

EFFECTIVE USE OF HUMAN RESOURCE DEVELOPMENT FOR IMPROVING PRODUCTIVITY IN CONSTRUCTION INDUSTRY- A REVIEW

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Abstract - The construction system can be considered as an IPO (Input, Process, Output) system. This paper includes systematic literature reviews on productivity in the construction industry the paper gives a review on the Effective Use of Human Resource Development for Improving Productivity in the Construction Industry. For this, Identify the HRD parameters suitable for construction, Preparation of questionnaire survey suitable for the construction industry, Selection of a competent industrial professional to answer the survey, Collection of answers from industry professionals and for further analysis using a statistical tool, The structural questionnaire is administered to all HR practitioners, The questionnaire data is analysed statistically using descriptive analysis in which the outcome of HRD interventions is factored sequentially, The mean and standard deviation of productivity with concern to labour count is calculated, Meanwhile the interview data and test parameters are subjected to content analysis to identify key themes and categories. so from this study suitable parameters can be recommended respectively to the Indian construction industry.

Key Words: Organization development, Training and development, Human resource development, HRD in specific industry orientation.

1. INTRODUCTION

The construction system can be considered an IPO (Input, Process, Output) system. There are four elements in the input (machine, materials, methods, labour) of this system and labour is the most significant factor among them and organization can properly use and consume other factors are left to the promotion and improvement of HR or workforce, and human resource development is the primary (improving HR). HRD can cause improving step-by-step firm performance in a construction company, these stages include.

- Improvement of HR outcome: Improved knowledge, ability, skills, and employee behaviour;
- Improvement of organization performance outcome: non-financial performance (employee's satisfaction, time, absence, change of organizational culture, increasing revenue);
- The increase in productivity and finally;
- The increase of financial outcome: Improved profitability.

The two major components of HIRD are (1) training and development and (2) organization development. Human resource development has three

critical application areas i) human resource management ii) career development iii) quality improvement.

Organization development: Organization development is the process of systematically implementing organizational change to improve performance.

Training and development: Training and development is the process of systematically developing expertise in individuals to improve performance.

Performance: There are three levels of performance organizational, process, and individual

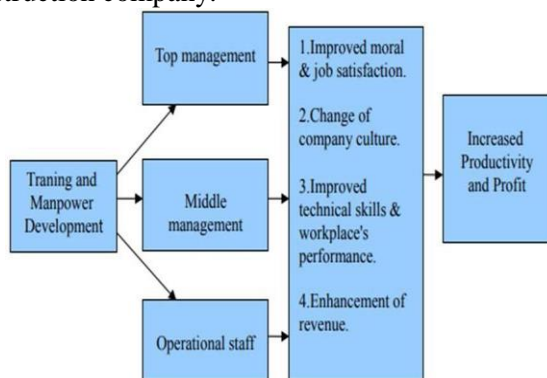
HIRD values HRD practices should be theoretically and ethically sound HRD calls upon theories from multiple disciplines. Thus, the problems of connecting sound theory and sound practice within a theoretically sound and ethically framework is an important part of HRD theory and practice. Human Resource Development (HRD) is the area that plays middle characteristic in an enterprise for the development, knowledge and abilities of employees. Human resource development includes such opportunities as employee training, employee career development, performance management and development, coaching, mentoring, succession planning, key employee identification and organization development. HRD has the key role in up information and skills on human resource in any organization. the most target of human resource development is on fostering the personnel so the corporate further as staff are able to do their work goals and objective to most satisfaction. the businesses implement a planned development of human resources required for the company to grow and actively support their employees within the voluntary development of their skills with the aim of achieving growth for each the company and our employees. Managers approach human resources development from the three areas such as:

1) Planned Human Resource Development which is to implement planned development to foster and secure the human resources needed to achieve the management vision (e.g., growth strategy, business continuity, creation of corporate culture);

2) Skill Development which is tasked to develop on individual employees their skills and increase their market value, and;

3) Career Development which is a continuous lifelong process of developmental experiences that focus on seeking, obtaining and processing information about self, occupational and educational alternatives, life styles and role options support medium to long-term career development and promote growth toward employees' ideals.

