

# ekati mare boutique resort

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*Information Systems  
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# EKATI MARE BOUTIQUE RESORT

## Introduction

Ekati Mare Boutique Resort is a hotel resort located to the south of the island of Corfu, Greece in the village of Kavos. It is a family business that started small in 1985 and expanded greatly during the last ten years. It is at its second generation of owners at the moment, who took the reins five years ago, thus giving to the hotel an air of renovation and a vision for further expansion in the coming years. It has twenty four permanent employees and consists of seventy eight rooms divided in three main buildings, a pool, a pool bar, a restaurant and an indoors bar. There are also plans underway for the construction of two additional buildings which will be able to accommodate more customers in the coming years. The hotel offers either only breakfast or breakfast and lunch as options to its customers. The grounds of the hotel can also be leased in order to host private parties and events. The turnover of the hotel for the previous season was around 750.000€.

## **Part One: AS IS**

### **Strategy**

#### Products

The hotel offers mainly accommodation, but also a wide arrange of foods and beverages. Foods such as breakfast, lunch and dinner can be enjoyed in the restaurant of the hotel, while snacks can be obtained at the outdoors tables by the pool. Beverages such as coffee, tea, juice, alcoholic drinks or cocktails are available both at the pool bar and indoors bar. Additionally, the hotel can host school/graduation parties and various events like business meetings and dinners, but this last product will be left out of the scope of this analysis.

#### Customers

The hotel accepts a big variety of customers such as families, couples (including children) and groups of friends. Most of its customers are statistically, in decreasing order, from England, Germany and France. A great number of tourists, not residing within the hotel itself, also visit the hotel in order to

have either lunch or dinner, or drinks at the bars in the premises. With its proximity to bars and nightlife, the hotel attracts lots of young people looking to have a carefree vacation to the Greek islands. Additionally, the seclusion offered by the establishment – as the word ‘resort’ is present in the name – allows people of greater age to also be able to enjoy a calm vacation without distractions from the surrounding happenings.

### Markets & Competitors

Due to its double nature, the hotel is included in the markets of both Accommodation and Food and Beverage. As so, it faces competitions from both sides. From the accommodation standpoint this includes other hotels, resorts, AirB&B rooms and rooms to let in the area. Additionally, from a food and beverage standpoint this includes restaurants, taverns, fast food restaurants, supermarkets, liquor stores and other hotels offering food and beverage. As the entire island of Corfu and the south are famous vacations spots, the pressure from its competitors is quite intense. All relevant businesses have invested heavily in their infrastructure and their products in order to combat their competition, forcing them to be in constant struggle in order to remain high in the ranks of preferred establishments from their customers. Nevertheless, the hotel has gained a substantial following in recent years, along with a respectable amount of returning customers who chose them for their vacations almost every year.

### Suppliers

The hotel does business with a big number of suppliers due to its need for a wide variety of goods in order to maintain its activities. It needs to procure supplies for all F&B concerning activities. This includes raw and semi-processed materials for its kitchen such as meat, bread products, spices, herbs, fruit, vegetables and pasta, and coffee, tea, alcoholic drinks, sodas, refreshments and juices for its bars. Additionally, in order for the F&B to function properly, there is a need for all types of cutlery, glasses, plates, special equipment and appliances such as stoves, grills, mixers, blenders, shakers etc. For the accommodation to be supported, the hotel has separate suppliers for sheets, towels and soaps along with washing machines and various cleaning equipment and products. Since the hotel has a pool and a garden in its premises, it also requires pool cleaning chemicals and gardening equipment and materials. The total number of suppliers of the hotel is 26, covering all the above categories.

### Partners

The hotel partners with many other businesses in the tourism sector which provides profit to both sides. These businesses include online reservation platforms such as AirB&B and Booking.com along with a number of travel agencies both domestic and foreign through which customers can make a reservation for a room. Local travel agencies also arrange excursions to surrounding tourist spots which are offered to the customers of the hotel. There are also a number of car rental businesses that partner

with the hotel in order to offer to their a customers an easier way to find a car or bike to rent during their stay. Additionally, the hotel partners with local bus and minivan enterprises allowing their customers to arrange for transportation across the island, towards and from Corfu town or the airport. The total number of partners of the hotel is 11, with some examples being Expedia, Hotelbeds, On the Beach, Love holidays, Last minute and Voyage prive.

### Vendors

In order for the hotel to function properly a number of services are required. These include telephony and internet which allow for communication with all third parties like suppliers, partners and the external Accounting Office. Furthermore, the hotel subscribes to a number of satellite and subscription channel so that the customers can enjoy the content of their liking during their stay. Additionally, in order to cover the need for immediate repair of damages that might occur to the building at any time, there is an agreement in place between the hotel and a local construction agency for such events. Finally, the vendors from which the hotel has procured all pieces of technology, such as various software and hardware are always available to provide assistance with faulty equipment or failure incidents.

### Facilities & Infrastructure

The hotel is divided in three main buildings. The original main building serves as the central part of the hotel, containing the reception, restaurant, pool, pool bar, indoors bar and Jacuzzi room, along with a number of rooms. There are also two more buildings holding additional rooms which are located one minute's walk from the main building. The hotel also has its own website, which can be used by potential customers in order to check for room availability, prices and make their reservations.

## **Roles**

Within the hotel there are mainly ten key positions, whose roles play a crucial part in running the business from an everyday along with an administrative perspective. There are three Managers and four Heads of Departments. Below follows a description of each one of these roles.

The Chef is the Head of the kitchen. He has three cooks under his control, is responsible for running the kitchen and all food related matters and making sure that the dished are properly prepared according to the given recipes. His tasks include keeping track of provisions and supplies related to the kitchen and reporting any shortages to the F&B Manager in order for the products to be procured as soon as possible. He also inspects the condition of all supplies stored inside the fridges and storage areas on a weekly basis in order to be assured that nothing has spoiled. Along with the F&B Manager they set

the prices of the foods and dishes which are prepared and keep track of the inventory of provisions every week. He reports directly to the F&B Manager regarding any issue that might arise in the kitchen and requires special handling or treatment, along with recommendations regarding changes that might be needed to be implemented. Finally, he is responsible for all movement of goods to and from the kitchen for every occasion that might require it.

The Cooks are responsible for preparing the food ordered by the customers. They are the assistants of the Chef and help him out with all manners of work in the kitchen. These include cleaning the kitchen, helping with inventorying and storing of supplies.

The Maître is the Head of the restaurant hall and the two bars of the hotel. He has four waiters and two bartenders under his control and is responsible for running the restaurant, bar and pool bar and all beverage and restaurant/bar related matters. He keeps track of provisions and reports any shortage of supplies to the F&B Manager, so that they can be replenished as soon as possible, along with checking the quality of the final product served to the customers in the restaurant and the bars. His tasks also include training of staff (waiters and bartenders). He is the one to instruct them regarding the proper way of serving foods and beverages, receiving orders, talking to customers, behaving during work hours and handling matters that might arise at any time, in order for the customers to receive the best service possible. Along with the F&B Manager they set the prices of the beverages which are prepared and served at the bars and keep track of the inventory of provisions every week. He is also responsible for keeping the restaurant hall and bars in proper order and positioning the tables, chairs and other relevant equipment according to the current needs. He reports directly to the F&B Manager regarding any issue concerning his job and all other relevant subjects.

