Learning outcomes

After reading this chapter, you should be able to:

- Appreciate that in order for revenue managers to successfully complete their mission, they need high performance decision-support systems in place.
- Understand that companies using revenue management techniques need to monitor random demand which must be adapted to a fixed and perishable offer through a system of differential pricing. At stake is the ability to determine how many units (rooms, seats) should be sold at a full and at a reduced price.
- Acknowledge and understand the sophisticated techniques of demand forecasting that are available.
- Understand that a Revenue Management System needs to be usable, enable reliable forecasts and, if possible, offer its users automated or non-automated recommendations.

The purpose of a revenue management system (RMS)

The purpose of a RMS is to ensure turnover growth and company margin optimization.

- **Purposes of the tool for revenue managers**: In general, it enables them to analyze clientele behaviour and market changes. Revenue managers conduct analyses in terms of different detail levels, for a specific date and a fixed goal by:
  - Clientele segments.
  - Pricing levels.
  - Revenue management (RM) levels for the hotel industry.
Revenue managers need to access the information enabling them to monitor, in highly specific ways, the consistency with which the company’s strategy is being applied daily. In the hotel industry, for instance, this implies the analysis of the daily revenue management production per class and its comparison with the ideal mix fixed for the day. Moreover, this task enables revenue managers to obtain specific information regarding the market and the clientele behaviour. For instance, the comparison of the bookings pickup for a specific day with the bookings pickup for the same type of day in the past (e.g. events day, ordinary day, and holiday day).

**Purposes of the tool for the end users:** The tool should enable hoteliers to manage their revenue management classes more effectively in their daily reservations system. The tool should provide four main benefits:

- Knowing every day the measures to be taken.
- Knowing the value of the client segments to be communicated.
- Adjusting the strategy / ideal mix.
- Possessing the main portfolio indicators (reservations and geographic area) for the hotel industry.

**Architecture of the RMS**

Constructing a RMS entails a certain number of operations (see Figure 5.1). The company wishing to integrate revenue management needs to consider the relevance of the constitutive elements of the RMS.

We will now consider the steps relating to the data and the system computerization, as the other steps have been dealt with in the previous chapter.

**The type and updating of data**

The number of systems, software programs, and databases revenue managers use depends on the size of the company and the choices made by the executive: in-house development or purchase/leasing of software solutions. It is thus essential to ensure that the interface between all software elements is right, that all relevant information is updated, and that no gaps exist.

Using the historical data, the RMS will calculate and show graphically the pickup curves, which enable the revenue managers to monitor demand and bookings per contribution level and length of time at the time of the booking. It is worth noting that reservation periods vary in terms of the different sectors that come together to form the wider hospitality and tourism industries. By examining demand curves, revenue managers are able to determine their clients’ reservation profiles and arbitrate the reservation demands accordingly.
Figure 5.1: Architecture of the Revenue Management System

Collecting data, putting them into readable and usable formats, sharing information, and updating the data are time-consuming and tedious tasks which are best carried out monthly or once or twice a year by revenue managers or trainees. In numerous sectors across Europe and worldwide, workflows are linked directly to specific events. Examples include:

- the hotel industry, in which activity is regulated by:
  - The business sector events (in large cities or capitals): conventions, seminars, trade fairs, shows.
  - The leisure business (tourist sites, seaside resorts, capitals): school holidays, public holidays.

- The organisers of trade fairs and shows:
  - Site owners.
  - Organisers.
  - Stand designers/suppliers for trade fairs.

- Manufacturers desiring to show their products and services:
  - Medical conventions (pharmaceutical laboratories, equipment companies).