

MOTIVATION AS A TOOL TO IMPROVE PRODUCTIVITY ON THE CONSTRUCTION SITE

Wellington Didibhuku Thwala¹, Lydia Nthabiseng Monese²

¹ Department of Quantity Surveying and Construction Management, University of Johannesburg,

² Department of Construction Management and Quantity Surveying, University of Johannesburg,, Didibhukut@uj.ac.za,
Tel No. 011-5596048

ABSTRACT

Purpose of this paper - Is to identify the factors that promote positive motivational behaviour among construction workers as to improve production in the construction site. Furthermore the study will identify consistencies in the behaviour of motivated, satisfied, committed and loyal employees in the construction field since these are important characteristics in the workplace.

Methodology/ Scope - The study is mainly a literature review with a special focus on the human resource management and leadership. A survey will be later conducted.

Findings - There are definite differences between different cultures as to how people can be motivated; this also must be taken into consideration. Management should play an active and continuous role in managing on site motivational processes; employee's desired outcomes should be tied to performance; and management should focus on eliminating performance obstacles.

Research limitations – The study will mainly be a literature survey of both South African and international experience.

Value - Workers are an asset to the business and it is up to the management to value them. It can not be a solution to hire and fire continuously as has been the common practice, recruiting goes with resources and money; and it is through the management that the companies grows, thus contributing to the economy of the country by developing the workers; thus reducing unemployment.

Keywords: Construction workers, human resource management, personnel management, motivation, motivators.

INTRODUCTION

The construction industry is an important player in the economy of South Africa. Although the industry's current contribution to the gross domestic product has shrunk to approximately 3%, compared to 7% in the 1970's, it remains an important economic sector (International Conference on Construction in the 21st Century, 2002). Statistics South Africa employment figures suggests that in 2006 the construction sector was responsible for 8% of the total national employment; this is an increase from the 2001 contribution of 6%. It is also estimated that the construction sector employs one million people, with some 424 000 individuals employed in the formal sector. Annual employment growth in the period of September 2005 – 2006 was 9.5%, with employment in the sector increasing by some 390 000 people 2001 – 2006. In 2006, the construction sector saw a real growth of 14%, compared to 14%, compared to 10% in 2005; this is also reflected in the double digit in the cement sales. In medium term the sector will continue to be underpinned by strong public infrastructural

expenditure. Public sector infrastructural expenditure has increased by 15.8% per year between 2003/04 and 2006/07.

According to the Department of Public Works (1999), the industry contributed 35% to the total gross domestic fixed investment and employed approximately 230,000 employees. The gross capital formation of the construction (civil engineering) was R53.5 billion (16.7%) of total capital formation in 2006, to this can be added a further R35.8 billion for residential buildings and R33.4 billion for non-residential buildings. Thus, the total value of the sector was R122 345 billion (38, 2%) of the total Gross capital formation in 2006. South African Government is the single biggest construction client, making up between 40% and 50% of the entire domestic construction expenditure.

CONSTRUCTION INDUSTRY IN SOUTH AFRICA

Construction industry has a critical role to play in fostering economic and development in the formal and informal sector of the South African economy. The industry, however, faces some serious challenges in its endeavour to deliver infrastructure projects effectively. This is evident from the research that was done by SAPOA. It stated that contractors face many problems when delivering construction projects, as a result poor contractor performance, as characterized by poor work quality and low productivity are common in the industry. The biggest challenge facing South African construction industry is the problem of skills shortage. In a survey that was done in July 2007 (Business Day), the annual international Business Report from Grant Thornton showed that a shortage of skilled workers is the main obstacle to expansion for 58% of medium-to-large business in South Africa. Official data has shown that shortage is already being experienced in the construction industry and is set to double in size over the next six years. Officials estimate that by 2010 the sector will need an additional 11000 engineers and 50000 artisans, including bricklayers, welders, electricians and draughtsmen. On the other hand, the South African Institute of Civil Engineering's (SAICE) executive director Dawie Botha believes that the construction and civil engineering industry may have to import some skills to facilitate implementation capacity. He added that training and education forms a vital part of the industry's success for going forward, but he believes that it is inevitable for certain skills to be imported, such as tunnel experts for Gautrain project. Botha noted that the need for skills is overwhelming, for example, one Gauteng municipality requires 25 engineers, but has only seven on the payroll.

