Editorial

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Biographical notes: Hans Rüdiger Kaufmann is a Full Professor Management at the University of Nicosia since 2006. Since 2016, he is also affiliated with the University of Applied Management Studies Mannheim as a Professor for International Sales Management having Chaired three Bachelor and Master Programs and a PhD research methodology module. More recently, he engaged for the Smart City movement. Beyond, consumerism, branding and entrepreneurship related topics are the core of his well cited research. He has been a launching member of three academic research networks and was the Vice President of the AMA Global Marketing SIG and takes editorial positions.

Niccolò Fiorini is an Adjunct Professor in Economics of Innovation and Digital Management at the University of Siena and a Post-doctoral Researcher in the Department of Business and Law. His research focuses on innovation management, industrial ecosystems, and technology-enabled transformation. He is involved in several national and EU-funded projects linking academia, industry, and regional institutions. He also serves as the Vice-President of the Santa Maria della Scala Foundation.

Based on selected papers presented at the 29th REAL CORP Conference in Mannheim on Urban Planning and Regional Development in the Information Society, this special issue portrays an eclectic mosaic of factors influencing the integration of often neglected human aspects in smart city planning and development. By investigating social, economic, consumptive, ethical, cultural, ecological and corporate dimensions of smart cities and regions in a variety of European and global settings, this issue provides suggestions on how to design intelligent urban spaces that are – besides being ecology centred and technologically advanced – also human-centred. This issue represents a holistic approach on human aspects regarded as prioritised drivers of smart city development.

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This issue entails conceptual suggestions, practical case studies and empirical research based on exploratory qualitative, descriptive and explanatory quantitative and mixed method research approaches.

The first paper by Vikih Edith Vefemsi on vertical farming – an innovative agricultural and start-up model – addresses urgent existential human problems in developing countries such as land degradation, urbanisation, climate change, urban food insecurity and water scarcity. Findings of this qualitative research from interviews with 12 key stakeholders, including farmers, investors in the agricultural field, and agribusiness experts, reveal that vertical farming can significantly enhance urban food security by optimising space use, reducing water consumption, and enabling year-round production. The study proposes a stakeholder-aligned vertical farming business model, with aquaponics as the most cost-effective basis, tailored to Cameroon's unique context. Cameroon presents a unique case for vertical farming adoption due to its urbanisation trends, traditional reliance on smallholder farming, and fragmented agricultural policies.

The second paper by Katharina Kirsch-Soriano da Silva is dedicated to social aspects linked to residents' and neighbourhoods' perceptions and practices on urban transformation of their living environments. The sustainable modernisation of existing former workers' housing estates in the face of advancing climate change is focal to the 'smart cities' program of the Austrian Climate and Energy Fund. This article examines two current projects in former workers' housing estates and focuses on the dimension of social sustainability in the transformation processes. Based on relevant literature, local contextualisation, and participatory processes the summarising lessons learned so far are: Navigating tensionfields between different perspectives of residents; working on the identity and sense of belonging to strengthen a 'common ground'; realising interventions in open spaces as first signs of change; integrating experiences of everyday life and social practices; preserving affordable housing throughout modernisation and transformation; involving professional process support and deepening findings with further research.

Mitsunori Hirogaki, in the third paper, sheds light on the determinants of electric vehicle adoption in Japan as a highly motorised country. Consumer adoption of environmentally friendly technologies within smart cities is crucial for promoting sustainable urban living and encouraging citizens to embrace sustainable practices. A quantitative online consumer survey using a full-profile rating conjoint analysis was conducted. The study reveals that brand origin is the most influential factor for Japanese consumers, with strong preferences for domestic brands and plug-in hybrid vehicles. Price plays a lesser role, suggesting that consumers are more focused on perceived value and familiarity. These insights highlight the cultural and market-specific dynamics of Japanese consumer behaviour and guide policies and marketing strategies to accelerate EV adoption.

When embarking on a digital transformation process, the human factor related to cybersecurity emerges as a significant challenge, with employee behaviour posing an often overlooked threat. The mixed method comprehensive study by Lara Sehlmeyer aimed to identify risks linked to employee behaviour, assess their likelihood and potential damage, and propose strategies for mitigation. Methodologically, a systematic literature review, a qualitative focus groups, and a quantitative survey were conducted. A total of nine risk factor categories (high sources of error, inertia, recklessness, lack of knowledge, convenience, excessive demands, uncritical behaviour, lack of transparency and malicious behaviour) were identified on the basis of the qualitative content analysis. Findings revealed high correlations between risk factors like 'overwhelm' and 'lack of

transparency'. Also, the relationship between probability of occurrence and severity of damage for the factors examined shows a positive correlation. Concrete actionable internal risk management strategies are suggested.

