

***THE IMPROVEMENT OF CHAMPETRE'S
BOOKING, MANAGING AND CONTROL
PROCESSES BY DESIGNING AN
INFORMATION SYSTEM***

by

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**Submitted in partial fulfillment of the requirements for
the degree of**

BACHELORS IN INDUSTRIAL ENGINEERING

in the

**FACULTY OF ENGINEERING, BUILT ENVIRONMENT AND
INFORMATION TECHNOLOGY**

UNIVERSITY OF PRETORIA

PRETORIA

OCTOBER 2009

Executive Summary

Champetre is an events catering business that specialises in on- and off-premise catering and runs a day spa at their facility. This promising business began in February 2009, and management has identified a need of improving certain business processes ever since.

Efficient booking procedures and processes, which involve managing and controlling resources, are not in place. Information is not strategically used as a key resource within the organisation. Many of the processes which could be automated are carried out manually and ineffective computer software is currently being used.

The aim of this project was to identify specific problem areas or areas of opportunity relating to Champetre's booking procedure as well as their resource management and controlling processes. An information system can assist in improving the identified areas of opportunity, while incorporating the client's detailed requirements.

A decision was taken to custom build an information system, as the purchasing of a commercial software package is too costly for the client's current budget. The FAST methodology was selected to assist in carrying out the project. The current system was analysed to identify specific problems and customer requirements. System models were constructed, from which a conceptual information system could be built using the appropriate software. The conceptual system was tested and can be fully implemented at Champetre in the future.

The proposed system will improve Champetre's current processes which could in turn result in higher profit. The automated system will allow system users to spend more time dealing with customers and focusing on the value-adding processes of the business.

This report comprises four chapters. The first chapter includes a background on the catering industry and Champetre itself and a description of the project. A literature study was carried out in Chapter 2, which discusses different approaches which could have been followed to complete the project. The third chapter includes some of the analysis and design phases as stipulated by the FAST methodology. Chapter 4 discusses the last phases which were carried out in order to complete the project successfully.

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CHAPTER 1: Introduction

This chapter discusses the background of the hospitality and catering industry and provides an introduction to Champetre. A description of the project is also discussed in detail.

1. Background on the Hospitality and Catering Industry

The catering industry is a relatively new industry. In the past, food was only prepared for feasts and celebrations where kings and noblemen were involved. The catering industry in America is still young, and started after World War 2 when companies who provided food for the soldiers had nothing to do when the war ended. Since then, the catering industry has been growing rapidly in the majority of countries, due to the fact that the economy is growing and people are becoming wealthier. The demand for catering services, which was previously reserved only for the very rich, is now booming in the beverage and foodservice industry (www.educationcenteronline.org)

Catering can be classified as social catering (comprising 25% of all catering sales) and corporate or business catering. Social catering would typically include birthday parties, weddings, charity events, reunions and similar events. Business catering, on the other hand, includes events such as product launches, corporate sales meetings, awards banquets and general conferences. (Shock et al, 2001)

Any catering department should have a set of objectives by which they should quantify the provision of their services.

Shock et al (2001:6) has compiled the following set of objectives:

1. A fair profit on invested assets should be earned in the catering organisation;
2. An adequate volume of sales should be generated to cover expenses and still obtain a fair profit;
3. Customer satisfaction should be delivered;
4. Consistent service and quality should be provided;
5. The organisation should communicate a specific image;
6. A dependable reputation should be developed;
7. A flexible reputation should be developed;
8. The organisation should stay within a budget.

2. Background on Champetre

2.1 General Background and History

Champetre, which is the French term for “out in the country”, is an events venue situated in a Conservation Park thirty minutes away from Pretoria. This park forms part of the village of Modderfontein, formerly the home of explosive manufacturing in South Africa. The village originated in 1894 and most of the buildings and houses have been restored. Champetre’s main century old building called Isidleke (Zulu word for “the nest”) was originally established as an environmental education and awareness centre for the benefit of the local communities and of the African Explosives Company Incorporated (www.champetre.co.za).

Champetre, which opened in February 2009, specialises in on-premise catering for weddings, conferences, birthday parties, picnics and other functions. Furthermore, they have an off-premise catering function and also run the Champetre Day Spa on their premises. Customers can also make reservations to dine at the Champetre Restaurant which is open on Sundays.

They have a variety of areas available where events can be hosted. They have beautiful gardens perfect for an afternoon picnic, an outside amphitheatre, The Old Barn with an upper level which usually caters for weddings and conferences, and Dobb’s House which caters for smaller functions. A marquee can also be set up at the request of the client.

2.2 Organisation Structure

Figure 1 is a representation of Champetre’s Organisation Structure.

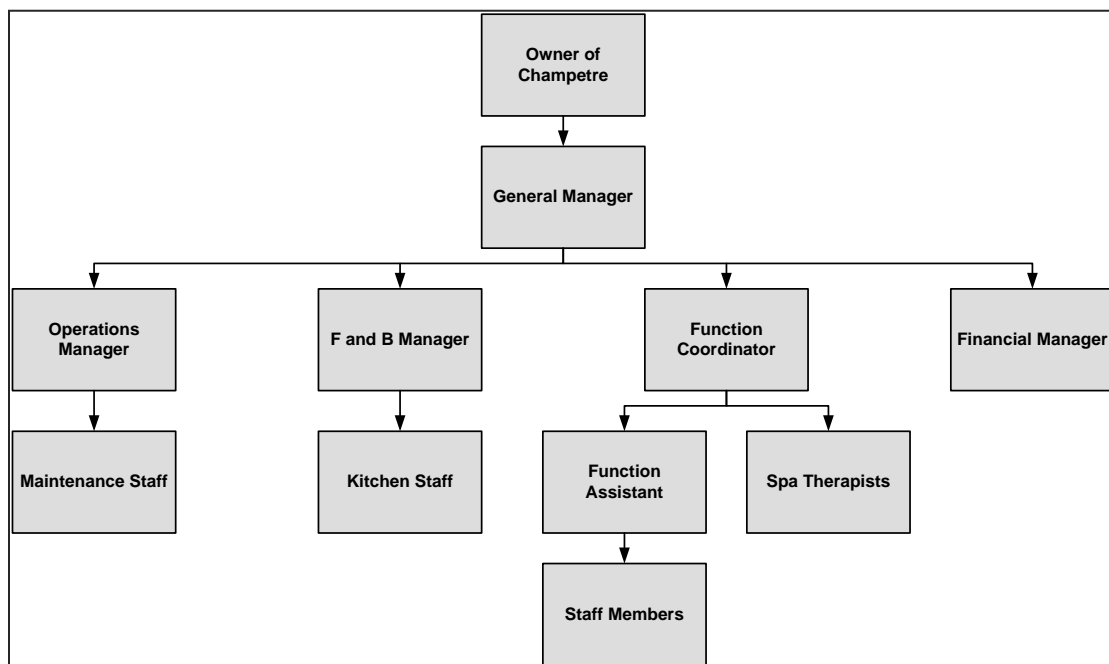


Figure 1: Organogram

The roles of the high-level managers are described in the following paragraphs:

Owner and General Manager

The role of Owner and General Manager is fulfilled by a single individual at Champetre. This person must ensure that all business processes take place as stipulated. The Financial Manager, Function Coordinator, Operations Manager and F&B Manager are required to report to the General Manager on a regular basis regarding their specific functional areas.

Financial Manager

The Financial Manger is responsible for bookkeeping at Champetre. This individual is required to monitor all payments and receipts on a daily basis.

Function Coordinator

The Function Coordinator's main responsibility is to manage all the events that take place at Champetre. This includes the management of people, stock and other resources. The Function Assistant and Spa Therapists are required to report to the Function Coordinator. The Function Assistant fulfils a more secretarial role and assists the Function Coordinator in organising events.

Operations Manager

The Operations Manager is responsible for general maintenance and managing of staff.

Food and Beverage Manager

The F&B Manager runs the kitchen activities and manages the kitchen staff. This individual must ensure that the required food and beverages are available for each event as requested.

3. Problem Description

Kendall et al (1995:48) stated that "Improvements to systems can be defined as changes that will result in incremental yet worthwhile benefits." Thus, during the problem discovery phase, both problem areas as well as areas of opportunity were identified.

The following list for possible system improvements was compiled by Kendall et al (1995:48):

- Speeding up a process;
- Streamlining a process through elimination of unnecessary or duplicated steps;
- Combining processes;
- Reducing errors in input through changes in forms and VDT screens;
- Reducing redundant output;
- Improving integration of systems and subsystems;
- Improving worker satisfaction with the system;
- Improving ease of customer, supplier, and vendor interaction with the system.

A thorough problem analysis was conducted which is included in Chapter 3.

Even though Champetre is a young organisation, they currently organise an average amount of 5 events a week. The organising process can become very complex, as they become more popular in the catering industry. The main problems within the project scope, in terms of bookings, resources and information are the following:

Problems encountered during bookings

Currently, all of Champetre's bookings are processed manually and with the aid of Microsoft Word and Microsoft Excel. It involves high volume quantities of paperwork, and excessive time is spent in capturing data on the above mentioned software. Time spent doing tedious computer work could rather be spent dealing with the customers themselves.

Problems in terms of resources

Champetre has a tremendous amount of resources which must be managed and controlled on a day-to-day basis. These resources include staff, equipment, consumables, money, etc. The current way of managing and controlling these resources is inefficient.

Information-related problems

Proper reporting could result in more effective resource management for events. Currently, information is not necessarily in the appropriate format for instantaneous access. With a proper system in place, visibility on required resources will be much more accessible.

4. Project Aim

The aim of the project was to:

- Analyse Champetre's booking procedure and the processes related to managing and controlling the resources for an event;
- Identify the requirements for a new and improved system;
- Design and build/purchase an information system which will aid in the:
 - Efficient processing of bookings;
 - Efficient management of resources for an even;
 - Efficient control over resources and stock;
 - Efficient input, processing and output of information;
- Implement the conceptual system and compile a user manual.

5. Project Scope and Deliverables

The project's focus was the improvement of Champetre's booking procedure as well as the improvement of its managing and control processes for an event. The financial aspect of the business was not analysed in depth, since appropriate financial software is currently used efficiently. The main deliverables of the project were the following:

- A thorough Literature Study on the relevant concepts;
- A detailed problem and requirements analysis;
- Detailed data and process models of the proposed system;
- A conceptual system;
 - The physical construction focused only on a specific part of the system.
 - Forms and reports were constructed only for the specific section.
- Guidelines for the implementation of change management at Champetre;
- A system user manual.

6. Expected Benefits

The following expected benefits were identified:

a. An Automated System

- An automated system will result in minimal manual- and paper-work. Thus more time can be spent in value-adding processes and dealing with customer needs.
- Reporting can be done much more efficiently.

b. Improved Resource Management and Control

- Champetre will be able to manage and control their resources better as the appropriate information system will aid in performing these functions efficiently.

c. A Large Customer Supplier Database

- The proposed system will make data capturing much more effortless.
- Customer and supplier details will be easily accessible in the required format.
- This could result in improved customer and supplier relations.
- A backup strategy will also be set in place, which will ensure that long term relations are kept with clients.

d. Cost Savings

- The efficient management and control of resources could expectantly result in cost savings.

e. Increased Profit

- Less time will be spent on tedious data capturing and the detailed planning of resources. Thus more time can be spent in dealing with the value-adding processes of the business. This could result in increased profits.

7. Expected Challenges

The following expected challenges were identified:

a. Insufficient Finances

- As Champetre only opened in February 2009, their budget is limited in terms of obtaining an information system.

b. Lack of Skill

- If new software needs to be studied, a concern exists whether the system builder will acquire the necessary skill to operate the new software in the scheduled time.

c. Managing Change

- As the proposed system will be new to the users, the change will have to be managed carefully.
- Change management tools and techniques will have to be applied to aid users in dealing with the change.
- It is important for management to buy into the proposed system to ensure a smooth transition.
- Users will have to be properly trained so that they can operate the new system with confidence.

d. Lack of user friendliness

- It is essential for the proposed system to be user friendly.
- A thorough requirements analysis and physical design will ensure a user friendly system.

e. Not meeting the deadline

- The building of the system may take longer than the scheduled time, thus a concern exists whether the client's need would be satisfied within the requested time.

