

The Hong Kong Polytechnic University
Department of Logistics and Maritime Studies
Research Seminar

Applications of Operations Research to the Real Problems - Rostering, Scheduling and Assignment

by

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Date: 1 September 2017 (Friday)
Time: 10:30am-12:00nn
Venue: M802, Li Ka Shing Tower
The Hong Kong Polytechnic University

(Conducted in English)

Abstract:

We introduce the projects which our research group tackled in these 15 years. We applied OR to the real world problems and obtained the solutions. For example, we solved the rostering of the anesthesiologists in Aichi Medical University Hospital. We formulated the problem as 0-1 integer programming problem and obtained the solution by CPLEX. We implemented the system on EXCEL and the system has been used in the hospital for two years. The other example is the assignment of supervisors of the entrance examination of Nanzan University. We formulated it as a transportation problem and solved it by What's Best! We implemented the system and the system has been used for thirteen years. There are many other projects for the other organizations including a manufacturer in Toyota Group. We will pick up several of them and show how we solved the problem and implemented the systems.

Bio:

Dr. Suzuki is a professor of the Faculty of Sciences and Engineering in Nanzan University in Japan. He is also the CTO of his consulting corporation, Sigmafield Co. He received the Bachelor of Engineering in 1981 from the University of Tokyo, master degree in 1983 and doctor degree in 1988 from the same institute. His research interest is mainly in the location sciences and the applications of OR methodology to the real problems. He has published papers in Operations Research, European Journal of Operational Research, Interfaces, Journal of Operations Research Society of Japan and the other leading journals of Operations Research. In these days he devoted to the applications of Operations Research to the real world problems. He established a consulting corporation and is doing consulting work with Japanese corporations in the field of retailing industry, manufacturing industry, and transport industry. In 2005, He received the Franz Edelman Finalist Award from INFORMS for "An OR/MS approach to the managing Nanzan Gakuen (Nanzan Educational Complex)". He received the Best Practice Award in 2008, the Best Case Study Award in 2009, 2014 both from the Operations Research Society of Japan and the Best Technology Award from Scheduling Society of Japan in 2015, too.

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All are welcome!