capital, economic system, and political-legal system are also important factors affecting the HRM practices in Thailand. For example, in Thailand there is the lack of unskilled or trained workers, increased immigrant workers whose language has become the obstacle for effective communication. Thai political system can also affect the management of human resources. For example, government policies, especially those related to workforce such as minimum wages may pose some financial risks to the management of labor cost, which represents a significant proportion of cost structure of most manufacturing corporations in Thailand.

4. CONSTRUCTION INDUSTRY AND HRM PRACTICES

Unlike many other industries whose performances are enhanced by new emerging technologies, construction industry is still a *labor-intensive* and *low-tech* sector; as a result, human capital is the most important and very often the most expensive resource deployed within it (Loosemore *et al*., 2003). According to Huemann *et al*. (2007), construction projects have the following characteristics that make HRM policies and practices different from those of the other industries employing routine organization: (1) managing by projects as the strategy of the company, (2) temporary nature of projects, (3) dynamisms, (4) project portfolio resource and multirole demands, and (5) specific management paradigm. In addition, it was also found that construction industry is a *male-dominate* culture (Loosemore *et al*., 2004). These are the main factors affecting the use of HRM in construction industry. The first two factors, (1) managing by projects and (2) temporary nature of projects, resulted in fundamentally different HRM models in classical managed companies and project-oriented companies like construction companies as presented in Figure 2 (Huemann *et al*. (2007).

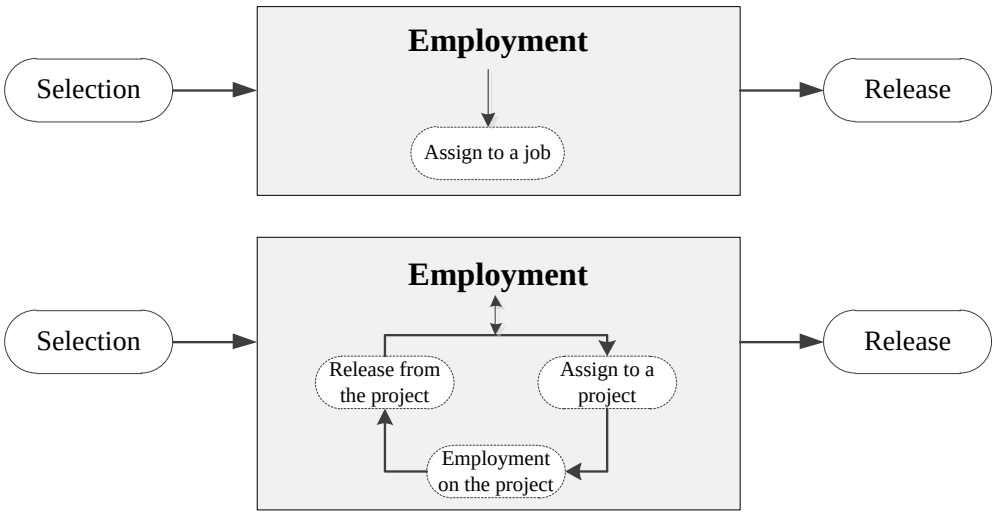

Figure 2 HRM in (a) the classically managed and (b) the project-oriented companies

Experts in the field of construction work have developed theories regarding how to successfully use HRM in specific conditions of construction. For example, Nesan and Holt (1999) described a "New Construction Philosophy," which is largely concerned with the idea of increasing level of employee empowerment. Similarly, Olomolaiye *et al*. (1998) proposed the "Lean Construction Philosophy", which combines existing

techniques and principles in a new dimension for productivity improvement and cost reduction by stimulating employees.

In this section, we examine the HRM model considered to be successfully used in construction projects around the world. We divide the topic into two parts: HRM practices in the global construction industry and in Thai construction industry.

4.1 HRM Practices in the Global Construction Industry

In the U.S., there is a growing shortage of skilled construction workers because construction job does not provide the appeal it once did, e.g., competitive wages (Liebing, 2001). Currently, the majority of workers entering into the construction workforce are from minority groups, immigrants, and chronically unemployed persons. The main problems faced by the U.S. construction industry are the lack of appropriate skill, unfamiliarity with methods and materials, language barriers, and educational background (Yankov and Kleiner, 2001).

