Extension of an application for usage and visualization of simulation in construction project

Initial Situation

At the chair fml the digitalization of the construction site is also investigated in the field of construction logistics. A central point for increasing efficiency in construction projects is the application of process simulations before and during construction. Detailed modelling of individual construction processes can provide recommendations for action in real time, taking machine data into account.

Objective

In a previous project, a concept was developed for an interface of the simulation results, called Project Control Center 2.0 (PCC 2.0). This project is now to be continued: This includes an interface to the now finished middleware as well as data exchange via files with commercial project planning tools. It also remains to be explored if data exchange with MS Project is not only possible via MSPDI, but also if the MPP format might be utilized to guarantee a more visually advanced export of data from the PCC 2.0 to MS Project. Additionally, the internal visualization of data in the PCC 2.0 could be improved, too. In addition to the existing Gantt chart, this might include additional diagrams, a similar progress visualization as in the PCC using a 3D model, or a more advanced visualization of Building Information Modeling (BIM).

Requirements

- Reliability and commitment
- Independent and structured way of working
- Open and communicative manner

Contact

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