The effectiveness of training and manpower development can improve the job satisfaction, technical skills, enhancement of salary and change the company culture to a proper level that company can compete with other companies as well as owners or contractors or HRM expected. These changes can help to increase and improve profit, productivity and employee's performance in a construction company.



(Fig 1.1: Detailed Relationship Between Training System and Productivity)

2. BODY OF PAPER

The construction sector is one of the most unorganized sectors in India. The Real property sector covers office, residential, retail, hotels among others. Urban development sector generally consists of sub-sectors such as Water supply, Sanitation, Urban transport, Schools, and Healthcare.

Construction projects in India are handled by globally recognized organizations as well as contractors on a very small scale. This leads to a lot of variations in various aspects like quality, safety, time of completion and cost of the project. Improved construction management is required for enhancing resources and maximizing productivity and efficiency.

For the achievement of the construction of any sustainable development project, several features must be taken into consideration, inclusive of planning and management. In that human resources, safety and health, construction delays, the designs of architecture and engineering, material availability and quality; the clients need, and financial or economic limitations. One of the aspects which is crucial in this study is human resource development.

3. LITERATURE REVIEW:

3.1. Human resource development:

1. Thomas (2007), proposed strategic human resource development (SHRD). SHRD is defined as a "coherent, vertically aligned and horizontally integrated set of learning and development activities which contribute to the achievement of strategic goals"(9). The model adopts an open-system approach and allows consideration of numerous factors that are simultaneously at play in firms. The criteria used to evaluate the effectiveness of SHRD will vary by stakeholder and firm. This model described that the satisfaction of all stakeholders is important.
2. Richa Chaudhary et. al., (2011), explore the impact of HRD Climate on employee engagement in select business organizations in India. An attempt is made to closely examine the interrelationship between factors of HRD Climate and employee engagement. The study was conducted on 85 business executives from both private and public sector manufacturing and service firms in India. Data were analyzed using correlation and regression analysis. The results of the study revealed that the general climate dimension of HRD Climate was the most significant predictor of employee engagement followed by the HRD mechanism dimension (7).
3. C. Scott Rigby and Richard M. Ryan (2018), studied effectively fostering and supporting the high-quality motivation that comes from within employees and prescribed Developing affective commitment and intrinsic motivation is highlighted as a key to organizational success and employee satisfaction. It is concluded that enhanced need satisfaction can come from managerial climate, job design, and well-crafted compensation strategies, as well as being influenced by the perceived mission of the company. A focus on basic needs provides a practical basis for leveraging positive change and achieving goals from talent retention to workplace wellness (2).
4. Sunyoung Park and Jae Young Lee (2018), studied Workplace learning measures for human resource development. By reviewing 141 studies on workplace learning published in six journals in the field of HRD, they have taken nine measures for workplace learning. 3-P model of workplace learning was adopted as the framework to analyze the features of each measure in terms of presage, process and product. Workplace Climate

Questionnaire, Learning Opportunities Questionnaire, Approaches to Work Questionnaire and Self-regulated Learning in the Workplace Questionnaire belong to the presage category. Small Business Workplace Learning Survey and Workplace Learning Activities are categorized as the process dimension. The Questionnaire on Informal Workplace Learning Outcomes is in the product dimension. Informal Workplace Learning Survey and Workplace Adaptation Questionnaire are across the three categories. Findings showed that eight of the nine measures were related to the presage or process of workplace learning (8).

5. Elena et al., (2018), using a methodological approach to the study of human resource development from the perspective of two-way communication between producers and consumers of an innovative product. The educational, structural-industry and information technology aspects of development are considered. The results of the analysis are presented, and the methods of partnership cooperation between higher educational institutions and representatives of the business community in the construction and housing and utility sectors are identified. A SWOT analysis of the strengths and weaknesses of urban modernization has been carried out. Among the weaknesses, the failure of highly qualified specialists was revealed. Among the threats is the absence of a legislative and methodological framework in many areas of housing and communal services reform. In the annexe to the concept of "smart cities", Rohmer's model is considered, confirming the primary role of human resources in reforming and further operating the urban infrastructure. It is shown that the success of the initiative of a smart city depends on personnel, processes and technologies (3).
6. Frank Nana and Mridula Mishra (2018), research the impact of human resource development (HRD) practices on employee performance in small and medium-scale enterprises. An integrated research model was developed by combining principal factors from existing literature. Data were collected through a questionnaire from 500 employees of the selected SMEs. The validity of the model and hypotheses was tested using structural equation modelling. The reliability and validity of the dimensions are established through confirmatory factor analysis. The results indicate that some human resource development practices impact employee performance. Performance appraisal however

does not impact employee performance of the firms studied (6).

