

Tutorial #5: Decision Aid Methodology

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Revenue Management

Gaga Flight Company is a new airline company that is operating between two cities in Timbawktu. Though the company was established as early as 2005, it took three long years to get a formal approval to fly from the ruling government of Timbawktu. With a lot of fanfare, Gaga launched its first daily flight between Shunglee and Long Bay on the New Year day of 2008. Flight is planned to leave Shunglee at 7:00 PM and arrive at Long Bay at 8:15 PM. Gaga is the first low cost carrier operating in Timbawktu and offering daily flights between Shunglee and Long Bay. Gaga targets the large leisure market which none of the airlines currently operating in Timbawktu are catering to. At this point, Gaga owns only one aircraft – A Boeing 737-400 with 126 all Economy class seating.

Government of Timbawktu is committed to serving its people in a clear and transparent manner. As a result, the civil aviation ministry of the country has mandated that all airline companies that operate out of Timbawktu must have clear, published fares. There is no scope for differential pricing and all seats are sold on a first-come-first-serve basis. After a reasonable market research, Gaga feels that a price of \$100 would be optimal for its Shunglee - Long Bay flight.

Gaga's Shunglee – Long Bay flight is a resounding success and enjoys higher than expected load factors in the first few weeks. Obviously the entire team is excited at this success. The number of booked seats on each flight, every day, starting from 1-Jan-2008 is captured and tracked. Shunglee – Long Bay route manager at Gaga feels very strongly that there is a huge demand which can be tapped into if only they can price their seats a little lower. However the CFO is firm and feels that it would be financial disaster if the ticket prices are kept below \$100. Senior Marketing Executive (CMO) is convinced that the only way to grow further would be by selling tickets at different prices and trying out some form of advanced purchase schemes. Meanwhile, based on the inputs of senior executives, CEO of the company is busy lobbying with the government to allow differential fare pricing for the airline companies.

Even though Gaga is doing excellently in terms of revenue, unfortunate global happenings are impacting the operating costs. When Gaga planned to introduce the first flight in early 2007, the crude prices were barely \$40 a barrel. When Gaga started operations in Jan 2008, prices had risen to \$84 and by April 2008, it had already topped \$100. These were indeed worry signs for the company and its COO. During a meeting in May 2008 when the crude prices were still soaring, Gaga's top executive decided to increase the seat prices by 10% for all flights starting 30th Jun 2008. By June 2008, the crude prices soared beyond \$125 following which CFO reported in an internal memo that Gaga's balance sheet won't be in black till the seat prices are raised by at least 50%.

Oil prices started stabilizing in the latter half of 2008. However Gaga was still not making money due to the heavy losses incurred earlier in the year. Gaga's management decided to hike the prices on routes selectively and the success of Shunglee – Long Bay flight prompted Gaga to hike the seat price to \$120 effective 31 Dec 2008. Obviously the route manager for Shunglee – Long Bay is not amused and warns that increasing fares will impact the profitability. However price hike plan proceeds as per schedule.

With increasing concern for security, airport authorities at Timbawktu raise the airport fees starting February 2009. The entire senior executive team is concerned at the escalating costs. The balance sheets after a year should be possibility of returning to black in the next 1-2 quarters, but these increasing costs could act as dampeners. Executive team decides to play safe and hike fares by 5% for all their flights, across the board, effective 30 April 2009. The fares for Shunglee – Long Bay is now \$125.

Meanwhile, a new "rightist" government takes over Timbawktu. They are in favor of freeing markets and giving more liberty to businesses to increase capital flow in the country. Intense lobbying from Gaga's investors and executives is showing fruits. The new civil aviation minister has agreed to put a proposal forward to the government for freeing airline fares. However it is unlikely to happen anytime soon. If everything goes well, there are indications of some freedom to offer dynamic fares, though still in a transparent manner. All this is unlikely to take effect till middle of 2010.

Fuel prices remain low since late 2008. CMO is keen to reduce prices for some routes to stimulate demand. Obviously route manager for Shunglee – Long Bay also wants the same. In a meeting in August 2009, everyone agrees to reduce fares. Route manager for Shunglee – Long Bay proposes the fares to be restored to \$100, but CFO wants to play safe. They ultimately agree to settle for \$110. In the mean time, senior executive team feels

that the pricing process must be done in a scientific manner and they hire **YOU** as the revenue manager at Gaga. One of your first assignments is to set a fair price for all flights including Shunglee – Long Bay one. For the longer term, you have to come up with strategies for effective pricing in view of the government policies and possible competition.

In one of your first meetings, you notice a discordant note between the route manager of Shunglee – Long Bay and the CFO. The route manager wants the fare to be restored to \$100 while the CFO feels that the load factors are higher compared to other flights operated by Gaga and thus the fares must be increased further. Route manager counters by asking the CFO to introduce one more daily flight between Shunglee – Long Bay. Obviously this is not possible as the company has only one aircraft and they may first need to seek permission to operate more flights on this sector. **Given this situation, what do you think should be the optimal fare for the Shunglee – Long Bay flight? What are your assumptions while deducing this fare? Do you think that they are realistic?**

In another meeting, there is an argument between the CMO and the route manager. CMO feels that the demand for Shunglee – Long Bay flight is different for different days of the week. However the route manager feels that the demand is steady and there could be slightly higher loads over the weekend. The ball gets rolled to your court and one of your first assignments is to understand if there is a pattern in the demand. **Are there differences in demand over different days of week, or is it steady? What are your assumptions while mining the data to understand demand fluctuations?**

If there is indeed demand fluctuation, what is the optimal fare for the different days of the week? In the past, Gaga has used four different fares. **Which combination of fares would you suggest to maximize revenues? What will be the number of seats protected for each higher class in every combination?**

Let us say the new government allows dynamic pricing, but enforces the airline companies to sell at least 20% seats at a fare less than 20% of the fare sold before the fuel price hike. **Would such a scenario be good for Gaga's Shunglee – Long Bay flight?**

For the month of May 2010, actual profile of booking pattern is given. **How would you use this information to assign capacity controls and overbooking to further increase the revenue?** Explain.