BIM in Real Estate Operations: Application, Implementation, Digitalization Trends and Case Studies

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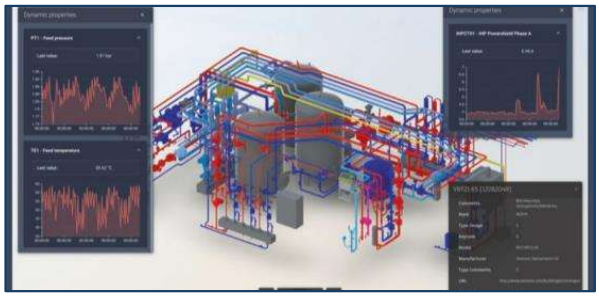
"The BPS Group, founded in 1992 as an IT company, is one of the leading providers of BIM technology in all phases of the lifecycle of real estate. The group brings together architects, engineers and IT specialists in a unique conglomerate.

The focus is on the creation of building information models (BIM) and the development of solutions for effective lifecycle management, such as 4D/5D and industrial IoT solutions.

By combining the functions of investor, developer and operator of its own 100,000 m2 commercial real estate, the BPS Group has extensive practical experience in the development and operation of large real estate portfolios.

BPS Group has developed the HiPerWare platform, which is based on Big Data, machine learning/AI and industrial IoT technologies. The animated virtual model simulates physical processes that take place in a real building, it is equipped with artificial intelligence and can remember, understand, analyze and optimize these processes.



By combining the BIM model with the HiPerWare platform, a long-term digital footprint of the technical systems was created, which reduces operating costs by up to 30%, improves energy efficiency by up to 20%, and reduces carbon emissions."

About this book

This reference book - not only for practitioners - deals with all facets and issues of the application of Building Information Modeling (BIM) in real estate operations and Facility Management (FM). Starting from the basics and advantages of BIM as well as its development, all areas in real estate operations are illuminated where BIM can be usefully applied. BIM and CAFM basics, modern digitization techniques, data standards and data exchange, as well as interoperability and aspects of the economic viability of BIM projects are explained in detail. The procedure for introducing BIM, application scenarios and concrete practical examples round off the work, as does a look at current research topics and future developments.

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