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MOTIVATING FACTORS IN UK CONSTRUCTION PROJECTS

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In the current economic downturn and fierce competition in the construction industry, enhancing performance and efficiency of workforce has become a more significant issue. Organisations begin to realise the potential benefits of motivating both site and office-based staff. Literature suggests the importance of motivating workforce, but anecdotal evidence indicates strategies for motivating staff have not been sufficiently implemented in construction, and only resides on the remit of human resource departments. Based on a review of literature, motivating factors relevant to those working in the construction industry have been identified and categorised into 4 main groups, namely drive, goals, relationship and incentives. They were then used in a questionnaire survey of site and office-based construction staff. Few interviews were used to gain some insight of the motivating factors. Despite a general recognition that motivating factors may be unique to each individuals, the findings suggest a tendency that non-financial factors are becoming more important, alongside financial ones. In the current economic crisis, it is recommended that managers may use a combination of non-financial factors appropriately to retain the best staff in the companies. Further research will analyse the responses according to respondent groups, which will be supplemented by further interviews to gain insight from those particular groups.

1 INTRODUCTION

What matter most for a civil engineering and construction project? In general, people would concern if the project had delivered on time, over or under the planned budget? Did the project able to fully utilise the limited revenue in order to generate the maximum profit in return? Did the client satisfied with the works and all the demanding requirements achieved? Are there any possible future prospect and returning business? No doubt, the finishing product or the state of the art appearance of the completed construction work may seem to be the most prominent and eye catching. Often, people overlook the process of construction projects. This has undermined the efforts and contribution by many hard working individuals during construction process. Every construction project, regardless to the size, cost, stage or nature of the project, require at least one or may be up to thousands of individuals to executive the tasks in order to make it happen. It will be just a dream, without the engineers' effort to translate the great idea into some accurately calculated design. Similarly, nothing would happen without the construction worker's hard work to physically transform the design from paper into a physical reality.

Every man's behaviour has a reason behind it. Somehow every individual will be

motivated by certain factors. The research will investigate these motivating factors which could drive them to contribute their very best so that works could be done in a more efficient way and achieve better possible outcomes without compromising quality of the final products. It is also useful to investigate if site-based staff have the same motivating factors to the office-based staff (designers/managers) and the clients. It will be interesting to investigate if good behaviour will occur naturally inside people or some external pushing or driving force is required. Did the "carrot and stick" motivation approach still works now as it did in the past? These are the areas which managers and leaders should look into and this research attempts to address the above mentioned areas.

2 RESEARCH METHOD

Based on a review of literature, motivating factors relevant to those working in the construction industry have been identified and categorised into 4 main groups, namely drive, goals, relationship and incentives[1]. They were then used as a basis for questionnaire survey. These factors were then translated into statements by which the respondents should indicate their level of agreement in a Likert scale, representing 'strongly disagree', 'disagree', 'neutral', 'agree', and 'strongly agree'. The respondents were selected to those who work in civil engineering and construction projects. They belong to different age groups, under different working environment, which may require different types or levels of motivation. The respondents included those working for three main parties; the client, the consultant/ designer, the contractor/ builder.

2.1 Questionnaire survey and interviews

The final questionnaire survey has been piloted and reviewed by project supervisors. This survey was conducted mainly through an on-line questionnaire sent to recipients via e-mails of personal contacts. A number of hard-copies of survey questionnaire were physically distributed on site to the contractor/construction workers to collect their responses. As such, the survey is targeting to various groups who works under the civil engineering and construction industry. This will followed by classification type questions to enable analysis and comparison of the responses. All data collected will be kept anonymous.

A series of interviews to the selected people across various discipline of work within the organisation has been conducted, this will be enable information received with direct insight opinions and comments to the project based on actual case study. Interviewees include project managers/directors, senior engineers, junior/graduate engineers, and other placement staffs/ gap-year students.