A further paper on the employee perspective is provided by Henning Tirrel and Marleen Christ. Whilst existing research concentrates mainly on ecological aspects, this study innovatively examined the relationships between sustainable HRM (SHRM) and various employee performance indicators. Using structural equation modelling, a quantitative analysis to assess anticipated relationships was conducted based on a sample of 228 German employees. Notably, the study found no association between SHRM and employee stress, while SHRM and employee engagement are positively and significantly linked. Additionally, employee engagement serves as an indirect-only mediator between SHRM and employees' turnover intentions. These findings highlight the strategic importance for companies to focus on SHRM to enhance employee retention and contribute both to a practical as well as academic debate.

In the innovative autonomous driving development, still not in its maturity and implementation stage, the sixth paper by Sebastian Rein refers to a nexus between ethical principles and values guiding human behaviour with modern technology. This might lead to a higher social compatibility and societal acceptance of this modern technology. This research covers the knowledge gaps on the ultimate integration of these ethical theories and principles in the ethical decision-making functions of autonomous vehicles and on how risk ethics and its associated tools, such as risk thresholds, can be utilised in the ethical decision-making processes of autonomous vehicles. Qualitative interviews with ten experts in the fields of technology, ethics, philosophy, autonomous driving, and artificial intelligence provide innovative insights such as criticism of the often controversial and deterministic ethical theories, a stronger consideration of risk ethics, and a return to a more traditionally programmed algorithm. A final model provides programmers and companies with essential ethical theories, rules, and principles for the ethical decision-making process of an autonomous vehicle.

Cultural not-for-profit agents such as museums, represent human citizen perspectives and serve society, for example, by preserving cultural heritage, promoting sustainability and territorial development, hence, contributing to local revitalisation and social inclusion. Niccolò Fiorini and Costanza Noferi, qualitatively analysed two case studies in Tuscany, the Mine Museum and the Chianti Sculpture Park. The authors highlight the importance of adapting museum strategies to the specific context, integrating digital technologies and sustainable practices to enhance the cultural and economic impact of museums within smart cities pointing to the important role of niche museums in local communities. It is concluded that museum strategies are the result of factors such as the environment in which the museum operates, intrinsic characteristics of the museum itself which are often linked to historical factors and, last but not least, aspects of sustainability, among which the most relevant appears to be the social and human one.

Pointing to the importance of measurement, Tatiana Popovich, Vasily Popovich, Manfred Schrenk and Judith Ryser reflect on how humans measure and interpret environmental phenomena based on environmental parameters as used by environmental monitoring. These measurements are regarded important as based on them specific decisions are justified and implications on a harmonious existence on our planet earth are derived. Their considerations are discussed at both theoretical and applied levels. Methodologically, the authors apply the logical chain: measurements, data, information,

knowledge and understanding. They deliberate on the imperfections of the modern understanding of the environment, the methods of measuring it and the interpretation of the measured parameters and data obtained by using diverse measuring instruments. Exemplarily, phenomena such as the mechanism of energy propagation in various known environments, the domino effect, the trigger concept and their importance for global processes in the ocean, the atmosphere and their interaction are discussed.

The role of regional networks and inter-municipal or intersectoral co-operation for a successful transformation and sustainable capacity building of smart cities and regions in a network of stakeholders are discussed by Christian Schachtner and Marvin Baldauf. The authors reflect on the example of the Rhine-Neckar metropolitan region. According to the authors, the current lack of empirical data necessitates to develop robust monitoring systems for SDG implementation in metropolitan regions. The lack of empirical research on SDG implementation in a specific metropolitan region as well as comparative data for the 11 German metropolitan regions poses a considerable challenge. This data gap portrays a discrepancy between aspiration and reality and makes it difficult to accurately assess progress and identify best practices. The authors call for a close co-operation between research institutions, local governments and statistical offices with cities being regarded as 'microcosms' laboratories of sustainable development.

The final paper, not being part of the initial guest edition but being contextually related, once more refers to consumer perspectives on socially and environmentally responsible corporate strategies and innovation influencing consumer satisfaction through reputation. Carla Campos, Rui Gonçalves, Renato Lopes da Costa, Leandro F. Pereira and Álvaro Dias results show that companies – with being innovative as a precondition – should preferably employ socially and environmentally responsible measures. Therefore, this study suggests companies to focus their efforts and investments on CSR activities adoption given that, as to the respondents of this quantitative study, CSR is a successful strategy to uplift consumers' perceptions/opinions about companies which inevitably improves business reputation and leads to consumer satisfaction. To design these factor relationships, a questionnaire was used to validate the initial conceptual model via the PLS-SEM technique. The study elicited the mediating role of corporate reputation in the relationships between CSR, innovation initiatives and consumer satisfaction.

The guest edition is designed to appeal to a broad audience, including researchers, urban planners, policymakers, industry professionals, and students in the fields of industrial ecology, urban planning, environmental science, and sustainability studies.