REVIEW OF INTERNATIONAL LITERATURE

In construction, higher productivity means seeing the final result sooner, which in turn creates satisfaction. Borcharding and Oglesby (1975) reported that job dissatisfaction can be one factor that will increase costs, produce time delays and generally reduce productivity on most types of projects. One way that construction management can influence productivity is by determining how smooth the work will flow and how much work can be accomplished. Another more important way that construction management influences productivity is by how it influence worker's attitude, which is a major element in worker motivation and determining how much work will be accomplished.

The experience of individuals within social settings is interpreted and given meaning by the actions and communications of the fellow constituents to the social setting. In construction sites, the discourse, language and behaviour of the participants forms a medium through which the organization expresses itself. For individuals within a site setting then, the sense they make of their experience, and importantly, the responses they give to their experiences is influenced by the discourse through which

they experience the organization. “Meaning comes from adherence to key values, with people left free to make choices over particular actions.” (Watson 1994).

MOTIVATIONAL THEORIES

The literature review has been done based on the research findings that were published on employee's motivation for more than 50 years ago by the works of Maslow in 1954; Herzberg et al in 1959; Alderfer in 1969; McClelland in 1961 and McGregor in 1960. The models used in the construction industry today have been developed from their theories. Their studies focused on *motivation, employee needs and incentives* in the construction industry.

The productivity of construction workers in developed countries has been extensively explored over the past decades. For instance, as reported by Kaming et al (1997), Borcharding (1975) investigated the effective utilization of manpower in construction and again he identified potential factors influencing productivity on large projects; whereas Borcharding and Garner (1981) and Maloney and McFillen (1986, 1987) examined workforce motivation and productivity. Furthermore Thomas (1981) employed activity sampling to investigate labour productivity, while Horner et al (1987) elaborated on the relationship between management control and labour productivity. Allmon et al (2000) went ahead to study the U.S. construction labour productivity trends, 1970 – 1998. Goodrum and Haas (2001) while closing discussion on the work of Allmon et al brought up arguments to further establish the fact that construction projects are rarely similar and identical undertakings are virtually non-existent.

EMPLOYEE MOTIVATION

A definition of motivation is “the set of processes that determine the choices people make about their behaviours”. Motivation is an abstract term. It imparts incentives that require a response on part of someone else to achieve a defined goal. In business, motivation is not synonymous with salaries; money is a means for accommodating the economic needs of workers. Motivation means an inner wholesome desire to exert effort without the external stimulus of money. Motivating is the ability of indoctrinating the personnel with a unity of purpose and maintaining a continuing, harmonious relationship among all people. It is a force which encourages and promotes a willingness of every employee to cooperate with every member of the team. To maintain it is to create and perpetuate the climate which brings harmony and equilibrium into the entire work group for the benefit of all who are involved – the company as a whole (Wilbert Scheer 1979). Since the effective motivation comes from within, by motivating others, the manager can do more than create proper conditions that cause people to do their work willingness and enthusiasm.

Motivating is the work managers perform to inspire, encourage and impel people to take action (Louis Allen 1986). To motivate the employee, the employee must be reached; to reach him there must be a completed understanding of the complexity his make-up (Louis Allen 1986). Motivation efforts must be directed towards improving company operations. To be effective, however, they must also be designed to show benefits to the employee. In fact, motivation can best be accomplished when workers are able to merge their personal ambitions with those of the company. According to Robin and DeCenzo (1995; 271) motivation is defined thus, “the willingness to exert high level of effort to reach organizational goals, conditioned by the effort’s ability to satisfy some individual need”. Campbell and Pritchard (1976) in defines motivation as a set of independent and dependant relationships that explains the direction, amplitude and persistence of an individual’s behaviour holding constant the effects of aptitude, skills, understanding of a task and the constraints operating in the work environment. Schrader (1972) linked construction worker need to motivation, and it was subsequently concluded by

Thomas et al. (1990) that there is evidence supporting the existence of a linkage between an employees' motivational level and their individual performance. Atkinson (1964) defines it as the contemporary immediate influence on the direction, vigour, and persistence of action.

