

Study of Organizational Behavior and Creating a Module for Implementation to Improve the Present Scenario of the Construction Industry

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Abstract—Organizational behavior is the individual and group behavior and patterns of structure incorporated in an organization in order to help improve organizational performance and effectiveness. Human Risk is a new term in the industry and it governs the occurrence of all other risks related to the project and finally decides the outcome of the project. Human resource is the most important asset of any firm and their psychology has to be closely studied, monitored and modified to enhance the work performance. In the modern scenario of construction industry, management has started playing a very important role in the completion of the project in good quality. Effective communication and coordination is required between the administrative and operational staff. Economic prosperity and progress largely depends upon leadership, training aspects, work place ethics, job satisfaction and job appraisal among other factors. This study aims to interlink organizational behavior with organization performance and also works out the interrelationship between different factors effecting organization performance, in the present day construction industry. With the help of mathematical analysis the different factors are interrelate and a module is developed to show their level of significance in enhancing organization performance and delivering construction projects in a more efficient manner.

Keywords: Organizational Behavior, Organizational Structure, Leadership, Job satisfaction, Construction Projects

1. INTRODUCTION

Any organization's success depends on its power of harnessing its employees' potential. In today's competitive world, companies have come to recognize that their employees are their most valuable asset. Their profitability and competitiveness depends critically on the skills, knowledge and motivation of their employees. Given this fact, the human resource (HR) management function which is responsible for recruiting, training, appraising, compensating, and motivating these employees has assumed a bigger and more significant role in the firm and its strategy. In a construction company there exist two groups of people, the administrative staff and the executive staff. The first works in the confinement of the office building planning the entire project on paper, taking all

major decisions related to it, while the second implements the decisions of the former on site. An effective communication is necessary between the two groups for successful execution and completion of the project. Moreover work place satisfaction, motivation and job place safety are important elements which govern human resource of the organization and bring out desired performance. Thus linking organizational behavior to construction projects is beneficial in finding out the impact of human resource on the project. [7]

Organizational behavior is a field of study that investigates the impact that individuals, groups, and structure have on behavior within organizations for the purpose of applying such knowledge toward improving an organization's effectiveness. It is a systematic study of the actions and attitudes that people exhibit within organizations (Stephen P Robins). Organizational behavior is an applied behavioral science and, as a result, is built upon contributions from a number of behavioral disciplines namely Psychology, Sociology, Social Psychology, Anthropology and Political Science. An organizational structure defines how activities such as task allocation, coordination and supervision are directed towards the achievement of organizational aims. It can also be considered as the viewing glass or perspective through which individuals see their organization and its environment. An organization can be structured in many different ways, depending on their objectives. The structure of an organization will determine the modes in which it operates and performs. [2] Organizational structure affects organizational action in two big ways. First, it provides the foundation on which standard operating procedures and routines rest. Second, it determines which individuals get to participate in which decision-making processes, and thus to what extent their views shape the organization's actions.

This study aims to improve relationships inside an organization and promote efficient team work, bring about faster and more effective decision making patterns and bridge of gap between administrative and executive authorities.

Construction projects are two phased namely planning and execution. The paper aims at improving the control of on-site projects by management officials and lastly improves the business strategies of the firm.

2. METHODOLOGY OF STUDY

The first step in this study is to determine the area of work from the various disciplines within Construction Project Management. Once that has been accomplished the principles of organizational behavior and research work done previously is studied extensively. The factors affecting the working of an organization and organizational behavior are studied and questionnaire for survey is prepared on its basis. The survey is conducted in various construction companies and the data collected is interpolated to get results. Furthermore the site implementation is carried out and based on the findings a module relating all the different factors and their impact on a construction project is formed. Finally the work is concluded with recommendations.

Empirical analysis is done with the help of mean and standard deviation and frequency distribution method. Chi square test is used to prove the hypothesis and find relation between the different factors. [1]

$$\text{Chi Square } (X^2) = \frac{\sum (oi - ei)^2}{ei} \text{ -----} \quad (1)$$

Where oi = Observed Frequency

ei = Expected Frequency

$$ei = \frac{nr * nc}{n} \text{ -----} \quad (2)$$

Where nr = Row Total

nc = Column Total

n = Grand Total

3. FACTORS AFFECTING ORGANIZATION PERFORMANCE

One of the important questions in business has been why some organizations succeeded while others failed. Organization performance has been the most important issue for every organization be it profit or non-profit one. It has been very important for managers to know which factors influence an organization's performance in order for them to take appropriate steps to initiate them. The different challenges faced on a daily basis in the organization are categorized into three levels namely:[4]