To handle this problem, several U.S. construction firms are heartedly adopting HRM as a tool to prevent further declining in productivity, and some of these companies are even surprised with the outcomes they received: a better performance. HR management theory that is currently widely accepted in the field of US construction is employee motivation through: (1) workers participation, (2) recognition, (3) team belonging, (4) management and commitment, and (5) effective training (Yankov and Kleiner, 2001). For example, TDIndustries, a Dallas-based contractor, has made use of the HRM concepts in order to cope with the growing problem of retaining employees, using "servant as leader" management philosophy (The Top Newsmakers, 2000). The result of this new management philosophy is that the company is rated as an excellent place to work for. Another contractor, Webcor Builders, places a great deal emphasis on the importance of employees' effective training (Kopochinski, 2000), which helped increase revenues of $60 million in 1994 to more than $600 million in 2000.

A study by Yankov and Kleiner (2001) concluded that in the U.S. the most successful construction companies are those who possess a fine line between company's interests and employee welfare. Successful construction managers also focus on creating workers' friendly environment and on developing effective and production employees. In addition, they are well aware that findings ways to motivate workers is an important key to making the HRM work. Motivation being the inner power in the process of HR enhancement is of interest to construction managers as a vehicle to achieve companies' goal, which is increasing stockholders' wealth.

In Europe, a study by Arashpour and Arashpour (2011) found that not only financial factors (e.g., remuneration, incentive payments, retiring pension, and overtime payments) but also psycho-social factors (e.g., employee empowerment, health and safety conditions, and work satisfaction) affected the productivity of human resource, leading to better performance of the construction companies. In the UK, team leadership was found to be the most important factor affecting projects' performance (Dainty *et al*., 2005).

In Asian countries like China and Singapore where the HRM practices in construction have been studied, it was found that leadership of construction managers played a

huge role in the success of a project (Toor and Ofori, 2007; Limsila and Ogulana, 2008; Toor and Ogulana, 2010). Tabassi and Bakar (2008) studied human resource management in construction projects in Iran; they found that training and motivation of employees are major obstacles to effective use of HRM in Iran. To improve the performance of construction companies, they suggested employing both short-term and long-term training at places like training centers, rather than on-the-job training.

Figure 3 summaries the HRM models for high performance construction companies that we found in the U.S., Europe, and Asia.

