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MODILLING THE FACTORS AFFECTING FORMWORK WORKERS PRODUCTIVITY IN THE GAZA STRIP

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Abstract

The construction industry is labor-intensive and relies heavily on the skills of its workforce. The workforce is the industry’s most valuable asset, which, at the very least, accounts for over a quarter of the total project cost. The present study focuses on improving the labour productivity in order to reach an optimal performance. This has been achieved by modeling the factors influencing formwork labour productivity.

Both qualitative and quantitative research methodology was utilized in this study. The qualitative research data consisted of eight in-depth interviews with contractors and project managers related to building projects. The quantitative research data was gathered with the aid of a questionnaire. Sixty questionnaires were sent to Contractors Company and site engineers and sixty five responses were received. The response rate was ninety three percent.

The results of the questionnaire revealed that the most influential group on productivity is physical factors group with percentage of 78.11%. The in-depth interviews revealed according to experts project managers the importance of productivity rate in major and on the labors statues in the work site in Gaza strip and their performance according to their affectedness aspect such as motivation and number of staff. The contractor adds some feedback about the importance of time that has a relationship with productivity to finish the project on or before the deadline.

The Analytical hierarchy process was then employed to model the most important factors affecting formwork labour productivity depending on the questionnair’s results. We recommend that management Contractor should take Job Satisfaction and Job security of formwork labour. It is recommended that there must be more awareness about lack of essential needs of labors in the site. It is recommended that the contractor should be careful when choose the number of skilled expert formwork workers. For further research; there is a need to focus on other activities in construction projects such as, tile work, painting work and plastering work.

Keywords: labour productivity, formwork labour, analytical hierarchy process.