Special Talk

The Synergy of Multi-issue Negotiation and OTSM-TRIZ: Inventive Problem Solving in Automotive Seat Design

Speaker Name,

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Speaker Biography:

Dr. Koray ALTUN holds a Ph.D. and a BSc degree in Industrial Engineering from Gaziantep University and Erciyes University, respectively. He is an Assistant Professor of Industrial Engineering at TU Bursa and a Research Collaborator at GLORAD. He is also the founder and manager of a start-up focused on digital innovation and software consultancy. He has served as a visiting researcher at Tongji University, Shanghai. He has published papers in well-respected journals and has led consulting engagements in reputable companies with a focus on R&D, technology, and innovation management. His recent research interests include the Innovation Excellence Model, Systematic Innovation, Technology and Innovation Management, and R&D Management.

Abstract/Outline

The issue of increasing complexity in new product development (NPD) is a challenge that is frequently faced by both academic researchers and industry practitioners. In response to this challenge, a wide range of innovation methodologies have been developed, each with its own strengths and weaknesses.

Multi-issue negotiation is a process where multiple parties work together to reach a mutually acceptable solution to a complex problem. In the context of new product development (NPD), multi-issue negotiation can be particularly effective in resolving conflicts between different design parameters and stakeholder interests. One key concept in multi-issue negotiation is the "zone of agreement," which refers to the set of potential solutions that are acceptable to all parties involved in the negotiation. OTSM-TRIZ (adapted to concurrent engineering as in Eltzer, 2006) can contribute to the zone of agreement by providing a structured approach for identifying and resolving conflicts between design parameters.

During the talk, I will discuss how multi-issue negotiation can be used to identify and resolve conflicts between design parameters. In contrast, OTSM-TRIZ can be used to generate innovative and effective solutions to these conflicts. A case study of the automotive front seat design project will illustrate the benefits of using these two approaches in combination, including improved collaboration between stakeholders, more effective problem-solving, and ultimately, a better user experience.