The Waiters are responsible for taking the customers' orders, bringing their orders to their table or room (in the case of room service), helping them in anything they might require during their meal and receiving payment. They are the assistants of the Maître and might help him out on many occasions with work needed to be done in the restaurant hall.

The Bartenders mainly take care of the bars and prepare the drinks of the customers. They fall under the control of the Maître and assist him in inventorying and storing of supplies.

The Head of Reception is responsible for running the reception of the hotel. He has one employee as a receptionist along with him, and reports directly to the Operations Manager. He is responsible for guest relations and handles all issues regarding the customers during their stay. His tasks include allocating incoming reservations to rooms and receiving payments (in receipt or invoice) for the customers' stay in the hotel and all other services provided. Finally, he informs the customers regarding said services along with recommendations for places to visit and activities available in the area (such as excursions), provides information about car/bike rental and arranges transportation around the island if requested.

The Head of Housekeeping is in charge of a team of five housekeepers who are responsible for cleaning, restocking and maintaining the rooms and all establishments in a presentable state for the customers to enjoy. He reports directly to the Operations Manager. He is responsible for allocating the

shifts and rooms requiring cleaning to the housekeepers and inspects the quality of their work .He informs the Operations Manager for any cleaning supply shortages so that they can be replenished and of damages that might occur in any part of the hotel under their care so that they can be fixed.

The F&B Manager is one of the three Managers running the main departments of the hotel. He oversees the Chef and the Maître, with in conjunction with which he performs various tasks, such as setting the prices of F&B products and inventorying the reserves, and all forms of provisioning and supply orders. He is responsible for all payments carried out by the hotel including, but not limited to, its employees, suppliers and vendors and enters all relevant receipts and invoices into the main Invoice Entry Software, so that they are available to the accountants. Finally, he performs reporting and analysis, both monthly and per season, of customers and suppliers per category in order to figure out new ways of improving the profits of the business and decrease its costs. He reports directly to the General Manager on a monthly basis assisting him in gaining knowledge form the reports he creates, informing him in the course of expenses and getting the green light to initiate and changes.

The Operations Manager oversees the Head of Reception and the Head of Housekeeping. His duties include the everyday running of the hotel, the repair of any damages to the buildings and the managing of Sales Relations. He handles payments made to the hotel through online platforms and forwards the reservations to the Head of Reception for allocation to rooms. He arranges and oversees repairs made to buildings and forwards relevant invoices to the F&B Manager for payment. Additionally, he negotiates contracts with tourist agencies and keeps track of payments towards and from them. Finally, he performs all Sales related tasks, including new partnerships and sales analysis by month and season. He reports straight to the General Manager regarding the course of Sales, state of reservations and other relevant matters to the daily procedures of the hotel.

The General Manager is the highest executive officer of the hotel. He may not have a day to day involvement in the matters of the business, but he has the final say in all decisions made. After being reported to by the F&B and Operations Managers, he instructs them regarding the course of action they are going to take and sets forward the tasks for them to execute. He also devises all the future plans of the hotel, such as undertaking new endeavors and expanding the business in every manner.

## Technology

The hotel is equipped with a relevantly medium number of pieces of technology, both software and hardware, in order to execute its daily functioning and its administrative procedures. In this section, all relevant subjects will be presented.

## Analysis of Technology

There are a total of 4 computers on the premises used mainly by the Managers of the hotel and the Head of Reception in order to record all information vital to the operation of the hotel and execute all procedures needed to run the business. Additionally, the Chef and Maître are provided with a PC mainly for keeping the supplies inventories of the kitchen and bars. There is no need for a central server, as all systems run in the cloud and keep all the required information stored there. In addition to the main systems used, the PCs also contain catalogues of the inventories of the hotel goods such as provisions, machines and equipment for the restaurant and bars, and all types of cleaning and maintenance tools. This is done to make sure that adequate reserves of all the essentials are always present.

Each of the information systems used throughout the hotel has its own support which is acquired over the phone or by remote control of the PC in which the given information system resides. Additionally, the hotel has an internal network for communication between the electronic equipment along with an internet connection used by the customers. Both these networks are supported by a local IT business. Below follows a description of each piece of technology used in the hotel.

The PMS is the backbone of the hotel and the most vital piece of technology in its premises, used by the Operations Manager and the Head of Reception. It contains all the essential information for room management and their status (available or occupied). It can also produce a calendar view of the hotel with all future incoming customers and assigns room for cleaning by the housekeepers, thus creating their daily schedule (shift allocation). Held inside it are all the information of the customers along with who has breakfast or breakfast and lunch included in their reservation. Additionally, it prints receipts or invoices for customers' payments and calculates the residence tax. Finally, it does sales, revenue and profit reporting and provides statistical information about customers, thus being a powerful tool which provides knowledge to its users. The PMS is connect to the accounting software (outsourced) so that the receipts issued by it immediately appear to the accounting software well, making sure no extra work need to be done. It runs locally on the PCs of the Operations Manager and the Head of Reception, while also keeping a backup in the cloud in the case of a system failure.

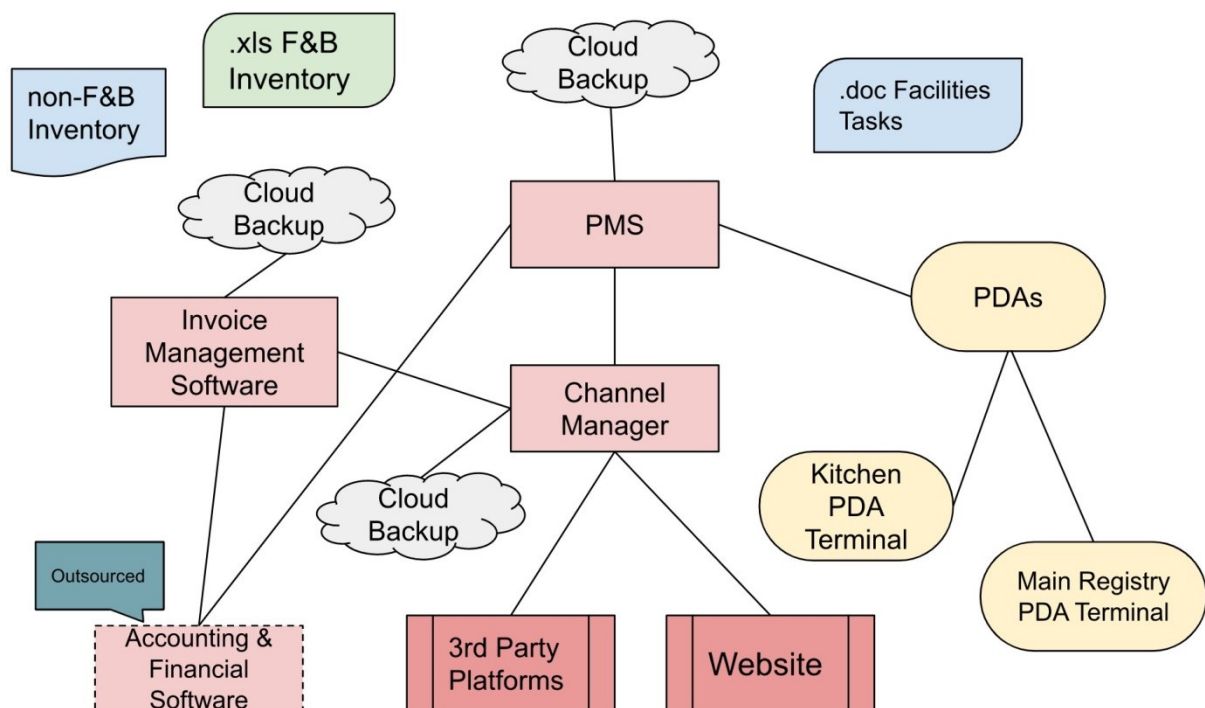
The Invoice Management Software is used by the F&B Manager in order to place orders to the suppliers and record the invoices of the hotel. It automates the ordering procedure by sending emails directly to the suppliers with the kind and quantity of supplies needed, while simultaneously keeping a record of all orders and their value and relevant information such as date of placement, name and category of the supplier, etc. It shows the method of payment of each invoice, what has been paid and which invoices are due and can also view the balance of payments. It also categorizes suppliers by product category, provides statistics of orders and does reporting by time/season, product and/or product category. Finally the system pushes all invoices to the accounting software (outsourced). The system runs locally on the F&B Manager's PC and keeps a backup in the cloud.