CHAPTER 2: Literature Review

The aim of this chapter was to carry out a thorough literature study on specific subjects by gathering relevant information from different sources. This research ensured that the relevant tools and techniques were used in the project approach.

The following areas were studied:

- The concept of information systems
- Buy or Build Approach
- System Development Methodology
- System Analysis approach
- Problem and Requirements Analysis
- Process Modelling
- Decision Analysis
- Implementation and change management

1. The concept of Information Systems

1.1 Information

Information is not only a by-product of executing business processes but is also a key resource of an organisation. In the same way that managers manage resources, they should manage information correctly in order to optimise the usefulness of this type of resource. It is important to realise that an organisation must use information strategically as a resource in order to achieve competitiveness. (Kendall et al, 1995)

1.2 Information Systems

Bentley et al (2007:6) state that “information systems in organisations capture and manage data to produce useful information that supports an organization and its employees, customers, suppliers, and partners.”

Brookes et al (1982) use the term instrumentation to describe an organisation’s information systems. Decision makers are informed about certain variables and their changes which represent the current situation of the organisation. Brookes et al (1982) state that information systems can encompass a mixture of computer as well as manual applications.

1.3 Information Systems in the Catering Industry

According to NFS Hospitality and Leisure IT Solutions, the conference and events industry is experiencing many changes today. Venues are challenged by competitors and clients to deliver outstanding service, facilities and catering.

Information systems have become very popular in the catering industry. In order to gain competitiveness, it is essential for any catering business to have such a system. "An events management software package responsive to current trends in the industry allows venues to spend less time on computers and more enhancing the customer experience." (www.ungerboeck.com)

Shock et al (2001) mention the fact that many benefits can be gained in the catering industry by information systems and the computerization of business processes. A computer system could be very costly, and to justify the implementation of a computerised information system, it should benefit the organisation and clients in many of the following ways (Shock et al, 2001):

- Improved client services;
- Streamlined paperwork and data handling;
- Improved control over operations;
- Generation of reports;
- Reduced cost of paper supplies;
- Increased sales revenue;
- Increased productivity of employees;
- Job enrichment, which results from minimized repetitive tasks;
- Ability to keep sales and expense data on file.

Shock et al (2001) state that it is beneficial for catering offices to be computerised. But the fact that offices are computerised does not necessarily mean that business processes are optimised. New programs are developed and software packages are constantly upgraded which ultimately improves business processes in the catering industry. There are many off-the-shelf software packages which can be used in the catering industry which will be discussed in the next section.

2. Buy or Build Approach

One of the most critical decisions to make during the early stages of development is whether to buy a commercial software package or to custom build an information system. This decision will influence the project approach methodology. Thus, all options must be carefully studied in order to make the most feasible choice.

Research showed that there are a number of commercial software packages on the market which could possibly meet Champetre’s needs. The Hospitality Property Management Software Finder was used to filter applicable software packages according to search criteria. The results which were obtained are included in Appendix A. From these, the more feasible packages were investigated. Table 1 provides a summary of the packages under investigation.

Table 1: A description of software solutions

Software	Description
PSD Hospitality Software Suite	The PSD Hospitality Suite is a comprehensive, secure and user-friendly business management system to help you stay in control of all aspects of business management. The PSD Software Suite facilitates real-time bookings, double entry accounting to debtors, creditors and general ledger, stock-management systems, staff, task and activities management and much more. (www.innkeeper.co.za)
Execu/Tech Software	A variety of Execu/Tech Software modules are available from which customers can select according to their specific needs. Execu/Tech’s Catering / Event Management module provides the tools an organization will need to make sure that every group’s requests are taken care of. One can designate departments from catering to valet to sales to housekeeping and print the information each department needs to keep everything on track. (www.execu-tech.com)
NFS Hospitality and Leisure IT solutions	The NFS range of highly software solutions lets you run a cost-efficient operation while providing the best possible customer service. NFS offer packages from scheduling, hotel, event management and/or leisure solutions. (www.nfs-hospitality.com)

The proposed software solutions were carefully studied and the following information system packages are proposed:

1. NFS Rendezvous Suite
2. Execu/Tech Catering/Event Planning Suite
3. PSD: Client Manager, INNKeeper and Spa Scheduler Suite

Bentley et al (2007Pageno) define feasibility as “the measure of how beneficial or practical the development of an information system will be to an organization.” A feasibility analysis was done to determine the feasibility of the implementation of one of the proposed systems. All three proposed systems are very similar in terms of functionality and cost. Therefore the feasibility analysis can be applied to any one of the three systems.

Table 2: Feasibility Analysis of proposed packages

Feasibility Criteria	
Operational Feasibility	Since an in depth requirements analysis has not yet been done, it is difficult to test how well the proposed systems will meet these requirements. These systems are flexible and can offer a variety of solutions. According to the basic identified needs of Champetre, the proposed systems are operationally feasible.
Cultural Feasibility	Management recognises the need for an information system, thus they support the proposed systems. The installation process of the proposed systems are accompanied with training for the system users. Therefore, the system users feel comfortable about the implementation of a new system.
Technical Feasibility	The proposed systems are very expensive to acquire. The cost for one of these systems start at more or less R50 000 which includes only the minimum features. Cost for training, which is compulsory, as well as annual maintenance costs are additional to the purchasing of the software. This is not within Champetre’s budget for at least the next 4 years. Thus, the proposed systems are not technically feasible.
Economic Feasibility	The benefits which could be gained from the proposed systems, does not justify the costs associated with the installation of one of the proposed systems considering Champetre’s current financial situation.

Based on the feasibility analysis, it was found that the proposed systems are not technically or economically feasible. The main reason being that the purchasing cost for one of these systems start at R50 000. Therefore, it is required that an information system be custom built in order to minimise cost, consequently achieving technical and economic feasibility. The following section discusses the types of methodologies which can be used to design, build and implement the information system.

3. System Development Methodology

A system development methodology is essential for the development of information systems. A methodology ensures that every aspect is covered and that the risk associated with taking shortcuts is reduced. The methodology also provides the necessary documentation and findings for any individual to retrieve and understand if required at a later stage. (Bentley et al, 2007)

Various system development and analysis methodologies are used by system analysts. This can either be home-grown or purchased. The more commercial methodologies include Architected Rapid Application Development (Architected RAD), Joint Application Development (JAD), Structured Analysis and Design, Dynamic Systems Development Methodology and Rapid Application Development (RAD) amongst others (Bentley et al, 2007).

For purposes of this project, the FAST (Framework for the Application of Systems Thinking) Methodology will be applied in developing the information system. Bentley et al (2007) developed this non-commercial methodology by combining best-practices from a variety of reference and commercial methodologies. The reason that FAST is so effective is that it is flexible to suit almost any strategy or project.

Figure 2 illustrates the phases of the FAST System Development Methodology as defined by Bentley et al (2007). Some of these phases will be discussed in detail in the next section.

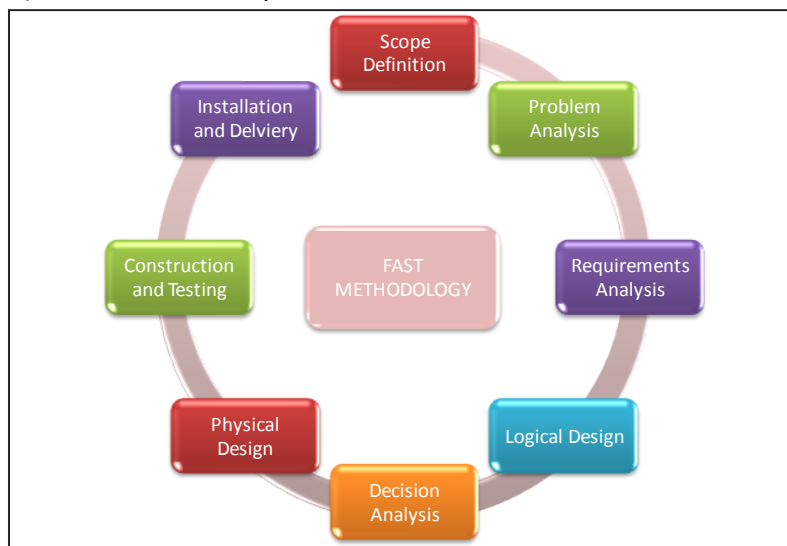


Figure 2: FAST Methodology (Bentley et al, 2007)

4. System Analysis Approach

Brookes et al (1982:86) define system analysis as “the study of a system’s problems, including the identification and analysis of various alternative solutions.” In addition to Brookes’ definition, Kendall et al (1995) state that during the system analysis and design phase, improvements are analysed, designed and implemented with the aid of a computerised information system. On the other hand, when looking at a catering approach of system analysis, Tesone (2006:19) identified the following categories which should be analysed:

- Information needs
- System needs
- Products
- Activities
- Capabilities of systems
- End users to get the job done

Tesone’s approach of system analysis (Tesone, 2006) is very similar to the FAST Methodology’s application of system analysis. The FAST Methodology’s system analysis consists of the following phases (Figure 3):



Figure 3: System Analysis Phases

5. Scope Definition, Problem and Requirements Analysis

5.1 Scope Definition

According to Bentley et al (2007), a current system always exists, regardless of whether it makes use of information technology or not. During this phase the existing system is studied and analysed in order to get a clear understanding of the current problems.

Various techniques can be used to define the scope for the system. Bentley et al (2007) recommend using a PIECES analysis which identifies problem areas and areas of opportunity. These areas are quantified in terms of the need to improve Performance, Information, Economics, Control, Efficiency and Service (PIECES).

A Context data flow diagram is also very useful in understanding the system and its respective interactions.

5.2 Problem Analysis

Mind Tools recommend using techniques which take on a structured and methodical approach to identify problems. These techniques and their functions are included in Appendix B.

The most appropriate techniques were identified and are as follows:

- ***Fishbone Diagram***
This technique is used to find the root causes of specific problems. A brainstorming approach is used to identify all possible problems and not only the obvious ones.
- ***SWOT (Strengths, Weaknesses, Opportunities and Threats) Analysis***
This analysis is used to identify the organisation's strengths and weaknesses and also aid in discovering opportunities and threats the organisation might face.

5.3 Requirements Analysis

A development project's success depends on how well a Requirements Analysis is conducted (Abran et al, 2005). A requirement can either be a business requirement or a technology requirement. During this phase, the analyst discovers what the client's business requirements are, not taking information technology (IT) requirements into account yet. See Figure 4.

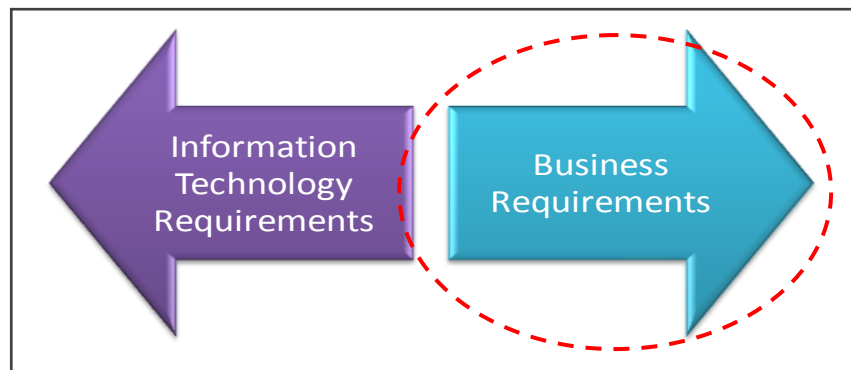


Figure 4: Business- and IT-Requirements

Bentley et al (2007) propose the following fact-finding techniques, which correlate with the techniques recommended by Kendall et al (1995).

