

LCM Digital: An Innovative Platform For Digital Schedule And Process Planning

In cooperation with Consolidated Contractors Company (CCC), the largest building contractor in the Middle East, Drees & Sommer is developing a new platform for efficient construction-processes – LCM Digital. The tool is based on the lean construction management method, which is abbreviated as LCM®. The online production planning tool allows an exchange of information in realtime, daily progress checks on the building site and a high degree of collaboration, from the planners through to the construction workers. Another feature is that LCM Digital can be linked to building information modeling (BIM) and supply chain management systems.

‘Combining lean construction management and building information modeling on a single platform is unique. LCM Digital even more closely links virtual and real building sites. It harnesses the full potential of BIM and LCM. This leads to highly transparent, up-to-date and efficient procedures, and it speeds up processes by as much as 25 percent, which enormously benefits principals, architects, planners, contractors and other project participants,’ says Patrick Theis, Partner at Drees & Sommer SE and Managing Director with responsibility for the new platform.

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With Lean Construction Management (LCM®), Drees & Sommer applies the lean principles used in the manufacturing sector to the building execution phase of construction projects, and the agile approaches used in software development to the planning phase. As a result, planning processes are coordinated in a target-oriented manner. The building execution process can be scheduled with exact dates down to the last detail, and it is flexibly controlled on the building site.

As far as schedule and process planning are concerned, manually compiled plans and conventional project sequences are still common in many real estate and construction companies. However, the constant progress of digitization and the growing complexity of construction projects require new and efficient solutions. In the future, the innovative platform LCM Digital will bring improvements. As the next step in the development of classical schedule and process planning methods, LCM Digital significantly reduces the complexity of processes and the organization of a construction project.

By using LCM Digital, the project participants can share all of their information about planned or changed deadlines, building site processes and possible obstacles in real time, and they can also view each other’s information without delay. This will enable them to react flexibly to short-term changes

and to make up-to-date decisions. On the basis of the schedule plans that have been prepared, they will be able to coordinate and control their activities for the next few days and months online. Plan cards with work packages for each team and each day can also be printed to ensure joint interaction between teams on the building site. By using a QR code and the LCM Digital app, the status can then be input into the system again. This means that LCM Digital can be used both online and offline with a smartphone, tablet or computer. The innovative platform thus acts as an interface between human experience and digital data, and on its own it can deduce standard processes, identify inter-dependent elements and indicate the next steps in the process and any possible risks and planning mistakes. This leads to genuine online collaboration, more effective meetings, and stable and transparent deadlines and processes.

As a project management and consulting company, Drees & Sommer has worked with lean construction management for over ten years and successfully implemented more than 350 LCM projects. At the same time, Drees & Sommer has substantial expertise and numerous references in building information modeling. With LCM Digital, the company brings together all of this experience and enhances planning and implementation processes in construction projects, irrespective of size and complexity. The cloud-based platform will be available for interested parties from November 2018.

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