The Chanel Manager is used by the Operations Manager in order to update and monitor the prices for the accommodation across all online means of reservations. Using this system he can input the prices of rooms or apply a change to an existing one and it automatically sends them to the main hotel website, along with all partners for online reservations such as Booking, AirB&B etc. Additionally, it can open and close room availability according to the needs or in response to special occasions or events. Finally, the Chanel Manager pushes all online reservations to the PMS so that they can be recorded, monitored and later assigned to rooms. This system runs locally on the Operations Manager's PC and also has a backup the cloud.

In order to handle orders placed by the customers in the restaurant, bar and pool bar of the hotel, a total number of eight PDAs and tree order terminals are used. Six of the PDAs are held by the waiters who receive orders by the customers, one by the Operations Manager and one by the F&B Manager in order to monitor the situation and intervene if necessary, with the F&B Manager being also able to send and receive orders. One order terminal is placed in the kitchen and one at bar so that they can receive the orders and begin their preparation. The third order terminal is placed next to the main registry of the hotel in order to produce proof of order, which is kept for the length of the day, if ever needed. Finally, the bills of orders placed through the PDAs can also be sent directly to the PMS to be aggregated with the main room bill. The system runs by using the F&B Managers' PC as a local server and the PDAs and order terminals are connected to it using the hotels internal network.

### Technology Map



## Information

The information involved within the daily operation and processes of the hotel can be broken down in nine entities. These entities are described below.

### Customer Information

In this entity are placed all the information pieces concerning the customers of the hotel. A few examples include the following information:

Day of Arrival, Day of Departure, Number of Guests, Customers' Names and Surname, Date of Birth, Guest Nationality, Room Type, Guests Total Bill for Stay, etc.

### Room

In this entity are placed all the information pieces concerning the rooms of the hotel. A few examples include the following information:

Room Availability, Room State of Cleanliness, Room Type, Room Capacity, Room Price, etc.

### Restaurant/Bar Order

In this entity are placed all the information pieces concerning on order of a customer at the restaurant or the bar. A few examples include the following information:

Order Contents, Order Details, Order Bill Amount, Room Number, etc.

### Kitchen/Bar Inventory

In this entity are placed all the information pieces concerning the contents of the inventory of the kitchen and the bar. A few examples include the following information:

Supplies List, Amount of Each Supply, Supplies Expiration Dates, etc.

### Supplier Information

In this entity are placed all the information pieces concerning the suppliers of the hotel. A few examples include the following information:

Supplier Name, Supplier Email, Supplier Address, Supplier Category, Supplier Products, Supplier Due Invoices, etc.

### Invoice

In this entity are placed all the information pieces concerning the invoices of the hotel. A few examples include the following information:

Proof of Order, Supplier Name, State of Invoice

#### Linens Inventory

In this entity are placed all the information pieces concerning the linens inventory of the hotel. A few examples include the following information:

Types of Linens, Number of Linens, Number of Linens to Be Cleaned, etc.

#### Cleaning Supplies Inventory

In this entity are placed all the information pieces concerning the cleaning supplies inventory of the hotel. A few examples include the following information:

Types of Cleaning Supplies, Number of Cleaning Supplies, etc.

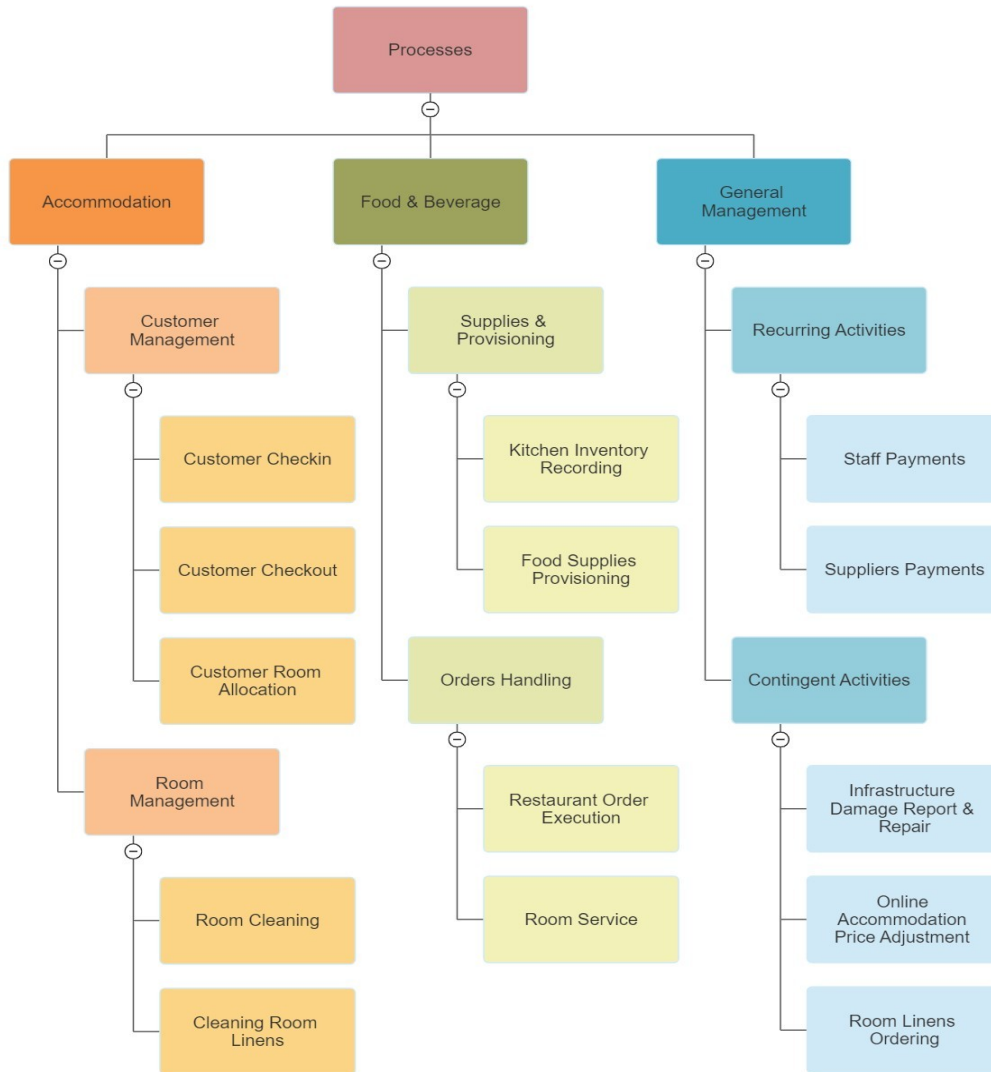
#### Staff Information

In this entity are placed all the information pieces concerning the staff of the hotel. A few examples include the following information:

Staff Salaries, Staff Names and Surnames, Staff Payments History, Staff CVs, etc.

