Volodymyr Pasichnyk Nataliia Kunanets Vasyl Lytvyn Sergey Bushuyev



Proceedings of the second International Workshop IT Project Management (ITPM 2021):

Volume 1

Lviv, Ukraine February, 2021 Volodymyr Pasichnyk, Nataliia Kunanets, Vasyl Lytvyn, Sergey Bushuyev: The 2nd International Workshop IT Project Management (ITPM 2021): Volume 1. Lviv, Ukraine, February 16-18, 2021, CEUR Workshop Proceedings (CEUR-WS.org), online.

This volume represents the proceedings of the 2nd International Workshop IT Project Management (ITPM 2021), held in in Slavsko, Lviv region, Ukraine, in February, 2021. It comprises 39 contributed papers that were carefully peer-reviewed and selected out of 50 submissions.

Copyright © 2021 for the individual papers by the papers' authors.

Copyright © 2021 for the volume as a collection by its editors. This volume and its papers are published under the Creative Commons License Attribution 4.0 International (CC BY 4.0).

It is our pleasure to present to you the proceedings of the 2nd International Workshop IT Project Management (ITPM 2021). This volume represents the proceedings of the ITPM 2021 workshop's tracks, which took place in Slavsko, Lviv region, Ukraine, on February 16-18, 2020.

Workshop materials present the results of original research in the field of IT project management, including project action methodologies, project team management, project analysis from the employers' point of view, important aspects of IT specialists training, formation of emotional states of project team members, etc. The main purpose of ITPM 2021 workshop is a discussion of the recent research results within such tracks:

- Management of IT projects and programs.
- Modeling of project management processes in the IT industry.
- Forming portfolios of IT companies' projects.
- Information technologies for project and program management.
- Methods for formation of IT project teams.

The workshop was soliciting only regular papers that had to present original reports of substantive new research techniques, findings or applications and clearly indicate innovative aspects. Detailed presented research procedures or technical solutions should be accompanied by experimental investigations. The paper's results had to be new, clear, and well-argued.

Submission of papers to the workshop was open to all authors from around the world within the framework of the domain area concerning IT project management.

The ITPM 2021 gathered scientists from Ukraine, Japan, Germany, Poland, Azerbaijan, Belarus. In general, the representatives from 6 Universities from around the world and 22 Ukrainian Universities, as well as 3 Azerbaijan, Belarusian, and Ukrainian companies and 1 National Library of Ukraine have taken part in the workshop:

Kyiv National University of Construction and Architecture	Ukraine
National Aviation University	Ukraine
Admiral Makarov National University of Shipbuilding	Ukraine
Odessa National Maritime University	Ukraine
Belarusian National Technical University	Belarus
Odessa National Polytechnic University	Ukraine
Austria Telecom Group	Belarus
Kyiv Municipal Company "Road Traffic Management Center"	Ukraine

Kyiv National Economic University named after	Ukraine
Vadym Hetman	
National Technical University "Kharkiv	Ukraine
Polytechnic Institute"	
Cherkasy State Technological University	Ukraine
Kryvyi Rih National University	Ukraine
Lviv National Library of Ukraine named after V.	Ukraine
Stefanyk	
Lviv National Agrarian University	Ukraine
Lviv State University of Life Safety	Ukraine
Azerbaijan Project Management Association	Azerbaijan
Baku State University	Azerbaijan
Taras Shevchenko National University of Kyiv	Ukraine
Lutsk National Technical University	Ukraine
Lesya Ukrainka Eastern European National	Ukraine
University	
West Ukrainian National University	Ukraine
Kazimierz Pulaski University of Technology and	Poland
Humanities in Radom	
PHEI "Bukovinian University"	Ukraine
Uzhgorod National University	Ukraine
Tokyo Institute of Technology	Japan
Podilsk State Agrarian-Technical University	Ukraine
AGH University of Science and Technology	Poland
Dortmund University of Applied Science and Arts	Germany
National Technical University of Ukraine "Igor	Ukraine
Sikorsky Kyiv Polytechnic Institute"	
Lviv Polytechnic National University	Ukraine
Ivan Franko National University of Lviv	Ukraine
National transport University	Ukraine

The official language of the 2<sup>nd</sup> ITPM Workshop was English. The workshop took place in the form of oral online presentations by presenters of peer-reviewed papers.

The Organizing Committee has received 50 submissions, and 39 out of them were accepted for presentation as regular papers. These papers are published in this Volume I of ITPM 2021 proceedings.

Doubtless, the workshop wouldn't have taken place without the support of a number of people. First of all, we would like to thank our partners from National Technical University "Kharkiv Polytechnic Institute", Dortmund

University of Applied Sciences and Arts, AGH University of Science and Technology, Ukrainian project management association, Lviv Polytechnic National University, Ukrainian Scientific ITSociety, University of the Basque Country, Silesian University of Technology.

Furthermore, we would like to thank the Honorary and Programme Chairs, Programme and Organizing Committees, external reviewers, and designer team for their excellent work. We sincerely wish that all attendees benefited scientifically from the workshop and wish them every success in their future research.

February, 2021

Volodymyr Pasichnyk Nataliia Kunanets Vasyl Lytvyn Sergey Bushuyev