- Sample current forms, documentation, files etc.;
- Research appropriate literature, investigate “best practices” etc.;
- Observe the existing system environment in action;
- Conduct surveys and make use of questionnaires;
- Interview relevant staff, users and management.

Requirements can be classified as functional and non-functional requirements. The functional requirements include types of inputs, outputs and processes as well as stored data. Non-functional requirements are those that can be associated with performance, user-friendliness, training needs and costs. (Bentley et al, 2007)

6. Logical Design

During the logical design phase, the business requirements which have been identified during the requirements analysis are translated into system models. The famous concept that a picture is worth more than a thousand words motivates the significance of constructing system models. These models ensure that requirements are valid in terms of consistency and completeness. Logical models only focus on the business requirements and do not include any technical applications. (Bentley et al, 2007)

7. Decision analysis

During the decision analysis phase, a number of critical choices must be made. Some of the questions which should be answered, as defined by Bentley et al (2007) are:

- Which parts of the system should be automated?
- Should software be built or purchased?
- Which commercial software packages are available?
- Which program should be used to develop a custom-built system?

As it has already been established that a system will be custom-built for this project, more research has to be done on choosing the best software for the building phase.

Each database problem requires a different solution. The key is to find the most appropriate solution which meets the requirements of the client while taking any possible constraints into account (Chung, 2009).

Figure 5 shows a comparison between the cost of installing a specific type of platform and the amount of database solutions found in a large business (Chung, 2009). It is clear that the larger platforms are much more expensive than the basic platforms (for example MS Excel or MS Access). The demand for larger platforms is also less as these are only required by very large companies.

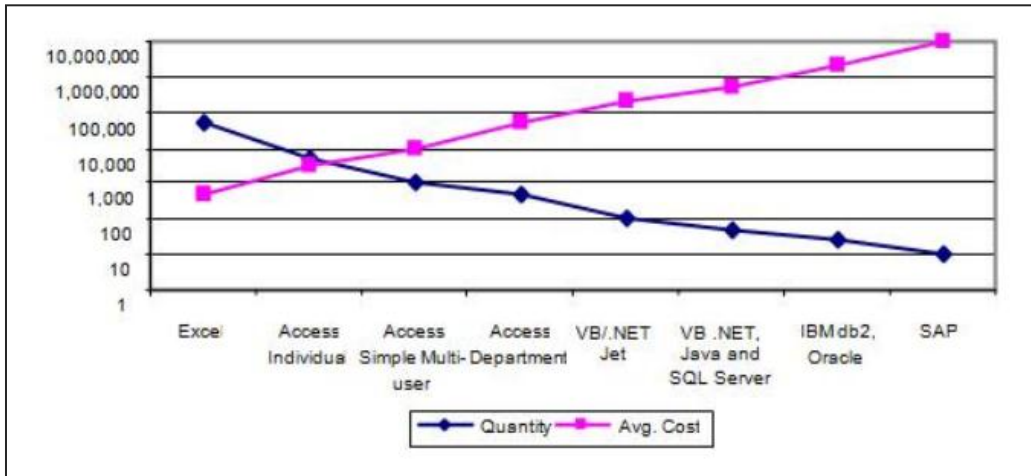


Figure 5: Database Solutions Graph (www.fmsinc.com)

Considering Champetre’s basic requirements and size, MS Access could be a successful candidate solution. MS Access is cost-effective and for this reason, amongst others, it is considered the most popular database software (Chung, 2009).

Reasons for using MS Access 2007: (www.fmsinc.com/TPapers/genaccess/DBOD.asp)

- MS Access 2007 can support up to 50 users which is sufficient for Champetre’s requirements.
- MS Access 2007 can support up to 2GB of data. As Champetre is a relatively small organisation, 2GB is sufficient.
- MS Access 2007 provides the most cost-effective solution complying with Champetre’s budget.

Chung (2009) stated that most databases created in MS Access will either go extinct or run smoothly forever. It makes no sense to spend an enormous amount of money on an expensive solution, when MS Access offers a cheaper and simpler solution. If an organisation outgrows MS Access, there are ways in which they can migrate to a larger platform like SQL Server.

8. Physical Design

The physical design phase is very similar to the logical design phase as it also involves the construction of system models from customer requirements. According to Bentley et al (2007) the aim of this phase is to include the information technology (IT) requirements within the system model. See Figure 4. These models are used to implement the database, interfaces, required networks and programs.

9. Construction, Implementation and Change Management

9.1 Construction

The aim of the construction phase, as defined by Bentley et al (2007), is:

- The development and testing of a functional system which meets business as well as design requirements;
- To implement interfaces between the existing and new system.

Bentley et al (2007) compiled the following set of tasks for executing the implementation phase:

- a. Networks must be built and tested;
- b. Databases must be built and tested,
- c. New software must be installed and tested;
- d. New programs must be written and tested.

9.2 Implementation

Operation of the constructed system must be achieved during the implementation phase. It is important to ensure a smooth transition to the new system.

The following tasks were identified by Bentley et al (2007) for the implementation phase:

- a. A system test must be conducted;
- b. A conversion plan must be prepared;
- c. The databases must be installed;
- d. System users must be trained;
- e. Conversion must take place to the new system.

9.3 Change Management

Pendlebury et al (1999) emphasise the fact that organisations should adapt to the changes in markets and customer requirements. Pendlebury et al (1999) believe that “leadership is the essence of successful change.”

Ten keys to change were identified by Pendlebury et al (1999). These keys will assist in maximising the possibility of success as well accelerating the transition process.

Key 1: *Define the vision*

The domain of change is defined by the vision and identifies the main issues which result from change.

Key 2: *Mobilise*

A comparison is made between the current situation and the defined vision.

Key 3: *Catalyze*

The organisation is set up by the canalization process which stimulates change. The necessary people and resources must be made available.

Key 4: *Steer*

This involves the planning and managing of the change process. It ensures that the process is kept on track throughout the implementation of change.

Key 5: *Deliver*

The process change is carried out, i.e. implementation of the vision takes place.

Key 6: *Obtain participation*

The entire workforce must take part in the change that takes place.

Key 7: *Handle the emotional dimension*

As individuals can easily interfere with the changes which take place within an organisation, they should be handled carefully to ensure a successful change implementation.

Key 8: *Handle the power issues*

Power issues must be identified and handled carefully to maintain the balance of power in the organisation.

Key 9: *Train and coach*

Sufficient training and coaching of individuals play an important role in the change process.

Key 10: Communicate actively

To ensure consistency throughout the change process, effective communication must take place.

Cook et al (2004) use a different approach in implementing change. “The most important qualities of effective change leaders are not the disconnected set of skills or knowledge that they possess. Rather, these qualities relate to four different intellects.” Refer to the “Change Compass” as depicted in Figure 6. Each intellect carries the same weight, thus if one of the intellects is overlooked, the compass will become unbalanced. Figure 7 provides more detail on what each intellect.

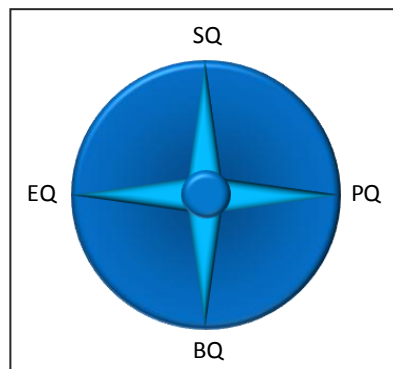


Figure 6: Change Compass (Cook et al, 2004:5)

Four Intellects for successful change

- SQ: Spiritual Intelligence
- PQ: Political Intelligence
- BQ: Business Intelligence
- EQ: Emotional Intelligence



Figure 7: Change Leadership Intellects (Cook et al, 2004:6)

Change is never easy and everyone in the organisation will be impacted by the implementation of a new system. It is therefore essential to use the right tools and techniques to aid in the transition phase.

CHAPTER 3: Project Analysis and Design

The FAST Methodology framework was used to analyze the current system and system requirements from which the conceptual information system was built.

The following phases were executed and the results obtained are included under each phase heading:

1. Scope Definition

The scope of the project was defined in terms of the following:

- Which **basic functions** take place;
- The **As-Is** business processes;
- Which types of **data** are being used in Champetre's current system;
- How the current system **interacts** with other departments, users and systems (Bentley et al, 2007);
- A PIECES analysis in order to identify basic problem areas and areas of opportunity.

1.1 Basic Functions

The basic functions which take place at Champetre are the following:

- *Booking Function:* Bookings are made for a variety of events on a daily basis.
- *Managing Function:* Events are managed from the time they are booked until the events are executed.
- *Control Function:* Limited control processes are currently implemented.

1.2 As-Is Business Processes

The above mentioned basic functions vary slightly for different events. The following use case narratives depict the general As-Is processes which take place on a daily basis at Champetre.

Table 3: Request Quote Use Case

Use Case	<i>Request Quote</i>
Description	A client requests a quote for an event
Actors	Client (Primary) Secretary
Steps	1. Client contacts Champetre 2. Client provides contact and personal detail 3. Client provides requirements for specific event
Variations	#1. Client can contact Champetre telephonically or Send an email or Visit the premises #2. An event can take on the form of a Wedding or A conferenc or A party or similar function or An outside catering event or A spa treatment session or A restaurant visit
Issues	a. Currently, the information provided by the client, is manually filled out on a form. This data is then processed on MS Excel and MS Word. These spreadsheets are used throughout the duration of the event for planning and organising purposes.

Table 4: Compile a Quote Use Case

Use Case	<i>Compile a Quote</i>
Description	Information is captured and manipulated to compile a quote
Actors	Function Coordinator (Primary) Client
Steps	1. REPEAT 1.1 The function coordinator enters all the requirements onto the required spreadsheet. 1.2. The function coordinator then manually compiles a quote by entering all the requirements onto a new spreadsheet. 1.3. The function coordinator sends the quote to the client UNTIL the client is satisfied or the client is not interested
Variations	#1. The quote is sent to the client via email or Via fax
Issues	a. Currently, no specific estimation can be given for the time to process a quote request and to compile a quote. This time fluctuates between 30min and 24hours

Table 5: Compile and send invoice Use Case

Use Case	<i>Compile and send invoice</i>
Description	An invoice is sent to the client containing additional information
Actors	Function Coordinator (Primary) Client
Steps	1. The function coordinator enters additional information onto the original quote, like due dates, deposit and other amounts. 2. The invoice is then sent to the client via email or fax.

Table 6: Make a booking Use Case

Use Case	<i>Make a booking</i>
Description	A booking request is initiated by the client
Actors	Client Function Coordinator
Steps	FOR 1.Provisional Booking 1.1 The client confirms that he/she is satisfied with the quote 1.2. The function coordinator enters "provisional booking" next to the client's details on the spreadsheet. FOR 2.Final Booking 2.1. The client pays a deposit amount 2.2. The function coordinator receives proof of payment 2.3. The function coordinator enters "final booking" next to the client's details on the spreadsheet. 3. The function coordinator enters the booking onto MS Outlook in order to generate a calender

Table 7: Pay balances due Use Case

Use Case	<i>Pay balances due</i>
Description	The client must pay a deposit amount in order to keep his/her booking, depending on the type of event. The remainder of the balance due must also be paid within a certain time.
Actors	Client (Primary) Financial Manager
Steps	1. The client pays the required amount into Champetre's account 2. The client sends a proof of payment to Champetre as soon as possible. 3. The financial department receives the proof and notifies the function coordinator.
Variations	#1. The above mentioned steps are currently only followed for big events, like weddings and conferences. Thus, for restaurant and spa bookings, payments are only made when the client arrives for the actual event.

