

# INF2011S – Systems Design & Development

2024

Phumla Kamnandi Hotels Case Study

# PhumlaKamnandi (Rest Well) Hotels Case Study

# **Business Background**

The Phumla Kamnandi Hotel group is a new empowerment group that was formed last year to manage a portfolio of small hotels around South Africa. There are about 30 Phumla Kamnandi Hotels in the group, each of which runs independently, but which benefits from being part of a group and from the marketing done at group level.

The hotels are all quite different in the facilities they offer, and in their appearance. Many were privately owned hotels that have been purchased by the group. However, despite these differences, an important strategic direction is that any interaction with customers should be the same at every hotel. The executive management is very focused on providing top quality service and comfortable accommodation at a reasonable price. The group is moving towards standardised business processes for everything from room servicing to check-out procedures. At a staff training seminars, staff are instructed in the 'Phumla Kamnandi' of doing things.

This standardisation will help to establish the Phumla Kamnandi brand in the minds of the customer. One important aspect of this is that a new computer system is needed. By implementing the same system at each hotel, it is hoped that the following benefits will be achieved, among others:

- Standardised, best practice business processes that will be enforced by the software
- Standard image in appearance of accounts and other client-facing documents
- Standardised management and financial reporting across the group, and easier consolidation of information at hotel level and at group level
- Reduction in the total cost of ownership (TCO) of hardware, software, and training across the whole group

The Phumla Kamnandi Hotel group has its head office at Century City in Cape Town. Strategic planning for the group happens here through Exco, the Executive Committee. Most employees in the group are found at the hotels themselves, and there is in fact only a small core group of staff at head office, doing a number of important functions. Group Marketing happens here, including a growing Customer Relationship Management (CRM) function. The group will shortly issue a Customer loyalty card programme, which will be co-ordinated and managed at group level. Some group accounting and human resource functions take place at head office, and there is a small centralised training function.

There is also a small but dynamic IT function, which is tasked with rolling out the new technology across the many hotels, and supporting the users of IT throughout the group.

# **Operating Details**

The hotels are scattered all over South Africa. Some are coastal hotels, while others are located inland. To simplify operations, all hotel rooms will be fitted as standard with 2 double beds. This will allow a variety of accommodation to be offered, such as two people in separate beds, a couple sharing one of the beds, children sharing the parents room etc. All rooms have been converted to en-suite, and have complimentary coffee and tea making facilities in the rooms.

Rates differ from hotel to hotel, but range from R450 per person sharing, to R1700 per person sharing. Children under 5 staying with parents stay free, with older children (up to 16 years old) paying half price. A single supplement (where someone wants an entire room to themselves) is an additional 50% of the standard rate. All rates include VAT.

Although the "per person per day" rate is the main basis for charging, some hotels prefer to charge per room, especially out of season. This allows 2 adults and up to 2 children to stay in a room for a fixed price for the room.

It is a regulation that no more than 4 people may stay in a room. All rates include breakfast, but other meals such as lunch and dinner are charged as extra.

All rooms have TV, with selected satellite channels, as well as a video (film) channel, where selected movies are rotated through a 24-hour period. Thus, all guests watch the same film at the same time. The intention is to implement cable TV (where guests can select and watch from a variety of films at any time, and which will be charged to their accounts). Each hotel has a PBX, which will allow direct inward dialing (to a known room extension), and full international dial-out facilities. All calls are charged to the guests account.

A typical hotel will have two or three bars, and two or three restaurants. It will offer room service, valet (laundry) facilities, housekeeping and babysitting services. Most hotels have a pool, and some have access to other sporting facilities like tennis and squash courts, horse-riding, bowls, or a gym or games room.

The hotel management team includes a hotel manager, housekeeper, administration manager, and catering manager. General staff include receptionists, catering staff (waiters, bartenders & chefs), administrative staff (book-keeper), housekeeping staff (bellhops, cleaners, room service staff) and maintenance staff.

Hotels are subject to significant occupancy fluctuations depending on the seasons. They are normally fully occupied during school holidays. Weekends are usually better than weekdays. The occupancy rate in the off-season averages 30%, and discounts and special packages are offered to boost occupancy during quieter months. The average hotel needs to have an average occupancy for the year of about 50% to survive.

Tourism and conferencing will be the life-blood of most hotels in the future. Since most Phumla Kamnandi hotels are not located in business centres, the main business of the group is not really the commercial or business traveller, although there are many of these types of guests in any case.