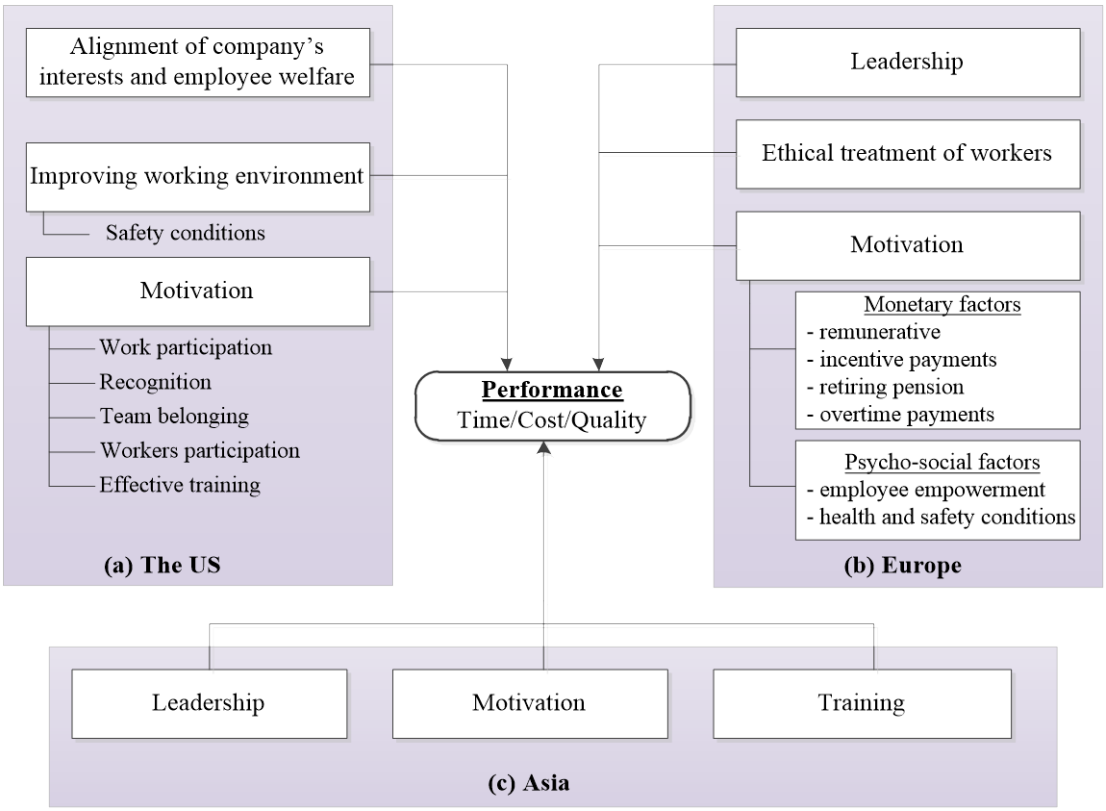

Figure 3 HRM model adopted by the construction industry

4.2 HRM Practices in Thai Construction Industry

One of studies concerning HRM in Thai construction industry was done by Tuntimas (2007) who studied the factors influencing on the efficiency of HRM practices in Thai construction companies, with the emphasis on small and medium size enterprises (SMEs). The study found that rewards created the most job satisfaction for employees. The second ranked factor was organizational characteristics. He concluded that external constraints such as educational, sociological, political and legal, and economic characteristics are at work on the practices of HRM in Thai construction companies. Another study by Ruthankoon and Ogulana (2003) tested Herzberg's two-factor motivation theory on Thai construction engineers and foremen. They found that achievement contributed to satisfaction for the engineers but not the foremen, who prefer monetary rewards to achievement. However, the two studies did not show the link between job satisfaction and performance or productivity. Therefore, in this

research, we developed a model of effective HRM for Thai construction companies, based on the literature presented in this paper.

In this study we hypothesized that (1) human resource management strategy, (2) leadership, (3) team management, (4) communication, (5) motivation, and (6) ethical treatment of workers are keys factors affecting the performance of construction projects in Thailand, measured in terms of time, cost, and quality. Using the proposed model of HRM, as presented in Figure 4, we tested the hypothesized using questionnaires sent to construction managers in Bangkok where construction activities are most concentrated.