Table 8: Compile Function Sheet Use Case

Use Case	<i>Compile Function Sheet</i>
Description	A function sheet is compiled containing requirements for the event, including dates, times, purchases to be made etc.
Actors	Function Coordinator
Steps	<ol style="list-style-type: none"> 1. The function coordinator processes the requirements of the client and compiles a Function Sheet spreadsheet. 2. This function sheet is then distributed to various staff members and work is delegated to respective individuals.
Variations	#1. The function sheet contains information on dates and times and Food requirements and Procurement requirements and Miscellaneous requirements
Issues	a. The function sheet is generated manually, thus there is a concern that data is left out or even duplicated.

Table 9: Maintain Details Use Case

Use Case	<i>Maintain client and event details</i>
Description	Client and event details need to be updated and archived
Actors	Secretary (Primary)
Steps	<ol style="list-style-type: none"> 1. Client details are entered onto MS Excel 2. Changes are made throughout the duration of the organising of the event as required. 3. Event and client details, depending on the size of the event, is printed and kept in files 4. Client details are kept on spreadsheets for an indefinite amount of time
Issues	a. No backup/archiving procedure is currently in place

Table 10: Resource management and control Use Case

Use Case	<i>Resource Management and Control</i>
Description	Resources need to be managed and controlled on a continuous basis
Actors	Function Coordinator Secretary Financial Manager Spa Therapists Operations Manager F and B Manager
Steps	IN PARALLEL <ol style="list-style-type: none"> 1. Procurements are made when stock levels are low 2. Beverages are purchased according to the size of events taking place 3. Beverages are counted as it is being sold 4. Spa treatment products are purchased when almost finished 5. Equipment and additional resources are hired if required by the client
Issues	No definite procedures are in place to plan and control resources.

Table 11: Maintain Calendar Use Case

Use Case	<i>Maintain Calendar</i>
Description	The calendar needs to be maintained when changes are made, or when scheduled meetings take place.
Actors	Secretary (Primary)
Steps	<ol style="list-style-type: none"> 1. The secretary makes changes to the calendar on MS Outlook when required

1.3 Data and interaction

The types of data as well as the interactions of the system were modelled in a Context Data Flow Diagram as can be seen in Figure 8. The diagram depicts the basic flow of data throughout the organisation in terms of its booking, managing and control processes. The external actors and how they interact with each other and the current system can clearly be recognised.

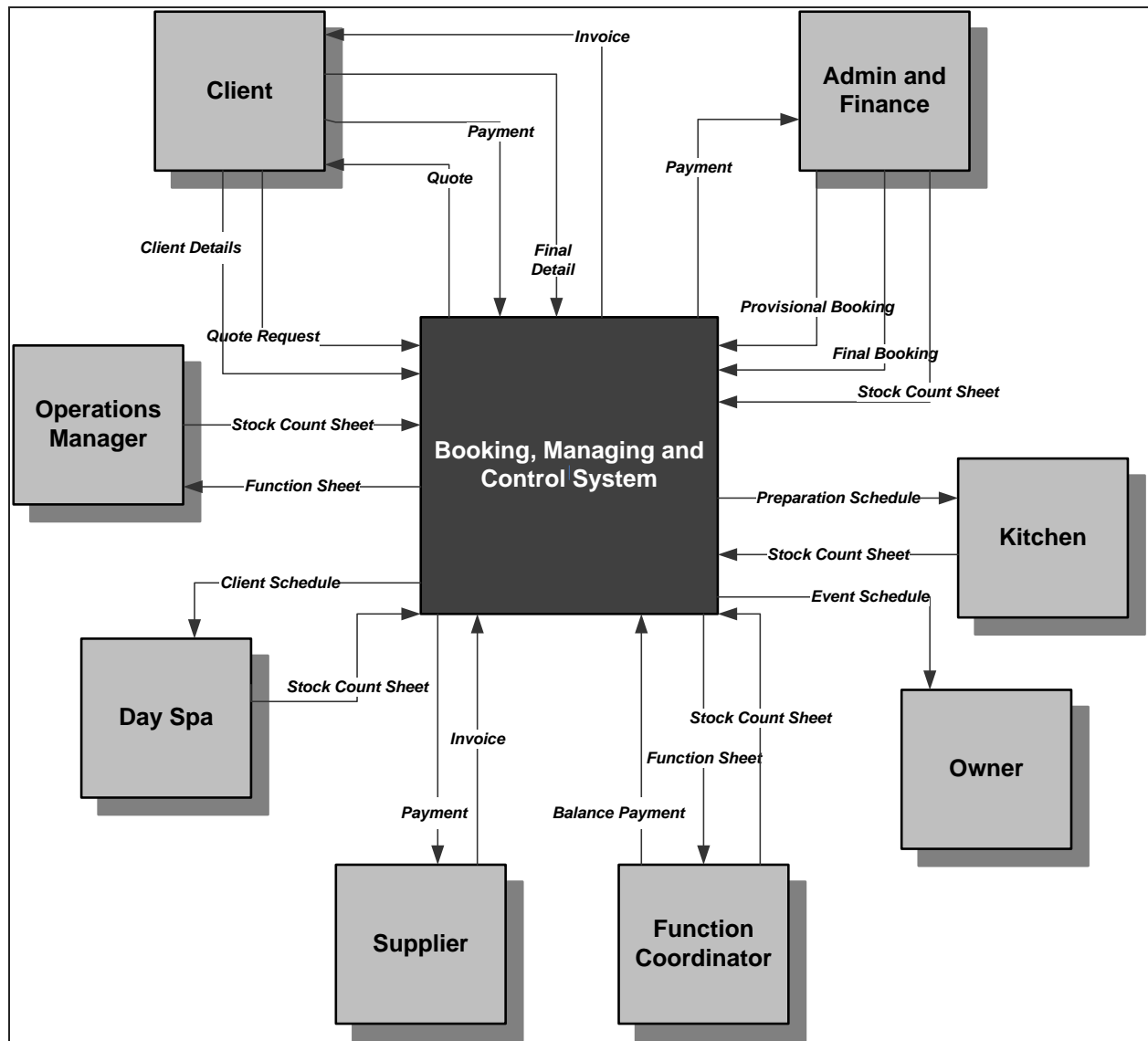


Figure 8: Context DFD

1.4 PIECES Analysis

During the scope definition phase the baseline opportunities and problems within the organisation were also established in the form of a PIECES (Performance, Information, Economics, Control, Efficiency, and Service) Analysis which is recommended by Bentley et al (2007). The focus of analysis was the booking procedure as well as managing and controlling various aspects of an event. The following results were obtained:

Performance

- Customer requests could be processed at a faster rate.
- Data could be captured much faster.

Information

- Client or event details are not necessarily captured accurately.
- There is a possibility that client or event details are captured redundantly.
- Client and event details are not always in a useful format.
- Client and event details could be better organized.
- Client and event details are not easily accessible to all the employees who would need it.
- No system is in place to back up stored data.

Economics

- The cost of purchasing food ingredients could be too high.
- Profits could be increased by obtaining more clients.

Control

- There is a need to better control resources and stock.

Efficiency

- Inefficient software is being used to capture and store data.
- Some tasks could be executed with much less effort.
- Paperwork is excessive.

Service

- Better customer service could be offered with improved processes.

2. Problem Analysis

The aim of the problem analysis phase was to carry out an in-depth study in order to identify areas of opportunity, problem areas and the causes for these problems. The following techniques, defined by Mind Tools, were used.

- Fishbone Diagram
- SWOT Analysis

2.1 Fishbone Diagram

The booking, managing and control processes were analysed in detail in terms of resources, employees, finance and methods. The causes for insufficiency in these areas were identified and are summarized in Figure 9, followed by a detailed description.

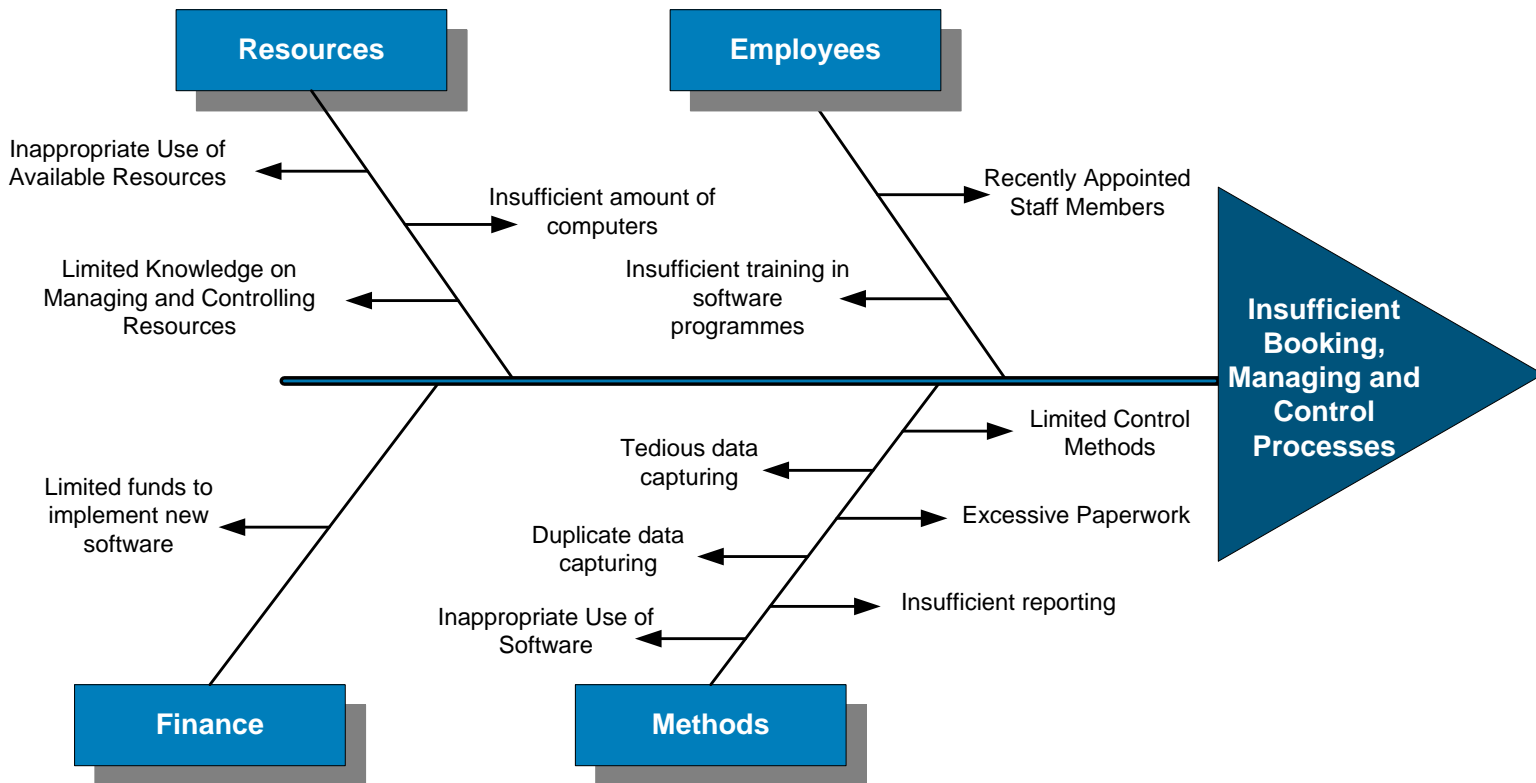


Figure 9: Fishbone Diagram

Employees

The employees at Champetre are relatively newly appointed and must thus still adapt to the way the business is run. All employees are not necessarily trained in computer software programs, and therefore also do not make appropriate use of the programs which are readily available.

Methods

Currently, utilisation of computer software is not effective or efficient. Management currently uses MS Excel and MS Word for processing client requests and managing events. No proper procedure is in place in which information is processed. This results in tedious and sometimes duplicate data capturing. The lack of procedures and inefficient software also give rise to tremendous quantities of paperwork.

Resources

Only two computers are available for use at Champetre. This is not the ideal solution as each manager as well as selected staff members could also make use of computers. Resources, which include people, equipment, stock etc. are not managed and controlled efficiently. The reason for can be ascribed to a lack of knowledge and ineffective application of methods.