## **Existing IT infrastructure**

All of the hotels currently have slightly different ways of operating. All have computers in some form or another, ranging from a single standalone PC in reception (which causes havoc at busy checkout times!) to reasonably sophisticated networked computer systems in 2 of the hotels. There are currently no hardware or software standards across the group, and the support of these installations is problematic. There is a variety of software installed, some of which is home-grown. There are one or two different hotel management packages of varying quality.

Apart from the typical personal productivity software such as word processing, spreadsheets and database applications, installed applications in various hotels include:

- Reservation management
- Guest Account Management
- Finance & Accounting (general ledger, management reporting, creditors, debtors)

- Stock control, purchasing and logistics (planning and replenishment of anything from linen to foodstuffs)
- Human resources (payroll, shift planning, tax, leave, training etc)
- Planning & forecasting (for occupancy etc)
- Marketing, brochures, signs, menu printing
- Catering and function management

None of the hotels has all of these applications. Most have a handful of these applications installed on separate PC or midrange hardware. Invariably, the software is not well integrated. The basic business processes in most hotels are similar, which is why standardisation should not be a huge problem. The extent to which existing software supports these processes varies enormously from hotel to hotel.

The typical business processes are as follows:

# How a typical hotel operates (business processes)

#### **Enquiries & Reservations**

Enquiries and reservations come via travel agents or individual customers, usually by telephone or email. The enquiries are usually about rates, room availability and facilities. Some enquiries are dealt with by sending standard brochures, while others may involve looking up information (such as room availability) or producing a quotation.

Once the customer or travel agent decides to place a booking, the receptionist will need to identify the details about the person placing the booking, as well as the number of rooms requested, the number of people expected, the start and end of the stay and any special requirements. The receptionist will check to see if there are rooms available for that period, and if they are, the reservation will be recorded. A booking reservation number is usually given to the person making the booking.

Private individuals are requested to provide their credit-card number when making a reservation. Although travel agents and companies are requested to confirm bookings by email, the chain has been accepting emailed confirmation as long as the deposits are paid within 7 days. This has generated some confusion when the deposits have not been paid and either the bookings have lapsed and the guests arrive, or the bookings have not lapsed and the guests don't arrive. Depending on the reservation software used, either can occur leading to embarrassment and lost reputation and lost sales.

Actual room numbers are not allocated to a booking but are instead allocated each morning based on who will be leaving the hotel and who will be arriving that day. This room allocation process invariably drives the room servicing process. Priority should be given to servicing rooms where new guests are expected that day.

Block bookings are frequent, especially by travel agents, who request a number of rooms without necessarily specifying who the guests will be until quite late (sometimes even at check-in time)

Cancellations and changes to bookings are also quite frequent.

Deposits are normally requested in order to secure a booking, especially for long stays during peak season, unless the guest has provided a credit card number. All or part of a deposit will be retained if the booking is cancelled, depending on how late the cancellation occurs. Refunds can occur.

One major concern in the reservation system is that rooms can be booked as early as a year prior to the visit. Reception must keep an accurate picture of the number of actual rooms available on a particular date to ensure that all possible reservations are taken without over-booking the hotel. Some hotels still have manual registers and when these are not kept up-to-date, the result is loss of income and, often, angry guests.

#### **Room allocation**

Each night, expected departures and arrivals for the following day are assessed. Expected arrivals are allocated to whichever rooms are becoming available. A list is produced for housekeeping so that these rooms can be thoroughly serviced, well in time for the new guests. Part of this servicing includes the replenishment of the bar fridge early in the morning (in hotels that have them) and informing reception of consumption so that this can be added to the guest's bill.

A list of expected departures is also produced, so that reception can ensure that accounts are as up to date as possible, and ready for check-out.

#### **Check in process**

The check-in process is simple. Guests arrive, fill out registration forms and, where relevant, provide their credit cards for swiping. They are given their room access key (which ranges from an ordinary key to a variety of plastic cards), and a guest card on which is written or printed their name, room number and duration of stay. They must sign this at reception. The card can be used to purchase meals, drinks and hotel services, all of which can be charged to the room account.

#### **Room servicing**

In the more organised hotels, room servicing is done based on a prioritised list prepared the evening before. Room servicing involves the usual cleaning and tidying. Complementary tea, coffee and soaps are replenished, new towels are provided daily. Bed linen is changed weekly, for a new guest, or if it is damaged or soiled. The bar fridge is restocked by bar staff, and the bar consumption form is completed and forwarded to reception. Laundry is collected at 9 am and returned at 5.00 pm.