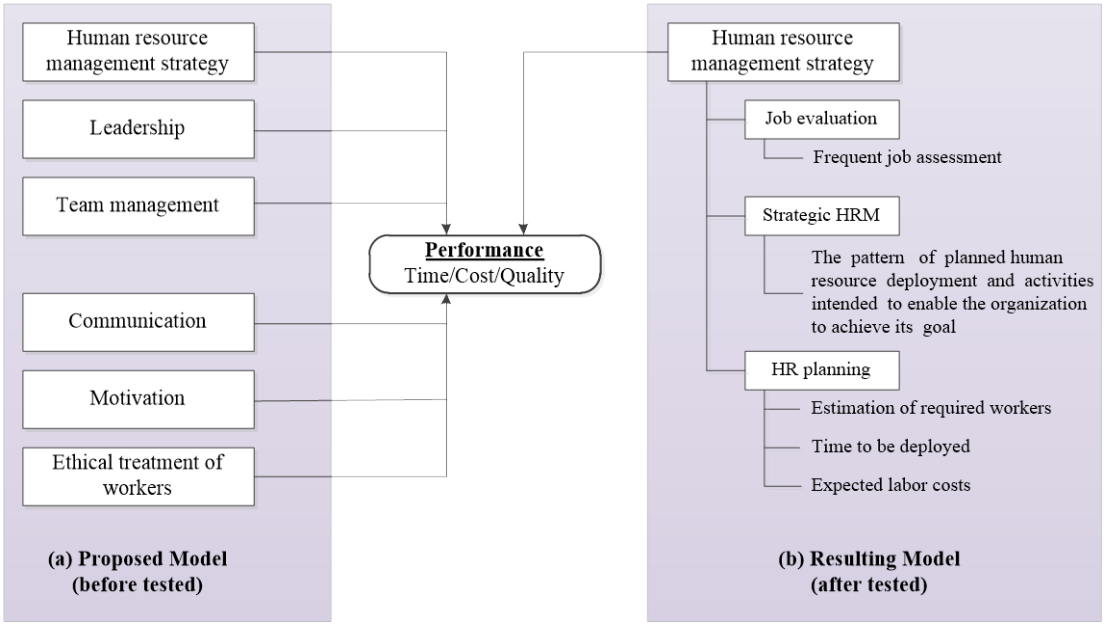

Figure 4 Effectiveness model of human resource management for Thai construction companies

From the preliminary data collected from 35 construction projects in Bangkok, we used stepwise regression analysis to determine which of the six independent factors (see Fig. 4) in our model that have a significant impact on the performance of the construction project and lead to project's success.

The finding obtained from the analysis indicated that the only factor showing a strong positive correlation with the performance of the construction of a project was *human resource management strategy*. Once further analyzed in more detail using the previous mentioned technique, HRM strategies that were the most important factor affecting the companies' performance is job evaluation, especially in those companies that have more frequent job assessment, such as two or more per year. The second most important factor is strategic HRM such as the alignment of the pattern of planned human resource deployment and activities intended to enable the organization to achieve its goals. We also found that human resource planning (e.g., estimation of required workers, time to be deployed and expected costs of labor) played an important role in the construction companies under the study.

5. RISK AND OPPORTUNITY

In this section, we aim at answering the question as to what the risks and opportunities concerning HRM practices in Thai construction companies are, given that there are significant uncertainties both in domestic and international construction markets. Therefore, we first identified the uncertainties surrounding construction markets that could affect HRM policies and practices used by Thai construction companies. Once the major uncertainties were determined, we examined further using in-depth interview with 11 construction or project managers to get the idea of what they perceived to be the risks and opportunities caused by such uncertainties.

5.1 Uncertainty Surrounding Thai Construction Industry

Uncertainty that could affect the HRM practices and policies of Thai construction companies can be categorized into two groups: exogenous and indigenous uncertainties. Examples of exogenous and indigenous uncertainties identified during the interview are presented in Figure 5.

