

A Framework for Improving Trade Contractors' Productivity Tracking Methods

Authors : Sophia Hayes, Kenny L. Liang, Sahil Sharma, Austin Shema, Mahmoud Bader, Mohamed Elbarkouky

Abstract : Despite being one of the most significant economic contributors of the country, Canada's construction industry is lagging behind other sectors when it comes to labor productivity improvements. The construction industry is very collaborative as a general contractor, will hire trade contractors to perform most of a project's work; meaning low productivity from one contractor can have a domino effect on the shared success of a project. To address this issue and encourage trade contractors to improve their productivity tracking methods, an investigative study was done on the productivity views and tracking methods of various trade contractors. Additionally, an in-depth review was done on four standard tracking methods used in the construction industry: cost codes, benchmarking, the job productivity measurement (JPM) standard, and WorkFace Planning (WFP). The four tracking methods were used as a baseline in comparing the trade contractors' responses, determining gaps within their current tracking methods, and for making improvement recommendations. 15 interviews were conducted with different trades to analyze how contractors value productivity. The results of these analyses indicated that there seem to be gaps within the construction industry when it comes to an understanding of the purpose and value in productivity tracking. The trade contractors also shared their current productivity tracking systems; which were then compared to the four standard tracking methods used in the construction industry. Gaps were identified in their various tracking methods and using a framework; recommendations were made based on the type of trade on how to improve how they track productivity.

Keywords : labor productivity, productivity tracking methods, trade contractors, construction

Conference Title : ICCEM 2019 : International Conference on Construction Engineering and Management

Conference Location : Dubai, UAE

Conference Dates : December 19-20, 2019