## **Processes**

### **Processes Tree**



The entire business is being run in accordance to three grand processes. The first is the accommodation part, the second is the food and beverage part and the third is the general interest part. In order to keep these main aspects of the hotel into consideration, we will tackle them separately in the following analysis.

## Process Analysis

### Core process 1: Accommodation

Accommodation as a process delivers the main product of the hotel to its customers. It is a process which involves all the activities that allow the hotel to be in position to provide its customers the rooms along with all the miscellaneous accessories required for their stay. All the processes from the arrival of the customers at the hotel up until their departure live herein. These include the Main Processes of Customer Management and Room Management. The Head of Reception, the Head of Housekeeping and the Operations Manager all play major roles in this process as they are the main participants.

In this part, all the processes that allow for customers buying the accommodation product to receive it will be presented. This is accomplished with the following main processes:

#### Main Process 1.1: Customer Management

Customer Management is a process containing all sub-processes revolving around the customers as entities and their handling during their stay at the hotel. These sub-processes are the Customer Checkin, Customer Checkout and Customer Room Allocation. As a process it is run almost daily and possible multiple times during a day, according to the schedule of arrivals and departures.

##### a) Customer Checkin

When a customer arrives at the hotel, the following procedure is executed.

The customer arrives at the reception desk and contacts the Head of Reception. The customer provides the Head of reception with their name (or reservation number) and their ID to run an identification check. The Head of Reception searches in the PMS to locate the customer's reservation. After the reservation is found and the identifications match successfully, the Head of Reception hands over the key of the room to the customer and provides them with information about the whereabouts of their room and time window when breakfast is served.

##### b) Customer Checkout

When a customer's stay at the hotel comes to its end, the following procedure is executed.

The customer arrives at the reception desk and contacts the Head of Reception. The Head of Reception checks the PMS in order to calculate the total amount of money that the customer has to pay based on the number of days spent, the price of accommodation and the accommodation tax. To this amount he also adds any extra products, such as foods or beverages, the customer may have consumed during his stay at the hotel, which have been sent to the MPS via the PDAs of the waiters. Following that, the Head of Reception receives the proper amount from the customer. Finally, the Head of Reception prints the customer's proof of payment and the customer can depart from the hotel.

##### c) Customer Room Allocation

In order for new reservations to be allocated to rooms, the following procedure is executed.

The Operations Manager collects all the reservations he has received via email from the online platforms and his partners and emails them to the Head of Reception. Then, the Head of Reception

performs the room allocation by checking available rooms and dates of the departing and arriving customers. The Head of Reception also inputs all the necessary data concerning the reservations (date of arrival and departure, number of people in the room, names, dates of birth, nationality etc) into the PMS system to be available for reference. Finally, the Head of Reception informs the Operations Manager that all new reservations have been processed and points out any issues that may have arose, such as with room availability and conflicting dates.

#### Main Process 1.2: Room Management

Room Management is a process containing all sub-processes revolving around the maintenance of the rooms in a condition appropriate for a hotel. These sub-processes are the Room Cleaning and Cleaning Room Linens. As a process it is run daily according to the schedule which is created each day.

##### a) Room Cleaning

For all the rooms of the hotel to be daily cleaned, the following procedure is executed

The Head of Reception, after checking the PMS system, informs the Head of Housekeeping regarding which rooms need to be cleaned during the current day. The Head of Housekeeping allocates the rooms to the housekeepers in order to be cleaned (allocates the shifts). The Housekeepers then can begin cleaning the rooms and report back to the Head of Housekeeping once they are finished. Then, the Head of Housekeeping inspects the finished rooms to see if the job was carried out properly and points out any points that need to be redone. Finally, the Head of Housekeeping informs the Operations Manager about the completion of the work and about any issues that might have arose.

##### c) Cleaning Room Linens

For the hotel to have a supply of fresh sheets and towels, the following procedure is executed.

Every day, when the Housekeepers clean the rooms, they pick up the dirty linens, including bed sheets, pillow cases and towels from the rooms. They collect them in two designated spots, one in the main hotel building and another in one of the side buildings, inside small storage areas. Each Housekeeper keeps note of how many pieces of linens they have collected and communicates that number to the Head of Housekeeping. The Head of Housekeeping then performs a final count of all the pieces accumulated and checks if the numbers hold up to what they were told by the Housekeepers. The linens are then collected by a cleaning agency to be washed and are returned the following day along with the invoice for the service provided. Upon their arrival the pieces are counted once more by the Head of Housekeeping and are compared to what is mentioned on the invoice received by the cleaning agency. If everything has been accounted for correctly, the clean linens are stored back into the cupboards and the Head of Housekeeping delivers the invoice to the Operations Manager for registry into the Invoice Management Software.

#### Core process 2: Food and Beverage

Food and Beverage as a process involves all the endeavors which lead to the hotel being sufficiently prepared to offer foods and drinks to its customers. It is a process which involves all the activities that allow the hotel to order, store, transform and serve anything the customers order in the restaurant and bars. All the processes from the procurement of the supplies to the preparation of the food are included here. These include the Kitchen inventory recording, Food supplies provisioning and Restaurant order execution. The Chef, the Maître and the F&B Manager all play major roles in this process as they are the main participants.

In this part, all the processes that allow for customers buying Food and Beverage products to receive them will be presented. This is accomplished with the following main processes:

#### Main Process 2.1: Supplies & Provisioning

Supplies & Provisioning is a process containing all sub-processes revolving around the handling of supplies for the kitchen and bars of the hotel. These sub-processes are the Kitchen Inventory Recording and Food Supplies Provisioning. As a process it is run once per week according to the schedule or, on some occasions, whenever it is required.

##### a) Kitchen/Bar Inventory Recording

In order to make sure all necessary supplies are available, the following procedure is executed.

First, the F&B Manager informs the Chef that he must perform a check of all the provisions of food in the kitchen. The Chef uses a special recording Excel worksheet on his PC in where he keeps track of all the provisions, called the Inventory Recording. The Chef checks all storage areas (fridge, freezer, cupboards, cellar, larder) and counts each type of supply individually. During this stage, the Chef also checks the expiration dates and the current state of the products. If any have products have passed their expiration date or have spoiled in any way, the Chef discards them. Then, the Chef registers the final results into his worksheet. Finally, the Chef sends the final report back to the F&B Manager via email for inspection.