Finance

Champetre is a new company and has consequently not budgeted for the application of expensive management software in the near future.

2.2 SWOT Analysis

A SWOT analysis was conducted to identify Champetre's strengths, weaknesses, opportunities and threats. Champetre should strive to increase their strengths, focus on opportunities and decrease any weaknesses and threats which exist in all the functional areas of the business.

Strengths

- The organisation provides high quality service.
- The employees are dedicated and enthusiastic in their work.
- They are situated in a conservation park, yet still close to the city.
- They are the only industry of their type in a large market area.
- They have a variety of venues available for events.
- The staff members are highly qualified in the respective job description areas.

Weaknesses

- The organisation is very young.
- The employees are newly appointed.
- They do not have a large client database yet.
- Their budget do not allow for expensive equipment and software programs.

- Their data capturing and booking methods are inefficient.

Opportunities

- The catering industry is a booming industry, even during an economic recession.
- The attractive surroundings can make Champetre a preferred choice for clients.
- Management and staff are willing to make improvements to current business processes.

Threats

- Limited publicity.

3. Requirements Analysis

The client's requirements were gathered and analysed by taking the following approach:

- Relevant documentation in the form of input sheets, reports and computer files were gathered and studied in detail to fully understand the applicable processes. The documentation included the planning documents used by the events planner. This type of documentation provided information on specific resources needed for a particular event.
- The environment was studied to gain an understanding of the employees and how they interact with each other, the current system as well as external systems.
- Interviews were conducted with management as well as the employees who interact with the system. The results which were obtained from the interviews were documented and logical models could be constructed from the written requirements.
- A system requirements model was formulated through the use of Use Case Diagrams.
- Flow diagrams were used to map how all the activities of required processes fit together. This provides a pictorial model for anyone to easily understand.

The outputs obtained from the Requirements Analysis Phase are the following:

- Purpose of the system
- The stakeholders
- System users
- Departmental and Functional Diagram
- Flow Diagrams
- Functional Requirements
- Use Case Diagrams
- Measurements of success
- Use Case Narratives (Appendix C)

3.1 Purpose of the system

The purpose of the proposed system is to improve current business processes at Champetre by simplifying and automating certain booking, managing and control functions.

3.2 Stakeholders

The main stakeholders of the system are the employees working at Champetre. The system will enable employees to work more efficiently. Customers and suppliers could be classified as secondary stakeholders, as they will also benefit from the system.

3.3 System Users

The main system users will be the Owner, General Manager, Financial Manager, Function Coordinator and Assistant, Operations Manager and F&B Manager. These individuals are computer literate and with their help in designing the interfaces, working on the system should be effortless. Only a selected number of individuals will have full access to the system.

3.4 Departmental and Functional Diagram

In order to understand the organisation and its functions, a function tree was constructed (Figure 10). There are five main departments, each with their own functions and tasks to perform.

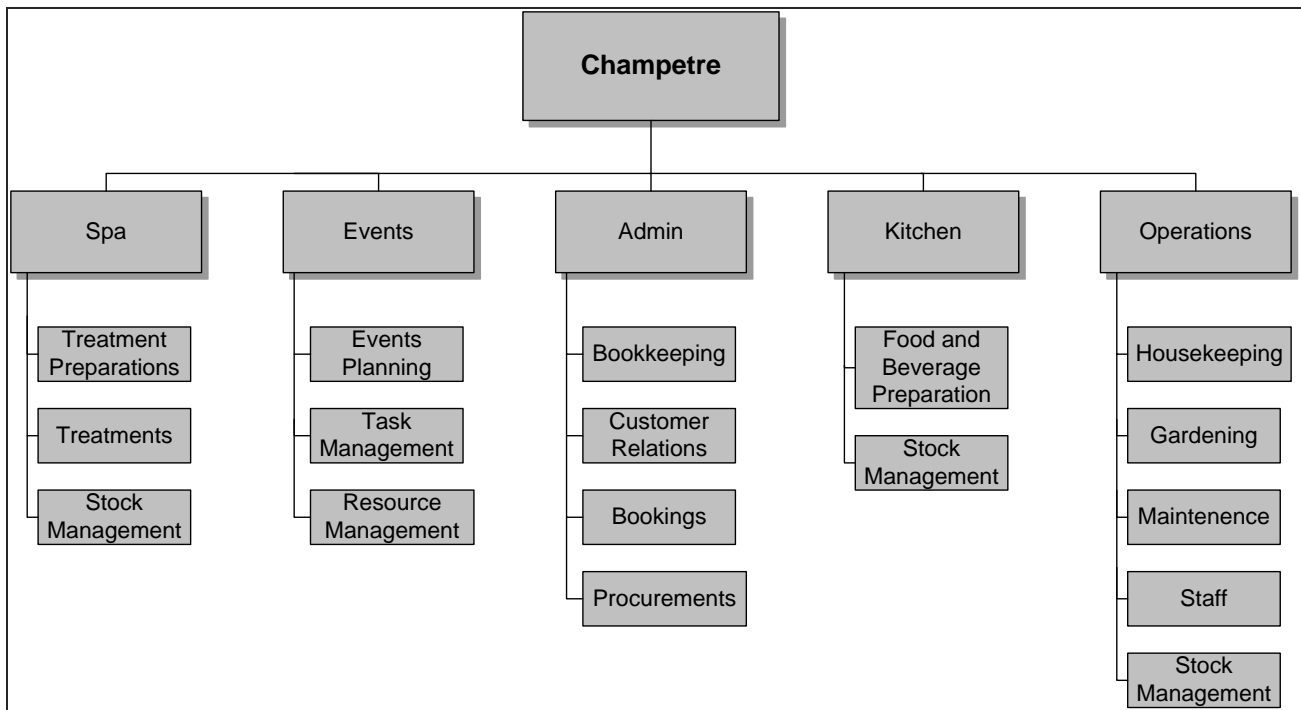


Figure 10: Function Tree

3.5 Process Flow Diagrams

Champetre offers a variety of events which are managed by their staff and which are hosted on their premises. This excludes their outside catering functions which do not take place on their premises. The following flow diagrams explain the basic steps which are carried out from the initiation to the completion of an event. Figures 11 and 12 depict the flow diagrams for the processes involved with booking and managing a function, conference, outside catering event, restaurant event and a spa treatment. Refer to Appendix C for its decomposition levels.

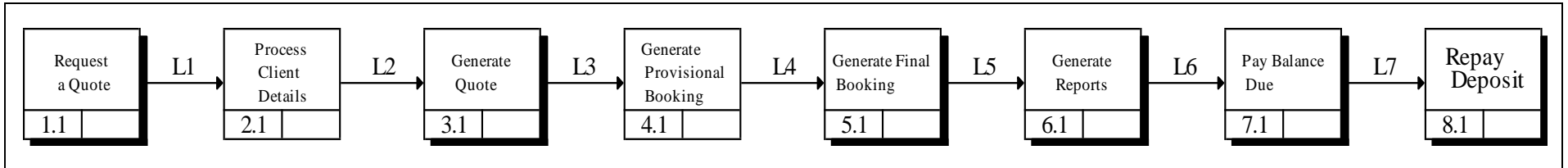


Figure 11: Function High-level Process Flow

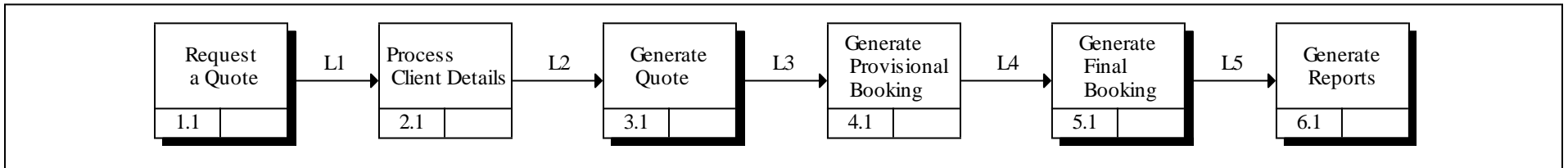


Figure 12: Outside Catering, Restaurant and Spa High-level Process Flow

3.6 Functional Requirements

The requirements of the system in terms of functionality are discussed in the following section. It is divided into the different functions which the system must perform.

Function, Conference and Outside Catering Process

A function takes the form of a wedding, party, year-end function, picnic as well as a conference, as a conference's process flow is similar to that of a function. The outside catering function will also be combined in the functional requirements. A customer requests a quote telephonically, via email or by visiting their facilities. The system must then generate a quote immediately by retrieving the requirements for the function from the customer.

Functional Requirements

This function must:

- Capture client details
 - What is the client's name and surname?
 - On which numbers can the client be contacted?
 - What is the client's physical address?
 - Which company does the work for?
 - Where did the client hear about us?
- Capture event details
 - What type of function is it?
 - What date and time will suit the client?
 - Which venue would the client prefer?
 - How many people are attending the function?
 - Are there any children?
 - What standard menu does the client request?
 - Are there any other requests?
 - Does the client need any special equipment?
 - What décor would the client like in which color scheme?
 - What needs to be ordered and purchased extra?
- Generate quote
 - What are the subtotal and total amounts to be paid?
 - What is the VAT amount to be paid?
- Capture invoice details
 - What is the reference number for the function?
 - How will the client be paying?
 - What is the VAT number?
- Generate Invoice
 - What are the total amounts to be paid?
 - What is the due date?

Inputs

The inputs needed for this function to be performed are:

- Client details
- Venues
- Calendar
- Selection of Menus
- Selection of Beverages
- Available resources and equipment

Outputs

The outputs which can be obtained from the system are:

- Date and time availability
- Schedule
- Function Sheet
- Food and Beverage Requirements Sheet
- Summary of all the function booking made
- Summary of exact amounts of meals to be prepared
- Summary of resources in terms of type and amount

Restaurant Process

The Restaurant is only open on selected days, depending on date and time availability. Customers can therefore make bookings for a specific restaurant event.

Functional Requirements

This function must:

- Capture client details
 - What is the client's name and surname?
 - On which numbers can the client be contacted?
 - What is the client's physical address?
 - Which company does the work for?
 - Where did the client hear about us?
- Capture restaurant event details
 - What is the date and time of the restaurant event?
 - Which venue will be used?
 - What is the maximum capacity for this venue?
 - How many people are attending the function?
 - Are there any children?
 - What standard menu will be served?
 - Are there any other requests?
 - Will there be any special equipment?
 - What décor will be used?
 - What entertainment will be provided?
 - What needs to be ordered and purchased extra?
- Generate quote
 - What are the subtotal and total amounts to be paid?
 - What is the VAT amount to be paid?

- Capture invoice details
 - What is the reference number for the function?
 - How will the client be paying?
 - What is the VAT number?
- Generate Invoice
 - What are the total amounts to be paid?
 - What is the due date?

Inputs

The inputs needed for this function to be performed are:

- Client details
- Venues
- Calendar
- Selection of Menus
- Selection of Beverages
- Available resources and equipment

Outputs

The outputs which can be obtained from the system are:

- Date and time availability
- Schedule
- Function Sheet
- Food and Beverage Requirements Sheet
- Summary of all the restaurant booking made
- Summary of exact amounts of meals to be prepared
- Summary of resources in terms of type and amount

Spa Process

Functional Requirements

This function must:

- Capture client details
 - What is the client's name and surname?
 - On which numbers can the client be contacted?
 - What is the client's physical address?
 - Which company does the work for?
 - Where did the client hear about us?
- Capture event details
 - What date and time will suit the client?
 - What treatments would the client want?
 - Which venue will be used?
 - How many people are attending the treatment?
 - Are there any children?
 - What standard menu will be served?
 - Are there any other requests?
 - Does the client need any special equipment?
 - What needs to be ordered and purchased extra?

- Generate quote
 - What are the subtotal and total amounts to be paid?
 - What is the VAT amount to be paid?
- Capture invoice details
 - What is the reference number for the function?
 - How will the client be paying?
 - What is the VAT number?
- Generate Invoice
 - What are the total amounts to be paid?
 - What is the due date?