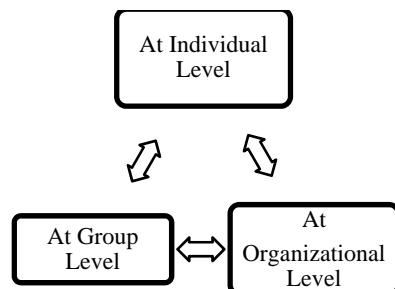


Fig. 1: Challenges faced in an organization

In today's construction world the factors which are seen to most affect organization's performance are as follows:

- **Organization Decision making Structure (OS):** An organizational structure defines how activities such as task allocation, coordination and supervision are directed towards the achievement of organizational aims. It can also be considered as the viewing glass or perspective through which individuals see their organization and its environment. An organization can be structured in many different ways, depending on their objectives. The structure of an organization will determine the modes in which it operates and performs. In this paper centralized decision making and decentralized decision making organization structure is considered. [9]
- **Leadership (L):** Leadership has been linked to management as it involves directing, controlling to an extent the nature, degree and extent of activities and changes occurring within the organization. [3]
- **Leadership Style (LS):** Leadership style is a leader's style of providing direction, implementing plans, and motivating people. The style of an organization's leadership is reflected in both the nature of that organization and its relationships with the community.
- **Training and Development (T):** Organizations are facing increased competition due to globalization, changes in technology, political and economic environments (Evans, Pucik & Barsoux 2002,) and therefore prompting these organizations to train their employees as one of the ways to prepare them to adjust to the increases above and thus enhance their performance. Organizations have to obtain and utilize her human resources effectively and keep them up-to-date. [1]
- **Motivation (M):** Employees' motivation represents a key factor which determine action and behaviors that materialize in effort and energy towards accomplishing the goals of the company and achieving also their own objectives. In this context, the organizational climate of the company influences employees' motivation and work performance.
- **Job appraisal (JA):** A performance management system consists of the process to identify, encourage, measure, evaluate, improve and reward employee performance at work. Performance appraisal is the process of evaluating how well employees perform their jobs compared to a set standard. It is used to give salaries and incentives and identifying individual's strengths and weaknesses. [10]
- **Supervisor relation (SR):** Supervisors have the responsibilities of leading the subordinates in their group task and the groups in the organizations. As a supervisor, they are the first line managers and is also

a person who can solve problem and also is the role model at the first level of organizational management.

- **Job satisfaction (JS):** Happy employees are productive employees. Even though organizations cannot directly impact employee personality, the use of sound selection methods and a good match between employees and jobs will ensure people are selected and placed into jobs most appropriate for them, which, in turn, will help enhance their job satisfaction.

4. EMPIRICAL ANALYSIS

Based on the above said factors a questionnaire was prepared and circulated to various construction companies. A total of 102 samples was collected. The sample was divided into four major class depending on the response from the participants namely Project Manager, Planning or Site Engineer, Fresher or Junior Engineer and Owner or Partner. The sample had responses from 38 Project Manager, 33 Planning or Site Engineer, 26 Fresher or Junior Engineer and 5 Owner or Partner.

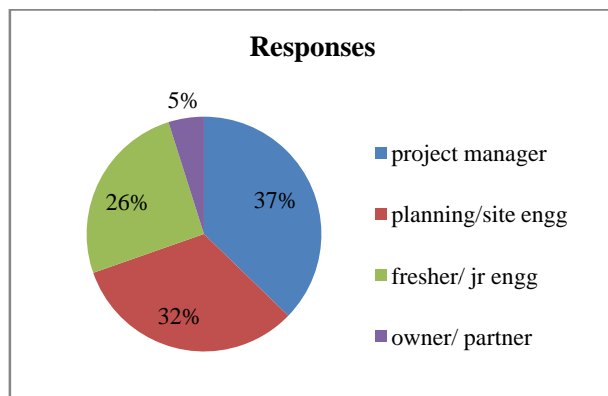


Fig. 2: Distribution of responses in the sample

4.1 Hypothesis Put Forward

- Whether Organizational Decision Making Structure affects Organization Performance?
- Whether Leadership is important to complete the project?
- Whether Decision Making Style has any effect on employee performance?
- Whether supervisor relation and motivation increases job satisfaction?
- Whether job satisfaction enhances employee performance index?
- The role of employee performance on organization performance?