*The above process can be applied to the Bar by replacing the Chef with the Maître.*

##### b) Foods/Beverages Supplies Provisioning

Whenever a supply is close to running out, the following procedure is executed.

The Chef checks the inventory recording he has produced in his PC. The Chef detects which supplies are in shortage and writes them in a separate worksheet as a Supplies Shortages Report. Then, the Chef informs the F&B Manager of the supplies that need to be procured and of their required quantities by sending him the created report via email. The F&B Manager proceeds with ordering of products required using the Invoice Management Software. Once the supplies have arrived, the F&B Manager inspects if all of the ordered products are present and receives the invoice of purchase. The supplies are stored in their designated storage areas with the supervision of the Chef. Finally, the Chef updates his

inventory records on his PC to include the new supplies acquired and the F&B Manager inputs the new invoice in the Invoice Management Software.

*The above process can be applied to the Beverages by replacing the Chef with the Maître.*

#### Main Process 2.1: Orders Handling

Orders Handling is a process containing all sub-processes revolving around the handling of orders for the kitchen and bars of the hotel. These sub-processes are the Restaurant Order Execution and Room Service. As a process it is run many times a day whenever it is required.

##### a) Restaurant/Bar Order Execution

When a customer places an order at the restaurant, the following procedure is executed.

The customer tells the waiter what he wishes to order. The waiter inputs the items that the customer ordered and all relevant details (like specific sides, allergies etc) into his PDA. The order arrives at the order terminal in the kitchen. Then, the cooks read the order, gather all necessary ingredients and prepare it. Once the order has been prepared, the waiter brings it over to the customer's table. The customer finally pays for the order, or in the case that the customer also stays at the hotel, they can add the bill to the final amount of their stay.

*The above process can be applied to the Bar by replacing the Cook with the Bartender.*

##### b) Room Service

When a customer places an order using Room Service, the following procedure is executed.

The customer places an order by using the telephone provided in their room. The waiter who answers the call at the restaurant hall inputs the items that the customer ordered and all relevant details (like specific sides, allergies etc) ordered into his PDA. The order arrives at the order terminal in the kitchen. Then, the cooks read the order, gather all necessary ingredients and prepare it. Once the order has been prepared, the waiter brings the customer's order straight to their room. In the case of Room Service, the bill can't be paid on the spot and the amount is added to the final bill of the customer and paid for during the checkout.

*The above process can be applied to the Bar by replacing the Cook with the Bartender.*

#### Core process 3: General management

General Management as a process involves all the procedures that allow the hotel to function as a business and do not fall into the scope of neither the Accommodation, nor the F&B department. It is a process which is carried out whenever it is necessary or required by the schedule of the hotel. These processes include the Infrastructure damage report and repair, Staff payments and Online



accommodation price adjustment (not travel agencies). The main participants are the Operations Manager and the General Manager.

In this part, all the processes that apply to the general running of the business will be presented. This is accomplished with the following main processes:

#### Main Process 3.1: Recurring Activities

Recurring Activities is a process containing all sub-processes revolving around the handling of standardized management procedures of the hotel. These sub-processes are the Staff Payments and Suppliers Payments. As a process it is run mainly according to a stable schedule, apart from emergency situations.

##### a) Staff Payments

In order for the employees of the hotel to receive their salaries, the following procedure is executed.

On the 28<sup>th</sup> or 29<sup>th</sup> of each month the outsourced Accounting department sends to the Operations Manager a designated Excel worksheet via email containing the hotel's payments obligations along with the names, emails and banking accounts of the beneficiaries. The Operations Manager obtains the approval of the General Manager to precede with payments by printing the worksheet which then the General Manager signs. The Operations Manager then logs in to the online banking platform and inputs the order for the salaries to be deposited at the employees' bank accounts. The order takes approximately one workday to be executed. Finally, the Operations Manager updates his worksheet noting that this month's salaries were successfully paid.

##### a) Suppliers Payments

In order for the suppliers of the hotel to be paid, the following procedure is executed.

On the 14<sup>th</sup> and 29<sup>th</sup> of each month the Operations Manager opens the Invoice Management Software and checks which invoices are due and need to be paid off. He collects them and prints them in a separate worksheet. He obtains the approval of the General Manager in the form of his signature in the print. The Operations Manager then logs in to the online banking platform and inputs the required amounts and bank accounts of the suppliers that are going to be paid. The order takes approximately one workday to be executed. Finally, the Operations Manager updates the listings in the Invoice Management Software noting that the specific invoices were successfully paid.

##### b) Suppliers Payments

#### Main Process 3.2: Contingent Activities

Contingent Activities is a process containing all sub-processes revolving around the handling of emergency or unexpected events that might occur within the hotel. These sub-processes are the Infrastructure Damage Report & Repair, Online Accommodation Price Adjustment and Room Linens Ordering. As a process it is run only when it is required, or in case of an emergency.

#### a) Infrastructure Damage Report & Repair

If any damage is noticed in any part of the hotel, the following procedure is executed.

The Housekeepers inform the Head of Housekeeping of the damage sustained in a specific place, since they are the ones who mainly notice such incidents. Then, the Head of Housekeeping informs the Operations Manager about the damage. The Operations Manager inspects the damage himself to assess its urgency and decide when action needs to be made. The Operations Manager calls in the proper technician to resolve the problem. Finally, after the damage had been successfully repaired, the Operations Manager receives the bill from the technician which he inputs in the Invoice Management Software and proceeds with payment.

#### b) Online Accommodation Price Adjustment (not for travel agencies)

When a change to the shown price of a room is required, the following procedure is executed.

The Operations Manager logs in the Chanel Manager which is the main system containing all the prices of the rooms available through the online booking platforms. Once there, he locates the room category whose price needs to be altered. The Operations Manager then inputs the new prices and applies the changes he made to the system. The system then automatically sends the updated prices to all the online booking platforms and the in-house PMS system. Finally, the Operations Manager checks if the process was successful by looking up the room's price in one of the platforms themselves.

#### c) Room Linens Ordering

Whenever a great number of linens are damaged, or stained, the following procedure is executed.

The Head of Housekeeping realizes that the hotel linen stocks are running low. The Head of Housekeeping detects which linens are in shortage and writes them down in a piece of paper creating a list. Then, the Head of Housekeeping informs the Operations Manager of the linens that need to be procured and of their required quantities and hands the list over to him. The Operations Manager proceeds with ordering of linens required using the Invoice Management Software. Once the linens have arrived, the Operations Manager inspects if all of the ordered products are present and receives the invoice of purchase. The linens are stored in their designated storage areas with the supervision of the Head of Housekeeping. Finally, the Operations Manager inputs the new invoice in the Invoice Management Software.

