CITIES IN A CHANGING WORLD: QUESTIONS OF CULTURE, CLIMATE AND DESIGN

• Paper / Proposal Title:
Online-Offline (O2O) Community Enablement Framework to Promote Social Resilience in the Post-Pandemic Age: Case Study in Singapore

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• Abstract:
Community enablement or empowerment has been the aim of citizen-centric governance. By involving the citizens and empowering them in everyday functions of the city, we could build up social resilience against various threats such as terrorism, climate change, economic disruption or public health crisis. The current global pandemic especially catalyzes the use of digital communication tools to build strong community despite the challenges due to social distancing. As communities now thread across both online and offline, it is thus important to investigate how citizens could be further empowered through O2O (offline-to-online, online-to-offline) strategies and platforms.

This paper introduces a participatory action research project, based on multidisciplinary collaboration between architecture, engineering and social science, which aims to develop a comprehensive, ground-up O2O community enablement framework that strengthens social capital and community bonding in the post-pandemic age. Complementary online and offline approaches have been developed to enable residents and local stakeholders (public organizations, welfare services, social enterprises, etc.) living and working in Singapore’s public housing estates to share information, connect with one another, roll-out initiatives, and collaborate in place-making and
place-keeping activities. Residents and local stakeholders from three towns (a young town, a middle-age town, and a matured town) have been enrolled to participate in this project.

Through a series of prototypes including facilitated programs, design clinics, virtual workshops, social media and a new mobile application, it was found that residents and stakeholders can be enabled in three levels of “neighboring”: 1) As participants in “Convenience Neighboring”, to share information, provide feedback, contribute resources, join interest group activities and participate in various online or offline engagements. 2) As co-organizers in “Activity-driven Neighboring”, to collaborate with like-minded people in initiating and managing various informal social groups with common interests (such as resource exchange, food rescue, healthy cooking). O2O platforms were developed to incentivize and support them in this project. 3) As co-producers in “Intense Neighboring”, to co-design and co-develop new types of community space or place-making program, to enable better neighborly interactions among all residents and to sustain co-living environment. Both online and offline processes were introduced to identify champions, activate individuals, build networks, and sustain communities, as part of placemaking and placekeeping process.

While the overall community enablement framework remains relatively intact, the targeted stakeholders and the engagement strategies vary across the three towns. Based on post-implementation surveys and interviews conducted, this paper will evaluate the O2O platforms and strategies employed in the past one year in terms of neighborly relations, collaborative competence, and level of empowerment, and will suggest improvements in building a more resilient society in future.

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Keng Hua CHONG, PhD, is Associate Professor of Architecture and Sustainable Design at the Singapore University of Technology and Design (SUTD), where he directs the Social Urban Research Groupe (SURGe) and co-leads the Opportunity Lab (O-Lab). His research on social architecture particularly in the areas of ageing, health, community development, and data-driven collaborative design has led to 2 books – Creative Ageing Cities (Routledge, 2018) and Second Beginnings (Lien Foundation, 2018), a mobile application, and other international publications. Dr. Chong has been Visiting Faculty at Massachusetts Institute of Technology (MIT) and Zhejiang University. He is currently the Lead Principal Investigator of the New Urban Kampung Research Program.

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Iresha Mihirani Weerasinghe PATHIRAGE received the B.Sc. degree (Hons.) from the Department of Information and Technology, University of Moratuwa, Moratuwa, Sri Lanka, in 2017. Then, she worked as an Embedded Software Engineer in Atlas Labs Pty Ltd in the field of Internet of Things and Embedded system development. She is currently a Research Assistant with Singapore University of Technology and Design, Singapore. Her research interests include Internet of Things, big data, smart city, embedded system development, mobile and web development.

Dr. Chau YUEN received the BEng and PhD degree from Nanyang Technological University (NTU), Singapore, in 2000 and 2004 respectively. Dr. Yuen was a Post Doc Fellow in Lucent Technologies Bell Labs, Murray Hill during 2005. He was a Visiting Assistant Professor of Hong Kong Polytechnic University in 2008. During the period of 2006 - 2010, he worked at the Institute for Infocomm Research (I2R, Singapore) as a Senior Research Engineer. He joined the Singapore University of Technology and Design as an assistant professor from June 2010, and received IEEE Asia-Pacific Outstanding Young Researcher Award on 2012. Dr. Yuen serves as an Editor for IEEE Transaction on Communications and IEEE Transactions on Vehicular Technology. Dr. Yuen is currently an IEEE Fellow and Distinguished Lecturer of IEEE Vehicular Technology Society.

This research, led together with the Housing and Development Board, is supported by the Singapore Ministry of National Development and the National Research Foundation, Prime Ministers Office under the Land and Livability National Innovation Challenge (L2 NIC) Research Programme (L2 NIC Award No. L2NICTDF1-2017-4). Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not reflect the views of the Housing and Development Board, Singapore Ministry of National Development and National Research Foundation, Prime Ministers Office, Singapore.