Inputs

The inputs needed for this function to be performed are:

- Client details
- Venues
- Calendar
- Selection of Menus
- Selection of Beverages
- Available resources and equipment
- Available treatment products

Outputs

The outputs which can be obtained from the system are:

- Date and time availability
- Schedule
- Function Sheet
- Food and Beverage Requirements Sheet
- Summary of all the spa booking made
- Summary of exact amounts of meals to be prepared
- Summary of the amount of products that should be available
- Summary of products used over a specific time period

3.7 Performance Measurements

Table 12 provides a summary of the performance measurements which can be implemented to test whether the proposed system has improved business processes at Champetre or not. Estimations of current measures as well as target values are provided.

Table 12: Performance Measurements

Critical Success Factor	Performance Measure/s	Current	Target	Note
Identification of Customer Needs	Number of hours spent discussing customer requirements	2hours/week	1hour/week	If information is accessible and thorough planning and control is in place, the target should be able to be reached
Success in satisfying customer needs	Number of customers per week	5/week	15/week	Champetre has limited publicity as it is fairly young
	Market Share			
Speed of servicing customer needs	Cycle time of a quote	Between 1 and 24hours	Max 30min	
	Percentage of customer calls answered	70%	100%	
Suitability of information resources	Staff Surveys	Average Satisfaction	High Satisfaction	Research showed that staff members are not full satisfied with the current suitability of information
Operations	Number of stages in the service creation process	Average 15 stages	Average 8 stages	This will depend on the complexity of the type of service provided
Technology	Capability of Software and Equipment	3 computers	6 computers	3 Computers are not adequate for the amount of staff members who need it
		Basic Software	Technology driven software	Benchmark research showed that new technologies should be implemented to compete in the global market
Staff Productivity	Number of staff performing administrative work	4 staff members	2 staff members	Staff members should be spending time in performing value-added functions
Information Systems	Frequency of reports	Once a week	Daily	Updated reports should be accessible on a daily basis
	Accuracy of reports	Out-dated	Updated	
		Incomplete	Complete	
Availability of relevant information	Survey Results	Effort to obtain information	Effortless to obtain information	
Time to create and disseminate information	Cycle time	20min	5min	This will depend on the detail and complexity of the information
Product Usage	Amount of waste (Treatment Product)	1litre product/week	None	As there are no controls in place for using treatment products, the wastage is high
Stock Control (Beverages, Food ingredients etc.)	Visibility of stock levels	Limited visibility	Full visibility	There is no stock-keeping or resource planning procedure in place
Staff Satisfaction	Surveys	Average Satisfaction	Full Satisfaction	

3.8 Use Case Diagrams

Use Case Diagrams were modelled with regards to each functional area. These models captured the functional requirements for the development of the system. Interactions of the actors in terms of who initiates an action and who receives an output can clearly be seen on the figures below. Use Case Narratives explain the function of each numbered arrow in detail and are included in Appendix D.

