

PAASE Webinars: Lecture #10

Policy Development for COVID-19 Pandemic Response Using System Dynamics

June 5, 2020

Friday

08:00—09:00

Philippine Standard Time

The webinar will be held on Friday, 5th of June at 8 AM (Philippine Time) or Thursday, 4th of June at 8 PM (Eastern Time)

To register please go

With a guest lecturette by Acd. Alvin Culaba, known expert on Engineering Systems Modelling



Dr. Charlle Sy



Charlle Sy is an associate professor and research fellow in the Department of Industrial Engineering of De La Salle University. She earned her B.S. and M.S. in Industrial Engineering from the same university. Meanwhile, she obtained her PhD in Industrial and Systems Engineering from the National University of Singapore. Her research interests are on robust optimization, systems thinking, and their applications to energy networks, supply chains, and environment systems.

About this webinar

The talk will show how pandemic response policies could be evaluated through a system dynamics modeling (SD) framework. An SD model was developed to capture relationships, feedbacks, and delays present in a disease transmission system, making it possible to identify the hotspots to leverage actions. The talk seeks to demonstrate how the dynamics of several policy actions could be analyzed and assessed based on effectiveness in mitigating infection and the resulting economic strain. Furthermore, the talk will also look into the interactions between policies, which reveal insights on how common policies may be improved, and which policies may be effective when enforced simultaneously with little to no additional consequence to the economy.