



ANNEX 2: EXPLANATIONS ON THE CHOICE OF PERFORMANCE MEASURES

There are five aspects of airline operation using 22 measures altogether on which the survey will focus. We have:

- Airline characteristics
- Labour productivity
- Marketing efficiency
- Cost control
- Profitability

Airline Characteristics

Operational characteristics such as sector distance, passenger length of haul, aircraft size and the degree of involvement in freight operation have a profound impact on airline unit costs. The longer the average sector distance or passenger haul the lower will be the unit cost of operations. Equally, the larger the aircraft size the lower will be the unit costs. The higher the percentage of freight carried, the lower the units costs, particularly when an airline operates all-cargo aircraft. In fact the cost of flying a tone of freight is considerably less than the cost of flying an equivalent volume of passengers, who demand additional services both on the ground and in the air.

We also have the average aircraft utilization, which does not sit comfortably in any of the five aspect mentioned above, but is shown here as an airline characteristic.

Labour productivity

Measure included here are available tone kilometre (ATK) per employee, labour as a percentage of total cost, labour cost per employee (wage rate), ATKs per US\$1,000 labour costs, passenger kilometres per cabin attendant and flying hours per pilots or co-pilot. Available tone kilometre (ATK) per employee is the basic labour productivity measure. A better measure is ATKs per US\$1,000 of personnel costs which would allow for the fact that carriers that have low wage rates might utilize more labour than carriers in high wage countries.

Flying hours per pilot and co-pilot illustrate both the productivity and also the efficiency of crew scheduling knowing that this measure is calculated by assuming two pilots on each aircraft. Passenger kilometres per cabin attendant illustrates the productivity of the cabin crew but, it could be argued that the carriers with low cabin crew productivity may not be inefficient and can offer a better level of in-flight level of service.



Marketing Efficiency

The indicators used here to measure efficiency are passenger load factor, total scheduled services yields, scheduled passenger yields and scheduled freight yield. The last three measures are in terms of revenue per revenue tonne km or passenger-km, and provide an understanding of the average price per unit of traffic for different types of operation.

The load factor illustrates how successful an airline is in marketing and also shows the effectiveness of the airlines' yield management and the appeal of their product to customers.

Yield figures must be treated carefully as they are influenced by sector distance as well as a carrier's involvement in freight and charter. They are also closely related to an airline's marketing strategy, and the growing use of net fares which tend to reduce both yield and costs. Low yield may not necessarily indicate a marketing weakness.

Cost Control

An analysis of an airline's unit costs of operation over time enables one to establish how competitive it is and how successful it has been in reducing or containing costs in an area of growing competition in its various markets. Every airline has implemented cost reduction plans, to various degrees.

Cost Control is measured by trends in four areas of cost; unit cost per available tonne kilometer (ATK), flight operations costs per ATK, passenger service costs per 1,000 revenue passenger kilometres (RPKs), and Ticketing, Sales and Promotion (TSP) costs per passenger.

Flight operation costs are the largest category of the total operating costs for all the airlines. It is based on ICAO cost categories and includes flight crew salaries and training, fuel and oil, and equipment rental and insurance costs.

Passenger service costs include wages and allowances of cabin crews and passenger service personnel, as well as passenger related costs such as in-flight catering and hotel accommodation.

Ticketing, sales and promotion (TSP) costs per passenger include travel agent commissions, all labour and materials costs incurred in issuing tickets, GDS booking fees, credit card commissions and advertising expenses.



Profitability

Airlines profitability is best measured by the operating ratio which is the operating revenue expressed as percentage of operating cost. This covers operating results, and does not include non-operating items such as interest, subsidies, profit from asset sales or financial results of affiliated companies.

Both unit cost and yield are directly influenced by average sector distances and the relative importance of freight within each airline's output. However, high costs may be counterbalanced by successful marketing to generate even higher yield.

The increasing use of operating leases can cause distortion in operation ratio. Operating lease expenses, which are included in operating costs, cover both depreciation and interest. So, an airline which leases a large part of its fleet to serve a specific market would have lower operating ratio than another airline which owns its aircraft, and therefore excludes interest costs from its operating costs.

IMPORTANT