## Bluesky assignment



Please refer interested instructors to TIE for access to the teaching notes. Introduction students have been introduced to revenue management. Have previously assigned the case in advance of class and then spent from 30 minutes to one hour of class time discussing the students' solutions. When using all three cases, have assigned the (A) and (B) Cases in advance of class and asked the students to submit spreadsheets with solutions to both cases before class begins. During the 90- minute class we would devote approximately 40 minutes to discussing the (A) Case, 20 minutes on the (B) Case, and the remaining 30 minutes working through the

Case together in class (students are told in advance to bring their laptops to class). Usually ask students to pair up, and I try to match a student with relatively little simulation experience with one who is more comfortable with the material. I tell pairs that the weaker student should be the one with hands on the keyboard. Finally, a note on timing: have used this full plan for Cases (A)-(C) only once, in an elective on service operations management. The schedule was a bit tight and we had to rush the discussion of the spiral-down effect in the (C) Case.

In the future may spread the material over more than one class period. These cases focus on the revenue management of a single flight leg with two fare classes and uncertain demand. The (A) Case asks the students to forecast high-fare demand and implement a simple booking's policy. The (B) Case uses simulation to establish booking limits in the presence of buy-up behavior and cancellations. The (C) Case focuses on the spiral-down effect, which occurs when there is a mismatch between the revenue management optimization model and actual customer behavior.

This Teach ins Note first describes the logistics for using the cases: the order of the cases, choosing assignments, and the timing of class discussions. Then the note summarizes each case, describes potential solutions, and provides guidelines for class discussions. The last section describes technical background, extensions, and additional reference material. The final section may be particularly useful for instructors without a strong background in revenue management as the section or its references may provide answers to students' questions about the implementation of revenue management systems.

The final section also explains how the models in this case may be adapted to handle multiple itineraries in an airline Nortek, as scribed in the Bluesy Airlines: Network Revenue Management Case Series. Single-Leg Revenue Management (A) This case provides students with the opportunity to build a statistical forecasting model and to use the output from this model in a simple revenue management decision. This section describes how the data were generated, potential solutions to the problem, and provides some guidance on how the case can be discussed in class.