

# Digitization of Sustainability in Facility Management

*The use of digital solutions for sustainability purposes in Facility management in Denmark, Norway, Sweden and the Netherlands*



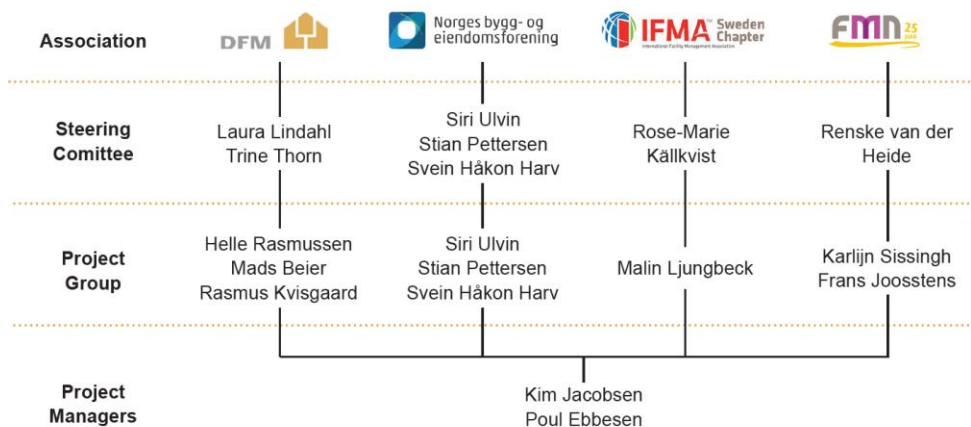
Whitepaper

## Digitization of sustainability in Facility Management

A new study of the use of digital solutions in FM organizations shows great potential for new areas of application when it comes to supporting sustainability goals.

To what extent do FM organizations use digital solutions to support their sustainability goals? And to what extent can knowledge and experience from one country benefit other countries?

These are two of the overall questions in a new international study “Digitization of Sustainability in FM” conducted by four European FM organizations. Two Expert Teams of FMN were involved: “Technology” and “Circular and Inclusive Economy”.



*The organization behind the study.*

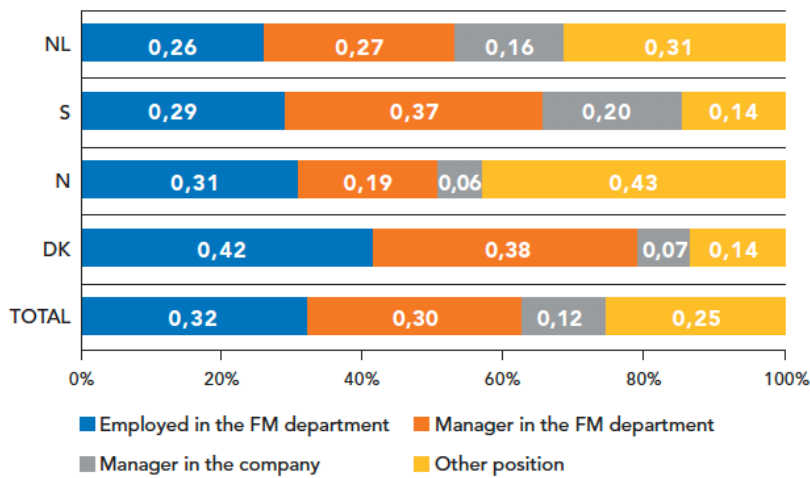
»Sustainability has become a goal for all FM organizations, and sustainability is on the international agenda. No FM company can have a strategy without sustainability being included at some level. Therefore, we have concluded that it would be interesting to see to what extent digital solutions are used to support sustainability goals in FM organizations,« says Renske van der Heide, board member of FMN and one of the initiators of this study.