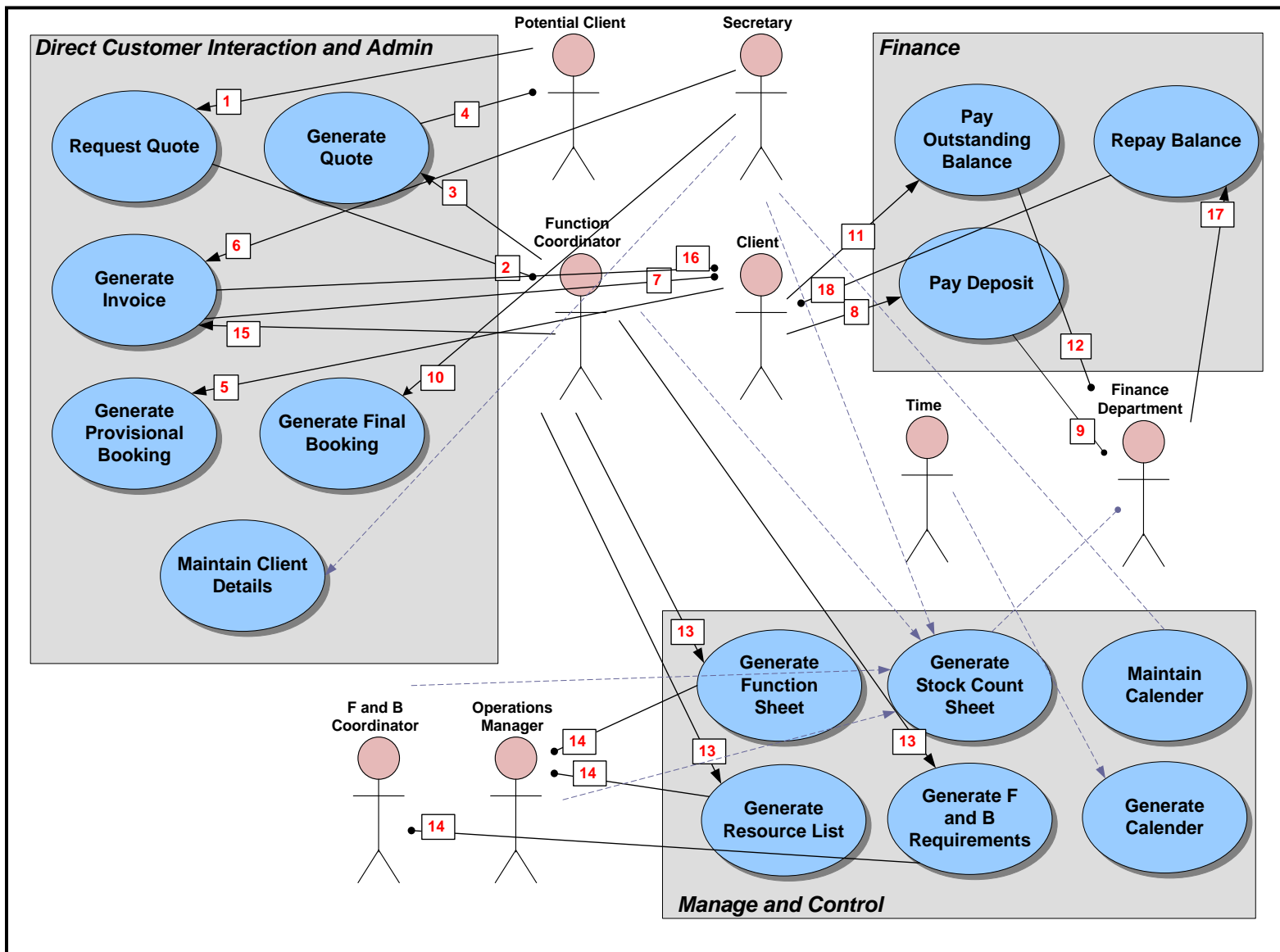


Figure 13: Function Use Case Diagram

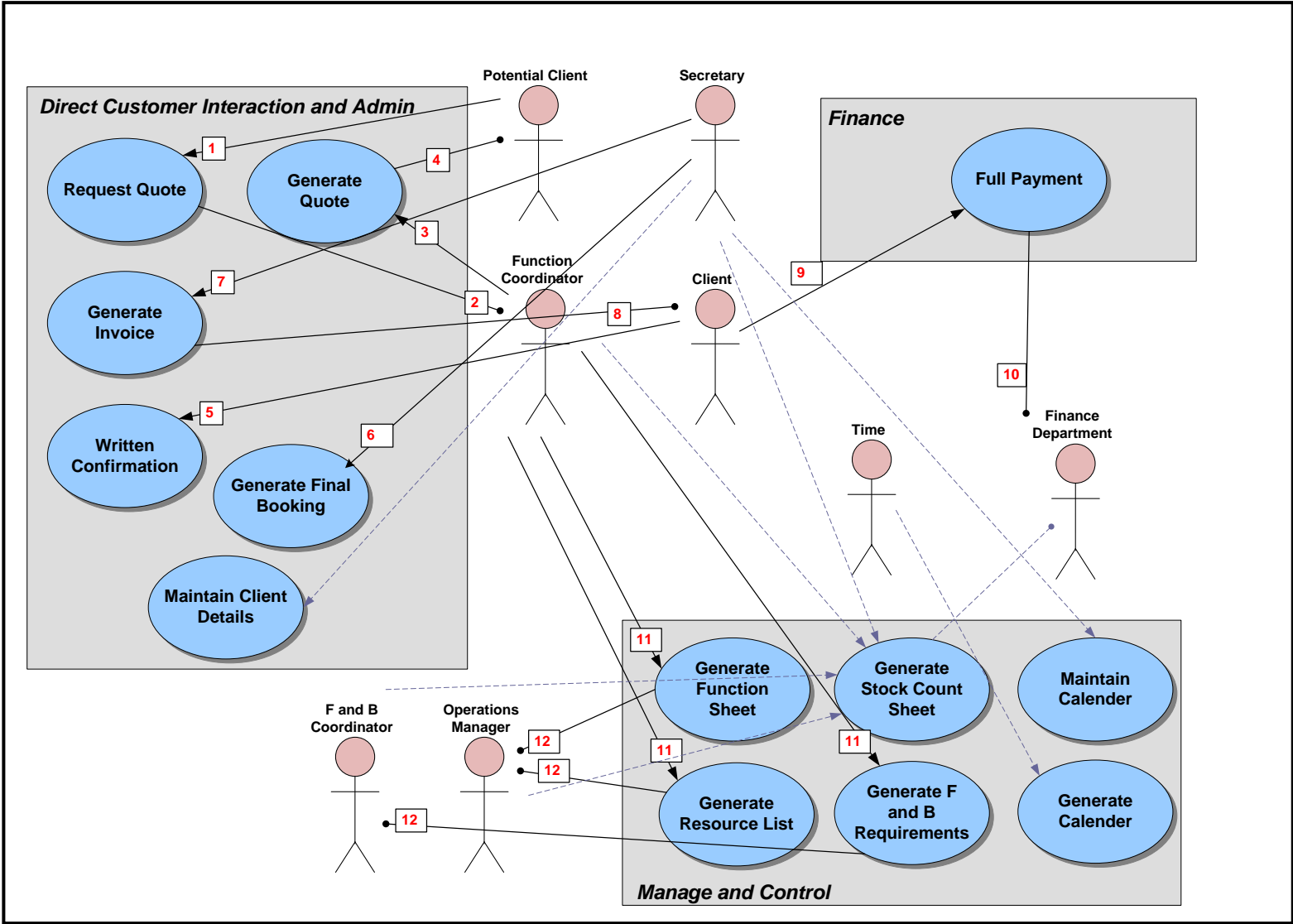


Figure 14: Conference Use Case Diagram

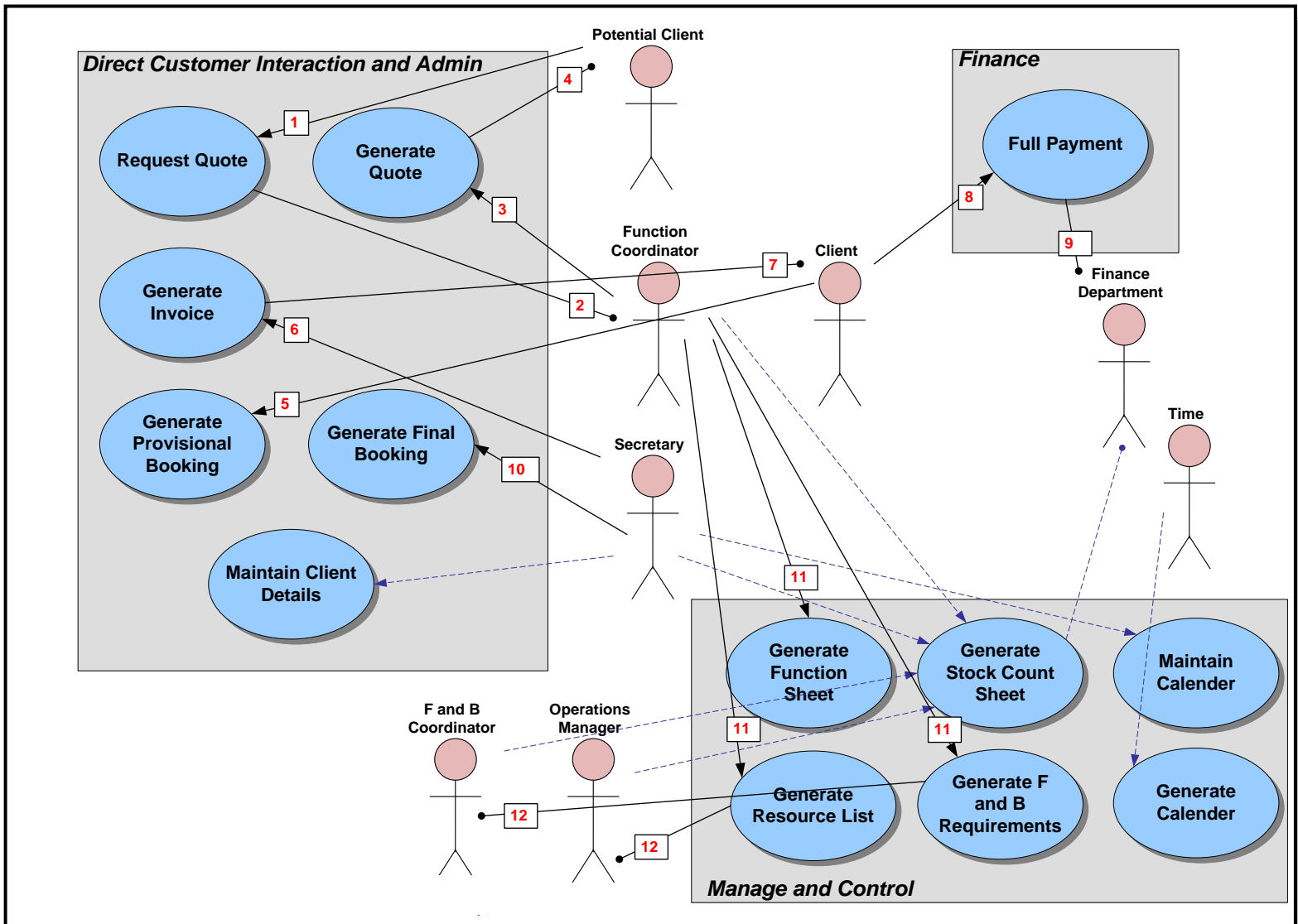


Figure 15: Outside Catering Use Case Diagram

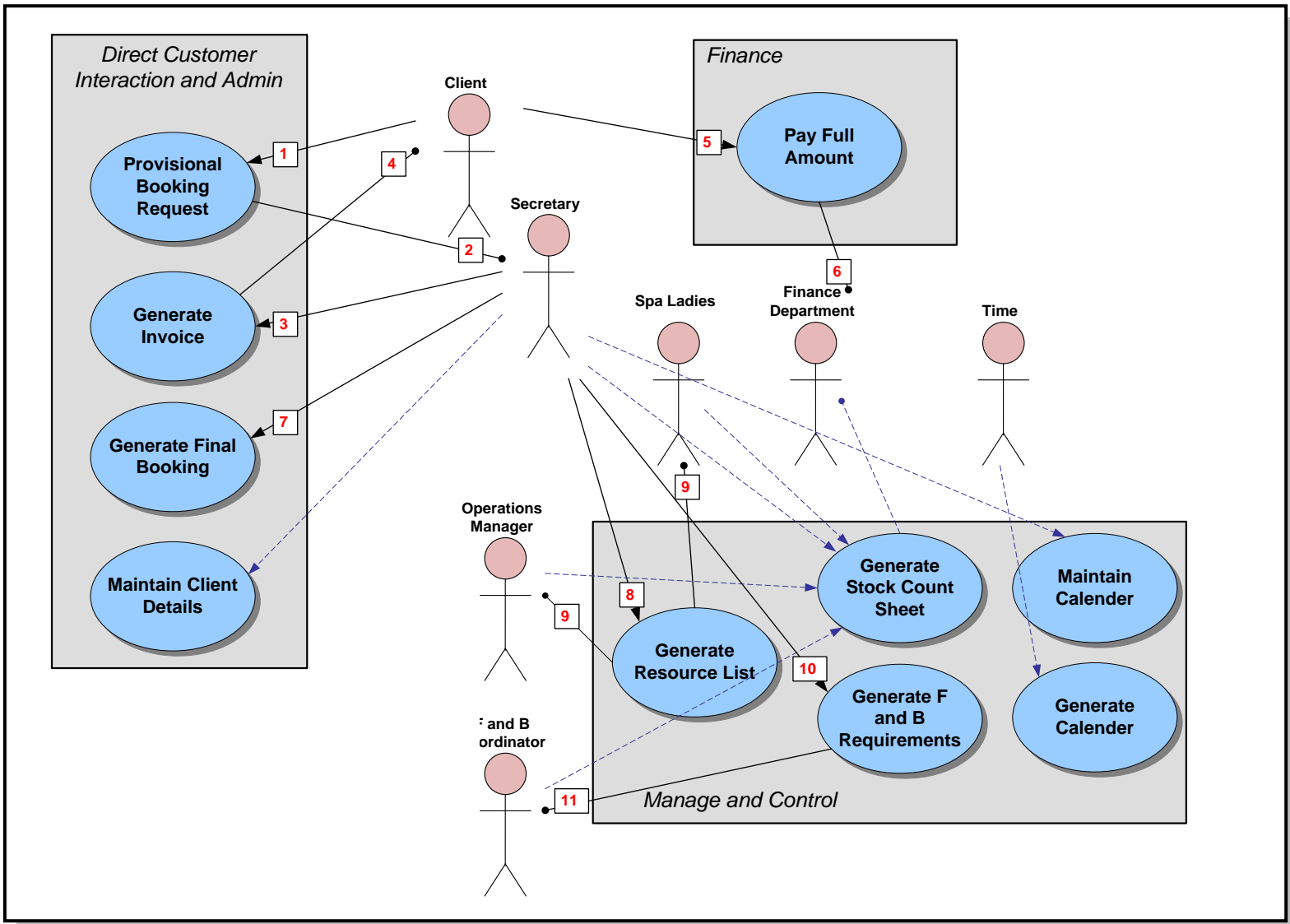


Figure 16: Spa Use Case Diagram

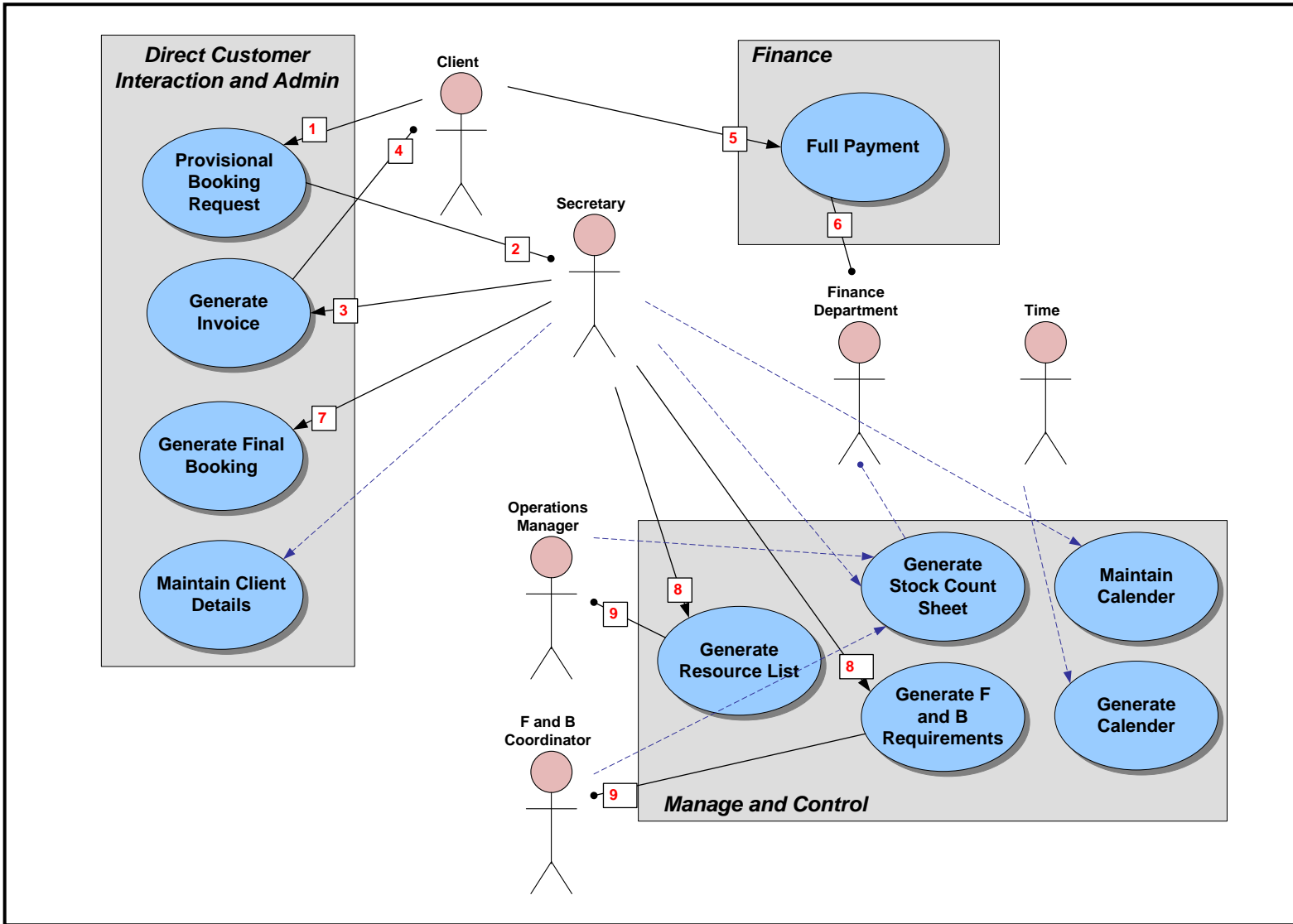


Figure 17: Restaurant Use Case Diagram

4. Logical Design

The functional requirements were modelled using the following diagrams as proposed by Bentley et al (2007):

- A *Functional Decomposition Diagram* to portray a top-down structure of the proposed system. The diagram is divided into 5 subsystems, namely the Function-, Conference, Outside Catering-, Spa- and Restaurant- Subsystems. Each subsystem will perform 4 main functions as can be seen in Figure 18.
- *Event Decomposition Diagrams* to include handling processes of an event. Each subsystem's functions were broken down further into processes in Figures 19 to 23, in order to obtain a clear understanding of where each process fits into the system.
- *Entity Relationship Diagrams* from which the information system was constructed.

