PROCEEDINGS

of the 11th International Conference on Customization and Personalization (MCP 2024)

September 25 – 26, 2024 Novi Sad, Serbia

Organised by:

UNIVERSITY OF NOVI SAD - FACULTY OF TECHNICAL SCIENCES Department of Industrial Engineering and Management

MY PRODUCT – Center for Product Development and Management

in cooperation with

Provincial Secretariat for Higher Education and Scientific Research of the Autonomous Province of Vojvodina

> Editors: Zoran Anišić & Cipriano Forza

Published by: Faculty of Technical Sciences in Novi Sad Title

Proceedings of the 11th International Conference on Customization and Personalization, MCP 2024

Publisher

UNIVERSITY OF NOVI SAD - FACULTY OF TECHNICAL SCIENCES DEPARTMENT OF INDUSTRIAL ENGINEERING AND MANAGEMENT 21000 Novi Sad, Trg Dositeja Obradovića 6, Serbia

Editors

Dr Zoran ANIŠIĆ & Dr Cipriano FORZA

Technical Editor

Nenad Medić

Manuscript Submitted for Publication 02.09.2024.

Printing Graphic Center GRID, Faculty of Technical Sciences

Circulation 100

CIP classification

СІР - Каталогизација у публикацији Библиотеке Матице српске, Нови Сад

005:001.895(4)(082) 005.591.6(4)(082)

INTERNATIONAL Conference on Mass Customization and Personalization (11; 2024; Novi Sad)

Proceedings of the 11th International Conference on Customization and Personalization (MCP 2024), September 25-26, 2024, Novi Sad, Serbia / editors Zoran Anišić & Cipriano Forza. - Novi Sad : Faculty of Technical Sciences, Department of Industrial Engineering and Management, 2024 (Novi Sad : Graphic Center GRID). - 273 str. : ilustr. ; 30 cm

Slike autora. - Tiraž 100. - Bibliografija uz svaki rad. - Registar.

ISBN 978-86-6022-686-2

1. Anišić, Zoran, 1969- [уредник] 2. Forza, Cipriano, 1962- [уредник] а) Менаџмент -- Европа -- Зборници б) Предузетништво -- Иновације -- Европа -- Зборници

COBISS.SR-ID 152294665

PREFACE



We are proud to celebrate the 20th anniversary of the International Scientific Conference on Customization and Personalization, marking two decades since the inaugural event held in 2004 in Rzeszow, Poland. For these reason, we welcome you to the Week of Customization and Personalization conference in Novi Sad, a location of special significance to our community. In addition to the main event—the 11th International Scientific Conference (MCP)—this week also features the 6th traditional Doctoral Students Workshop (DSW) and the 3rd professionals forum (ProForum), the new format designed to further enhance the exchange of knowledge and experiences.

Over the past 20 years, the MCP Conference has grown into a highly respected event within the field of mass customization and personalization across Europe. This growth is a testament to the dedication and collaboration of our community, which has continually expanded its reach and influence. In this landmark year, we are delighted to present a diverse collection of thirty-six insightful papers from authors representing 15 countries. Despite the lingering challenges of the global economic crisis, the participation and breadth of topics underscore the vibrancy and dynamism of our field. Key areas of focus include configurators, circular economy, additive manufacturing, and product innovation driven by customer and crowd co-creation. As we navigate an era that demands sustainable resource planning, people-centric smart industries, and a heightened commitment to environmental protection, these themes have never been more relevant.

As we celebrate 20 years of the MCP-CE Conference, we are deeply grateful to everyone who has supported us throughout this journey. We extend our heartfelt thanks to all participants of this year's jubilee conference for sharing their knowledge, experiences, and for contributing to the vibrant exchange of ideas that makes this event so special. We hope that you find this year's conference both intellectually stimulating and personally rewarding.

Thank you for being a part of the history we have been building together for two decades.

Novi Sad, September 2024

Chairperson of MCP-CE 2024

Dr Zoran ANIŠIĆ

Organizers:

University of Novi Sad - Faculty of Technical Sciences Department of Industrial Engineering and Management My Product – Center for Product Development and Management

Scientific Committee

Chairman: Cipriano Forza, University of Padova, Italy

Committee Members

- Alessio Trentin, University of Padova, Italy
- Alexander Tsigkas, Democritus University of Thrace, Greece
- Christos Chatzopoulos, Democritus University of Thrace, Greece
- Claudio Sassanelli, Polytechnic University of Bari, Italy
- Danijela Lalić, University of Novi Sad, Serbia
- Dinu Dragan, University of Novi Sad, Serbia
- Dominik Walcher, Salzburg University of Applied Sciences, Austria
- Duško Lukač, Köln University of Applied Sciences, Germany
- Enrico Sandrin, University of Padova, Italy
- Ivica Veža, University of Split, Croatia
- Jelena Spajić, University of Novi Sad, Serbia
- Joanna Daaboul, University of Technology of Compiègne, France
- Lars Hvam, Technical University of Denmark, Denmark
- Lars Skjelstad, SINTEF Technology, Norway
- Marcel Weber, University of Amsterdam Business School, Netherlands
- Maria Mikela Chatzimichailidou, Imperial College London, United Kingdom
- **Nikola Suzić**, University of Trento, Italy
- Paul Blažek, cyLEDGE Media GmbH Vienna, Austria
- Paul Christoph Gembarski, Leibniz University Hannover, Germany
- Petar Vrgović, University of Novi Sad, Serbia
- Robert Freund, Germany
- Sara Shafiee, Technical University of Denmark, Denmark
- Thomas Aichner, South Tyrol Business School, Italy
- Vladimir Modrak, Technical University of Košice, Slovakia
- Zoran Anišić, University of Novi Sad, Serbia

