

Are you planning a technical renovation?

Go for the modern Hotel Building and Room Management System!

Too many investors, developers, architects, and even consultants still continue to believe that the Hotel Building Management System (HBMS) represents a luxury, probably because they do not fully appreciate the true benefits it can bring. Personally I believe there is insufficient awareness of the enormous technical advantages which the HBMS provides for the staff responsible for the smooth operation of the establishment.

We must never forget that a hotel represents a non-stop activity, day and night, 365 days per year!

Today it is simply impossible to guarantee everything the guests require without having a central overview of the total activity of the building. On average, a hotel with 100 bedrooms implies monitoring some 1'500 to 2'000 data points. This in itself exceeds what any individual can be expected to survey.

Only computerized tools able to gather and organize information can provide the kind of overview required.

Moreover, BMS suppliers have now greatly improved the system, making it far easier for the operator, who is in permanent on-line communication with nearly all the technical devices of the building. As we shall see later, managing guest rooms will require a similar approach.

Several studies have proved that the BMS, while offering this overview, allows the staff to prevent customer complaints and moreover can reduce the cost of operating the building by 15-20 %*.

BRIEF SUMMARY OF BUILDING MANAGEMENT IN HOTELS

- Integration has become the key word in the management of buildings in general, and hotels in particular.
- The rapid spread of technology into the domain of hotels greatly facilitates the installation of integrated Building Management Systems and Room Management Systems (HBMS) in such properties.
- The engineer responsible for the technical specifications of the project should see the hotel as an extremely specialized type of building: its management is different to that of any other type of building.

- The on-line Room Management System (RMS) should preferably be operated from the front desk. Thus allowing the staff at the reception to respond to any customer requests immediately.
- The Building Management System (BMS), which deals with all the building services in the hotel, remains the direct responsibility of the hotel technical staff.
- The BMS may be situated in the basement floor of the hotel. The two systems - BMS and RMS (HBMS) - communicate with each other and so form a single whole.
- The hotelier who wants a reliable and lasting partnership within a permanently changing environment will only be satisfied with BMS and RMS suppliers who are fully aware of the special needs of hotels, and who have fully mastered the integration of the different systems offered by the manufacturers.

MAIN FUNCTIONS PROVIDED BY THE BMS:

- Automatic control of temperature, humidity, pressure and air quality
- Graphical representation of plant diagrams
- Dynamic display of values on-line
- Display and handling of alarm messages
- Trend recording
- Evaluation of consumption figures
- Generation of energy-saving measures
- Automatic generation of status reports
- Normal / emergency power supply
- Remote system management via modem

The Author



Jacques Lévy-Bonvin, a graduate of the Ecole d'Ingenieurs of Geneva, has led international seminars in technical hotel management and air quality, and has published papers related to comfort control and building management systems.

His works *Hotel Technical Management and Upgrade your Hotel!* show the importance of integrated hotel room management solutions.

He conducted the building management of hotels worldwide, including the Burj al Arab, Dubai, the Adlon Hotel, Berlin, the Noga Hilton, Geneva, the Baur au Lac Zurich, the Mecca Hotel, Saudi Arabia, etc. He is a member of the International Society of Hospitality Consultants, ISHC, and a worldwide hospitality lecturer at international hospitality congresses. Since 2001 he has opened his own hospitality consultancy: CONSEIL. He is Visiting Professor at several international hotel schools. www.jlevy.ch.

UPGRADE ROOM MANAGEMENT!

The hotelier must no longer regard a guest room as simply a room with a guest in it! On the contrary, he must provide the guest with an atmosphere which can be guaranteed at all times, on line.

This must include safety, comfort, well-being, security and enjoyment: the guest, after all, is not an employee - but on the contrary is paying for such services!

In their heating systems, far too many hotels are still equipped with a simple (or indeed, in certain cases, sophisticated) thermostat acting on a valve and activating a fan coil unit at different speeds.