The relationship between the employer and employee must be one of understanding in order for the employee to identify himself with his work and with the business he is working for. Lack of motivation in return affects productivity. A number of symptoms may point to low morale: declining productivity; high employee turnover; increasing number of grievances; higher incidence of absenteeism and tardiness; increasing number of defective products; higher number of accidents or a higher level of waste materials and scrap (William Day 1978). A motivated employee is a loyal employee and to be loyal implies that the employee supports the actions and objectives of the firm. The appearance of the job as a whole has, in fact a bearing on the willingness and quality of an employee's performance (Martin Bruce 1962).

According to McClelland (1961) individuals tend to develop certain motivational drives on the cultural environment in which they live and these drives affect the way people view their jobs. McClelland suggests that achievement, affiliation, competence and power are four types of motivational drives that are found in individuals that are self-motivated and this may be the case for many construction workers. Motivation plays a part in enhancing construction labour productivity (Smithers and Walker, 2000) and forms the basis for identification of the work environment factors. For example, Laufer and Moore (1983) advocated the use of financial incentive programmes to improve construction labour productivity, reinforcing Maloney's (1982) thesis of driving forces that led to productivity improvements. Autonomy and comradeship (Edwards and Eckblad, 1984) are also found to be important aspects that add to the way construction workers are self-motivated about their work. However, much work in linking motivation and productivity relied on Herzberg's sample involving mainly white-collar professionals (Mullins, 1996). Furthermore, Hofstede (1980) decried such motivational theories as merely point made about the *ad nauseam* emphasis on the managerial perspective in the quest to improve productivity.

John Borcharding and Clarkson Oglesby (1974) discovered that productive job creates high job satisfaction while non-productive job (one which fall behind schedule) produce dissatisfaction at all levels of the management/worker chain. The relationship is believed to be due to the very nature of construction, thus different from the one found in an office or factory setting which states that high job satisfaction leads to greater productivity. In construction, a worker, through his own efforts produces a highly visible, physical structure in which great satisfaction comes from completion. Therefore, jobs that are well-planned and run smoothly produce great satisfaction while jobs with poor management (with scheduling and planning problems), create dissatisfaction. This illustrates the relationship between job satisfaction and productivity since; well-managed jobs are generally more productive.

A close review of all theories of human motivation reveal a common driving principle that people do what they are rewarded for doing. In general, the theories on motivation can be classified as: employee needs motivation through goal-setting, employee reward/incentives and reinforcement.

INCENTIVES

In order to keep construction workers motivated their needs must be addressed as project goals are reached. Satisfying workers' needs can be viewed as distributing incentives when certain objectives are achieved. Employees have needs that they want met and employers have goals that they reach and they can work together as a team to satisfy the wants of both the employees and their employers. Workers

who are motivated to help reach the goal of the employer and do so should be recognized with an incentive/reward. When considering what type of incentives to use there are two types to be aware of, extrinsic and intrinsic. *Extrinsic* rewards are external rewards that occur apart from work, such as money and other material things. On the other hand, *intrinsic* rewards are internal rewards that a person feels when performing a job, so that there is a direct and immediate connection between work and reward.

The power of incentives is immense and pervasive, which is all the more reason they require careful management (McKenzie and Lee 1998). Heap (1987) has summarized a list of these advantages and disadvantages associated with financial incentives. Many construction companies have already considered that there can be advantages and disadvantages of developing an incentive program. A study by Sanders and Thompson (1999) showed that those companies that keep their program simple with the main objective of the program in mind (to benefit the project in reference to cost, schedule, customer service, environment and quality) are also deemed success of any incentive program.

