

The role of computers in hospitality management essay sample

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According to Frank M. Go and Ray Pine another significant development is the exponential growth of knowledge. It creates new technology and new technology creates new knowledge. The systematic gathering and dissemination of knowledge requires information technology. However, the use of technology in the hotel industry is not widespread and its assimilation is expected to be slow, due to two barriers:

(a) The gap between management's business needs and technology understanding is the leading reason why the lodging industry is lagging behind others in using technology as a strategic weapon.

(b) Technology buyers [hotels] are uncertain about the effectiveness of technology investments. The proliferation of [technology] alternatives has undermined the confidence [perceived] of many (41 per cent of the hotel executives surveyed) in the effectiveness of their technology investment. For now the lack of management's understanding of technology has led to dissatisfaction with results and a reluctance to pursue further implementations of technology(1995: 296)

The use of computerisation in the hospitality industry has changed greatly over the past twenty years. The launch of low-cost personal computers in the early 1980s started an explosion in the use of technology that is still continuing today. Technology still in development, such as truly integrated hotel systems and Internet-based reservations systems, will have a profound effect on how hospitality organisations transact their business and perhaps even on the structure of the industry itself. For hospitality business, it is no

longer a question of whether to computerise, but which system will give the most benefits and should be installed first!

The role of computers in hospitality management and operations has become increasingly complex. Many different types of hardware and software are used, and it can be difficult even to begin to understand the array of technical terms that can be encountered. Computing isn't just about PCs any more: it's also about connectivity, networking and communications. Integrating this connectivity poses one of the greatest challenges for the future. The pace of change is also very swift, and thus it can be very difficult to keep up-to-date on what's happening in the area. That being said, knowledge of both the capabilities of computer systems and the benefits that can be gained by using them is essential for every hospitality manager.

The companies that effectively use information technology will be the ones with the most improved customer service, whether those customers are external (e. g. guests) or internal (e. g. employees, shareholders). The speed with which information is accumulated, stored, manipulated, and transferred is such that today most travellers expect that hotel rooms they rent will allow them to be as productive as they are in offices or at home. Technology affects how an organisation is managed and how communication takes place in the organisation. The more sophisticated the technology, the easier it is to communicate and manage large organisations. Systems such as management information systems mean that information can be accessed with the click of a button rather than sifting through mounds of paper to identify the correct information to be used.

Computer systems in the hotel industry are developed to perform two basic functions:

- First, they are designed to store data in convenient way.
- Second, they then process this data in such a way that management will receive information conducive to effective decision making.

Such systems help management to satisfy the needs of the guest better, and should be capable of handling every transaction from the guest's initial telephone inquiry to their final billing. As can be seen from Figure, an integrated hotel system is composed of many different systems linked together.

Property Management system (PMS)

Sometimes referred to as ' front-office systems', these track which rooms are currently occupied or vacant in the hotel, and maintain the guests' folios by recording details of all sales and payment transactions. A PMS is now a necessity for most hotels as it would be difficult, if not impossible, to manage a hotel of 100 bedrooms or more without one. It not only acts as the main contact point between the hotel and the guest, but also provides information to and receives information from practically every other department in the hotel. A PMS helps manage these interactions, and at the same time acts as an information hub for the other computer systems. The functions of a PMS may be broken down into the following different categories:

Registration – allocating vacant rooms to incoming guests and marking those rooms as being occupied;

Housekeeping – tracking which rooms are occupied, waiting to be cleaned, waiting to be inspected, or ready to be passed back to the front desk for allocation to incoming guests;

Guest accounting – tracking all guest charges and payments and producing the final guest bill;

Night audit – automatically performing end-of-day routines such as posting room charges to each guest folio.

A multitude of ancillary systems are also used to support the hotel's PMS. For example, electronic door-locking systems generate a unique electronic key each time a new guest is registered, thus helping to increase security.

Energy-management systems help to reduce heat and power costs by automatically turning off heating or air conditioning in rooms or sections of the hotel which are unoccupied. In-room entertainment systems provide extra services such as information screens, video-on-demand or computer games to guests, while at the same time generating additional revenue for the hotel. A computerised switchboard enables the billing of the telephone calls to be controlled in a much more effective manner. Each call is logged with the date and times, the number was called, how long the call was connected for, the number of units consumed and cost of units. This can be then automatically charged to the guest's account, printed out in the case of query or use for control purpose.

Telephone systems can provide a range of services valuable for both the hotel and customer. The system is known as 'voice processing', which is combination of computer technology and the spoken word. The system includes: wake-up calls where the most advanced systems will pick up the guest's nationality from the front-office property management system and instruction will be in their language. The system also includes a message-waiting facility, access to hotel services, voice mail, e-mail, fax machines.

