Using logistic and Multilinear Regression Technique for Modeling Productivity finish work Construction in Ramadi City

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Abstract

An essential part of managing construction projects is productivity estimation. The accuracy of the construction productivity estimate determines the management quality. This research established a multi-variable linear regression and another mathematical model for the same variables to assess the productivity of building projects using the logistic regression approach. Data from residential, commercial, and educational projects in various regions of Anbar was utilized in the research. Numerous dependent variables were chosen with care. These independent factors, which include age, experience, the quantity of work, level of execution, and security circumstances, may be divided into objective and subjective variables. The person-hour/unit and the cost/unit are two inputs to the system that are used to measure input/output, the parameter known as productivity. The first is used for procedures that need a large amount of labour and is focused only on labour. All impacts are combined in the second cost/unit. The researcher came up with an equation that contains the following factors (Health condition, equipment available, Security, labor, Quality work, morale, the material available, site condition, Experience, Weather, Height, and Age).