### Process analysis with Archimate

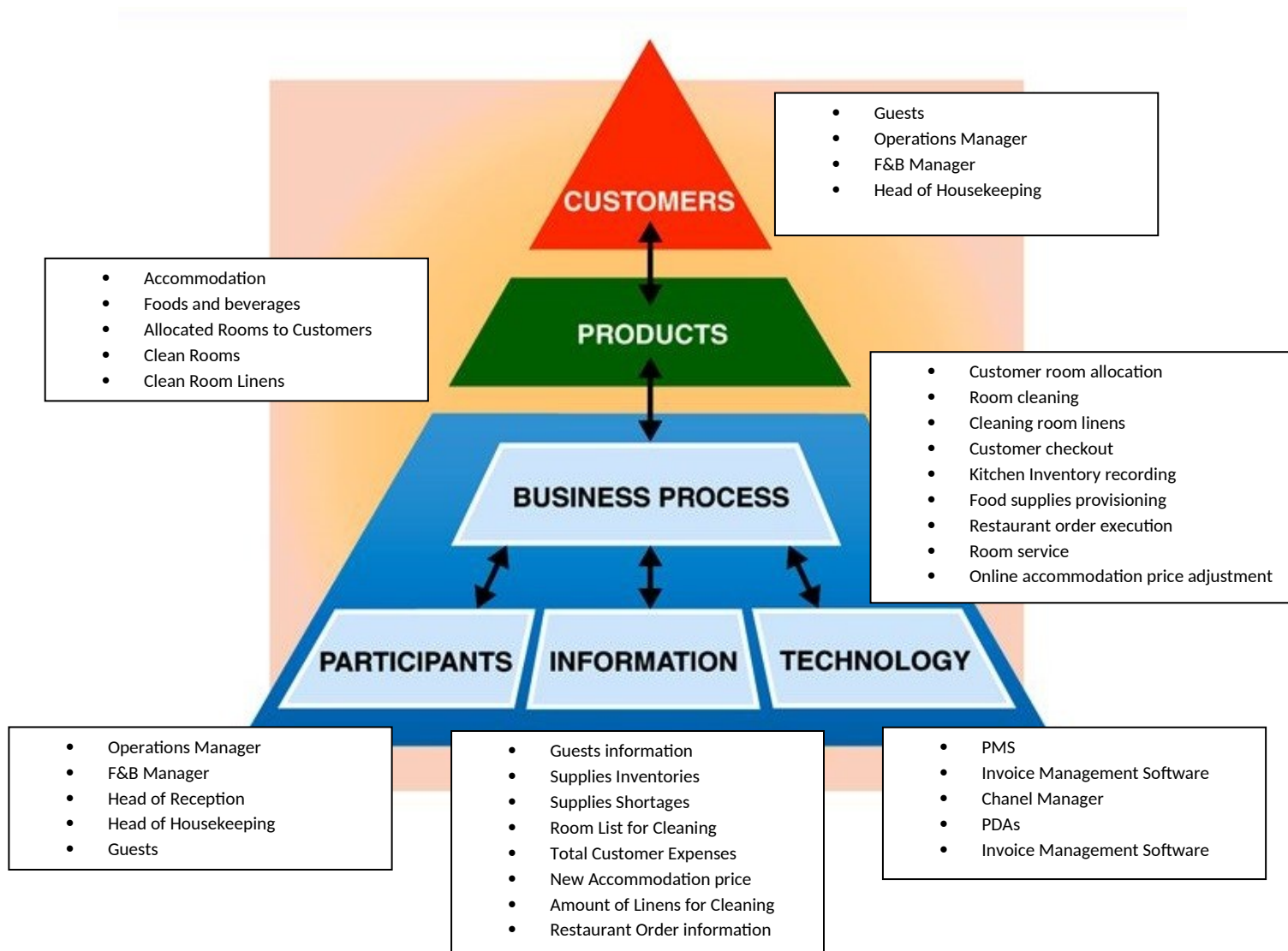
The core process "Food & Beverage" will be modeled using Archimate.

This specific process plays major role, as it is one of the two main sources of income of the hotel. A steady flow of provisions is necessary so that the customers can enjoy food and beverage products daily.

On top of breakfast and lunch which may be included in the price of the accommodation, a crucial point of income for the hotel is the dinner served in the restaurant and the drinks sold at the inside and pool bars. Thus, provisions must always be kept in check and new orders for ingredients that are running low must be placed as soon as possible to the suppliers. Additionally, managing the inventories of the kitchen and bar requires great organization and precision to detail, as healthcare and food safety systems obligation are in place. Finally, order completion for the restaurant/bar and the room service, in an orderly fashion adds great value to the hotel, as it allows the process

## Work System Snapshot (WCA Framework)

Having concluded the presentation of the AS IS, we can produce the Work System Snapshot for our system under study.



## Part Two: EVALUATION

Now that each part of the Work System has been presented in detail, on the second part of our analysis we are going to go forth and put its elements to the test. We will examine them under the scope of their Architecture, Performance, Infrastructure, Context and Risks. After interviewing four employees of the hotel we were able to come to a conclusion regarding the overall performance of the system under study.

### Architecture

From an architecture standpoint, all elements of the Work System seem to be adequately structured. Customers can easily have access to the products in order to use them and the prerequisites to obtain them are minimal, mainly an internet or telephone connection with which to book their room. The product 'Accommodation' itself is well constructed and easily accessed no matter the geographical restrictions of the customer and 'F&B' is easily available within the hotel premises. The service of the products is carried out in an unambiguous way with all the information concerning them being easily available to the customer and the employees. The hotel has a straight forward organizational structure with well-defined roles, thus all participants know exactly what part they fulfill in the greater picture, and what responsibilities they have rested upon them. Information and technology are well defined, organized and used throughout the hotel, although some minor details could be subject to improvement, but such matters will be discussed in the final part of this paper. Finally, Business Processes are well structured and effective in their objectives. They are integrated seamlessly with one another and not very complex as to create confusion to the ones carrying them out.

### Performance

From a performance standpoint, we have similar results for our Work System. Customer satisfaction seems to be at a high level as evidenced by the great occupancy levels that the hotel is enjoying in the past years. This fact is greatly backed up by the Product (mainly accommodation, which is the primary product in our case), as the quality of the rooms provided has increased by a huge factor after the hotel's recent renovation projects, while maintaining a competitive cost. A four-star rating has been attained by the hotel, as proof of its quality of products and services, as well as its conformance to

modern hospitality standards and regulations. The hotel's Participants also seem to be involved in a very productive way in their everyday tasks and labors. The good working conditions brought forth by the new generation of Managers, along with the very fact that tourism is a major source of income for the entire local area creates the necessary conditions for employees, partners and suppliers to work with a feeling of commitment towards the organization. Information and Technology fulfill their respective parts with ease and consistency, aiding the employees in their day to day tasks with the organization and automations they offer, despite their room for improvement which will be discussed in the final part of the analysis. Finally, the Business Processes contained within the Work System consistently produce the necessary results while, thanks to the low complexity of the system, being flexible enough to handle emergency situations or changes in parameters. Their rate of output and cycle time are satisfactory enough as to raise no alarms regarding the need for reconstruction of the processes.

## Infrastructure

The general infrastructure of all levels of the Work System seems to be at a minimum level of complexity. No high technical skill is required by the Customers in order to use the Products and the Products themselves are very straight forward and without a lot of room for implications. Participants require only their expertise on their respective fields in order to thrive within the organization. Information and Technology each have their respective policies and practices which are being followed and could potentially be revised in order to become even more efficient and embedded into the system.