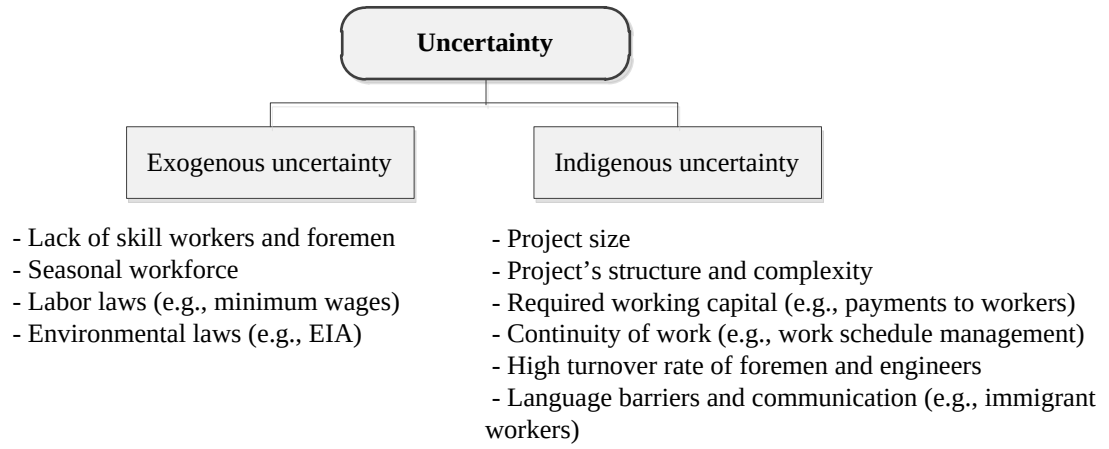

Figure 5 Uncertainty in HRM of Thai construction companies

Exogenous or external uncertainties affecting the HRM practices and policies of Thai construction companies are (1) lack of skill workers and foremen, especially those who are Thais; (2) seasonal workforce (i.e., the number of workers fluctuates according to harvest seasons); (3) labor laws such as minimum wages; and (4) environmental laws such as the requirement for the construction project to do the environment impact assessment or EIA. However, when compared with indigenous uncertainty, exogenous uncertainties were found to be less worried in managing human resources in construction projects. This is because, we found, most uncertainties are those inside the organization, for example, (1) project size (large projects require a larger pool of workers, thereby increasing the difficulty in managing people involved); (2) project's structure and complexity (complex organizational structure requiring interaction among various people across different organization or companies can result in the siphon of talented workers); (3) required working capital (construction workers are very sensitive to payments, without timely payments they could goof-off or even strike); (4) continuity of work; (5) high turnover rate (it is very difficult to retain talented workers, foremen, and engineers, who may find it better to work as a subcontractor, rather than a worker of the general contractor); and (6) language barriers to communication (since many workers are immigrants, it is sometimes difficult to immediately communicate with them).

5.2 Risk and Opportunity Faced by Thai Construction Companies

As presented in Figure 5, uncertainties affecting the HRM in Thai construction market can be analyzed to examine what the risks and opportunities are. We summarize the analysis as shown in Figure 6.

Uncertainties	Risks
- Lack of skill workers and foremen - Seasonal workforce - Labor laws (e.g., minimum wages) - Environmental laws (e.g., EIA)	- Skill labor shortage - Increased construction costs from increased wages, compliance with environmental laws, etc.
- Project size - Project's structure and complexity - Required working capital (e.g., payments to workers) - Continuity of work (e.g., work schedule management) - High turnover rate of foremen and engineers - Language barriers and communication (e.g., immigrant workers)	- Difficulty in managing people in large construction projects - Complex organizational settings - Siphon of talented workers (increased costs of training new workers) - Goof-off and strike (low productivity) - Work related errors resulting from miscommunication (increased costs of correcting work)

Figure 6 Risks and opportunities relating to HRM in Thai construction industry

As for the prospect of international construction markets such as the AEC, most of the companies we interviewed acknowledged the importance of the economic integration under the AEC, and many viewed this as both risk (e.g., competition) and opportunity (e.g., business expansion) for the companies. However, they saw the challenges that could prevent them from entering into international market. For example, one manager said that "to work in other countries, we must recruit workers responsible for coordinating work between the office based in Thailand and that in another country. Moreover, we have to familiar ourselves with issues such as local officials, and different laws and cultures." The consensus agreements about the main challenges in working abroad are the lack of skill workers and increasing competition. In terms of increasing competition, they believed that, with their long experience, they can compete with those construction companies in the neighboring countries.

6. SUMMARY AND CONCLUSION

Human resource management plays an important role in increasing productivity and performance of companies through effective use of the companies' most value asset: people. Construction industry is the sector characterized as labor-intensive and low tech. Therefore, the sector can improve its productivity through the effective use of HRM. We reviewed the HRM practices in Thai construction companies and then developed a model of effective HRM for Thai construction companies. In the model, six independent factors relating to HRM activities influencing the performance of the companies are (1) human resource management strategy, (2) leadership, (3) team management, (4) communication, (5) motivation, and (6) ethical treatment of workers. One of the findings was that better *human resource management strategy* had a significantly and positively impact on the performance of construction companies we studied. Other factors showed less influence on the performance of the companies. We also examined the risks and opportunities faced by Thai construction companies in managing human resources. It was found that the most important risk posed by

exogenous uncertainties is the shortage of skilled labors. It was also found that the majority of risks in human resource management in construction were caused by indigenous factors occurred within the management of organization, for example, increased costs from low productivity of workers, increased cost of training new workers, increased cost of correcting infective work occurred by miscommunication.

ACKNOWLEDGEMENTS

This research was financially supported by the *Institute of Research and Development* of Walailak University.

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