Computerisation in India: the Story of Indian Airlines

More than twenty years ago, Indian Airlines decided to computerise some of their operations. These were to begin with, financial control and inventory control. Five years later, in 1971, one more IBM 1401 system was acquired. The first one had been a tape-based system, but this one was a disk-based system. Besides the earlier operations, advance reservation seats for passenger flights was now brought within the scope of computerisation.

With the increase in the number of flights and the volume of traffic, the need for a real time system was felt. This is a system in which data input is processed immediately and the result is available instantly to be used as feedback information. In airlines booking, each booking is processed as soon it is made, so that a completely up-to-date picture of the position is maintained by the computer at all times. In 1983 a real time system was sanctioned for Indian Airlines. It could deal with ten million passengers. A year later, another Central Processing Unit (CPU) and eight disk drives were added. The system could now meet the needs of 15 million passengers.

Today seat reservation in IA can be done instantly with the aid of a computer at the four international airports as well as a dozen domestic stations. The remaining stations in the country are connected to the central system by teletype links. Tickets are printed automatically in the major cities.
Another facility that has been made possible by computerisations is the Flight Information System which provides updated information on the departure and arrival times of flights. This information can be displayed on screens in the passenger lounges.

Meteorological information is of vital importance to a flight; the crew will find such information most useful, since flights may have to be delayed or canceled or diverted if the weather does not permit safe landing or take-off. The computer provides up-to-the-minute information that can be displayed on the screen at any airport from where a plane is to take off.

After computerisation, the management information system in IA has become efficient; the management can now have up-to-the-minute reports on the performance data of the airline. The management will require data on capacity utilisation, passenger and cargo transport, income and expenditure with reference to aircraft as well as to each sector of operation, and crew utilisation, to make policy decisions as well as decisions on normal working of the airline. In the past only batch processing of data on a monthly basis was done; but now data are processed instantly and are available on a day-to-day basis. This is an important feature of the present computerisation, and makes it possible for the management to ensure that the total system is profitable and to optimise resource utilisation.