

SERVICE INNOVATION CHALLENGE

“PREMIUM AIR”: HOW DOES AN AIRLINE OFFER THE RIGHT SERVICES?

PROF. ADITYA GHOSE
DECISION SYSTEMS LAB
UNIVERSITY OF WOLLONGONG

This is an account of a set of business challenges faced by a hypothetical airline. It draws heavily on a number of real-life problems in the airline industry. While this is not the story of a particular, real-life airline, the astute reader might recognize elements of the stories of a number of airlines they might know and fly with.

The purpose of this hypothetical account is to consolidate and present a set of real-life triggers for research with impact.

The ASSRI Symposium series invites papers in its Service Innovation Challenge Track that present original research contributions in the traditional sense, but draw inspiration from the challenges presented in this document.

Background:

Premium Air is a full-service airline operating out of a busy Asian hub. Premium Air is a brand that has been recognized for several decades for the quality of its customer service. The airline has a largely unblemished safety record. It operates a fleet of mainly new aircraft that connect destinations on almost every continent to its Asian hub.

In tandem with the explosive growth of a number of Asian economies, Premium Air decided to set up a regional airline (Satin Air) to serve a number of high-volume destinations in these growing Asian economies. Satin Air is fully owned by Premium Air. While it is also, nominally, a full-service airline, the level of service in Satin Air are not kept at the same high standards as Premium Air. While this is driven in part by cost savings, it is also driven by the observation that exceptionally high levels of service matter less on the short-haul flights of a regional airline.

More recently, Premium Air established a low-cost carrier, CutPrice Airways, with both long- and short-haul flights. Ticket prices are kept exceptionally low by industry standards, but the service unbundling often seen in low-cost carriers is taken to the extreme. Customers pay steep prices for food and drink (including water), even on long-haul flights. Most other in-flight amenities (entertainment, pillows, blankets etc.) are charged separately.

Premium Air has a well-regarded frequent flyer program of long standing. Satin Air clients can earn and use privileges on this program. CutPrice Airways clients are offered very limited access to this program. They also earn a very small fraction of the actual miles flown.

Premium Air has a very sophisticated IT infrastructure in place, with state of the art ERP and CRM systems. It has a mature approach to business process management (BPM). The Chief Process Officer manages several thousand documented processes. The footprints of these processes are carefully logged, even though they extend across a number of systems. It has a number of service touchpoints that support self-service, including flight booking, check-in, seat and meal selection etc. Customer interactions are carefully logged.

The problem:

Premium Air currently faces a number of difficult challenges. Growth, revenue and profits have plateaued (and dipped in some cases). A number of competitors in other geographies have established brands that are equally well-recognized for their standards of service quality. The traditional customer base has become more price-conscious. A newly-introduced Premium Economy Class seems to be cannibalizing business away from the Business Class client base. Recent changes to the frequent flyer program has made it harder to earn miles, and has led to customer pushback.

The rationale for maintaining Satin Air as a separate brand is being questioned. The general trend with low-cost and regional carriers to reduce maintenance costs by flying only one model of aircraft isn't helping Premium Air, given the diversity of aircraft models that the full-service airline flies. With Airbus and Boeing bringing a number of new models designed for long- and medium-haul flights into the market, the airline faces difficult decisions around predicting future scenarios and investing in the right model of aircraft.

Premium Air's maintenance resources are being stretched, and questions have been raised about whether maintenance might be outsourced to other, cheaper geographies.

Recent internal studies have shown that ROI (return on investment) on aircraft isn't as high as it ought to be. Put simply, too many expensive aircraft are spending too long on the ground (and thus not earning revenue).

There is growing competition for optimal take-off/landing slots at a number of busy airports served by the airline. There has been some discussion around the prospect of auctioning these slots.

There has also been customer pushback on the extreme service unbundling practiced by CutPrice Airways. While customers seem to appreciate the low fares, the quality of the in-flight experience is rated as being particularly negative, and ultimately hurting the Premium Air brand.

The challenge:

Use techniques from a range of disciplines (including service science, computing, operations research, industrial engineering, organizational theory, strategic management etc.) to address some or all of these problems.

Some examples of questions that could be answered (and multi-disciplinary approaches that could be brought to bear) include:

- What should the long-term strategy of Premium Air be? A single brand? Two brands? Or three? Can this question be answered by viewing each brand as a service bundle, thus bringing to bear the literature on service bundling/unbundling? Can operations research techniques help answer the question of what an optimal service bundle is? [DISCIPLINES: SERVICE SCIENCE, OPERATIONS RESEARCH, STRATEGIC MANAGEMENT]
- What is the optimal design of the frequent flyer program? What strategic objectives should the program satisfy (customer retention, data-driven acquisition of customer insights, upsell incentives etc.)? [DISCIPLINES: COMPUTING, SERVICE SCIENCE, OPERATIONS RESEARCH, STRATEGIC MANAGEMENT]
- What should the optimal aircraft acquisition and maintenance strategy be? This should involve reasoning over a long-term strategic horizon (10 years +), medium term strategic and tactical (3 years – 10 years), and a short-term tactical/operational horizon (from daily shifts to 2 years

look-ahead). [DISCIPLINES: SERVICE SCIENCE, OPERATIONS RESEARCH, STRATEGIC MANAGEMENT, INDUSTRIAL ENGINEERING]

- Outsourcing strategy: What functions should be kept in-house? What functions are amenable to outsourcing (aircraft maintenance, customer contact, IT management etc.)? [DISCIPLINES: SERVICE SCIENCE, OPERATIONS RESEARCH, STRATEGIC MANAGEMENT]