## Preface of the publisher

## 16. Journal for Facility Management: Science meets Practice

The Facility Services (FS) industry is often underestimated. According to the EU statistics the outsourced FS according to EN15221-4 are the fourth largest industry considering value added and the third largest according to the number of employees. In Europe and the USA almost 10% of all employees work in this industry. It is a diver of the economic growth as it grows faster than most of the other industries. In addition, it cannot be offshored, as buildings have to be serviced where they are. Digitalisation will change the way FS will be provided in the future intensively. As FS are very repetitive most of the tasks can easily be automated. Especially IoT, Big Data, Artificial Intelligence and Machine Learning will change the operation in this area to a large degree. The people working in this industry will still be very important, as they are the face to the customer. Nevertheless, in the background emerging technologies will enable disruptive changes. A current study of the TU Vienna provides deeper insides about technical and economic feasibility. IoT providing accurate data about the condition of the buildings and their equipment are already widely spread. As the devices become self-sufficient (producing the power they need by themselves and connecting to the WIFI easily) and the price of the sensors dropped dramatically, this technology is economic feasible in a lot of use cases. Mobile apps as access-point to the data and enabling process optimisation are also already feasible. Big Data, AI and ML developed rapidly over the last year. The increased provision of SaaS tools supported their immediate use. As the technology is available now, office and residential developers but also service providers are to analyse their optimal use, that they will stay in the driver's seat and not technology companies will take over.

This issue provides you several insights into these topics:

- The Outsourced Facility Service Industry in Austria and its Neighbouring Countries and the Impact of Digitalisation on it
- Internet of Things for Facility Management
- National legislation, standards and recommendations with respect to water risk management and Legionella prevention

The first paper gives an insight in the size of the FS industry. It shows that in most European countries this industry was a driver of the whole economy during the crisis of 2009. It also provides a first insight how digitalisation will change the industry. This part of the paper refers to several studies that estimate the changes on a macroeconomic level, but also at the task level. It points out that mainly the jobs of the first line supervisors will change dramatically, as the

equipment will report its status automatically to the technicians and "call" them directly in case it needs service or repair.

The second paper dives deeper into the subject of IoT. The Article shows how this technology will change Facility Management and how IoT can provide value added. Based on an intensive literature research and presenting case studies the paper shows how IoT can increase the efficiency of FM and can help to reduce costs.

The third paper deals with the national legislation, standards and recommendations with respect to water risk management. The paper discusses FM relevant duties. In the first part, the paper lists relevant statutes, standards and documents guiding the design, operation and maintenance to reduce risks. In the second part, they are compared to practice. The papers depicts that there are many differences in the available standards and regulations of the countries. It also stresses the importance of this subject as it can result even in lawsuits. These articles present high-class research results, providing new approaches and scientifically grounded answers to urgent questions within the area of real estate and facility management. The suggested solutions can be used directly by practitioners to solve day-to-day problems. They even suggest new service offerings or ideas for start-ups.

At this point, I want to thank all international researchers, who sent us numerous abstracts and papers for the double blind review. The decline rate kept high with more than 50%. The high quality research handed in enabled us to increase the quality of the IFM journal over the last years. Thanks for your help and we are looking forward for your support. I also want to thank the members of the editorial and the scientific board for their terrific work. They supported me in reviewing first the abstracts and then the full papers and gave a lot of input to the authors.

The high decline rate, the high reputed members of the editorial and the scientific board and the supporting universities ensure that the articles are not only having a high scientifically quality, but also that practitioners can put them into practice easily.

I also want to thank my team, especially Lisa Grasl MA und DI Christine Hax. Without their personal engagement, the journal would not be available in this high quality.

I wish you all the best from Vienna, an enjoyable reading, a lot of input for your research and/or for your daily work. I look forward to a lot of new abstracts and papers for the next call for papers for the 11th IFM congress 2018.

Yours

Alexander Redlein

Head of Editorial Board

To my family Barbara, Caroline Sidonie und Alexander David