Of approximately 800 questionnaires sent, a total of 168 replies were received, representing an overall response rate of 21%. The majority of respondents came from consultants (74% of the completed questionnaires). Clients and contractors contributed to approximately 4.5% and 13.6% respectively, while others (e.g. contract-based, placement or students) represented 3.9%. Therefore, the findings may be bias towards the views of consultants.

3 RESULTS AND DISCUSSION

3.1 The "drive" factors

In the survey, respondents were asked for their views on what "drive" factors could motivate them at work. Majority (97.6%) of the respondents recognised and agreed that "achievements" will motivate them at work. Follow closely by "higher salary" (77.3%) and "family/loved ones" (56.6%). "Unsatisfied needs" and "stress/fear" scored the lowest in terms of motivating people under the "drive" factor (45.2% and 39.8% respectively). The consequence of gaining achievement will in return release "energy" for people to execute an action or task. Indeed, the work itself, the self satisfaction, proud of one's own work is a very strong motivating factor[2]. "Achievements" could be categories in the group of intrinsic motivation factors. Intrinsic motivation is defined as the execution of an activity by its inherent satisfactions rather than for some external factors or consequence. When a person is intrinsically motivated to do an act, they do it for the joy or even challenge entailed rather than by the external force, prods, pressure or rewards[3]. It is the natural motivational tendency of inquisitive, curious, readiness to learn and explore, that become the critical element in cognitive, social and physical development because it is through acting on one's inherent interest[4]. According to some informal interviews with a couple of managers, staffs were able to be self-motivated or intrinsically motivated by the job, usually by the job itself or a favourite by the project manager or leaders.

"Higher salary" remains as one of the top concern to many people in terms of motivation. However, money alone is not good enough; monetary incentives could be a motivating factor only if it is related to performance and there is a limit and time frame associated to it. We will discuss this with the financially related incentives in later section.

"Stress/fear" scored the lowest percentages to motivate people among all, this may well indicated that punishment (refer to traditional "carrot and stick" approach) may not be an effective motivating factor anymore as it used to be in the past, a "harder" stick approach may not be applicable to drive somebody to work for you.

According to the Working in the Arup (UK) survey 2007, 89% of the Arup staff in Europe claim that there is a good flexibility working in Arup when people have family matters to look after. In addition, 86% of the staff in the Midland office (approximate total of 500) felt that Arup took a positive interest in the well being of employees.

3.2 The "goal" factors

Among the goal factors of power, status, recognition and comfort). Recognition scored far better than the rest, with 90.5% of respondents agreed that it will motivate them at work, regardless to the age groups, years of experience or working nature. Compare to the Working in the Arup (UK) survey 2007, 61% of the overall Arup staff responded positively to the statement, "Where I work, praise is given in recognition of good performance." Recognition is becoming important to individuals.

Refer to "comfort" under the goal factor, it could relate back to the need hierarchy theory by McGregor. The goal is to first satisfy the lower order need (physiological and safety) before focus on satisfying the higher order needs (social, esteem, self-actualisation). Although McGregor could not provide much data to support his endorsement of Maslow's theory for the workplace, Porter had done the job in early 1960s, using Maslow's theory as a framework to develop his research and survey; results showed that people in low level jobs were

concerned with satisfying lower order needs rather than higher order needs. The study also suggested that people did not become concerned with their higher order needs until they had progressed to higher level jobs where the lower order needs had been well satisfied. In addition, if one had progressed to higher level jobs, they will focus on higher needs, such as self-esteem through achievement as well as self-actualisation, finding ways to upgrading and make improvement, and assume that their lower needs are satisfied[5]. This finding is also consistent with a research survey carried out to worker's motivation on various selected construction sites in Bangkok, Thailand[6].

Regards to the "goal setting program", the majority of respondents (70%) believe that such program will trigger and motivate the individual to have a clear focus on what needed to be done or achieved. The importance of goal clarity is well documented in the goal setting theory of motivation by Edwin Locke[7], which assumes that clear and specific goals will lead to increased performance, when the goals are manageable, reasonable and acceptable to the employee. A recent study carried out by Kerzner, indicated the importance of goal clarity for achieving optimal project performance provided the goals are set realistically with due consideration for the resources available. Ways to achieve this could be done by the application of Work Breakdown Structure (WBS), specify project objectives in consonance with accountability of each tasks to be performed will motivate people to perform better.

