

### **BOOK OF ABSTRACTS**

### EDITORS

Aleksandra Djukić Aleksandra Krstić-Furundžić Eva Vaništa Lazarević Milena Vukmirović

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### Keeping up with technologies to imagine and build together sustainable, inclusive, and beautiful cities

PLACES AND TECHNOLOGIES 2023	8th International Academic Conference on Places and Technologies Book of Abstracts
EDITORS	Aleksandra Djukić Aleksandra Krstić-Furundžić Eva Vaništa Lazarević Milena Vukmirović
PUBLISHER	University of Belgrade Faculty of Architecture
FOR PUBLISHER	Vladimir Lojanica
DESIGN	Vladimir Kovač
TECHNICAL SUPPORT	Jelena Marić Nikola Mitrović Ana Šabanović
PRINTED BY	Donat Graf d.o.o. Belgrade
CIRCULATION	150 copies
PLACE AND DATE	Belgrade, 19-21 October 2023
	ISBN 978-86-7924-338-6

### PLACES AND TECHNC LOGIES 2023

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CLOSE DOMAINS TO PLACES AND TECHNOLOGIES >>

### DIGITALIZATION OF THE AECO SECTOR – ACCOMPLISHMENTS IN BIM APPLICATION AND DEVELOPMENT IN SERBIA

### \_ Mirjana Devetaković

PhD, Assist. Professor, University of Belgrade, Faculty of Architecture, Bulevar kralja Aleksandra 73/2, 11000 Beograd, mirjana.devetakovic@arh.bg.ac.rs

### \_ Djordje Djordjević

PhD, Assoc. Professor, University of Belgrade, Faculty of Architecture, Bulevar kralja Aleksandra 73/2, 11000 Beograd, djordje@arh.bg.ac.rs

### \_ Djordje Mitrović

MArch, Assistant, University of Belgrade, Faculty of Architecture, Bulevar kralja Aleksandra 73/2, 11000 Beograd, djordje.mitrovic@arh.bg.ac.rs

### ABSTRACT

Focusing proposed paper on the Architecture. Engineering, Construction and recently included Operation (AECO) sector, we start from a statement that this sector is a step behind other manufacturing domains in overall application of digital technologies and artificial intelligence. With the main motivation to examine ways of bridging the digital gap, we consider adoption of Building Information Modelling (BIM) as one of reliable indications of the state of digitalization in the sector. After briefly introducing general features of BIM technology, this study focuses on the actual situation in Serbia, searching for examples of the most advanced applications and developments in practice. Methodologically the study is gualitative and the research is based on examination of cases, where the observed sample has been created from the application examples presented within the series of online sessions titled "BIM in Practice Serbia", organized by the Group for BIM Technology of the Chamber of Commerce of Serbia. Consisting of twenty examples of various advanced applications of BIM in Serbian practice, this sample is formed "by difference", looking for various cutting-edge applications. The selected examples of BIM application in Serbia are firstly structured by area of application (design, infrastructure, scan-to-BIM, investors' adoptions, etc.), then analysed in detail. The results obtained indicate that within the Serbian market we could identify advanced BIM usages. and especially valuable development results, represented by the BEXEL Manager software, developed in Serbia and spread and localized worldwide. Based on the obtained results, we could predict the future of BIM application in Serbia, but also could highlight the contribution of Serbian development efforts to the global AECO sector.

KEYWORDS \_ BIM, Building Information Modelling, Serbia, Digitalization, Architecture

### CIP - Каталогизација у публикацији Народна библиотека Србије, Београд

711.4.01(048) 711.4:005.591.6(048)

INTERNATIONAL Academic Conference on Places and Technologies (8; 2023; Beograd)

Keeping up with technologies to imagine and build together sustainable. inclusive, and beautiful cities : book of abstracts / 8th International Academic Conference on Places and Technologies, Belgrade, 2023 ; editors Aleksandra Djukić ... [et al.]. - Belgrade : University of Belgrade, Faculty of Architecture, 2023 (Belgrade : Donat Graf). - 103 str. ; 24 cm

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### ISBN 978-86-7924-338-6

1. Đukić, Aleksandra, 1964- [уредник] а) Градови -- Мултидисциплинарни приступ --Апстракти б) Урбанистичко планирање -Технолошки развој -- Апстракти

COBISS.SR-ID 127482121

ISBN 978-86-7924-338-6