Editorial: Smart Solutions with Focus on Innovations from Various Perspectives

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Editorial:

The special issue Smart Solutions with focus on Innovations from Various Perspectives is dealing with up-to-date issue of innovations and creativity and their impact on Smart and Safe Cities attracting Smart Communities. However, the emphasis is also put on particular management areas, like HRM, logistics, finance which are influenced by current trends in the period of globalization.

The special issue of this current content journal contains 12 papers.

The first paper “On Smart City and Safe City Concepts” deals with presenting the systems common to both equal concepts. Smart Cities are becoming the need of modern society. Many cities in the world are already transforming their ways to be more efficient, greener and also safer. However, to create a real Smart City, it is needed to understand the city as a complex environment with its smart and safe concepts as interconnected parts.

The second paper titled “Designing Playful Cities: Audio-Visual Metaphors for New Urban Environment Experience” discusses two playful outdoor artworks featuring audio-visual metaphors capable of involving the audience in playful and social experience in an urban space. The authors of the paper have used the sensor technologies and visually enhanced public spaces together with sonic interaction design approach, to enrich aesthetic and fictional dimensions of the urban environments.

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In the next paper with the title “Participation of All Employee Categories in Innovation Processes in Slovak Organisations” the authors of the paper aim at analysing the focus of Slovak organisations on the activities associated with the commitment of all employees in innovation processes, and at identifying the overall change in their orientation on this issue in time.

The aim of the paper “The Influence of GDPR on Activities of Social Enterprises” is to research the frequency of the communication tools used by social enterprises in the Czech Republic and the influence of General Data Protection Regulation on these instruments.

In the paper “Smart Solution of Traffic Congestion through Bike Sharing System in a Small City”, the authors point out the opportunities and constraints arising from the concept of shared bicycles in the conditions of city Nitra. The proposals and recommendations are based on the opinions of Nitra citizens and brought important insights into improving the strategy of shared bicycles, focusing on attractiveness for citizens, and ultimately, urban transport solutions.

The authors of the sixth paper “Smart Cities concept for historical buildings” present the literature review on building environment quality especially humidity of historical buildings based on the research of the electro osmosis application for drying the historical buildings in Bratislava. The applied technology is put in the context with the Smart Cities concept, to extend and improve the efficiency of the dehumidification process.

The following paper is titled “Systematic Literature Review on Energy Efficient Routing Schemes in WSN – A Survey”. In wireless sensor networks (WSN), routing is quite challenging area of research where packets are forwarded through multiple nodes to the base station. The packet being sent over the network should be shared in an energy efficient manner. It also considers the residual power of battery to enhance the network life time. Existing energy efficient routing solutions and surveys are presented.

In the paper “Using SMS for Communication with IoT Devices”, the authors of the paper have proposed a novel approach in communication of IoT devices via SMS messages that can be beneficial during changing configuration of IoT devices or during sending data from IoT devices.

The next paper “Emissions Production from Small Heat Sources Depending on Various Aspects” deals with the aspect that influence the combustion efficiency and emissions production of small heat source. Automatic small hot-water boiler for wood pellets with 18 kW heat power was used for the experiments. The experiments results show that these tested aspects have high impact on combustion process and environment pollution. The most significant aspect was fuel moisture while with rising moisture the heat power of boiler significantly decreased and production of emissions increased.

“Smart Collaborative Learning Environment for Visually Impaired Children” paper is discussing designed processes in prototyping In-Visible Island: Inclusive Storytelling Platform for Visually Impaired Children to contribute ways in accelerating their social learning curve. The authors have designed the novel system to achieve common multi-sensory user experience between groups of users with different physical preferences by using tactile and sound simulations, common elements of realities for both groups, as essential for users’ experience design.

The author of the paper “Managerial Skills for Innovation Support” brought their own point of view on managerial skills for innovation support and came to particular conclusions from their current research in innovation management. One of the verified tools how to be prepared for the changes and how to react is the never ending process of education; it means long-life education and gaining new knowledge and innovation skills.

The last paper is titled “Designing Energy Efficient Strategies using Markov Decision Process for Crowd-Sensing Applications. The authors have considered indoor localization as an example of a smartphone based crowd sensing application. The strategies found by solving MDP formulation are implemented for a smartphone application for crowd-sensed indoor localization.

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