## Context

From a standpoint of context, we can see that regarding the Product there is a big number of substitutes for the customer to choose from. Apart from hotels there are also 'Rooms to let' and Airbnbs competing for the same customers. From the part of the Customer, the entire experience of the hotel needs to be immaculate without any major issues arising during their stay in order to keep customer satisfaction to high enough levels in order to have returning customers for the next season. Additionally, the organization needs to keep in mind the Participants own incentives and possible job pressure in mind in order to make sure it doesn't sustain losses of employees, partners and suppliers. A lot of attentions must also be given to the Information and Technology used as policies and best practices regarding them change very often and keeping up with the best practices of the field is of great importance. Finally, Business Processes are well aligned with government regulations (safety and cleanliness) and industry standards (quality of accommodation, customer satisfaction) which, paired with a good organization culture, have given the hotel the chance to thrive in the local market. The hotel seems to have established itself firmly enough on all the above grounds to feel confident for the continuation of its successful operations.

## Risk

Given our analysis so far we can come to our conclusions regarding the risks of the organization. With the significant amounts of recurring customers, we can assume that customer satisfaction is at a very good level. This conclusion is also backed up by the many positive reviews the hotel has received in the past years, as the competition from the rest of the hotels in the surrounding area forces the organization to really try to minimize the risk of losing customers. The Products of the hotel seem to please customers as well. Apart from the already blooming accommodation product, there has been a big improvement to the F&B product which is reflected in the increased sales in the past three years. The risk of not mint condition bedrooms and bad food pushed the hotel to refine its products with attention to detail, thus avoiding losses in customers and not conforming to government and health standards. The Participants play a huge part in this case, as accidents and minor neglects can really damage the products offered by the hotel and consecutively its image. For this reason, all staff members undergo rigorous training at the beginning of their work at the hotel and all employee complaints are addressed by the Managers it time in order to ensure that they carry out their duties with the best morale possible. Information and Technology always pose some threats due to risk of equipment failure, data errors or incorrect use. These risks are mitigated by restricting access to information and technology only to authorized personnel. Yet, a few issues seem to arise regarding Information and Technology as some technology could be used in a much wider spectrum throughout the hotel giving much more reliable results and information could be stored in different formats, thus ensuring safety and better organization. Finally, Business Processes require a lot of attention during their execution in order to make sure all steps are performed correctly and without any errors in order to produce the required end result without any accidents occurring along the way. For these reasons, the processes of the hotel remain simple and clear in order to avoid this type of risk.

## KPIs

A number of KPIs are used throughout the organization in order to monitor aspects of the work essential to the good health of the hotel. Below follows a brief description of these KPIs categorized by the level of the Balanced Score card in which they reside.

## Financial

### **Revenue per available room (RevPAR)**

This is the measure used to analyze the average revenue for a certain period of time (usually given as a daily average), based on the income across all bookings. RevPAR creates a price metric for how

much revenue is being generated per room. A high RevPAR typically means a good occupancy rate as well as a high ADR.

Below follows the calculation:

$$\text{RevPAR} = \text{average daily rate} \times \text{occupancy rate} \text{ or } \frac{\text{total revenue from night}}{\text{total number of rooms available}}$$

### **Market penetration index (MPI)**

MPI is an important metric which shows the hotel's performance with respect to its competitors in terms of industry. If the score is less than 100, then it means the hotel is doing poorly and under the market average. On the other hand, if the score is more than 100, it shows that the hotel is performing better than most of its competitors.

Below follows the calculation:

$$\text{MPI} = \frac{\text{hotel occupancy \%}}{\text{market occupancy \%}} \times 100$$

### **RevPAR Room Type Index (ReRTI)**

The main aim of ReRTI is to analyze which room types are the most profitable, and assess whether promotions like free room upgrade can help or hinder the hotel. If the room type scores higher than 1, it means that the room type contributes proportionally more than it should based on the number of rooms that exist of that type. If the score is less than 1, it means that that room type is contributing proportionally less than would be expected.

Below follows the calculation:

$$\text{RevPAR Room Type Index} = \frac{\% \text{ total RevPAR} \times \text{number of specific room type}}{\% \text{ inventory} \times \text{number of specific room type}}$$

## **Customers**

### **Average length of stay (ALOS)**

This is a measure used to determine the occupant's length of stay by dividing the total number of occupied rooms by the number of bookings. It's important to note that the occupied spaces are counted in terms of the number of nights the guests stay at the hotel. The final score represents the average length of stay of the clients in the hotel. A higher score normally is a better indicator than a lower score, as it's an indicator of higher overall spend. An advantage to ALOS is that the hotel can use the data to make pricing decisions. For example, if there is a low ALOS, the hotel could increase the room rate for short stays or offer better deals for longer stays. The length of stay is a big variable in affecting the revenue for the hotel and also allows the hotel to have a general idea of the impression it leaves to its customers.

Below follows the calculation:

$\text{ALOS} = \text{total occupied room nights} / \text{number of bookings}$

#### **Percentage of returning customers (PRC)**

This is a measure derived by calculating the total nights spent in the hotel by customers who had visited the hotel the previous year. It provides a good incentive to understand if the customers enjoy their stay at the hotel enough in order for them to return the next year.

Below follows the calculation:

$\text{Percentage of returning customers} = \# \text{ nights spent of returning customers} / \text{total \# of nights in the current season}$

#### **Hotel performance by questionnaire**

Upon their checkout, the customers are given a small questionnaire to fill in. This provides the hotel with crucial information regarding the customers' satisfaction, along with pointing out areas of improvement. Unfortunately, we don't have access to the questionnaire itself. From the answers provided by the customers, one of the metrics produced is the hotel performance, which is measured as a mean score of 1-5 divided by last season's score. This is a simple KPI which give a well-rounded idea of the customer satisfaction. If this score is low at the beginning of the current season, the hotel understands that it needs to try harder in order to improve the ratings for the rest of the season.

Below follows the calculation:

$\text{Hotel Performance} = \text{mean of ratings} / \text{mean of ratings of last season.}$

### **Internal Business Processes**

#### **PerRC (Percentage of room completion)**

This metric concerns the room cleaning process. The total number of assigned rooms that a specific housekeeper finished cleaning within their shift is divided by the total number of rooms usually expected to be cleaned during a shift (usually 15 rooms per shift). This KPI proves very useful as it allows the Head of Housekeeping to evaluate the performance of the housekeepers.

Below follows the calculation:

$\text{PerRC} = \# \text{ of rooms cleaned within shift} / \text{target \# of rooms to be cleaned.}$

Usually we need 15 rooms to be cleaned in 7 hours, but it might depend on current hotel occupancy

#### **PerSOinT (Percentage of supplier orders arriving in time per supplier)**



This metric provides information regarding the suppliers of the hotel. One number is generated for each supplier. It is calculated by dividing the number of supplies orders that arrived late by the total number of orders. This KPI is essential as it allows the hotel to score its suppliers and rate their trustworthiness.

Below follows the calculation:

$$\text{PerSOinT} = \# \text{ of orders per supplier that arrived on time} / \# \text{ of total orders per supplier}$$

### **Kitchen efficiency**

This KPI receives data from the PDAs and the kitchen terminal of the PDAs in order to examine the overall speed in which the kitchen can handle the inflow of orders. It is calculated by dividing the orders which are currently being prepared by the kitchen and dividing them by the order still waiting to be executed. This number needs to stay below 1 to make the assumption that the kitchen is handling the orders successfully.