#### **Accounts processing**

Accounts processing is the single biggest headache for hotels, and the area for potentially huge financial losses. It is also an area for really significant improvements.

Separate accounts are kept for each room in the hotel and are 'open' from check-in time to check-out time, when their status changes to 'closed' (meaning that no charges can be incurred by the guest against that account) and finally 'settled', once the account is eventually paid. Almost all the hotels maintain accounts on computer in some way. Some use spreadsheets or home-grown database applications to do this, while others use accounting packages.

Guests may choose to charge any hotel service or purchase to their room account. This would include services like laundry, room service, housekeeping or babysitting. They can only do this on production of a valid guest card, and by signing the voucher for the service.

All charges are charged to the room itself, even where there are, for example, two conference attendees rooming together. They must divide the room bill themselves if they want to split the costs. It is common that a family or group will thus receive several room accounts, and pay for these accounts in one go.

In most cases, accounts are updated at night, but ideally this should be real-time. Including breakfast as part of the tariff has done a lot to prevent missing these charges at check out time, but there is still the problem of ensuring that late bar, meal, phone, housekeeping and other charges are included on the bill.

Charges emanate from what are called 'cost-centres' (by the accountant) or 'service points' by other staff. Bars, restaurants, laundry, room service, housekeeping, are examples of these. In many cases, charges consist of paper vouchers or 'chits' which are forwarded to accounts processing each night and each morning, for recording to an account. Unfortunately the chit system has high potential for unintentional error and fraud. The documents are often difficult to read and on occasions are "doctored" by unethical members of staff. Nearly all charges work through the 'chit' system, although some specific charges are handled as follows:

**Room tariffs**: Each day the tariff for accommodation is entered onto every account. Discounts, promotions and prepayments (deposits) are recorded on the account as they occur.

**Phone bills**: All hotels have a PBX installed. These have the capability to record calls summarised by extension (room number). Reception can print a call summary sheet at any time for guests so they can check on call costs. A final summary is produced at checkout, the total added to the account, and the summary stapled to the account as proof.

#### **Debtors**

Although most room accounts are settled at checkout time, about 10% of room accounts need to be forwarded to travel agents or companies for payment. These organisations have debtors accounts directly with the various hotels. Debtors payments are thankfully received. Monthly statements are sent as reminders. Bad debts are followed up.

## **Creditors and replenishment**

Each hotel has its own system for dealing with creditors. Restocking of obsolete, damaged or lost goods such as linen and towels, takes place regularly. Bulk orders are placed for promotional consumables like complementary toiletries and tea/coffee packs. Catering deliveries are frequent.

The group is currently setting up a central purchasing office for certain types of item, especially those that carry branding, in order to pass on bulk discounts to the group. These will be requisitioned from Cape Town.

The hotel managers meet periodically with their senior staff to decide their requirements for the months that lie ahead. Contract orders are placed on local suppliers along with negotiated prices and delivery dates to ensure uninterrupted flow of consumable foodstuffs and lower prices.

#### **Banking**

Each service point that takes cash, is required to cash up at the end of the day, and forward the takings and the batch totals to the bookkeeper. Reception does the same.

Total takings for the day are tallied, and cross checked to till slips or receipt books. A deposit slip is produced, and the takings placed in the safe overnight. Deposits are made each morning.

## **Staffing and Human Resources**

Hotel managers need to keep track of their staff. Hotel managers have authority to recruit and dismiss any level of staff, except for managers, who need to be approved by head office.

Some staff are salaried, while others are shift or casual workers. Staff are either monthly-paid or weekly-paid. The usual tax, benefits, leave and training functions are the responsibility of the hotel manager.

## **Future requirements**

The IT function at head office has been tasked with a 3-year initiative to revitalise the use of IT throughout the group. Several projects have been identified. The overriding constraints of this project are that any solution proposed by IT must:

- Show positive business benefits, and preferably a positive return on IT investment (ROI)
- Integrate and standardise business processes across the group
- Implement best business practice
- Exploit new technologies so long as those technologies can be shown to add proven business benefits,
- Seek to optimise service levels and reduce costs
- Provide rich, flexible and accurate management information, both at the hotel level and the group level

The analysis phase of the project was concluded 6 months ago. You are now at the design and development phase of the project. Your task is to design and develop the system as per the requirements