

# METHODOLOGY AND TECHNOLOGY IN DIGITALIZATION OF INFRASTRUCTURES FOR LIFECYCLE INFORMATION MANAGEMENT

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## Abstract

Digitalization is one of the most important keywords in the fourth industrial revolution. Computerized various attempts and multidisciplinary skills have been made and adopted to improve the efficiency of information utilization of civil infrastructures during the last two or three decades. GIS is the most widely used technology in representing spatial information of any region, site, and facilities. Whereas Building Information Modeling (BIM) is a very powerful tool to represent spatial/physical information and attributes of construction project more precisely. A lot of projects in civil engineering field are not only not limited to some areas, but also each facility is closely related to each other, so various methodology and technology should be used for the information management of infrastructure. This study shows some key strategy points and application techniques for the lifecycle information management in construction projects and facility management. In addition, the comprehensive infrastructure information management and urban disaster prevention in the city are presented and discussed.

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