Below follows the calculation:

$$\text{Kitchen efficiency} = \# \text{ of orders being executed in kitchen} / \# \text{ of orders in backlog (to be executed)}$$

### Learning and Growth

#### **Employees' score**

At the end of each season the employees are given a special questionnaire to fill in regarding their experience at work during the last season. One of these metrics is given as a score (1-5) and it represents a general idea of their experience in the hotel. This number is then divided with the previous season's score in order to examine the changing perspective of the employees.

Below follows the calculation:

$$\text{Employees' opinion} = \text{employees' opinion} / \text{previous season's employees' opinion}$$

#### **Employee evaluation by supervisor**

At the end of each season all employees undergo evaluation by their supervisors (The Chef, Maître, Head of Reception and Head of Housekeeping). These results are then further discussed between the supervisors and the Managers (F&B Manager and Operations Manager) in order to produce the final score of the employees which has the form of a number ranging from 1-5. This score is then divided with the last seasons' score in order to check the evolution of the employees' performance.

Below follows the calculation:

$$\text{Employees' score} = \text{employees' score} / \text{previous season's employees' score}$$

## **Part Three: RECOMENDATIONS FOR CHANGE**

Having gone through the AS-IS presentation of the hotel and the Evaluation of the Work System, we can now safely proceed with our recommendations for change. The medium sized caliber of the hotel doesn't leave a lot of room to work with restructuring the business processes themselves as they seem to be effective as they are right now. Additionally, The F&B and General Management core processes seems to work very well in their current form. Their main and sub processed are very straight forward which, given their relatively small complexity, makes for a stable environment .Our main focus will be Information and Technology regarding the Accommodation core process. These two factors seem to greatly impact the effectiveness of the work done in that particular process, which also happens to be the main source of income for the organization, thus making an improvement on this front one of grave importance.

Information seems to suffer on two fronts, form of storage and dispersion. For the first issue we recommend all information imprinted on paper be replaced with standardized '.xls' or '.doc' files which will be better able to store the required information. In addition such files provide more security, reliability and retroactivity in case previous states of the information need to be inspected. Regarding dispersion, we recommend three PC terminals be installed one on each building of the hotel which will allow the employees who work the furthest from the main building, mainly the housekeepers, have access to crucial information right on the spot without any need to travel back and forth. These files would also result to much better organized information in a much cleaner form with all its relevant pieces present in one spot. This leads us to the next part of our intervention.

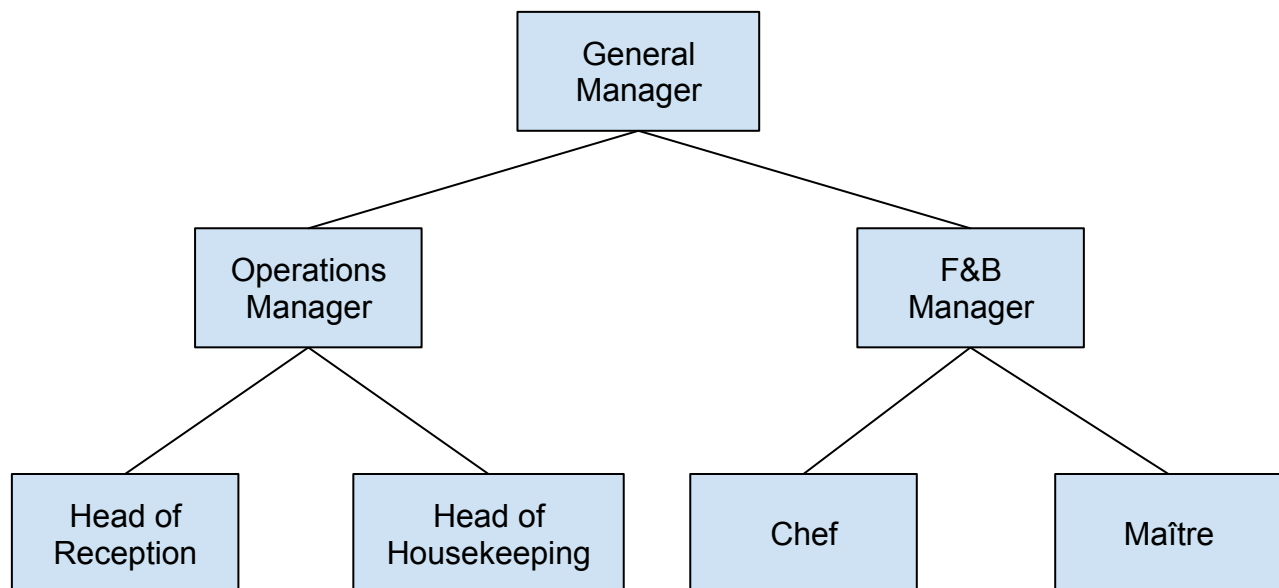
Technology needs to become more embedded into the processes. The addition of the two new PCs in the remote buildings of the hotel could be equipped with the necessary information systems in order to aid in the everyday works of the hotel. A copy of the PMS present in the PCs could show the state of the hotel rooms and those requiring cleaning while allowing the housekeepers to instantly update the state of the rooms once they are cleaned. Inside these PCs could also reside the Non-F&B Inventory '.xls' or '.doc' file which could be updated right after room cleaning is finished. These two updating steps of the room state and the inventory contents could also become part of the Room Cleaning processes, thus allowing said process to finish much faster and have its results communicated instantaneously. Finally, one more change we would recommend is to equip all housekeepers with a small portable personalized PDA which would show the rooms required to be cleaned by this specific housekeeper as well as allowing them to instantly update the room state, the number and types of linens to be cleaned and report any incidents like infrastructure damage right away.

The above interventions we believe will greatly improve both the effectiveness and the efficiency of the Accommodation core process. The introduction and assimilation of new up-to-date practices as the ones proposed would be of great importance if we consider the fact that the hotel is still in the process

of expanding, by constructing two additional building which will increase its total capacity by approximately 40%. In that time, the existence of these practices will allow the processes to catch on much easier with the new increased work load, thus allowing the hotel to keep the product quality that they offer to its high standards.

## Appendix

### Organization Chart



## **Process Tree**

### Core Processes

1. Accommodation
2. Foods and Beverages
3. General Management

### Main Processes

- 1.1 Customer Management
- 1.2 Room Management
- 2.1 Supplies and Provisioning
- 2.2 Orders Handling
- 3.1 Recurring Activities
- 3.2 Contingent Activities

### Sub-processes

- 1.1.1 Customer Checkin
- 1.1.2 Customer Checkout
- 1.2.1 Room Cleaning
- 1.2.2 Cleaning Room Linens
- 2.1.1 Kitchen/Bar Inventory Recording
- 2.1.2 Foods and Beverages Supplies provisioning
- 2.2.1 Restaurant/Bar Order Execution
- 2.2.2 Room Service
- 3.1.1 Staff Payments

3.1.2 Suppliers Payments

3.2.1 Infrastructure Damage Report & Repair

3.2.2 Online Accommodation Price Adjustment

3.2.3 Room Linens Ordering