



## Facilities Management Models, Methods and Tools

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Editorial

# Facilities Management Models, Methods and Tools

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The starting point for this Special Issue was the book “Facilities Management Models, Methods and Tools: Research Results for Practice” [1], edited by the guest editor. The book presents research on facilities management (FM) since 2008 at a research centre in Denmark, with particular focus on models, methods and tools applicable for practice. The research covered the following six themes:

- Facilities that support users and activities;
- Sustainability from goal to action;
- Innovation and partnerships;
- Transfer of knowledge from FM to building projects;
- FM and added value;
- FM organisation and development.

The book also presents five main challenges and processes for facilities managers, and shows how the different models, methods and tools can be used to manage one or more of these processes. The five processes are:

- Strategy development;
- Organisational design;
- Space planning;
- Building project;
- Optimisation.

The Special Issue aims to expand this research with further models, methods and tools of relevance to FM. This could include research with a practical application, but it could also include more genuine theoretical models, which contribute to a deeper understanding of the field of FM. Five papers have been accepted and are included in this Special Issue.

Groen and van Sprang [2] present an exploratory qualitative study of hospitality and safety in relation to the entrances and reception areas of corporate buildings. The methodology for data collection combined a pilot group interview and telephone interviews with staff and visitors. The group interview included three managers responsible for hospitality and security in reception areas working for a major FM supplier in the Netherlands. The interviews with staff and visitors focused on collecting critical incidents and narratives. A total of 51 descriptions of situations were collected for analysis, and 46 of these were classified as critical incidents, while five were classified as narratives. The results show that hospitality and safety are two sides of the same coin. Usually, people do accept security measures, provided that staff act in a hospitable way. A lack of security measures may seem inviting, but also decreases the perception of care for your visitor, and may cause uncertainty and therefore decrease comfort. A correct risk perception, the flexible appliance of security measures and a friendly approach connect aspects of safety and hospitality, such that they complement each other. The paper provides interesting insights into how FM can deal with the partly contradictory concerns for control and care in buildings’ reception areas.

Echeverri et al. [3] investigate corporate strategies for utilizing co-working spaces. Co-working is a fairly new phenomena and has experienced an exponential growth. It is estimated to have doubled from 2016 to 2019, when there were more than 22,000 spaces



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and 2,000,000 members worldwide. Co-working spaces are usually occupied by freelancers, entrepreneurs and start-ups. However, this study shows that co-working spaces are increasingly also being used by larger corporations to provide flexibility in their real estate portfolio. The study is exploratory and based on five case studies from the Netherlands, including in-depth, semi-structured interviews with corporate real estate managers and related case documentation. The results suggest that companies in different stages of the organization's life-cycle can implement co-working as the main office location or as a temporary or complementary space solution, through six different strategies: (1) swing space, (2) expansion space, (3) core and flex, (4) touchdown space, (5) testing market and (6) temporary projects and staff. Each strategy plays a specific role in the corporate real estate portfolio and implies different sources of flexibility. The paper provides novel information on how co-working can be utilized as part of corporate real estate portfolio management.

Lahti and Nenonen [4] present a study of co-design of digitally and physically integrated hybrid working environments. New information and communication technologies enable spatial reconfiguration of work, opening possibilities for work to take place across multiple locations. The paper applied a conceptual framework of design-science research in information systems. The methodology was based on action design research. The empirical data included two case studies of university facilities, with a case from a university in Finland and a case established by the same Finnish university at a university in Namibia. Both cases had intensive user participation and their developments were investigated and analysed step by step based on a process model for usability briefing. Multiple methods of data collection were used, including participatory workshops, documents analysis, observation and experience mapping questionnaires. The results include four recommendations for the co-designing of hybrid working environments. The use of hybrid working environments, the design of spatial solutions, the identification of iterative processes and the user experiences of presence and distance are significant. The study contributes to the traditions of usability and design studies, and it provides interesting insights on designing hybrid workplaces.

Abisuga et al. [5] investigate how facility managers handle user feedback to drive collaboration between facility managers and users during occupancy. The paper draws on theoretical insights from organizational justice, organizational response and service quality studies. Empirically, it is based on a case study of a faculty building in an Australian university using various methods, including document analysis, interviews and observations. There was a total of 29 interviews with users covering students, academics and administrative staff. The analysis of the interviews identified five themes that are applicable to FM services and could influence user post-feedback behaviour. The themes were: facilitation, timeliness, redress, apology and explanation, and attentiveness and efforts. Current responses to user feedback were not satisfactory, resulting in a poor relationship between facility managers and users that negated service acceptance and the engagement in positive word-of-mouth behaviour. To foster more facility manager–user collaborative relationships in post-occupancy evaluation, and position FM as a service organisation, there is a need for improvements in current FM responses to user feedback and the effective management of user post-feedback behaviours. This could be achieved by the provision of effective means of communication, a clearly defined FM policy and procedures, acceptable FM redress, giving sincere apologies and credible explanations, and paying attention to and extending efforts to resolve user needs. The paper provides interesting insights into understanding and analysing building users' relationships with FM.

Boge et al. [6] present a study of the factors that are the most important for building and renovation projects' short-term and long-term value creation. The focus is not primarily financial and on a building's asset value, but instead on the completed building's effect for owners and users. The short-term value is the output of the project, while the long-term value is the outcome. The study was based on a national questionnaire survey in Norway. The study population (N = 550) was professional practitioners, who have been involved in the planning and construction of buildings. Multivariate statistics were used to test

nine hypotheses. Short-term project management priorities, such as early involvement of technical contractors and FM providers, contract strategy and involvement of owners and users, largely decide the qualities of the building, and thus the potential for long-term value creation. The most important factors for long-term value creation, i.e., buildings that facilitate the demand organisation's value creation, are the qualities of the completed building, project governance and involvement of owners and users during early-phase planning. Buildings are facilities managers' most costly resources. Thus, knowledge about how to obtain the most out of building or renovation projects, both in the short term and in the long term, are of great importance for facilities managers. The paper provides interesting insights into buildings' value for owners and users, which supplement the extensive research on the added value of FM.

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