

Thursday November 26, 2015

Assignment 2: 10 percent of final course grade

Southwest Airlines is unique in its boarding process. Rather than providing assigned seats, Southwest has a policy of "open-seating." This means during the boarding process that travelers are free to sit in any seats that are available.

As an aside, people have a love/hate relationship with open-seating. The bad part is that groups and families cannot reserve seats and might get split up. The good part is that open-seating is much faster than assigned seating. Shorter times at the gate save Southwest money, and that indirectly keeps airfares low.

The cost savings are a major reason Southwest has employed open-seating for its entire 42-year history. In the last 6 years, however, there have been a couple of notable changes.

One change, in particular, translated into revenue of \$98 million in 2010 and \$144 million in 2011.

While Southwest does not assign individual seats, it does have an organized procedure for how passengers board the aircraft.

Prior to 2007, passengers generally boarded on a first-come, first-serve basis. That is, travelers who arrived at the gate earliest could board first and pick the most favorable seats. This led to passengers "camping out" at the gate to secure a good boarding position and it was accompanied by minor arguments as people tried to save seats or cut in line.

In 2007 Southwest decided to end this "cattle call" process. The new process assigned each traveler a boarding group A, B, or C and boarding number. Travelers in group A went first, then B, and then C. Within each group, a traveler with a lower boarding number got on the airplane first. Travelers could still choose seats once on board the airplane, but there was much more order at the gate because people lined up in an orderly fashion.

How were travelers assigned a boarding number? The number was based on time at which the traveler checked in for the flight. Someone who checked in at the earliest time, 24 hours in advance of the flight, could secure a favorable boarding assignment. A traveler who forgot to check in online was often doomed and would have to wait at the end of the line.

The boarding assignment changed the game in a very interesting way. Instead of rewarding passengers who waited at the gate the longest (people who did not value their time), the boarding assignment generally rewarded people who could check in online in advance (people who were organized and often affluent).

A secondary market sprung up to capitalize on the technology of online-boarding, with some websites offering to automatically check a traveler in at the earliest time 24 hours before a flight. The service was reliable and cost \$1, a very appealing offer for the busy business traveler.

These third-party websites were tolerated until Southwest shut them down and decided that it should be the one profiting. In 2009, Southwest unveiled the most recent change to open-boarding called EarlyBird Check-in. It was this option that led to millions of dollars in extra fees.

Use your insights from Game Theory to answer the question: *Why can Southwest Airlines make such high additional profits by charging \$10 for early boarding of a flight?*

Instructions:

1. Your cover page needs to have your Group number and all the names of group members
2. Please underline the group leader whom I can correspond with and who will submit your assignment
3. You are limited to 4 pages' maximum (excluding the cover page). We are interested in how you approach the problem and structure your thinking using the tools of analysis.
4. You are not allowed to consult the Internet, use only your notes and what you have learned in class. Any violation will result in a grade of 0 (zero) for this assignment for the entire group.
5. Group Assignments are to be submitted to David Gillen no later than 20:00 Thursday November 26th at: david.gillen@sauder.ubc.ca