5. RESULT AND DISCUSSION

Depending on different chi square tests with a significance level of 0.05 the various relationship between different factors were found. The results are depicted as graphs.

It was seen that leadership was given about 98% priority in any project followed by motivation and supervisor appraisal. Training is seen to have a major impact on how employees handle their work and hence increase or decrease the level of productivity.

Out of the 102 samples surveyed a majority of 63% people said that a decentralized system of decision making benefits the company and also motivates employees to take more interest in the companies working and give their best efforts in completing projects.

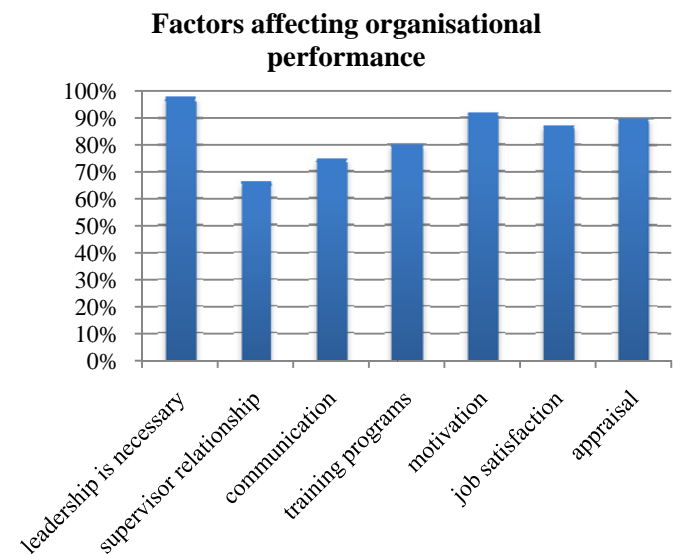


Fig. 3: Frequency distribution graph for factors affecting organizational performance

Centralised Vs Decentralised Decision Making Organisation

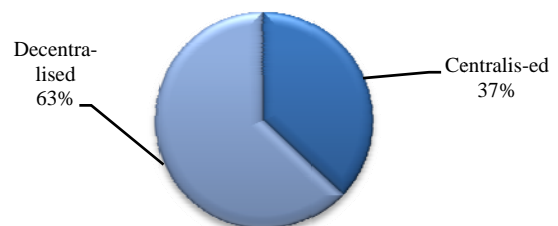


Fig. 4: Decision making structure in construction industry

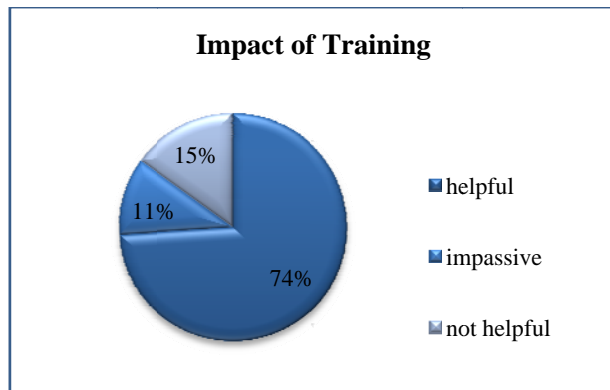


Fig. 5. Impact of training

Leadership is the key factor for the success or failure of most projects. It was seen that employees want someone to guide them. A leader who motivates and supports the workers was found to bring out more efficiency in his team than one who just orders and waits.

It can also be seen that with supervisor appraisal job satisfaction increases at nearly a linear pace. The same is also true for employee productivity but with the difference that if employees get too much appreciation there comes to be a slack in their performance and hence lowers productivity.

