

SEMINAR SERIES  
Department of Quantitative Analysis and Operations Management  
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## **Coordinating Revenue Management Decisions in Airline Alliances**

**Robert Shumsky  
Tuck School of Business  
Dartmouth College**

**Friday, January 26, 2007  
12:30 p.m.  
216 Lindner Hall**

The term revenue management refers to the allocation of limited resources, such as airplane seats or hotel rooms, among a variety of customer types, such as business or leisure travelers. By adjusting this allocation a firm can optimize total revenue, given a particular investment in capacity. In this talk we examine how revenue management is currently applied by the airlines, and then we discuss how revenue management techniques can be applied across the boundaries between partners in an airline alliance.

A central component of an airline alliance is a code share agreement that allows each partner to sell seats on flights operated by another partner. While code sharing allows alliance members to virtually extend the reach of their networks, the practice creates a difficult coordination problem: each member makes revenue management decisions to maximize its own revenue, and the resulting behavior may produce sub-optimal revenue for the alliance as a whole. Airline industry researchers and consultants have proposed a variety of mechanisms, and for several mechanisms we examine, (i) how alliance partners behave in equilibrium, (ii) the effect on alliance-wide profits and, (iii) how revenues are split among alliance partners.

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Robert Shumsky is an Associate Professor of Business Administration at the Tuck School of Business, Dartmouth College. His research focuses on the improvement of service operations, with particular emphasis on the coordination of service supply chains in which service provision is split among multiple firms. He has conducted research on the U.S. air traffic management system and studied transportation operations for state agencies and the Federal Aviation Administration. Before joining the Tuck School, Professor Shumsky was on the faculty of the Simon School of Business at the University of Rochester. He has published articles in Manufacturing and Service Operations Management, Operations Research, and Management Science. He currently serves in various editorial positions for academic journals and is the vice-chair of the INFORMS Revenue Management and Pricing Section.

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