An inadequate approach to operation based only on thermal comfort remains one of the main causes behind the poor technical status of a majority of the 3-, 4-, and - unbelievable but true - even 5-star hotels throughout the world.

THE (TOO) CONVENTIONAL APPROACH TO GUEST ROOM MANAGEMENT

Illustrated below are various types of conventional guest room controls.

They do not communicate information either to the front desk or to the BMS.

The third one, however, (Communicating DDC) also integrates controls for the lights and blinds. It can communicate with the BMS. If requested, it also communicates status information related mainly to thermal conditions to the front desk.

The Hotel Room Management System is characterized by the integration of access control and all the functions requested by the guest, such as 'Do not disturb', 'Make up room', 'SOS alarm' etc.

Example of non-dedicated room control units

a) Non-communicative controls

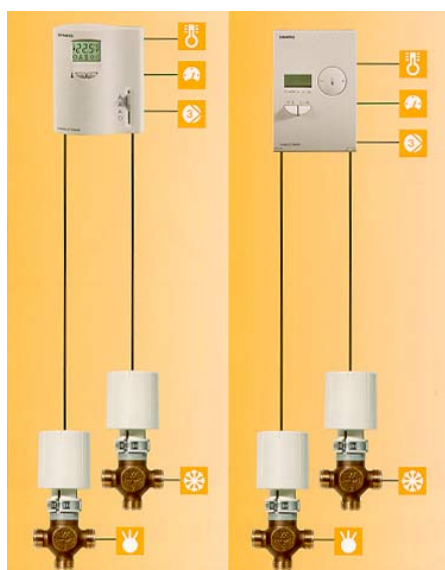


Figure 1: Various terminal control units used for offices

These simply control needs in thermal comfort and are therefore not suitable for use in hotels: continuing to believe that they are indeed suitable for this purpose represents a fundamental mistake.

b) Communicative terminal control units

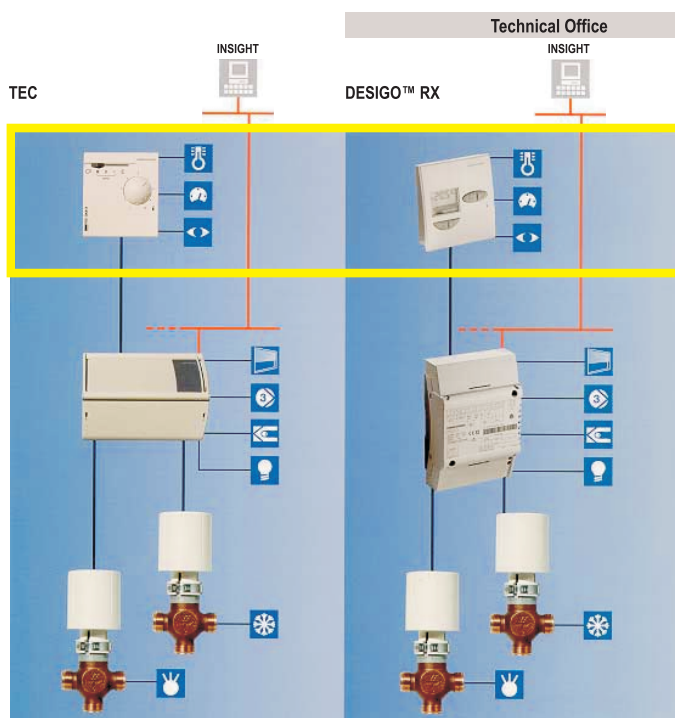


Figure 2: Terminal control units (top) frequently used in administrative buildings

These devices are not flush-mounted. Modern hotel interior design does not favour devices of this kind in guest rooms, as they are not compatible with the appearance of other electrical outlets.

While they do present a high degree of sophistication (modulating controls, PDI correlation, accurate thermal comfort, simple lighting and control of window blinds), they still do not offer a fully dedicated solution for hotel rooms, with integrated access control, links to the front office, a variety of functions etc.