3.2 HRD in specific industry orientation:

1. Y.A. Debrah and G. Ofori's (2006), the study provides a review of the extent of the neglect of HRD for professionals in emerging/developing economies and what needs to be done to address the problem. In particular, it explores why there is no systematic integrated industry-wide training programme for professionals in the industry. It reveals that the existing programmes are fragmented and lack overall strategy and continuity, coordination and sustainable funding. The lack of sustainable funding is identified as the main obstacle to both the creation and sustainability of a training programme for professionals. To overcome this problem, the study suggests the establishment of an industry-specific training levy for professionals. But it warns that in an emerging/developing country environment there is the need to ensure that both the training programme and the administration of finance are not derailed by bureaucratic bottlenecks and other constraints, such as corruption (5).
2. Haslinda et. al., (2007), conducted a study on Human Resource Development Practices in the manufacturing sector of Malaysia country. They examined the degree and nature of HRD activities being practised and implemented within this industry. A mixed-method combination questionnaire survey and personal interviews were employed. The results indicated that HRD is strategic with the involvement of other levels of management in the different practices of HRD despite the various setback and factors impeding the effective implementation of HRD. And it was concluded that employees are developed for the short term rather than longer-term development.
3. N. Aniekwu and C. A. Ozochi (2010), conducted a study on Restructuring education, training and human resource development in the Nigerian construction industry and considered the knowledge acquisition, the constraints and the possibilities of creating new human resource capacity for the industry. By stabilizing the construction environment and re-orienting existing training and training institutions in terms of government skills-development strategy. They suggested mandatory for every company of a defined minimum category to accept students on industrial training from various schools under stipulated conditions.

4. Obiri et. al., (2020), studied the Approach to Human Resource development in the Oil Industry. They adopted the system thinking (ST) methodology to provide a comprehensive approach to identifying, analyzing and understanding the interconnections and interrelationships among the variables affecting the challenge of human resource development (HRD) in the oil industry. The concept of feedback embedded in ST allows complex issues to be viewed as an interconnected set of circular relationships rather than the linear cause-and-effect. Consequently, the ST tool of causal loop diagram (CLD) aids in visualizing the understanding of HRD factors, their relationships with the causal factors and the strategies for sustainable development of domestic skills, know-how and local capacity.

4. Proposed Work:

Objectives:

1. To study and identify various parameters for questionnaire survey to construction industrial experts according to various HRD models from literature review.
2. To analyze of data inputs received from industrial professional using any statistical tool according to size of data.
3. To Rank the considered parameters based on analysis.
4. To Identify the major factors to boost the construction industry and recommendation of top parameters for future.
5. Task of interviewing HRs to identify significance and effectiveness of HRD about every individual employee and group with concern to enhancement of work progress.
6. By the outcome analysis of fundamental aspects, examination of method approach by HR practioners.

5. Methodology:

To achieve the objectives of this study, the following methodology is adopted.

1. Identify the HRD parameters suitable for construction.
2. Preparation of questionnaire survey suitable for the construction industry.
3. Selection of competent industrial professional to answer the survey.
4. Collection of answers from industry professionals and for further analysis using a statistical tool.
5. The structural questionnaire is administrated to all HR practioners.

6. The questionnaire data is analyzed statistically using descriptive analysis in which the outcome of HRD interventions is factored sequentially.
7. The mean and standard deviation of productivity with concern to labour count are calculated.
8. Meanwhile the interview data and test parameters are subjected to content analysis to identify key themes and categories.

6. CONCLUSIONS

From the above literature, it is concluded that there are many methods of increasing productivity in the construction industry. To date, very limited research was done on HRD in the construction industry. This study on human resource development is to identify the lack in existed policy and to suggest measures to be taken by organizations of various scales in the construction Indian construction industry.

The concept of HRD in the construction sector has very limited research today, so from this study suitable parameters can be recommended respectively to the Indian construction industry.

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