Central Reservation System (CRS)

Many authors include the reservation function within the property management system. However, with the growing importance of central reservations systems and other forms of electronic distribution, and the development of techniques such as 'yield management', reservation systems need to be discussed separately.

The growth of travel in the 1960s, which prompted airlines to develop computerised reservation systems, put similar pressures on hotels. Individual properties were receiving growing numbers of telephone calls, letters and telexes from potential customers wanting to book accommodation. Large clerical squads were needed to sort mail, type letters, send telegrams and handle other requests. Bottlenecks were frequent, administration costs were sky-high and experienced staff was in short supply.

An opportunity for rationalisation was recognised by many of the American hotel chains. They noted the inefficiencies of the existing system and determined that the best way to serve the customer, and at the same time

provide a valuable service to their member hotels, was to centralise the reservations function into central reservation system. The CRS kept track of the rates, availability, special packages, negotiated rates and descriptions of each property, and allowed customers to book any room in the chain by contacting a single central location. Centralising the reservation function also brings other advantages. A more professional level of customer service is possible because of the dedicated, well-trained staff, and service quality is also more consistent as centralisation makes it easier to monitor and control. Overall the lesson is clear: a centralised booking environment is faster, more efficient and, if well designed, far more economical to operate than unit level reservation offices.

Security

As the task of keeping staff, customers and buildings safe becomes more complex, security is making more onerous demands on management time and budgets across all hospitality industry businesses. More managers are now looking to innovative solutions and high tech systems to help them meet with their duty of care obligations and to protect the business against claims.

Security systems are now required in almost every department of a hotel and can range from alert staff to CCTV monitors and smart card access systems. Indeed the need for security begins even before the guest arrives at reception. Car parks constitute a major security problem both in terms of potential damage or pilferage from parked vehicles, to the potential

members of public to fall or trip, to the use of the car park by drivers who are not customers. Car park security has been stepped up in hundreds of hotels around the country. CCTV cameras are used to monitor vehicle and pedestrian movements and some car parks are also patrolled at night. More hotels are installing automatic barriers at the entrance to car parks and levying a charge for parking, which is usually waived for genuine hotel customers. Magnetic cards issued automatically at the barrier record the time of arrival and the applicable charge at the time of departure. They can also be verified by passing them through a reader which programmes the magnetic strip to raise the barrier, allowing the holder to leave the car park. With this system car park charges can be collected or waived at the reception.

The system provides hotels with a high level of car park security, particularly if it is supported by CCTV monitoring. Cameras which can operate at very low light levels can be used to monitor movements in the car park on a 24/7 basis and will record images which can be stored. The system can be invaluable if claims arise from falls or other accidents in the car park.

IT in bedroom

Guests on both business and leisure now expect a source of information and entertainment in their bedroom. It must be, of course, electronic not just a news paper and some book for reading. The IT industry had already designed services and applications. Big IT suppliers like Granada, Hoist, Quadriga and new-comers like Otrum, eTV, STSN and many more are interested in the

business of IT application for Hospitality Industry. Hotels large, small and middle range can not ignore that IT bedrooms are an important factor in attracting guests. Today in the use of IT there is not so big difference between business and leisure guests. Many leisure guests make use of Internet, not just for website browsing but also for emailing friends, checking out local attractions and verifying their next travel arrangements. A lot of people book their holidays on the Internet today so they naturally use it to keep track of it, especially if they need to change something. Without exception, system suppliers aim to provide a plug-in-and-play solution.

They provide the necessary central computing and server hardware and software, connection to an external broadband telecoms link and incoming terrestrial, cable and/or satellite TV services. Then they connect it internally to TVs and control Keypads in the guest bedrooms. Sometimes they can make use of existing TV sets and telephone cabling around the hotel with some modifications. They also provide the necessary interface with the hotel PMS computer for any charging to guests and for intersystem links like room service and bill viewing. The number of services that we get from those systems is innumerable. Satellite TV-radio, the possibility to access to a database of stored movies at any time, it allow to see pictures, videos, check news, browse websites or order service at the same time. Guests can also take a look at their room and see how it's going or check out from their room avoiding the possibility of join annoying queue in reception. Using the TV for web browsing and emailing means combining two applications that are powerful guest services but we need to think about guest profiles and needs.

Leisure guests may be content with viewing websites on the room TV but business guests will not.