Organizing Committee

Chairman: Zoran Anišić, University of Novi Sad, Serbia

Committee Members

- Nenad Medić, University of Novi Sad, Serbia
- Nikola Suzić, University of Trento, Italy
- Branislav Bogojević, University of Novi Sad, Serbia
- Jelena Demko Rihter, University of Novi Sad, Serbia
- Jovana Miletić, University of Novi Sad, Serbia

Financing and publishing of this Proceeding was supported by the **Provincial Secretariat for Higher Education and Scientific Research** of the Autonomous Province of Vojvodina.

TABLE OF CONTENT

Thomas Aichner, Lukas Pixner, Jan Smolarski, Aaron Matscher TAILORING AI CONVERSATIONS: CUSTOMIZED CHATBOT AGENTS
Helena Anišić, Dinu Dragan, Dušan B. Gajić, Veljko B. Petrović FACILITATING NFT CUSTOMIZATION: OVERVIEW OF TOOLS ENABLING NON- PROGRAMMERS TO ENGAGE IN THE DIGITAL ASSET SPACE
Zoran Anisic, Claudio Sassanelli ALIGNING MASS CUSTOMIZATION WITH CIRCULAR ECONOMY
Christian Becker, Paul Christoph Gembarski, Roland Lachmayer GRAPH-BASED MULTI-AGENT ANALYSIS OF COMPONENT ASSEMBLY .23
Paul Blazek, Clarissa Streichsbier STATUS QUO ANALYSIS OF WEB-BASED CONFIGURATORS WITHIN THE HOUSE & GARDEN INDUSTRY WITH FOCUS ON TINY HOUSE & HOUSE CONFIGURATORS
Paul Blazek, Vladimir Blazek CUSTOMIZED MEDICINE: RE-THINKING HEALTHCARE
Paul Blazek, Marton Liszka UNDERSTANDING AND ENHANCING NATIONAL INNOVATION SYSTEMS: DYNAMICS, CHALLENGES AND STRATEGIES
Javier Cabello, Lars Hvam BETTING ON PRE-ASSEMBLY FOR MITIGATING UNCERTAINTY: LESSONS LEARNED FROM A GLOBAL JEWELRY COMPANY

Jelena Demko-Rihter, Wolfgang Raeder ANALYSIS OF GEN Z PERCEPTION OF POTENTIALS CONCERNING PERSONALIZED CUSTOMER EXPERIENCE WHEN USING FINANCIAL SERVICES
102 Paul Christoph Gembarski, Sebastian Orth, Ole Ullrich A SPREADSHEET-DRIVEN CAD MODEL FOR CONFIGURING CULTIVATORS

Aleksandra Pavlović, Andrea Ivanišević, Minja Bolesnikov, Jelena Ćulibrk, Miloš Šešlija THE ROLE OF DIGITALIZATION IN THE INTRODUCTION OF CUSTOMIZATION AND PERSONALIZATION OF PRODUCTS AND SERVICES – THE CASE OF SERBIA
Milan Rackov, Sinisa Kuzmanovic HOW TO FACILITATE THE SELECTION OF UNIVERSAL GEAR MOTOR REDUCERS AND MEET CUSTOMER EXPECTATIONS
Rebecca Steiner HEAD OUT OF THE CLOUD: CO-CREATION AS GROUNDING IN A DIGITAL AGE
Erika Marie Strøm, Lars Hvam, Anders Haug TOWARDS A DEFINITION OF 'LOGISTICS SERVICE INTERFACES': LITERATURE SYNTHESIS AND A CASE STUDY
Alessio Trentin, Enrico Sandrin, Cipriano Forza THE RELATIONSHIPS AMONG MASS-CUSTOMIZATION ENABLERS: A REVIEW OF THEORY-TESTING RESEARCH
246 Frances Turner, Marie Watts, Nikola Suzic INDIVIDUAL THINKING STYLE, SALIENCE BIAS, AND THE MASS CUSTOMIZATION CO-DESIGN EXPERIENCE
255 Qingsong Zhao, Lars Hvam FRAMEWORK FOR INVESTIGATING POSSIBLE AREAS TO APPLY PRODUCT CONFIGURATION SYSTEMS FOR ENGINEER-TO-ORDER PRODUCTS