Based on the interviews conducted, the majority of interviewees regardless to age, gender and discipline of work, all agreed that "Recognition" is a crucial factor to them. People want to be respected, and be valued among others. This same principle applied on a technician trainee and up to a director who in-charge of some most prestige projects.

Recognition is a basic human need[8]. Everyone needs to know what they are doing is recognised and making a difference (i.e. individuals' goal). It is especially curial for managers to reach out and identify all recognition opportunities to staffs or workers. Furthermore, it is also important to be fair with the form of recognition. For most, recognition in itself is an excellent award to individuals, as corresponded to the survey results that majority of the respondents' ranked recognition as the top priority motivation factor. Effort recognition has been demonstrated to have an effect on individual's motivation and productivity[8]. Research and studies have found out that non- recognition of work done is one of the top five de-motivating factors affecting mostly full-time on site construction professionals[9].

3.3 The "relationship" factors

Respondents were asked a series of statements related to the relationship factors in the survey. Relationship is the link between the individuals to their organisation, managers and colleagues at work. Majority of respondents (over 90%) recognised a friendly working environment is crucial and considered that organisational changes, company restructure will affect the team's morale and fighting spirit, thus affect daily performance.

Referring to the statement "my boss is aware of the obstacles that stop me performing to my best." It suggested that leaders in the organisation should be capable of removing the obstacles that stop people from performing. Greg Dagnan, CEO of Centrex Construction 1998, he advised that when people aren't delivering on their promise, besides spend time to motivate them to take action, the secret is if the leader is aware of the obstacles that prevent one to perform normally to their best[10].

Referring to the statement, "no blame culture at work could encourage staff to be more responsible, admit their mistakes and learn from them." Human natures tend to deny their

mistake or avoid it completely when something went wrong. No one is perfect and sometimes things do go wrong. The focus here is the "blame culture", it would really destroy the workers in terms of motivation, and regardless how much effort they had spent on the job.

Referring to the statement, "I feel valued by my company and I see a future for myself in my current organisation." This refers to recognition as well as the relationship between individuals to the organisation or company, whether the staffs are being valued. If one is being valued most of the time at work and obtain a sense of belonging to the organisation, we could assume they would be more loyal to the organisation and work hard for the company than those who are being neglected.

Referring to the statement, "friendly working environment is crucial." Work environment could directly affect the morale of the staffs in the work place. A positive climate for any work force depends on the people who have common objectives to achieve for the same tasks, and constantly interacting with each other to successfully execute these tasks. In contrast, un-friendly/hostage work environment (hygiene factor) will lead to de-motivation for individual at work in long term.

Respondents were asked if organisational issues such as changes, company restructure would affect the morale or fighting spirit. This leads to the issues of job security, especially with the current economic downturns, uncertainty within the organisation. Job security has been defined as a hygiene factor under the two-factor theory proposed by Herzberg and as an existence need under the ERG theory by Alderfer. Some recent studies have shown that it is an important determinant of performance. Indeed, based on the informal interviews with a number of colleagues, regards to a recent redundancy program conducted by the organisation, having a secured job is a significant motivation to the employees. This could possibly explain the emergence of job security as a stand-alone factor.

Change could be a real issue which affects an individual's motivation at work. Human being's natural tendency is being able to adapt to new environment, but when one had settled down in an area and be comfortable to the surrounding, he may be very reluctant to change. Similarly, people tend to adapt what they have done before and carry on doing it. However, managers or leader should always remind their staff that no job would be the same; people would require growing all the time. This is the key difference. A new way should be developed to train people to understand that works are becoming more sophisticated, complex and demanding, everyone is being challenged to work even harder, faster and more effectively, with the only certainty that is "change". People may get comfortable with change if they see change is a natural process. Managers or leaders should underscore that "changes" could be positive in many ways and that will make a difference in terms of motivating people.