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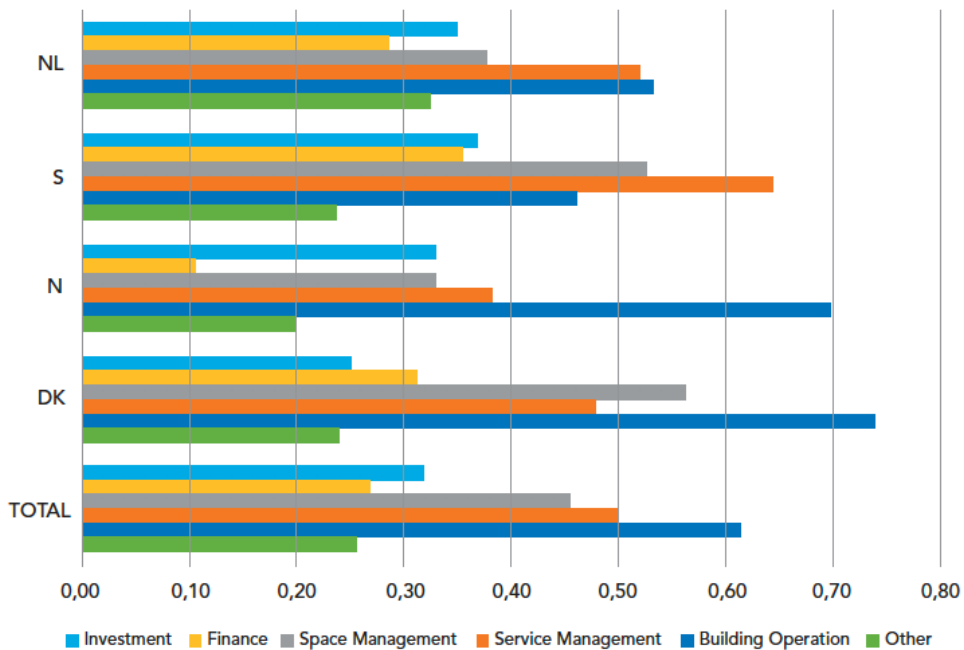
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## A study in four countries

FM-responsible employees in Denmark, Norway, Sweden, and the Netherlands have taken part in the study. A total of 326 employees in FM companies have participated in the online survey, which was conducted by FM associations in these countries.



Type of position of respondents per country and in total.

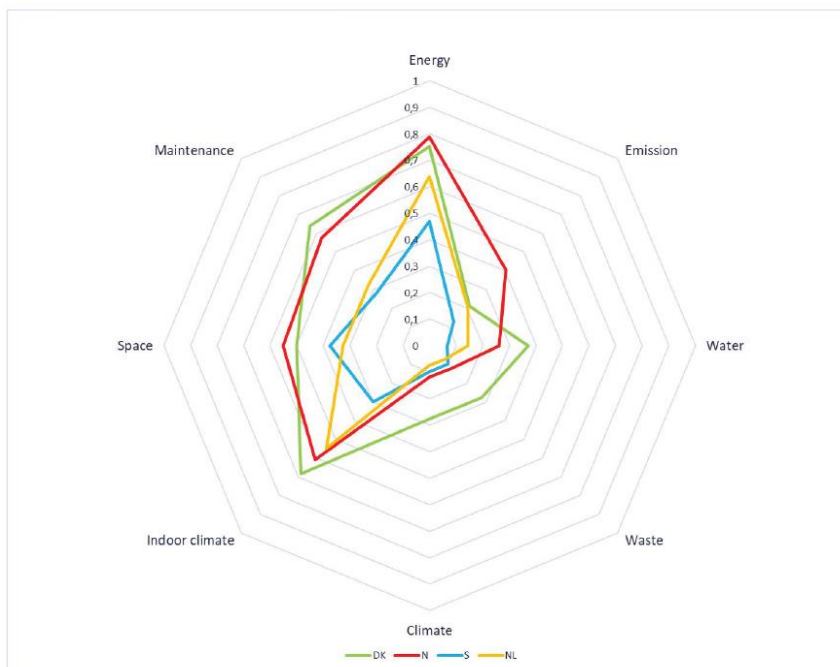


Distribution of FM areas the respondents work in, per country and in total.

## Eight sustainability parameters

The study includes eight selected sustainability parameters: Energy, Waste, Emissions, Indoor Climate, Climate, Maintenance, Space and Water - and the study shows the extent to which there is strategy for these parameters and the extent to which the strategies are supported by digital solutions.

The study shows that energy is the parameter where there is both the greatest prevalence of strategies and the greatest prevalence of digital solutions.



