Professor Goutam Dutta

Professor Goutam Dutta is currently Professor of Production and Operations Management Area and the Former Chairperson of Research and Publications at Indian Institute of Management, Ahmedabad, (IIMA) India. He is currently heading the Agricultural Business Management Programme at IIMA (Currently Rated No 1 in the world). He has joined IIMA after spending 11 years in Corporate India. He has about 30 years of experience of working in multinationals, in teaching, research and consulting in three continents (Europe, North America and Asia). His has trained over 1800 executives in last 14 years in General Management, Project Management, Revenue Management and Dynamic Pricing, and in Operations Management. He is probably the first to design and develop Revenue Management and Dynamic Pricing Course in India in 2004. His work (with six others) at Tata Steel resulted a direct financial benefit of 73 million USD for which Tata Steel was awarded prestigious Franz Edelman Prize (only Asian Company).His work (with Robert Fourer) became a licensed software. His research papers (about twenty five) have appeared in major international journals. He is in the editorial board of three major international journals, Interfaces, JORS, and ITRM and former Associate Editor of OMEGA, International Journal of Management Sciences and International Transactions in Operations Research.

Talk 4: A Passenger Revenue Management System for National Railways of emerging Asian Economy (MREAE)

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Abstract:

In this paper, we provide the mathematical model for a Revenue Management System that consists of an optimizer, a simulator and a forecaster, and implement these systems on the National Railway of an Emerging Asian Economy (NREAE). We formulate a multi-period network revenue optimization model based on deterministic linear programming which emphasizes capacity allocations adjusted to the leg based passenger demand. Our model incorporates the crucial features of NREAE like Passenger Reservation System (PRS) and urgency based booking schemes. We conduct a simulation study of passenger demand between stations and analyze the variations in revenue and also compare the performance of different pick up forecasting techniques. We illustrate and apply the concept of expected marginal seat revenue (EMSR) with the passenger booking data of NREAE.