

# (SEC) SINGAPORE-ETH CENTRE

## Closed-Door Discussion on Digital Technologies for Community-Building and Social Resilience

Friday, 8 March 2024 3.00pm to 5.30pm

IPS Meeting Room, 18 Evans Road, Singapore 259364

### PROGRAMME (as at 4 March 2024)

3.00pm to 3.15pm Introductions Dr Gillian Koh

Senior Research Fellow

Institute of Policy Studies (IPS)

National University of Singapore (NUS)

Dr Renate Schubert Professor of Economics Singapore-ETH Centre

3.15pm to 4.15pm Decentralised

Governance Through

Blockchain (20 mins)

Mr R Avinash

Research Assistant

IPS, NUS

and

Dr Woo Jun Jie, Senior Lecturer

Lee Kuan Yew School of Public Policy,

NUS

Discussion (40 mins) Chaired by Dr Koh

4.15pm to 4.30pm Tea Break

4.30pm to 5.30pm Digital Technologies for

Community-Building and Social Resilience

(20 mins)

Dr Jorin Jonas Director

Future Resilient Systems Singapore-ETH Centre

and

Dr Vincent Chua, Associate Professor

Department of Sociology and

Anthropology,

Faculty of Arts and Social Sciences,

NUS

Discussion (40 mins) Chaired by Prof

Schubert

5.30pm End

### **Decentralised Governance Through Blockchain**

#### **Abstract**

This paper explores the application of blockchain technology to decentralised governance. More specifically, it examines the potential of blockchain in creating self-governing ecosystems that help manage shared resources effectively. The paper examines Elinor Ostrom's (1933 – 2012) model of decentralised governance to prove that effective resource management can be undertaken through a system that facilitates and rewards cooperation, as well as punishes parties that violate key principles and laws. This can be achieved without the overriding authority of the state imposing its will on the participants of that said ecosystem. Blockchain is presented as the ideal mediating platform that enables players within a given system to function without the fear of being undercut or cheated. Blockchain has the potential to revolutionise the way nations, societies, and industries engage with each other. As the 21st century progresses, adopting blockchain will go a long way in aiding Singapore's digital transformation and supplementing its goal of becoming the digital hub of Southeast Asia.

## Digital Technologies for Community-Building and Social Resilience

#### **Abstract**

In the dynamic landscape of advancing decentralised governance, effective resource management and the capacity for self-governance are paramount. Information and Communication Technology (ICT) emerges as a crucial mediating tool in this transformative process. Web 2.0 platforms, fostering online networking and communication via mobile apps, have proven their efficacy in enhancing social capital, cultivating civic networks, and fostering interpersonal trust. Building on these achievements, the integration of blockchain and Al technologies in the Web 3.0 era is anticipated to further amplify the positive impact of ICT on social resilience. This anticipation is rooted in the potential enhancements in privacy, data ownership, and advanced functionalities offered by Web 3.0 technologies. Our research delves into the intricate dynamics of community-building and social resilience, scrutinizing how these digital tools shape trust dynamics and contribute to bottom-up initiatives. The study systematically compares the effectiveness of conventional communication, Web 2.0, and Web 3.0 technologies in realizing community projects and strengthening social resilience indicators. The resultant insights aim to empower urban and community planners, aligning with Singapore's overarching objective of harnessing digital technologies to elevate community well-being and catalyse the evolution of decentralised governance.