3.4 The "incentives" factors

There are many different incentives (or rewards) available within an organisation, financially related incentives, such as salary, bonus, pensions, refer as extrinsic motivator, while those non-financially related incentives, such as achievement, autonomy, on-going job training, achievement, praise, refer as intrinsic motivator.

In some organisation, most the official reward systems do almost nothing for motivation if salaries are paid regardless of performance, unless there is a danger that they will be withheld. On the other hand, if salaries and wages are paid on assessed performance, this would have a profound effect in the short term on motivation, especially if money is a primary goal of those individuals[2]. This corresponded to a research done back in the 1970s in the UK construction

industry, to offer additional payment to the construction work force as incentives for job completions, resulted in the labour elsewhere making similar demands on other clients and slowing down jobs to make their point[11]. This incident further demonstrated that monetary rewards must link with performance in order to work effectively.

As most of the organisation already had an official reward system (salary, bonuses) and it is hard to change. Therefore, regards to motivation in a longer term, manager should develop an intrinsic rewarding system to motivate staffs to work. These non-financial rewards could be success, accomplishment, friendship, recognition, power, autonomy, achievement, etc. These are all interpersonal and intrapersonal outcomes of linking to the drive, goal, incentive factors[2]. Certain incentives or rewards could possibly lock people to the organisation. One good example is the final salary pension scheme. One principal engineer who joined a civil engineering consultant firm in Coventry for over 20 years, expressed that he would not look for any career movement to another firm since he has participated on the final salary pension scheme (which is no longer available to new staff), because of this very attractive incentive that he is looking forward to after his retirement. The scheme bonded him to the organisation. When further asked what will motivate him to perform better now, he expressed interest on non-financially related incentives, such as challenge and recognition.

"Autonomy" is categories as the non-financially related factor. The survey result suggested that autonomy is dominantly agreed and recognised by the respondents (over 95%) that it is important to motivate one at work. An important aspect from Cognitive Evaluation Theory suggested that the feelings of competence will not enhance intrinsic motivation unless provided with an adequate level of autonomy[3].

Regardless to work nature, people (engineers or construction workers, professional or non-professional) valued the sense of responsibility. These expectations are expressed in their inclination for flexibility or freedom at work (autonomy) and in receiving feedback on their performance. This could be either praise or constructive criticism, as some individuals would perceive such comments as a symbol of recognition and as a non-financial reward.

The most effective incentive or reward systems would happen when individuals satisfy both their intrinsic and extrinsic needs by executing the task or works required by the organisation. This is called goal congruence[2]. The main challenge here relies on the leader or manager, who must be capable of helping the individuals to identify their personal goal satisfaction within their works that required by the organisation. Obviously, simply offering high salaries within the profession would serve as a way of recognising job efforts and leads to increase in motivation in a short term. However, rewards need not be monetary in nature. Even symbolic and verbal recognition for job well done could be very effective[12]. Other non-monetary rewards for example off-in-lieu, sponsored study/training, or even a bottle of champagne/wine, sometime would work very well too.

4 RECOMMENDATIONS

Based on the research and findings from the survey responses and interviews with people, below are some recommendations and suggestions to the managers and leaders.

1) **The "drive" factors** - Most individuals wish to achieve something to prove that he or she is worthy and valuable to the organisation. Thus achievement is a factor which would likely to motivate an individual to perform better.

Balance between work and family life becoming a more significant issue to people in the 21st century, people want to live longer and stay a healthier lifestyle. Thus, managers should

aware that helping individuals to achieve a work balance is crucial. The outcome itself (achieving work/family balance) becomes the drive factor for individuals to perform better.

2) **The "goal" factors** - Recognition is a powerful motivating factor provided that it is used in the correct way. From the feedback, majority of people regards "Recognition" to carry the most significant effect in terms of motivating a person, this could be a hint to the managers that recognising good works or performance is critical and could possibly make a huge impact to an individual's behaviour.

