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Systems Integrated Approach to Improve the Design and Construction of Green Buildings

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Abstract : Efficiency, productivity and sustainability are important factors for structure and the application of processes in green building. Various previous studies have addressed efficiency, productivity and sustainability separately. This research study aims to investigate the implications of these three factors taking together. Frequency analysis and the ranking techniques are carried out to explore the connection between these factors. The interconnection matrix has been developed and functional grouping is made based upon data from expert opinion and field professionals. The existence of a relationship, the type of relationship and the scaled impact have been drawn. Additionally, a system diagram has been developed to show the variable correlation. The results of expert opinion show that efficiency, productivity and sustainability have a stronger impact on green buildings.

Keywords: efficiency, green building, productivity, sustainability

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