YIELD MANAGEMENT

THE PROBLEM

The acceptance of shipments on any given flight does not always meet the objectives of filling the aircraft of its combined weight/volume cargo capacity, nor of its potential revenue.

Historically, available space is controlled by the weight/volume factor and the revenue derived is analysed post departure by Marketing and Accounts Departments.

THE SOLUTION

The SITA Yield Management development introduces a new factor to reservations' acceptance: Does the shipment provide sufficient revenue? This is done by valuing shipments complete with all components before they are sold and the resulting value is compared against a number of present rules.

FUNCTIONALITY

Through a series of User initiated mechanisms, Yield Management will control the sale of space by Leg of Flight whereby only Cargo returning the highest yield possible will be booked.

The mechanism is applied to reservations' requests. It represents the airline's minimum revenue standards for carriage of shipments on a particular flight and sector.

What is the Mechanism?
It is a simple principle. The airline will calculate a charge for the space to be taken up by a shipment being offered for booking, and will accept the consignment only if adequate payment can be made.

It is a process by which we determine a charge for aircraft space and then check if the shipment can 'afford' to meet it.

How does the Mechanism work?
Flight space is priced by applying a pre-determined value to the weight and volume of each leg of the flight. Once this has been established the shipment will be accepted if the weight charges on the air waybill exceeds the weight charges calculated by the pre-determined weight/volume values.

The Mechanism formula

The acceptance or waitlisting of a shipment will be determined using a formula based upon value per unit weight, value per unit volume, charges and weight and volume of the shipment.

If we call;

C (W,V)	=	Charges for a shipment
Yw	=	Value per unit weight
Yv	=	Value per unit volume
W	=	Weight of Shipment
V	=	Volume of shipment
>	=	Equal to or greater than
<	=	Less than
x	=	Multiply
+	=	Plus

Therefore, the mechanism formula is expressed as:-

$$C(W,V) > Yw \times W + Yv \times V$$

Example:

Flight XS114/28May has 1.45 value per unit weight (Yw) and 213 value per unit volume (Yv).

a)   A shipment weighing 50 kilos (W) with a volume of 0.250CM (V) is being processed for acceptance. The charges calculated by Marquis is 145.00

Therefore the above formula would translate to:

$$145.00 > 1.45 \times 50 + 213 \times 0.250 = 125.75$$

$$
\begin{aligned}
1.45 \times 50 &= 72.50 \\
213 \times 0.250 &= \underline{53.25} \\
& 125.75
\end{aligned}
$$

Therefore: 145.00 > 125.75 = Accept

b)   A shipment weighing 75 kilos (W) with a volume of 0.600CM (V) is being processed for acceptance.   The charges calculated by Marquis is 187.50.

Therefore the above formula would translate to:

$$187.50 > 1.45 \times 75 + 213 \times 0.600 = 236.55$$

$$
\begin{aligned}
1.45 \times 75 &= 108.75 \\
213 \times 0.600 &= \underline{127.80} \\
& 236.55
\end{aligned}
$$

Therefore: 187.50 < 236.55 = Waitlist

THE BENEFITS

- Greater visualisation and utilisation of high yield weight/volume

- Online control of resulting revenue

- Manual control of flight leg values by weight and volume

- Station performance and uplift statistics

- Marketing and Revenue statistics