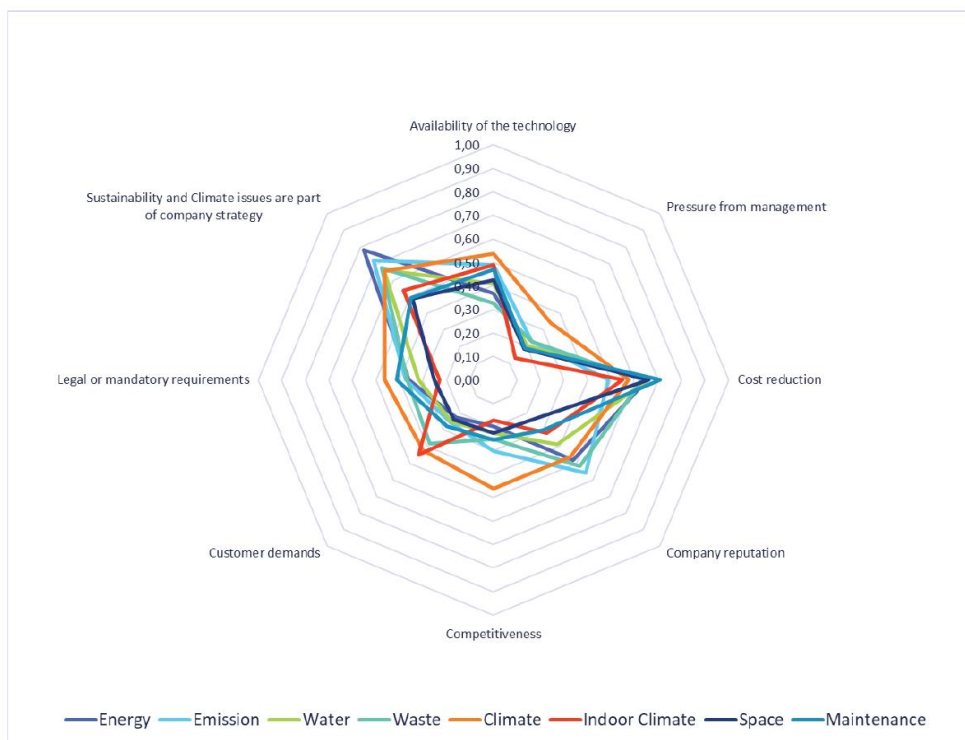
*Rate of use of digital solutions to support the FM disciplines, all countries.*

»It is not surprising that energy stands out from the other parameters. Energy has been high on the agenda for many years and is a parameter that is relatively easy to measure and easy to communicate to the outside world. It is perhaps more surprising that an area such as waste is given high priority strategically, but not nearly as high priority when it comes to digital solutions. My expectation, however, is that there will be an increased prioritization of the digital effort when it comes to waste and other areas of sustainability, as legal requirements and other sustainability influences increase, but a possible later study will be able to tell more about this,« says Frans Joosstens, member of the Expert Team Circular and Inclusive Economy.

## Strategy and cost reductions as main drivers

The study also shows that for the surveyed employees, the two most important “drivers” for digitization are the company’s overall strategy and cost reductions.

»At first glance, one may wonder why parameters such as customer requirements, legislation, reputation and competitiveness do not score as high when asked what drives the process, but the explanation may be that employees have their primary focus on the announced strategy and an ongoing effort to reduce costs. The other parameters must also mean something to the FM organizations, but are probably often incorporated into the overall strategy and therefore do not show as strongly as independent parameters when surveyed,« says Frans Joostens.

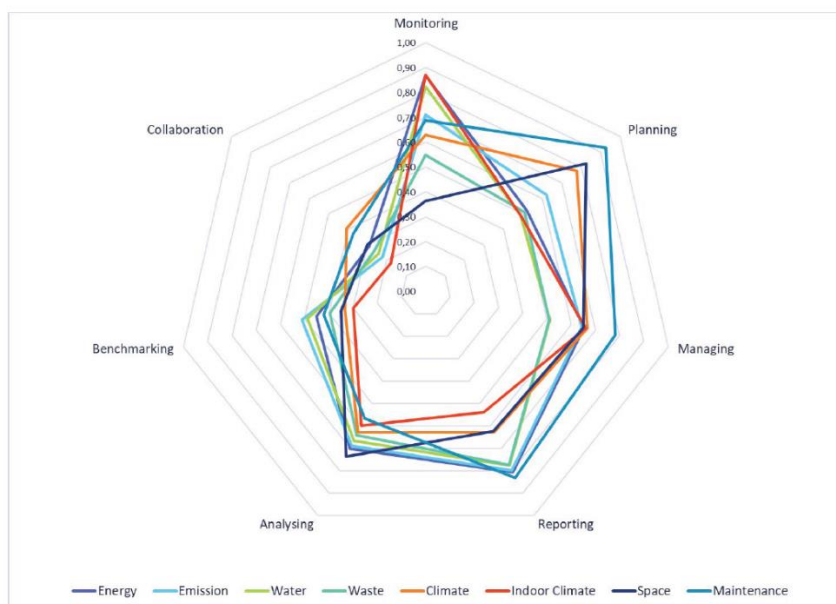


Rate of drivers per FM discipline, all countries.

