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EMPLOYEE EMPOWERMENT IN CONSTRUCTION: A REVIEW OF ISSUES

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The construction industry is a high-risk commercial sector. As such, concerns regarding performance, waste, health and safety, insurance, legal/budgetary and cost compliances, and client satisfaction levels are an ongoing challenge. An increasing area of focus is human resources and, in particular, productivity. In place of traditional approaches to dealing with employee performance concerns, better job design and work systems are increasingly being seen as essential in alleviating poor employee/ independent-contractor performance. Academic research on *employee empowerment* in the construction industry has so far been limited and/or haphazard, despite advocates presenting it as a means to deal with worker dissatisfaction, absenteeism, turnover, poor quality work, and sabotage. This paper reviews the literature concerning the utility of employee empowerment in the construction industry, with particular emphasis on its practical benefits. The aim is to provide direction for future research and development in the construction and civil engineering fields.

Keywords: Civil Engineering, Construction-productivity improvement, Offsite construction, Operational-management.

1 INTRODUCTION

The construction industry, across several countries, has over the last few decades been criticized for deterioration in performance and low productivity (Nadim 2010). A decrease in specialist skills and craftsmanship are considered to be crucial barriers to increasing efficiency in the construction industry (Eastman 2008, Abdel-Wahab 2011). In addition, stakeholders are experiencing variations in organizational processes, systems, and requirements due to the increasingly challenging and uncertain nature of projects (Sackey *et al*. 2011a). Several government-sponsored reports previously evaluated the structure, culture and functions of the industry and its ability to fulfill customer requirements (Latham 1994, Egan 1998). The Egan Report *Rethinking Construction*, for instance, provided an overview of the personnel issues faced by the industry. The focus of these debates has recently shifted to whether it is possible to address deteriorating performance by considering how employees in the industry are dealt with, appreciated, and unempowered (RFP 2000).

Empowerment is a managerial concept that incorporates intrinsic motivation, participative decision-making, job design, social learning theory, and self-management concepts (Egan 1998, Dainty *et al*. 2002, Price *et al*. 2003, Tuuli and Rowlinson 2007). It has the potential to improve efficiency in off- and on-site construction. However, Egan (*ibid*) suggests that the existing agenda on employee empowerment is quite

different from the traditional top-to-bottom hierarchies in the construction industry, moving from a) the customer, b) the customer's design team delegate(s), c) the supervisor, d) the representative of the supervisor, e) the regional manager, f) the site manager, g) down through the foreman, ganger, trained tradesman, and semi-trained worker, before arriving at h) the general worker at the lowest level.

Employee empowerment has recently received increasing attention in construction research. It still faces a challenge regarding its practical implementation to ensure it adheres to the industry's operational background and culture (Dainty *et al*. 2002). This paper examines the literature below to provide historic and current perspectives.

2 EMPLOYEE EMPOWERMENT DEFINITIONS

The term "empowerment" is often used in an abstract manner and still lacks an appropriate universal definition (Psoinos and Smithson 2002, Price *et al*. 2003). Although its definition in different organizations varies (Dainty *et al*. 2002), most definitions focus on decentralization, providing (within acceptable parameters) greater freedom, control, responsibility and associated accountability for decision making to employees at lower levels (Holt *et al*. 2000, Dainty *et al*. 2002). The goal is to enhance feelings of effectiveness (Liu *et al*. 2007) and "self-efficacy" through the adoption of appropriate motivational and involvement techniques, including identification and removal of conditions that foster powerlessness (Nesan and Holt 2002). Employee empowerment is therefore a movement away from the traditional organizational hierarchy, where managers are responsible for the majority of decisions and lower level employees merely implement such decisions. Nevertheless, Hammuda and Dulaimi (1997) argue that although employee empowerment may result in the creation of a different relationship between managers and employees, it does not necessarily lessen in the role or importance of management within the organization. Managers are particularly important as "organizational emancipators" who can use their leadership skills to motivate employees. Without careful management, empowerment initiatives are likely to be abandoned, as employees take more responsibility without a meaningful structure or direction within which to exercise it (Dainty *et al*. 2002).

3 LACK OF KNOWLEDGE IN THE EMPLOYEE EMPOWERMENT LITERATURE

There is limited clarity on both the conceptual and practical aspects of empowerment in management literature (Huq 2010), as well as construction-specific literature (Sackey *et al*. 2011b). In the construction industry, the research on empowerment is quite scarce and disjointed (Tuuli and Rowlinson 2007), while its potential has been largely disregarded by professionals and researchers (Dainty *et al*. 2002). There is also concern amongst researchers regarding gaps in application and practical results of the concept at the organizational level (Sackey *et al*. 2011b). Therefore, this paper presents a review of recent empowerment literature in construction and civil engineering.

4 EMPLOYEE EMPOWERMENT PERSPECTIVES

Structural and psychological empowerment have received independent consideration in management literature (Tuuli *et al*. 2012). Structural empowerment pertains to the organizational procedures, structures and practices through which employees receive the authority to make decisions and be in greater control of their work (Mills and Ungson 2003). It also relates to power sharing between the managers and their subordinates; lower-level employees receive material power, knowledge, and increased information, as well as opportunity, encouragement and resources at their disposal (Spreitzer 2005). Psychological empowerment emphasizes employees' perceptions and emotions (Thomas and Velthouse 1990, Holt *et al*. 2000), using the four elements: meaning, competence, self-determination, and effect (Thomas and Velthouse 1990), depicting the subordinate's psychological state (Lee and Koh 2001). An integrative approach to empowerment is therefore more holistic; it acknowledges the influence of environmental factors (structural approach) on empowerment perception (psychological approach) and behavioral outcomes (Sackey *et al*. 2011a).

