

Preface of the publisher

29th Journal für Facility Management: Science meets Practice

AI changes dramatically the way we do research and publish it. Also economic and social challenges change the way we work and live. Therefore, I am more than happy that the scientific community but also the editorial board and the reviewers support our journal over all these years. This community stands together and is convinced of the importance of a scientific journal for real estate and facility management based on high class international research and following strict rules for scientific quality assurance.

It was not always easy, a lot of hard work and sleepless nights, but the results prove that this is worth the efforts and that a high standards journal is needed by researchers but also by practitioners. For me especially the bridging of science and practise is important. Science develops great ideas, new methodologies and approaches. But they only come to life due to exchange with practice. When these ideas are known to practice, when they are taken up and used, then we develop innovation. Especially in times of change, solid, validated approaches are important. I know that several papers presented in this journal were taken up by industry and led to innovative user-centric services and products. This makes me very proud and fulfils the slogan “Science meets Practice” at its core.

I know this issue of the journal has some great insights and ideas for innovation. The papers cover topics from sustainability and life cycle management to urban facility management (FM) and the usage of AI to generate digital twins:

- Systematic Integration of ESG Criteria into Infrastructural Facility Management – Development of an Evaluation Framework
- A Lifecycle-Oriented Framework for Facility Management in 3D Concrete Printed Infrastructure
- Monitoring Urban Conditions through Computer Vision – New Possibilities for Data-driven Urban FM?

Sustainability and life cycle management are increasingly important in FM, especially due to international ESG legislation. The first paper focuses on the social dimension of sustainability, which is especially important in infrastructural FM while coordinating external service providers. The aim of this paper is to develop a standardized evaluation framework for the use of corporate and facility service providers based on recognized Global Reporting Initiative (GRI) framework. Therefore, the existing gefma ESG-KPI tool is extended to include weighted social criteria. The developed model is validated using data from real university buildings. The developed framework supports the structured collection and evaluation of operational sustainability information that can contribute to ESG reporting processes.

The second paper deals with the gap between how 3DCP structures are designed and printed and how they will be maintained throughout their service life. This study develops a Lifecycle-Oriented Facility Management (LOFM) framework. A structured literature review combines ISO 41001 and EN 15221 with research on 3DCP durability, sensing, design and application as a digital twin while identifying five LOFM dimensions. These dimensions are translated into a quantitative framework for decision-making

that covers 3DCP condition, FM requirements, monitoring systems, deterioration, intervention, repair and lifecycle cost. The framework provides a practical pathway for translating 3DCP characteristics into decisions on access, inspection, monitoring, maintenance, digital handover and lifecycle cost.

The third paper explores how computer vision can transform urban condition monitoring through the analysis of street-level imagery and positions these methods as a technical foundation for dynamic digital twins. The study highlights data-driven methods – particularly image segmentation and deep learning models such as DeepLabv3+ – used to assess indicators such as greenery, cleanliness, or accessibility. The findings demonstrate computer vision's potential to generate high-frequency data that can feed dynamic digital twins, enabling continuous monitoring and immediate response strategies. Integrating these techniques into Urban FM supports more data-driven decision-making and adaptive management of the built environment.

At this point, I would like to express my sincere gratitude to all international researchers who submitted abstracts and papers for the double-blind peer-review process, with particular appreciation for our new colleagues from India, whose contributions enriched the submission process. More than 50% of the submissions were declined, reflecting the selectivity of the review process.

I would also like to thank the members of the Editorial Board and the Scientific Board for their valuable contributions, and dedicated work. They supported me throughout the review process, from the initial assessment of abstracts to the evaluation of full papers and provided authors with constructive feedback to support the further development of their work.

The selectivity of the review process, the expertise of the members of the Editorial and Scientific Boards, and the support of the participating universities contribute to maintaining the journal's scientific standards while fostering the practical relevance of its contributions. Our aim is to publish research that meets academic expectations and offers insights that practitioners can apply in their professional contexts.

My sincere thanks also go to my team, particularly Barbara Gurdet and Elisabeth Morillo-Napetschnig. Their personal commitment and dedicated work are essential to maintaining the journal's quality.

From Vienna, I wish you an enjoyable and insightful read, and I hope that the contributions in this issue will provide valuable perspectives for your research and professional practice.

I look forward to receiving further thought-provoking research for the next issue of the IFM Journal and to continuing our stimulating exchange at the 20th IFM Congress in 2027.

Grammar optimized with AI

Your

Alexander Redlein

Head of Editorial Board

To my family Barbara, Caroline Sidonie und Alexander David