

SmartMetro : Smart Metro Operations Enhancement through Data Analysis

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Activities under SmartMetro Project

Meeting about project plan via Webex

The project team has continued using online communications instead of in-person meeting to discuss and update about the project plan and activities since the COVID-19 pandemic worldwide started. During August 2020, the SmartMetro forum meeting has been organized. The team met via Webex to discuss about future activities and decide which activities should continue using online facilities and which activities should wait for a better situation. The decisions were based on the best for the project outcomes and the safety of our researchers and participants. Dr. Jirapan and Dr. Waessara of Mahidol University as well as Dr. Fujiyama and Ms. Natchaya of UCL had participated in the meeting. Dr. Taku would also discuss with the staff of TFL to get their opinion on how to arrange the activities.



Participation at Thailand Research Expo 2020

On 4 August 2020, the Thailand Research Fund together with British Council and National Research Council of Thailand (NRCT) organized Thailand Research Expo 2020 at the Centara Grand and Bangkok Convention Center at Central World. The Expo, presided over by HRH Maha Chakri Sirindhorn, gained a lot of interest from researchers, students, industry experts, and general public. Dr. Jirapan Liangrokapart and Dr. Waessara Weerawat participated at the Expo and presented on the topic of “Emerging Smart Metro” in which the SmartMetro project was presented together with the RailExchange and MetroExchange Projects. This is a part of the Newton UK-Thailand “Response to National & Global Challenges” theme.



Official MOU between Mahidol University and the Department of Rail Transport signed

The Memorandum of Understanding (MOU) between Mahidol University and Department of Rail Transport under the Ministry of Transport has been signed officially on 14 August 2020. Both the President of Mahidol University and the Director-General of the Department of Rail Transport agreed to collaborate in the areas of academic, research, and capacity development in the rail-related system. Dr. Jirapan Liangrokapart, Director of the Ph.D. Program in Logistics and Engineering Management, Mahidol University and Dr. Pichet Kunadhamraks, Deputy Director-General of the Department of Rail Transportation are coordinators for the future project activities.

Courses for Master’s program at Mahidol University

Dr. Taku Fujiyama taught a course for Thai researchers and students via online class on 12 October 2020. The topic was on “Data Analytics for Metro Performance Management: Lessons Learnt from London Underground.” The faculty members, researchers and graduate students of Mahidol University participated in the class at the Faculty of Engineering, Mahidol University. Ms. Natchaya and Mr. Nattanon, Ph.D. students supervised by Dr. Fujiyama also joined the course as facilitators.

The characteristics of data, how to analyze data and the work towards Machine Learning for Big data were trained in the beginning. Then the participants got a chance to work in group on the real timetable and map of TFL Rail as well as the signal block (berth) data and the demand for the assigned lines. All of the participants had enjoyed working on the projects and gain a lot of practical knowledge.



Future Activities: SmartMetro Project

Due to the continued problems of COVID-19 pandemic, the project has been delayed. Some of the key activities could not be delivered as they need face-to-face activities in Thailand and the UK. Examples of the activities include the Capacity Development for Professional, the Guideline for Data Center Development which need physical and practical experiences. In order to get the best outcomes of the project and benefit for all, the coordinators plan to ask the Newton Fund to extend the deadline of the project until the end of 2021.

Contact: Dr. Jirapan Liangrokapart, Program Director-Ph.D. program in Logistics and Engineering Management, Faculty of Engineering, Mahidol University, Thailand (Email: jirapan.lia@mahidol.ac.th)