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Facility management - Overview of available technologies (ISO/TR 41016:2024)

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English Version

Facility management - Overview of available technologies (ISO/TR 41016:2024)

Facility management - Vue d'ensemble des technologies disponibles (ISO/TR 41016:2024)

Technologie im Facility Management - Anwendungsbereich, Schlüsselkonzepte und Vorteile (ISO/TR 41016:2024)

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Contents

Page

European foreword

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The text of ISO/TR 41016:2024 has been approved by CEN as CEN ISO/TR 41016:2024 without any modification.

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Facility management — Overview of available technologies

Facility management — Vue d'ensemble des technologies disponibles

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Contents

Page

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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Introduction

This document provides facility managers, their teams and stakeholders an overview of available facility management (FM) technologies. Only by understanding technology's diverse, evolving potential can the facility manager community make best use of its scope, efficiencies and benefits to support its everyday operations.

The long-term benefits of FM technology are not only commercial or budgetary, relating to hard or soft services, safety or environmental objectives, or achieving process change; they will contribute to achieving the United Nation's Sustainable Development Goals (SDGs). As a component of the ISO 41000 family of standards, integrated technology also offers significant potential value by providing input to their core business strategy roadmap. It will allow facility managers to fully understand and deploy the power of technology as a business productivity enabler, to improve on their capabilities and system capacities. Those that take advantage and embrace technology will be better able to shape the vision of an enhanced, digitalised FM experience.

Globally, the FM industry continues to adapt by advancing thought leadership and creating innovative, operational digital frameworks. Applied effectively, frameworks that are designed to foster international best practices will enhance the productivity of the FM workforce and enable each FM sector keep pace with digital advancements and transformation campaigns.

Further education on achievable goals is needed, as well as a shared common vocabulary and a collective understanding. Digital FM (DFM) is the interface between FM and technology. It presents an ideal opportunity for transformation, enhancing workforce skillsets, improving asset owners' awareness and service delivery performance capabilities, by further automating the built environment and connecting all stakeholders.

FM has become a globally recognized discipline, in which challenges are faced, be they technology-related, involving safety or environmental protection, or even from pandemics or budget constraints. It is important to note that facility management is a people-centric sector. As devices become more tech-capable, these resources need to be able to work in buildings that are categorized as SMART (specific, measurable, achievable, realistic and time-related). From the PC to the internet, smartphones to energy management, the public has high expectations from technology and its everyday use. Well-managed facilities and carefully applied technology enable facility occupants to work effectively and safely, in a constantly changing digital environment. Facility managers need to be an integral part of this digital transformation.

Adoption of the Internet of Things (IoT), together with Building Information Modelling (BIM), the use of 5G telecoms, new software products and applications for 3D to 7D management of the life cycle of buildings (including their design, construction, operations and maintenance), is not a single change management programme. This document gives insight into the means by which technology can be more understood and better incorporated, a key part of a business strategy.

Technical Report **ISO/TR 41016:2024(en)**

Facility management — Overview of available technologies

1 Scope

This document provides an overview of the available facility management (FM) technologies. This document is applicable to facility managers, their teams and their stakeholders. It aligns specifically with ISO/TR 41013, the ISO 19650 series and the ISO 41000 family of standards as part of an integrated framework to achieve FM best practice.

This document outlines various long-term benefits and enhanced value that can be derived progressively by the operators, occupants and owners of facilities, worldwide, via the effective application of technology. This document includes, defines and categorises systems, equipment, methodologies and software applications that are available.

This framework defines how facility managers can understand and integrate digital practice and technologies in the built environment.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 41011, *Facility management — Vocabulary*