

Field Management Solutions Supporting Foreman Executive Tasks

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Abstract : Productivity is decreasing in construction compared to the manufacturing industry. It seems that the sector is suffering from organizational problems and have low maturity regarding technological advances. High international competition due to the growing context of globalization, complex projects, and shorter deadlines increases these challenges. Field employees are more exposed to coordination problems than design officers. Execution collaboration is then a major issue that can threaten the cost, time, and quality completion of a project. Initially, this paper will try to identify field professional requirements as to address building management process weaknesses such as the unreliability of scheduling, the fickleness of monitoring and inspection processes, the inaccuracy of project's indicators, inconsistency of building documents and the random logistic management. Subsequently, we will focus our attention on providing solutions to improve scheduling, inspection, and hours tracking processes using emerging lean tools and field mobility applications that bring new perspectives in terms of cooperation. They have shown a great ability to connect various field teams and make informations visual and accessible to planify accurately and eliminate at the source the potential defects. In addition to software as a service use, the adoption of the human resource module of the Enterprise Resource Planning system can allow a meticulous time accounting and thus make the faster decision making. The next step is to integrate external data sources received from or destined to design engineers, logisticians, and suppliers in a holistic system. Creating a monolithic system that consolidates planning, quality, procurement, and resources management modules should be our ultimate target to build the construction industry supply chain.

Keywords : lean, last planner system, field mobility applications, construction productivity

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