Leadership is necessary in completing projects successfully

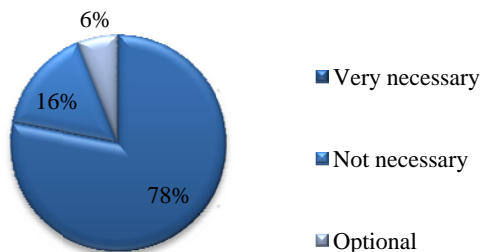


Fig. 6: Necessity of Leadership

Presence of Leadership skill in Project Managers

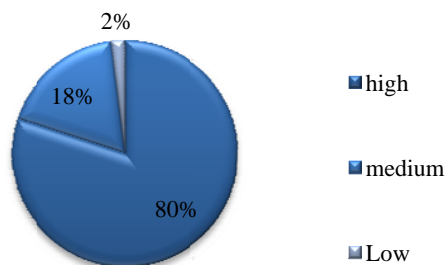


Fig. 7: Leadership increases



Fig. 8: Relation between supervisor appraisal and Job satisfaction

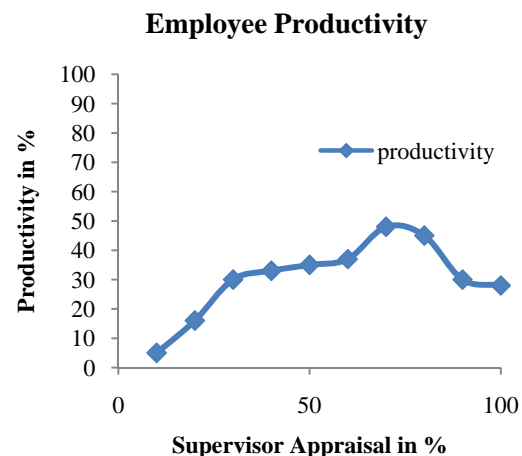


Fig. 9: Relation between supervisor appraisal and Job satisfaction

Table 1: Correlation Matrix between factors, (N=102)

	OS	L	LS	M	T	PA	SR	JS
OS	1.00							
L	0.8	1.00						
LS	0.63	0.89	1.00					
M	0.22	0.30	0.25	1.00				
T	-0.4	5.06	0.01	2.12	1.00			
PA	0.72	0.33	0.09	0.55	2.01	1.00		
SR	0.33	0.50	0.12	0.33	1.87	0.55	1.00	
JS	0.02	0.22	0.03	0.67	0.03	0.72	0.92	1.00

Depending on the correlation matrix a module was created to interrelate the factors. The correlation matrix should range from -1 to +1. Negative values indicate that there is an inverse relation between the two factors. Values above 1 indicate that there is no significant relation between the factors.

The proposed module is shown below.

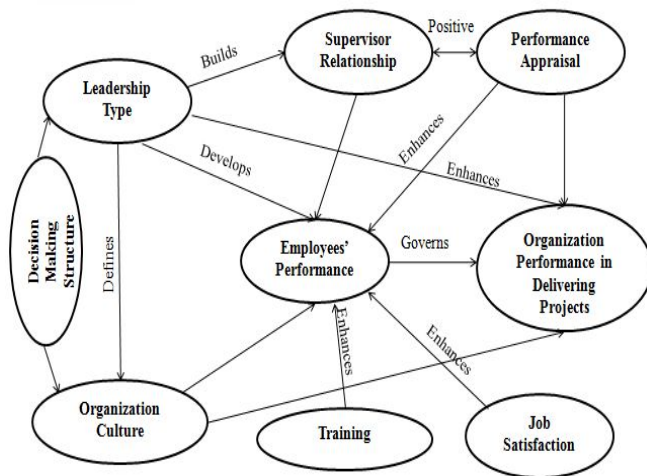


Fig. 10: proposed module to enhance organization performance

6. CONCLUSION

From the study we can come to a conclusion that most risks in the construction industry, be it financial or technical has its root cause in the activities of people. Thus it stresses that organization performance to deliver projects is directly related to its employees' performance. The paper strongly stresses that leadership recognizes the needs of employees, employs appropriate motivational tool such as promotions and incentives and merit on skills and provide suitable work environment for attaining maximum job satisfaction and hence complete the given project in the stipulated time and with all other constraints. Specific points which can be concluded are:

1. Decision making structure not only determines the leadership style but also determines the flow or order in the organization. Decentralized decision making allows employees to take part in the process and employ their new and creative ideas in the day to day activity of the organization. Leaders take into account the feedback from the employees before formulating new policies or making decisions.
2. Employees look up to their leaders for guidance, motivation and support. On the contrary the concept of lean leadership is coming into being in the construction industry.
3. Most of the construction companies in India follow a democratic leadership style in which **leaders** make the final decisions, but they include team members in the decision-making process. They encourage creativity, and people are often highly engaged in projects and decisions. As a result, team members tend to have high job satisfaction and high productivity.
4. Motivation and job appraisal works effectively to increase workplace satisfaction and hence employee output. Incentives and promotions are the top means of motivation and appraisal. Companies which maintain a

balance between employee personal and professional life bring out the efficiency in their employees.

5. Training of employees is helpful in bringing them in terms with the goals of the company and gives the employees an insight to as what the company expects from them. This helps employees perform better.

7. ACKNOWLEDGEMENT

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