5 EMPLOYEE EMPOWERMENT ADVANTAGES

The benefits of employee empowerment include organizational efficiency and quality, reduced operating expenses, greater flexibility, and improved job satisfaction and motivation (Swenson 1997). Sackey *et al*. (2011b) emphasized a positive relationship between employee involvement and job satisfaction, motivation and performance, as well as personal commitment and corporate success. Patil *et al*. (2012) also asserts that empowerment will result in:

> …greater motivation to make fewer errors; individuals taking more responsibility for their actions; greater opportunities for innovation and creativity; continuous improvement in procedures, products and services; increased efficiency through increased employee self-worth and self-esteem; increased profits through waste reduction and quality; increased competitiveness; increased long-term competitiveness with greater market share; increased trust and support for management; and greater communication between employees and departments.

6 EMPLOYEE EMPOWERMENT BARRIERS

Apart from limited understanding of construction industry-specific aspects (Tuuli *et al*. 2012), barriers to the implementation of empowerment include internal factors such as lack of management commitment, underestimation of the degree to which change is needed, refusal to accept behavioral change, unwillingness to implement continuous learning, bureaucracy, and unproductive communication (Holt *et al*. 2000). Empowerment programs are often affected by the disinclination of managers to relinquish power (Tuuli *et al*. 2010a), as well as Health and Safety laws, the influence of the immediate manager (Greasley *et al*. 2005), "deep-rooted employment traditions" and "time-based organizational delivery structures" which cannot easily be removed (Dainty *et al*. 2002). The fragmentation of the traditional supply chain does not make employee empowerment easier to implement.

7 EMPLOYEE EMPOWERMENT IN CONSTRUCTION AND CIVIL ENGINEERING CONTEXTS

One of the most commonly-cited conceptual frameworks on empowerment is Nesan and Holt's (2002) nine-action model, comprised of leadership, empowerment system, resources, involvement, education and training, teamwork, process improvement, measurement and recognition. Hammuda and Dulaimi (1997) observed a relatively high degree of empowerment, albeit in a narrow sense. They found that while construction managers had a great deal of authority over their own projects, they had little influence over the company's general strategy.

Holt *et al*. (2000) developed an alternative empowerment model for traditional, on-site construction contractor organizations, consisting of three stages: *preparation*, which involves assessing the organization and developing a plan; *implementation*, which requires employees to be equipped with appropriate skills; and *sustaining*, which requires a continual sustained approach to implementation management. Nesan (2004) called for construction organizations to be like teaching and learning organizations in order to maintain continuous improvement. Empowerment and learning have similarities in areas relating to implementation, including organizational structure, leadership style, resources development, teamwork, and performance measurement.

Price *et al*. (2003) presented three key strategies (or "performance enablers") for delivering employee empowerment: organizational culture, training, and knowledge management. The authors urged firms to work towards flatter management structures and cultural changes that facilitate a) teamwork and employee participation, b) investing in training, and c) adequate knowledge support; any failure to do so will render empowerment attempts into a "sham". Liu *et al*. (2007), in their Hong Kong study of perceptions of empowerment, divided empowerment into four elements: opportunity, access to information, access to support, and access to resources.

Tuuli and Rowlinson (2010b) examined employee empowerment at four levels, namely, the individual, team, organization, and project. Individual-level factors include quality of relationships, work experience, and openness. Team-level factors were mainly team size, support from colleagues, leadership, and the nature of the demands of the task. The main organizational-level factors were an enabling work environment, HR practices, incentives and remuneration levels, top management involvement, and the level of compliance with rules. The main project-level factors relate to the level of information processing, common goals or visions, project priorities, the size of the project, and the uncertainty inherent in the project.

Several studies argue that productivity issues cannot be sufficiently addressed when individual cognition of empowerment is neglected (Tuuli and Rowlinson 2007, Tuuli and Rawlinson 2009a, Tuuli 2010a, Tuuli 2010b, Tuuli *et al*. 2012). An integrative multi-level approach towards empowerment and job performance, an expansion of social cognitive theory, is further suggested (Tuuli and Rowlinson 2009b).

8 CONCLUSIONS AND RECOMMENDATIONS

A comprehensive literature review has been presented as part of an ongoing research project aimed at examining the link between productivity of off-site manufacture and employee empowerment. Offsite construction arguably offers better opportunities for successful implementation of employee empowerment compared to traditional

construction. Several ongoing case studies in off-site construction empirically examined the nine factors of employee empowerment (Holt *et al*. 2000, Nesan and Holt 2002, Nesan 2004). This ongoing research project will assess (off-site) skill application efficiencies and related employee empowerment for sub-element/building-material manufacture via appropriate quantitative methods, such as check sheets, scatter diagrams, cause-and-effect diagrams, Pareto charts, flow/process charts, histograms, and statistical process control during prefabrication and modularization processes (Alazzaz and Whyte 2012). The results will improve the process of constructing built assets and advance productivity levels in the off-site sector of the industry.

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