Incentives are usually defined as tangible rewards that are given to those who perform at a given level. Such rewards may be available to workers, supervisors, or top managers. Whether the incentive is linked directly to such items as safety, quality or absenteeism, the reward follows successful performance (MaKenzie and Lee 1998). Many companies feel that pocket money is no longer a good motivator. Others contend that small rewards such as toasters and blenders do not motivate. Many companies therefore offer profit sharing plans; or companies have abandoned monetary rewards and instead offer lavish trips to such places as Europe and some Caribbean islands.

Because of the expense, these programs require careful monitoring. Some companies merely reward good producers with an extra day off with pay. Other concerns reward top performers with better working conditions. Since incentive programs aim to increase workers' performance levels, the measure used to decide if a reward has been earned should be carefully set. The performance level must be attainable or workers won't try to reach the goal. That fact underscores the usefulness of having workers themselves contribute their ideas about what constitutes a reasonable level of performance. An incentive scheme may also fail if the measure of success ignores quality or safety. An obvious problem exists when an incentive is applied to work that is machine paced. Incentives should be clearly linked to performance, but not all incentives can be clearly tied to objective criteria. Some incentive rewards are issued on the basis of a subjective assessment by a superior on the merit of particular workers. This method, in particular, may cause conflicts between workers, especially those who do not win rewards.

PERFORMANCE

Despite development in the project management technology workers are still the key players in the projects. They determine the success or the failure of a project; they define project goal, they plan, organize, direct, coordinate and monitor project activities. They also meet project goals and objectives by using interpersonal and organizational skills such as communication, delegation, decision-making and negotiation (Yvonne du Plessis 2003). She adds "In project environments, people can be viewed as contributing problems and constraints or as providing solution and opportunities", and concludes that human resource management is a vital component of a project. The emphasis is on the workforce and how they can be managed and led to increase their overall efficiency and effectiveness as individuals, as project teams and as the members of the organization. It is important therefore, that the right people enter the project at the right time, which they are organized and motivated as individuals and work as a team to deliver according to the project goals and therefore recognized and rewarded for their achievements. She has the following definition of performance;

Commitment: A person's ability to complete a job successfully

Caliber: It is a term used to describe the personal qualities and ability a person brings to the job. These are the qualities of skill that enables a person task, and give him the capacity to cope with the demands of the job. A person's level of caliber is associated with their inmates' ability and the amount of training and experience they have acquired.

Therefore, performance of an individual depends on his wiliness and drive to complete the task, which is his commitment. Unlike caliber, commitment is not a fixed commodity; it may change quite frequently in response, to conditions and situations the individual encounters.

Performance = Function (Caliber x Commitment)

The manager must use an appropriate style of leadership to control the working environment in such a manner that the workforce will be committed to do the task and so motivate themselves to achieve the objectives of the project.

CONCLUSION AND RECOMMENDATIONS

Productivity is one of the most important factors affecting the overall performance of any organization, large or small. At the micro-level, improved productivity decreases unit costs and serves as an indicator of project performance. At the macro-level, improved productivity is a vital tool in countering inflationary effects and determining wage policies. Improved productivity is thus always counted among the basic means of solving economic problems. It is increasingly recognized that capital alone is an inadequate means of producing more wealth or for starting a business in developing countries. Improved productivity is also required; if all production inputs are well utilized, capital improvements and enhanced productivity go hand in hand. In other words, increased productivity enhances investments without any burden to governments. In addition to the advantages at this fundamental level, the advantages of productivity improvement can be summarized as follows:

- Decreased total cost and duration of production
- Improved quality
- Growth in market share of product
- Increased employment and wages without inflationary pressures
- Enhanced purchasing capacities among employees, employers, and customers.

REFERENCES

Allardyce, J., McNamara, S., 2005. *A Workforce Needs Assessment of the Arizona Construction Trades Industry*

Basson, G., Garruthers, M., Kruger, D., du Plessis, Y., Visser, K., Steyn, H., Prozesky-Kuschke, B., Van Eck, S., 2003. *Project Management – A Multi-Disciplinary Approach*, FPM Publishing, South Africa

Chan, W., Kaka, A., 2007. *Productivity improvements: understand the workforce perceptions of productivity first*. Vol. 36 (4) pp. 564 – 584