10th International Workshop

WHEN SOCIAL SCIENCE MEETS LEAN AND DIGITAL TECHNOLOGIES:

10 years and beyond

1st & 2nd June 2023
Federal University of Bahia, Salvador, Brazil

INITIAL PROGRAMME

DAY 1: 1st of June 2023 – Prof. Magno Valente Auditorium – 7° floor – Polytechnic School – Federal University of Bahia - Prof. Aristides Novis Street, 02, Federação, Salvador (Bahia)

Time	
8:30 – 9:00	Registration
9:00 – 9:15	Welcome and introduction to workshop day 1
9:15 – 9:45	Keynote presentation 1 ***Decision-Support Systems for Production Planning and Control in Digital Twin Construction: Should software help Last Planners or think for them?*** *by Prof. Rafael Sacks (online)*
9:45 – 10:00	Q&A Keynote presentation 1
10:00 – 11:15 *Lean & BIM Implementation* *Theory Building*	***BIM in the design of hydro sanitary systems: a case study*** *Pedro J. F. Lazzarini, Maria Teresa Barbosa, Kleos M. Lenz Cesar Jr.* ***Replicating an infrastructure project for professional BIM education*** *Martina Mellenthin Filardo, Jürgen Melzner and Hans-Joachim Bargstädt* ***How does lean construction fit in Procrustes' bed?*** *Tobias O. Malvik* ***Managing value in major projects: a longitudinal perspective*** *Daniel Forgues* ***Reconsidering the meaning of visual management from the viewpoint of connections among people*** *Koichi Murata*
11:15 – 11:30	Coffee break
11:30 – 12:30 *Health & Safety Management* *Facilities Management*	***Evaluation of acoustic comfort in four healthcare units in southern Brazil*** *Drielle Sanchez Leitner, Leonardo Piluski Bilinski and Adriana de Paula Lacerda Santos* ***Analysis the service management of maintenance tools on building*** *Vinícius Martins Galil, Maria Teresa Barbosa and Kleos Cesar Junior*

	A lean approach for the use of agent-based modeling for safety management on construction sites *Vanessa Pacheco, Márcio Barros, Guilherme Bonfim, Elaine Varela and Dayana Costa* ***Modelling cast-in-place concrete wall process using FRAM and UAS monitoring*** *Roseneia Rodrigues Santos de Melo and Dayana B. Costa*
12:30 – 14:00	Lunch
14:00 – 15:00 *Blockchain &* *Artificial Intelligence*	***Barriers and challenges of using BIM and blockchain in the management of buildings as banks of materials*** *Rafael Otávio Araújo Santos, Gisele Cristina Teles dos Santos, Elaine Pinto Varela Alberte* ***Impacts of blockchain technology on the construction supply chain: an analysis based on the theory of change*** *Gisele Santos, Elaine Alberte, Aldo Mattos* ***How open artificial intelligence plataform and ChatGPT interact with lean construction?*** *Bernardo Martim Beck da Silva Etges and Marcus Costa Tenório Fireman* ***Development of machine learning model for cost analysis of an industrial shed using generative algorithms*** *Bruno Leão de Brito, Felipe Tavares da Silva and Érica de Sousa Checcucci*
15:00 – 15:15	Coffee break
15:15 – 16:00	Workshop 1 Activity: Looking Back
16:00 – 16:30	Discussion and Report
16:30	Close day 1

DAY 2: 2nd of June 2023 – Prof. Magno Valente Auditorium – 7° floor – Polytechnic School – Federal University of Bahia - Prof. Aristides Novis Street, 02, Federação, Salvador (Bahia)

9:00 – 9:15	Welcome and introduction to workshop day 2
9:15 – 9:45	Keynote presentation 2 ***What is the value of thinking about value?*** *by Prof. Koichi Murata (in-person)*
9:45 – 10:00	Q&A Keynote presentation 2
10:00 – 10:15	Coffee break
10:15 – 11:30 *Digitalisation & Automation* *Industry 5.0*	***Location-based planning and control core concepts and requirements for digital solutions*** *Fabrício B. Vargas and Carlos T. Formoso* ***Smart twins 5.0: digital twins for concrete wall constructive system*** *Caroline Araújo, Edvane Salomão Souza, Caio Sousa, Dayana B. Costa, Emerson Ferreira and Fabiano Corrêa* ***The interrelation of processes and stakeholders for digital building permitting in the Brazilian AECO sector*** *Douglas M. de Brito, Dayana B. Costa and Emerson A. M. Ferreira* ***Automated façade inspection using UAS and custom vision to support quality control during execution phase*** *Alisson Souza Silva, Roseneia Rodrigues Melo and Dayana Bastos Costa* ***Maturity measurement dimensions for an intelligent construction environment in Industry 5.0*** *Luara Lopes de Araujo Fernandes and Dayana Bastos Costa*
11:30 – 13:00	Lunch
13:00 – 13:30	Keynote presentation 3 ***Lean Construction 4.0*** *by Prof. Luis Fernando Alarcón (in-person)*
13:30 – 13:45	Q&A Keynote presentation 3
13:45 – 14:30	Workshop 2 Activity: Future
14:30 – 15:00	Discussion and Report
15:00	Close day 2