Recognise a specific accomplishment such as challenging milestones met is a good way of motivation. Monetary awards could be difficult to administer while recognition by itself on the emotional side of individual would have a longer lasting effect. In certain counties or for certain people, self-recognition is far more important than public-recognition. Some counties recognise and access performance by group rather than individuals. Thus, it is essential for management to use recognition with better understanding to the local or individuals. Based on some empirical research, publicise recognition works really well in the UK.

Comfort is actually a major issue to individuals, managers should aware that comfort is based on the need hierarchy theory, especially for people who worked on site, comfort, health and safety is essential and basic needs for them. If a safe, neat, comfortable working environment is provided to the workers, basic needs are satisfied, which will lead them to pursue a higher need, thus increase work performance.

3) **The "relationship" factors** - Hire people who are compatible with one another. In addition, concern with the growth of the employee is essential. Personal touch may be the key. People sometimes perform to their best not just for reward, but simply because they wish to work for a specific person who inspired or valued them. This may refer to admiration or loyalty. Sense of belonging to the organisation is also crucial. Friendly working environment is important as suggested in the survey, so the team could understand each other's working style better, able to communicate more freely and work in a seamless way.

4) **The "incentives" factors** - It is important and fair to provide pay and benefits which ensure that an employee's physiological and safety/security needs are met. Managers should emphasis on improvement to the reward system, when salaries are paid regardless to performance, there will be little effect on motivation. In contrast, if salaries are paid on a fair assessed performance, this could have a profound effect on motivation. In addition, rewards could be tangible or intangible, and reward system could be creative and tailor made for individual, groups or teams.

To achieve high performance on the definitional tasks in the 21st century, the solution is not to entice people with a sweeter carrot, or threaten them with a sharper stick, but with a new approach[13]. This new approach must be built more around intrinsic motivation or around the desire to do things because people pay more attention when the job is interesting, people matter if they are part of something important too. This also leads to intrinsic motivators such as: (i) autonomy - the urge that people want to have control over their work, (ii) mastery - the desire to get better at something that matters, derived from one's own autonomous urges, and (iii) purpose - directing our mastery into a drive to achieve in the service of something larger than ourselves. People want to be part of something that is bigger than they are[13].

What matter for high performance is a not just reward or punishment, but the intrinsic drive (such as autonomy). The drive to do things for people's own sake, because it matters and people believe that is important. The carrot-and-stick approach may work for some mechanical or repetitive tasks. However intrinsic motivation is far more effective in complex

tasks which require innovative thinking, which I trust that is exactly what the majority of civil engineering and construction industry is looking for in the 21st century.

Bear in mind and understand that when one is motivated, he or she is ready but still may not necessary to release 100% of their effort for the work. Managers should lead and help the individuals to identify their goals which excite them to work better, link up to the requirements of their tasks/works. Not limited of linking goals to energy, in order to induce individuals to release all their energy to fulfil their work requirement as well as achieving their goals at the same time.

5 CONCLUSIONS

Of all the factors affecting performance, an individual's motivation is one of the best predictors of performance. Human natures are purposive, a person's behaviour or good performance would always have at least one or more reasons behind it. People choose to behave in certain particular ways. People select goals which are important to individuals and attempt to achieve them. Certain goals are easier to identify than others, such as basic needs, food and shelter. In our careers the goals sometimes could become more complex, such as achievement, autonomy, recognition, and the goal varies according to age, status and environment.

Employees get satisfaction only when properly motivated. As more and more organisation became internationalised, geographical limitation no longer became a barrier to a project due to the advance technology, people from various background could travel and work together relatively easier. Culture became a significant role in terms of motivating people, individuals from different countries may practice and behave in a different way, thus understand an individual's need is essential, in order to motivate one effectively. Selection and the appropriateness of motivating factors to each individual are critical, as the same motivating factor may not be applicable to the same group of people. A personal touch is the key.

This research study has indicated and makes recommendation to managers the motivating factors that could affect individuals to perform better and become more efficient at work in the civil engineering and construction industry in the 21st century.

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