BIM-Cluster Hessen

3rd Frankfurt BIM Symposium highlights the importance of the BIM planning method and underlines the importance of technical building services equipment

The components used in the construction of a building have a huge impact on future operating costs. A well-equipped building technology, a detailed planning method and highly qualified staff are essential.

Frankfurt, December 10, 2019 – The 3rd Symposium of the BIM-Cluster Hessen was a complete success. The event took place on November 07th in Frankfurt and offered the 280 participants a platform to network and to obtain and exchange information.

Two years earlier, the BIM Cluster Hessen was founded on the same date. Dr. Philipp Nimmermann, State Secretary in the Hessian Ministry of Economics, Energy, Transport and Housing, personally congratulated the cluster. "Networking and active exchange play a major role. This is exactly where the BIM Cluster Hessen comes in. It's a really good platform. That's why the state of Hessen is providing financial support for this new industry cluster."

BIM as a working method and an important part of digitalisation

BIM projects provide transparency for all parties involved right from the start. Prerequisite for this, is the collection of all relevant data from the first day. Field reports show that construction projects work better with BIM. "We have just completed a project planned using the BIM method. I have rarely had so few collisions on a construction site as with this current implementation," reported a site manager.
In their technical lectures, the speakers made clear, that Germany still has a lot of potential for development with regard to BIM. Northern European countries, for example, have far more experience with the BIM method than Germany, which currently ranks 20th on the BIM country list.

The importance of qualified personnel and the fact that the BIM method is the tool of the future were also emphasized. Employees need to be trained to use this digitization tool. Thus BIM initially causes costs for appropriate training and further education, but in the long run offers considerable savings potential. "Well-trained people are needed to be able to assess cost-benefit factors," said Konstantinos Kessoudis, Züblin AG. Prof. Dr. Uwe Rüppel, Technical University Darmstadt, also highlighted in his lecture: "It is becoming more and more important to incorporate your own know-how, i.e. at best to be able to program yourself and be trained accordingly". Furthermore, digitisation and BIM are likely to provide more time for creative activities in the long term and the promotion of good education is therefore of crucial importance on the path to digital transformation.

**Building technology gives life to the building**
The importance of technical building services equipment (TGA) in construction projects and in relation to BIM was made clear in several contributions.

Building services engineering is a sector with complex technical requirements that can map a coherent flow of information with the targeted application of the BIM method. A TGA model planned with BIM methodology allows realistic estimates of space requirements, reduces sources of error and lowers costs.

"BIM will fundamentally change the processes involved in planning, constructing and operating of buildings," said Dr. Thomas Schräder, Managing Director of the German Association for General Air Handling Technology (VDMA) and member of the Executive Board of the BIM Cluster Hessen. "It is therefore extremely important for us to have a wide variety of technical building equipment experts to illuminate this complex topic in connection with building technology".

Klaus Ege, Fakt GmbH, made clear that specific TGA products can only be included as objects into digital models if they are described exclusively by standardized attributes, i.e. consistent data sets. The TGA thus becomes a challenge. Because far ahead of architecture, structural design and other aspects, it stands in a typical storey design for more than 90 percent of all required objects. For an office floor area of around ten thousand square meters, this rapidly increases the number of TGA attributes to millions, continues Ege. In addition, he raised the thesis that TGA product and operating data can one
day be more valuable than the building itself. Namely, when these are used in the operating phase as the key to significant reductions in the life cycle costs of complex buildings.

Daniel Leitner, TROX GmbH, spoke on digital twins from the manufacturer's point of view and summarized: "BIM accelerates the digitization of the construction industry and is the standard of the future. Therefore, digital manufacturer data is becoming more and more important". Leitner emphasized in his presentation that although "the" BIM standard does not yet exist, there is still a need to establish standards for product data exchange for the TGA industry.

"The BIM method should also be understood as important tool for energy-efficient and sustainable construction. It helps to achieve the ambitious climate protection targets set for the building sector. Today's event has once again shown how important the exchange of experience on BIM planning methods is in order to continuously promote digital transformation," said Schräder, drawing a positive summary at the end of the event.

Do you have any further questions? Dr. Thomas Schräder, VDMA Air Handling Technology, phone 069 6603 1227, thomas.schraeder@vdma.org will answer your questions.

The VDMA represents more than 3200 companies in the medium-sized mechanical and plant engineering sector. With 1.3 million employees in Germany and a turnover of 232 billion euros (2018), the sector is the largest industrial employer and one of the leading German branches of industry overall.

The Air Handling Technology Association comprises the departments Air Conditioning and Ventilation Technology (Process air as well as Ventilation and air conditioning), Refrigeration and Heat Pump Technology, Air Pollution Control (Process air), Surface Technology and Drying Technology.