For them, downloading information to their own lap-top and handling their email just as easy as they do in their offices are important services. We need to provide broadband to phone sockets or wireless connection for their. One IT services that business or even leisure guests will need from time to time is print-out. Nobody brings a computer printer around with them so the hotel can advertise “ Printing services available”. There are two ways to do it: provide a service using the hotel’s office printer or put printers in the bedroom, perhaps on request. The most exigent e-guest will prefer the printer in the room using compact all-in-one devices that print, fax and copy. Marriott hotels in USA have a network service called PrintMe that permit to send a print command to the hotel’s office printer by radio.

Systems have to be simple for the guests. They have to feel almost the same to be at home when they open their email box or browsing. If they do not email regularly but they want to try for the first time during the stay, they may seek help. We need staff trained for help guests if they have problems with our IT services. More complicated are conference application and we need technicians that help guests.

All this services add value to our product and they are really guests oriented but the costs are not indifferent. How do we charge all this services? It is difficult to answer the best way can be, get the best deal with the suppliers,

give basic service like Internet TV and broadband and charge for extra service like movies, printer, video conference...

Telecommunications Equipment

To serve guest efficiently and price calls properly, hotels need the right mix of telephone equipment and lines. There are many types of telephone lines or trunks. Each type of line is designed to carry certain types of calls. There are lines dedicated to incoming calls, lines dedicated to outbound calls, and two way- lines as well. Based on level of guest service, each hotel must determine the types and number of lines to have installed.

Direct -dial facilities from the guest room are provided by a piece of equipment known as the private automated branch exchange (PABX). This is basically computer systems that connect the hotel's internal telephone system to the outside world and manages the allocation of lines to incoming and outgoing calls. A computerised switchboard enables the billing of telephone calls to be controlled in a much more effective manner. Each call is logged with the data and times, the number that was called, how long the call was connected for, the number of units consumed and cost of units. This can be automatically charged to the guest's account, printed out in the case of query or use for control purposes. Many hotels use CCS System which enable telephone operator to have access to the reservation or guest information by guest name, arrival, departure dates, company name or room number, group or company affiliation, special requests, additional names or shares in the room, vehicle information, etc.

Guestroom Phones. Along with other telecommunications equipment, guestroom phones are increasing in sophistication and capabilities. For example, guest can plug personal computers or portable fax machines into some guestrooms phones. Other features found on some guestroom phones include: conference calling, caller ID, speed dialling, and hold buttons, call waiting, hands free speakers, voice messaging, etc.

Telephone system can assist with rooms' management and prohibit the unauthorized use of telephones in vacant rooms. Housekeeping or room service employees can use guestroom telephones to enter data concerning room service charges (for example, what was consumed from an in-room bar), maintenance information, or current room status information. Since these features improve communication, they also contribute to lower payroll costs and help ensure a more efficient in-room bar restocking system for guestrooms.

Pagers and Cellular phones.

Some hotels offer a pager or cellular phone to guests at check in. In the case of cellular phones, the hotel bills the guest for the number of minutes of recorded use, as indicated by the phone's usage meter. Calls placed through cellular phones may not go through the hotel Call Accounting System and therefore are priced outside the system.

Many hotels have taken advantage of new technologies to provide their guests with additional services and may well present a good selling point.

Hotel Nikko at Beverly Hills developed Portable Telephone System and

installed it throughout the hotel. Phones can be used for any outgoing or incoming calls, but work only within the confines of the hotel. The portable phones are available in all guest rooms and meeting rooms and are issued to select hotel employees, including housekeepers, bell staff, and workers from the convention-services, maintenance, security and front desk department. The phone has the same features as any other phone, including long-distance call capability, but they operate only within the confines of hotel. Extra phones are available upon request and for billing purposes, are easily programmed to relate to a specific guest room. The system has greater reliability than cellular one and main advantage is its use at night to minimise inconvenience to guests. Nikko's portable telephone system has been popular with guests, and as a result, the system has increased guest telephone use by 6.5 percent and telephone revenues by \$2 per room-night sold.

Teledex, the leading worldwide provider of telephones for the hospitality industry unveiled its new iPhone IP and iPhone Hybrid guest room telephones.

The iPhone display telephones feature a 5.6 inch(diagonal) interactive colour touch screen display that's usually reserved for phones that costs hundreds more. The colour display invites guests to interact with their guest room telephone, to find information about their hotel or surrounding area, order food and other items, get news, sports, and weather information, and more. Using iPhone Content Management Console is highly customizable by the hotel, allowing for substantial branding and marketing opportunities.

The use of technology to improve the efficiency of hotel operations and service to guests will be the key to future success in the hotel industry. The IT best-practice champions used IT technology to develop specific competitive advantages and generate increased revenues in the process.

For the most part, the best practices related to IT technology involved streamlining operations by reducing paperwork and increasing employee productivity and organisation's profitability and also use of IT technology for the sole purpose of upgrading guest service.