## More gains in current systems

According to the study, FM organizations in the four countries use digital solutions primarily for monitoring, planning, management, and reporting - and to a lesser extent for collaboration and benchmarking.

»The answers show that there is great potential for utilizing digital solutions to an even greater degree and for even more types of tasks than is the case today. The level of maturity is not equally high in all areas, such as collaboration with external parties and benchmarking. So here you can probably reap new benefits in the future when the FM organizations start using the technologies in the areas where they are not used to a great extent today,« says Karlijn Sissingh, member of the Expert Team Technology.



*Rate of use of digital solutions per FM discipline, all countries.*

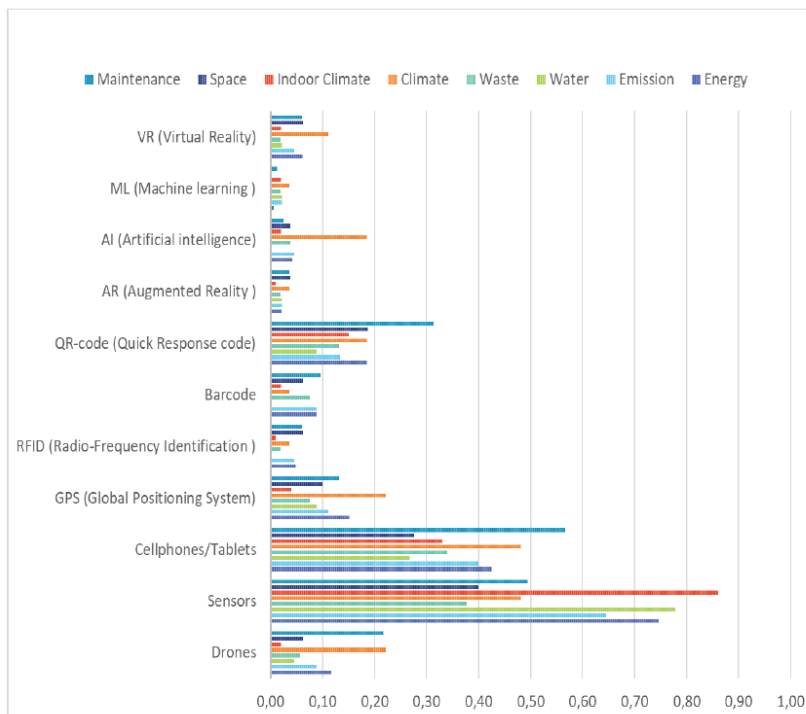
The study does not unequivocally show whether new digital solutions are needed to reap more benefits, or whether FM organizations can achieve more benefits from existing systems.

»My assessment is that in many cases, it will be possible to reap more benefits from the current systems. In several cases, they are not used to their full extent. You can use them smarter and for more types of tasks than you do today. So, in many cases, it will not require new investments in systems, but perhaps rather in upgrading the employees' digital skills and increased implementation of systems,« says Karlijn Sissingh.

## Technologies now and later

Technically, sensors are the most widely used technology, and this fits in well with the fact that the systems are largely used for monitoring. Conversely, Virtual Reality, Artificial Intelligence and related technologies are used only to a very limited extent.

»These are technologies that have been talked about for many years now, but the practical application is still limited. Only the future can show how quickly and to what extent the FM industry will use these solutions to achieve increased sustainability,« says Karlijn Sissingh.



Rate of use of digital technologies per FM-discipline, all country.

Going forward, it could also be interesting to focus more on whether there is a difference in the utilization of digital solutions in relation to sustainability, depending on whether the FM activities take place in a private or public context.

»If you look at waste again, it seems that the strategies in many cases are there, while there is a low level of digitization in the area. Whether it is because it has not been prioritized to digitize the area, or because there are limited digitization options, the study does not show. On the other hand, the study shows that many FM organizations expect to invest in further digitization in the coming years - also in the waste area. Here, it will be exciting to see if there are any other technologies and systems that come into play than those that are most widespread today,« says Frans Joostens.



## Acknowledgement and participants

The study has been developed by FMN in collaboration with the FM associations in Norway, Sweden, and Denmark. The full report can be downloaded from the FMN website.

### Participants

- Norges Bygg- og Eiendomsforening
- IFMA Sweden Chapter
- Danish Facilities Management network (DFM network)
- Facility Management Nederland (FMN)

The project was a spin-off of the book "Facility Management as a digital change agent" (2019) by the Digitization Committee in the Danish DFM network.

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