THE MODERN, DEDICATED APPROACH TO ROOM MANAGEMENT

Understand the needs of your guests

The diagram below shows the various technical points in the room which correspond to the wishes and needs expressed by the hotel guest.

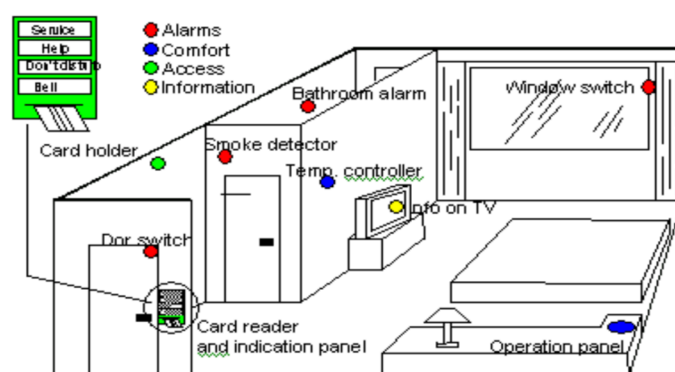


Figure 3: Obviously, this is a guest room and not an office!

The diagram illustrates how thermal control alone is definitely insufficient. Access control, safety and security, and communication with the front desk are equally key issues.

SYNTHESIS OF NEW TECHNICAL MANAGEMENT SYSTEMS IN HOTELS

It is important to structure the conventional approach of BMS selection into 2 dedicated areas:

First: Public and services area (mainly corresponding to the technology management like air and water preparation and distribution, etc.) and, **Second:** the guestrooms' management (corresponding to the front desk customer oriented needs activity). This subdivision represents the most fundamental progress to achieve. This philosophy has become a standard in the hotel industry. Most BMS suppliers who really want to durably enter the hospitality market have adopted this approach. The link between the 2 systems will permit to transfer a rich amount of information from the HRMS to the BMS system.

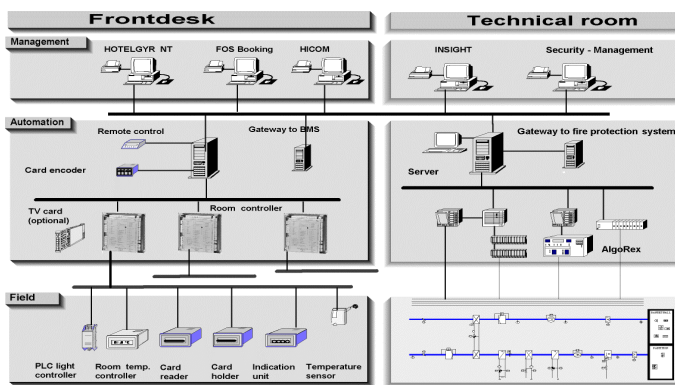


Figure 4: Topology of Modern Hotel Building Management System (HBMS)

Hotel rooms require a Room Management Solution which provides the minimum number of functions which correspond to the needs of the guest and are primarily managed by the Front Desk.

The engineers generally operate the BMS in the basement (right side of figure). The Front Desk operates the HRMS (left side of figure) for the full technical comfort of the guest.

With this innovative and optimised solution illustrated in the next figure, the general manager is quite sure to master the real comfort of both his guests and his staff.

This approach has been used in both cases new construction and renovation in several countries.

Jacques Levy-Bonvin

Plusieurs études démontrent que le Système de Management de l'Infrastructure Hôtelière (BMS - Building Management System) permet aux employés d'anticiper les plaintes des clients et surtout de réduire considérablement le coût de fonctionnement du bâtiment (entre 15 et 20 %). A ce système s'ajoute également le RMS (Room Management Solution) qui permet à la Réception de contrôler depuis son emplacement la chambre du client avec quelques fonctions correspondant aux besoins les plus courants du client.

