ABSTRACTS
DEVELOPMENT OF SMART CITIES, REGIONS AND PUBLIC SERVICE

Sanna Ketonen-Oksi, Laurea UAS, Finland

The importance of more futures-oriented, translational approaches and methods in creating long lasting competitive advantage for cities and regions

In accordance with the quintuple helix model, this paper brings forth the importance of more futures-oriented, translational approaches and methods to learning, education and in-service training that collectively challenge the existing forms of producing and exploiting knowledge about the future.

Jan Vanbockrijck, City of Mechelen, Belgium

SCIFI - The smart cookbook for midsized cities

Do you want to accelerate innovation in your medium-sized city?Then look no further, because The Smart Cookbook for Midsized Cities contains all the ingredients to create a smart city such as opening your data, interoperability of solutions, co-creation, innovative procurement, and much more.

Steven van den Oord, Avans University of Applied Sciences, The Netherlands

Legal mumbo jumbo: liability in network governance of publicservice delivery networks

We present a conceptual paper to advance our understanding of network liability in public service delivery networks. We address who is responsible, and how the network properly needs to compensate clients if something goes wrong.

SC
SR

ABSTRACTS
URBAN INFRASTRUCTURES AND NEIGHBORHOODS

Eeva Aarrevaara, LAB University of Applied Sciences, Finland

Map based research for investigating the urban hubs

A digital map-based questionnaire has been used in asuburban area related a research project for user information acquisition. The research project is to the urban hacks that experiment and test different improvements and services in the existing suburban environment with the real residents.

Mette Hiltunen, Forum Virium Helsinki, Finland

Temporary green modules as urban green infrastructureinterventions Case: Parkly

Temporary green modules can demonstrate the multiple benefits of green infrastructure in densifying cities. In an urban green infrastructure intervention in Helsinki's Kalasatama district, Parkly module is used to experiment with urban GI elements and community engagement during summer 2021.

Steven van den Oord, Avans University of Applied Sciences, The Netherlands

The influence of neighborhood characteristics and safety: a cross-neighborhood comparison

Using interview data of citizens involved in project "Wijkmakers on the move" and survey data of "Leefbaarheid en Veiligheid" survey this article examines the influence of neighborhood characteristics on neighborhood safety in four neighborhoods of the municipality of DenBosch.

SC
SR

ABSTRACTS
URBAN FUTURES

Marco Bevolo, Breda University of Applied Sciences, The Netherlands
Urban Futures: the city.people.light legacy

The subject of this presentation is a world class method by the world's leading lighting manifacturer to envision what cities will become tomorrow, or urban futures, namely a process determining how to anticipate the future through a design-led innovation approach.

Jaanus Müür, Ragnar Nurkse Department of Innovation andGovernance; Smart City Center of Excellence, Tallinn University of Technology, Estonia
Learning to become a smart city: how the organization of technology pilots affects learning and innovation in cities

Although there are many cities that claim to be or become a smart city, it is clear that some of them are more capable of adopting new technologies than others. We emphasize the importance of learning from technology pilots as we propose a framework that helps to analyze learning from such pilots.

Maaike Harbers, Rotterdam University of Applied Sciences, The Netherlands
Value-ing the Smart City: a study of the values of different stakeholders regarding Living Lab Scheveningen

This article describes a study that investigated how different stakeholders experience the 'smart city' area of Living Lab Schevingen in The Hague, The Netherlands. Residents, visitors,entrepreneurs, and governments were included in the study, which resulted in a list of ten values at stake.

Petri Pohjola, Tampere University of Applied Sciences, Finland
Enriching Participatory Innovation in Future Smart Cities

Participatory innovation involving all actors of the quadruple helix is often an under-exploited opportunity in smart city development. Knowledge Transfer Charter boosts initiatives to co-create, co-innovate, develop and demonstrate new smart city solutions providing unique way to create new value.

SC
SR

ABSTRACTS

DIGITAL TECHNOLOGIES AND DATA FOR URBAN DEVELOPMENT

Ossi Laakkonen, Karelia University of Applied Sciences, Finland

Digital Twin - More than just Building Services and Civil Engineering

Digital Twin of building requires tight integration of different tools, systems, and services. It is based on digital model of building and data gathered from various sources such asbuilding automation system and IoT sensors. Visualization of such data can be done with various ways.

Juho-Pekka Virtanen, Forum Virium Helsinki, Finland

Exploring city information models & GIS as data via PowerBI

This case study presents the utilization of PowerBI business data analytics platform with CityGML models and urban GIS data. The aim is to allow the discovery and analysis of the semantic information contained in these data and support the development of smart cities and urban digital twins.

Wim Zeiler, TU Eindhoven, The Netherlands

Using small data and big data: Neighborhood Energy & Data Management Integration System

The project aims to develop functional data clustering and transformation by deep learning from a bottom-up approach based on big data of smart meters and small data from home/building automation systems. The study uses neighborhood Prinsenhage of the municipality Breda as case study.y

Asiye Irmak Ozkan, Glasgow Caledonian University, Belgium

Green Roof Runoff Modelling in Dublin for Climate Resilience

Hydrological modelling of green roof runoff with SWAT using a climate change model for a building scale site in Dublin is studied alongside urbanization trends which affects theimperviousness of the city.

SC
SR

ABSTRACTS
ROBOTS AND VIRTUAL PLATFORMS

Jarno Rautiainen, LAB University of Applied Sciences, Finland

Digital built environment in accident prevention and risk management

A virtual training platform is being developed for cross-border accident prevention and risk management between Finland and Russia in Cross-border safety, accident prevention and management, CB-SAFE-project. It offers a new tool for rescue authorities to modernize their training environments.

Tuija Toivola, Haaga-Helia University of Applied Sciences, Finland

Robot service as a smart Click & Collect solution in the new heart of Helsinki

The number of customers in urban centers and shopping centers has decreased as remote work has increased and the movement of people in shopping centers has decreased. Our study focused on robot's role in customer experience creation in ecommerce click & collect domain as a part of delivery services.

Anna Lahti, LAB university of applied sciences, Finland

Hand washing hygiene improvement - case machine vision

How to motivate children to wash their hands long enough by using machine vision. Is speaking robot an option? In this study, children's motivation for hand washing was strengthened and the time spent hand washing increased by using robot.

SC
SR

ABSTRACTS
CIRCULAR ECONOMY

Katerina Medkova, LAB University of Applied Sciences, Finland

Case BIOREGIO – Boosting Bio-based Circular Economy

International cooperation and knowledge exchange, including sharing tested solutions, speeds up the transition towards a bio-based circular economy.

Marjut Villanen, LAB University of Applied Sciences, Finland

Case CECI – Citizen involvement in circular economy implementation

In addition to institutional and political decisions and recommendations, also practical solutions are needed to easilyinvolve citizens in the circular and sharing economy. The sharing of good practices between different regions can facilitate the implementation of sustainable practices

Kaj Lindedahl, Metropolia University of Applied Sciences, Finland

Circular City Adaptation by Co-activity company case

The adaption and innovation case was trying out new sustainable and environmental friendly solutions for the side streams produced in coffee shops and coffee breweries. The development and testing showed that there is hidden potential in ground coffee and silver skins left from the roastery process.

SC
SR