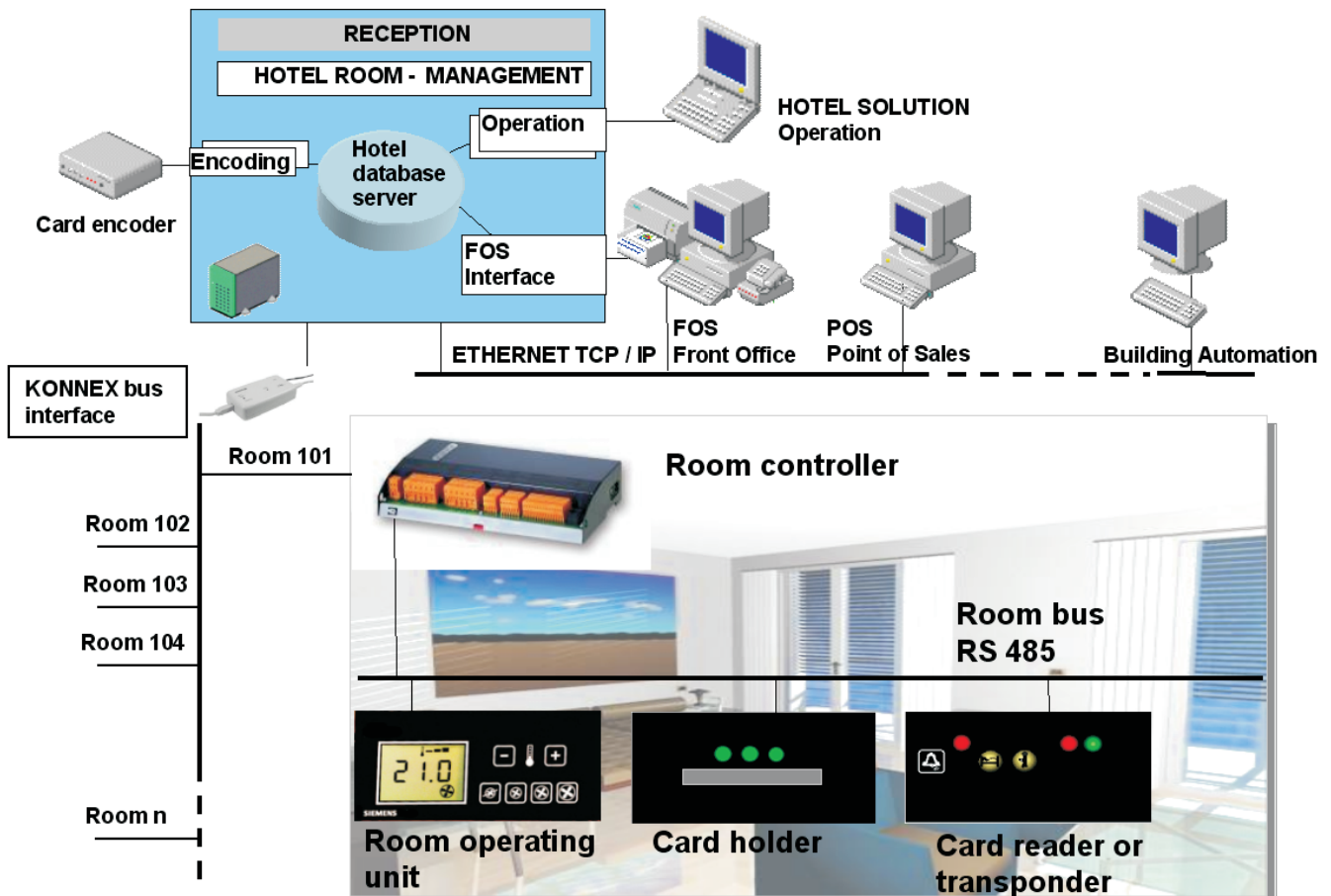


Figure 5: Hotel Building Management System topology