4.1 Functional Decomposition

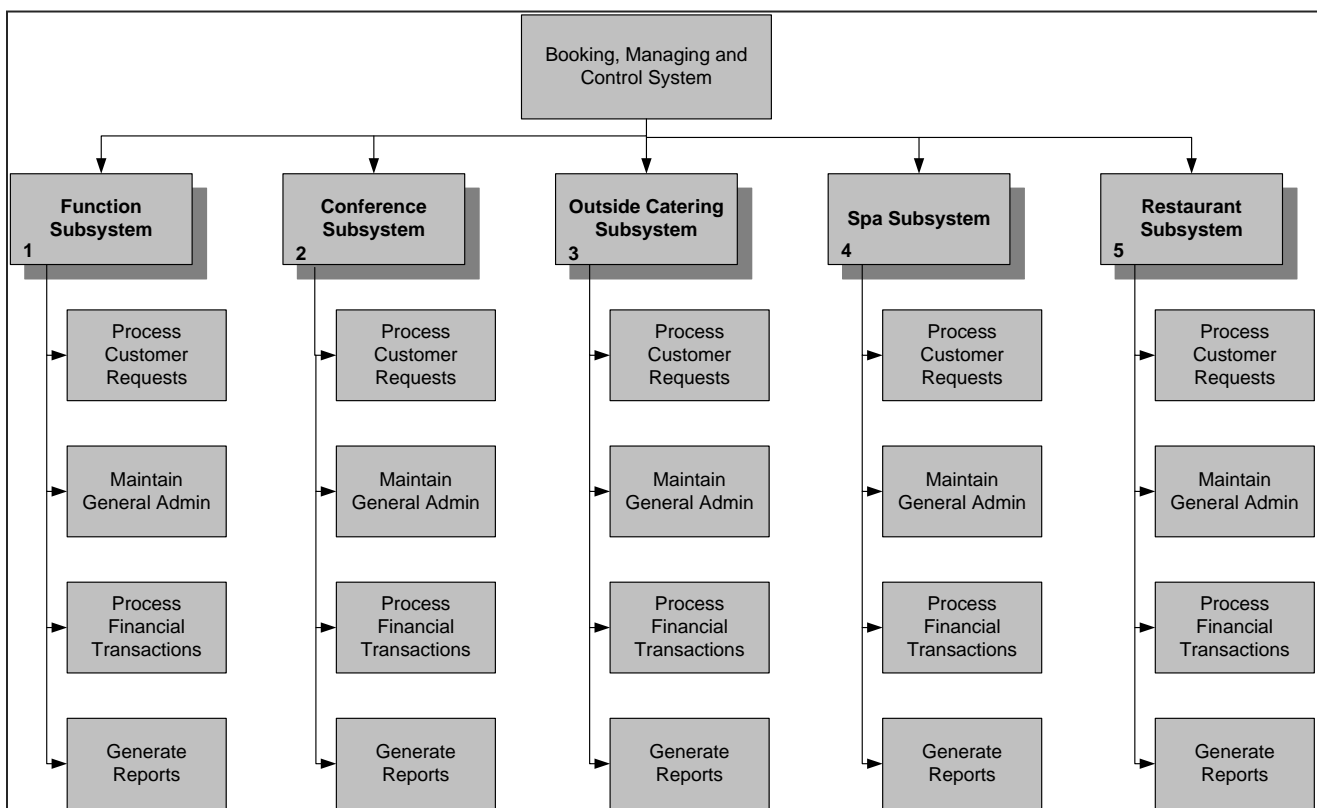


Figure 18: Functional Decomposition Diagram

4.2 Event Decomposition

The functions can be broken down further into their respective use cases as is depicted in Figures 19 to 23.

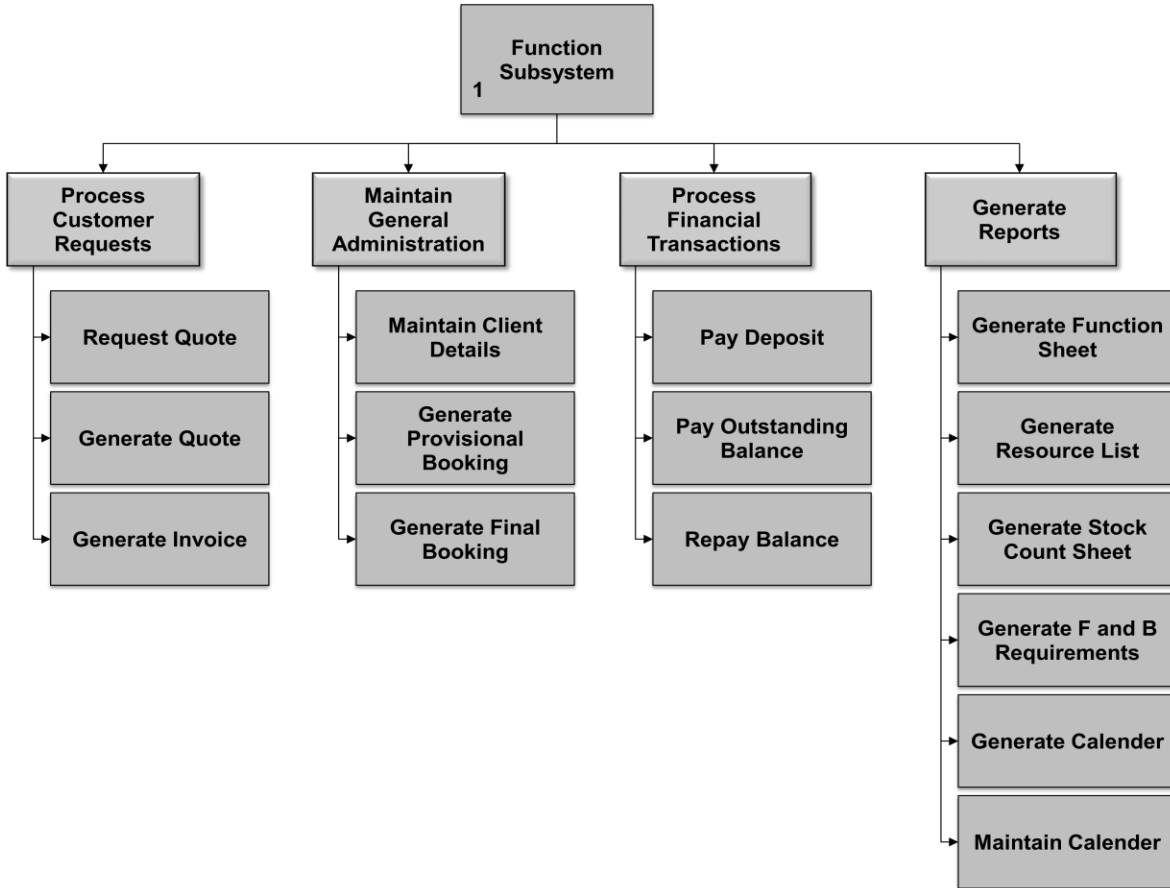


Figure 19: Function Subsystem Event Decomposition Diagram

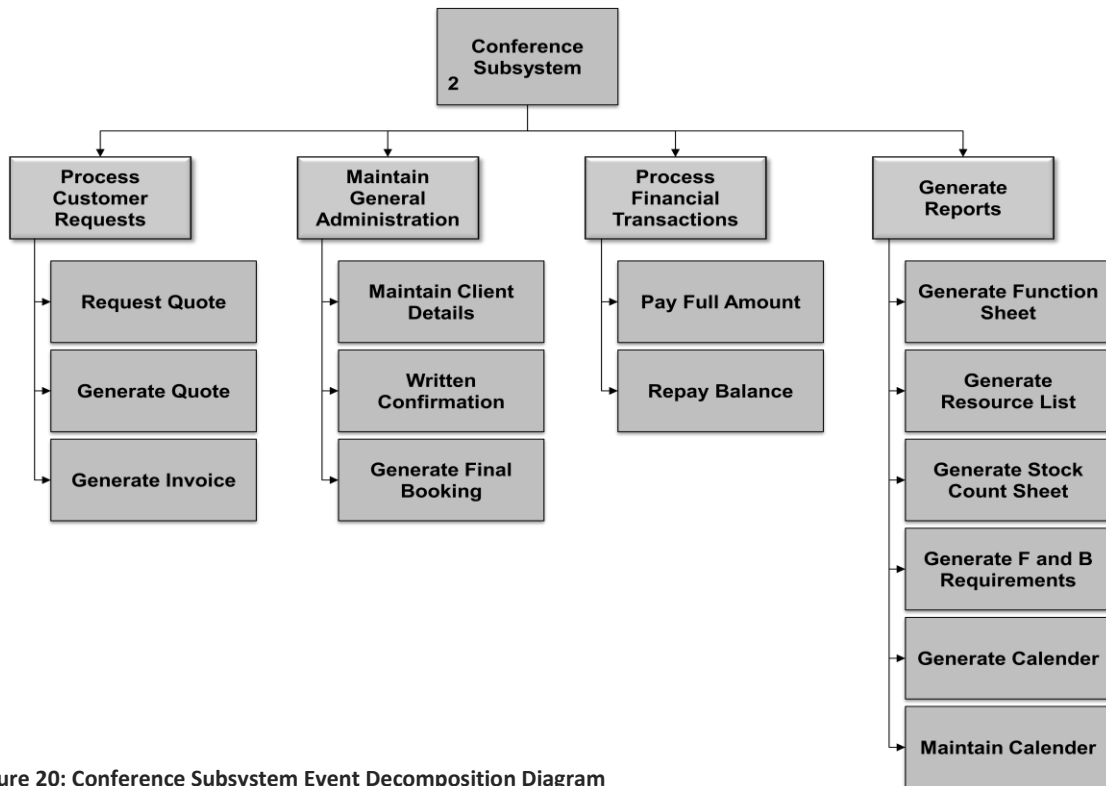


Figure 20: Conference Subsystem Event Decomposition Diagram

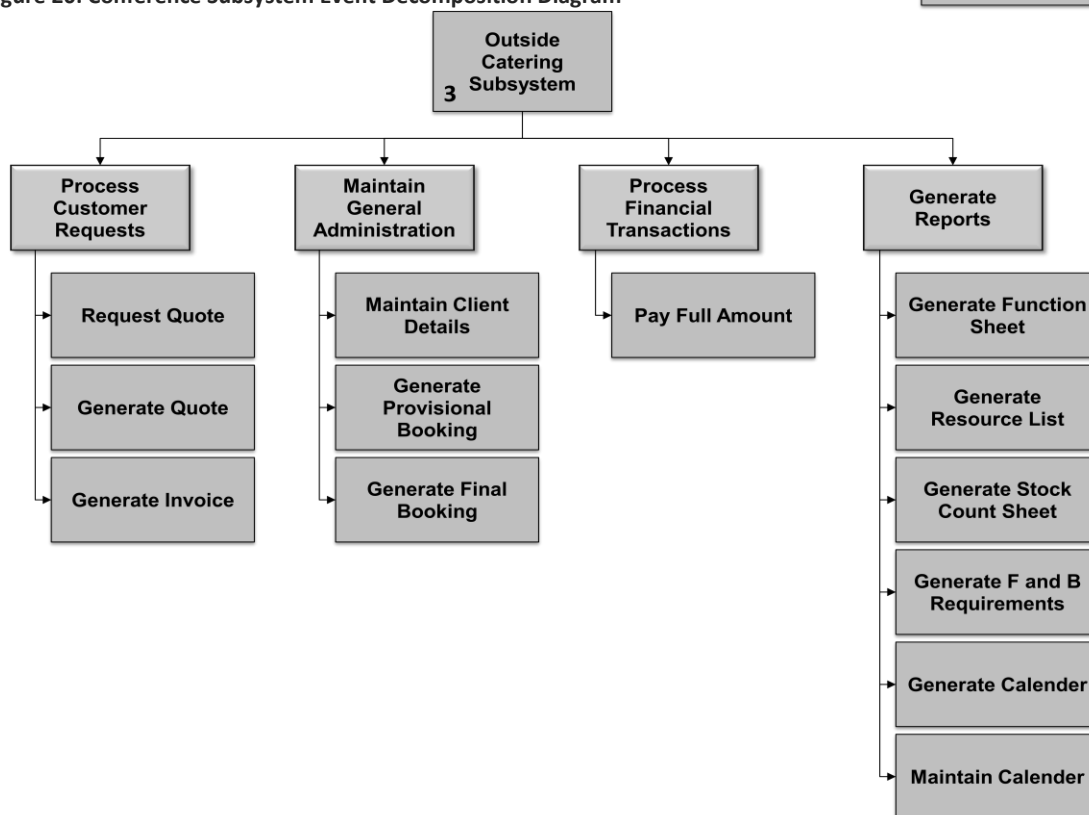


Figure 21: Outside Catering Subsystem Event Decomposition Diagram

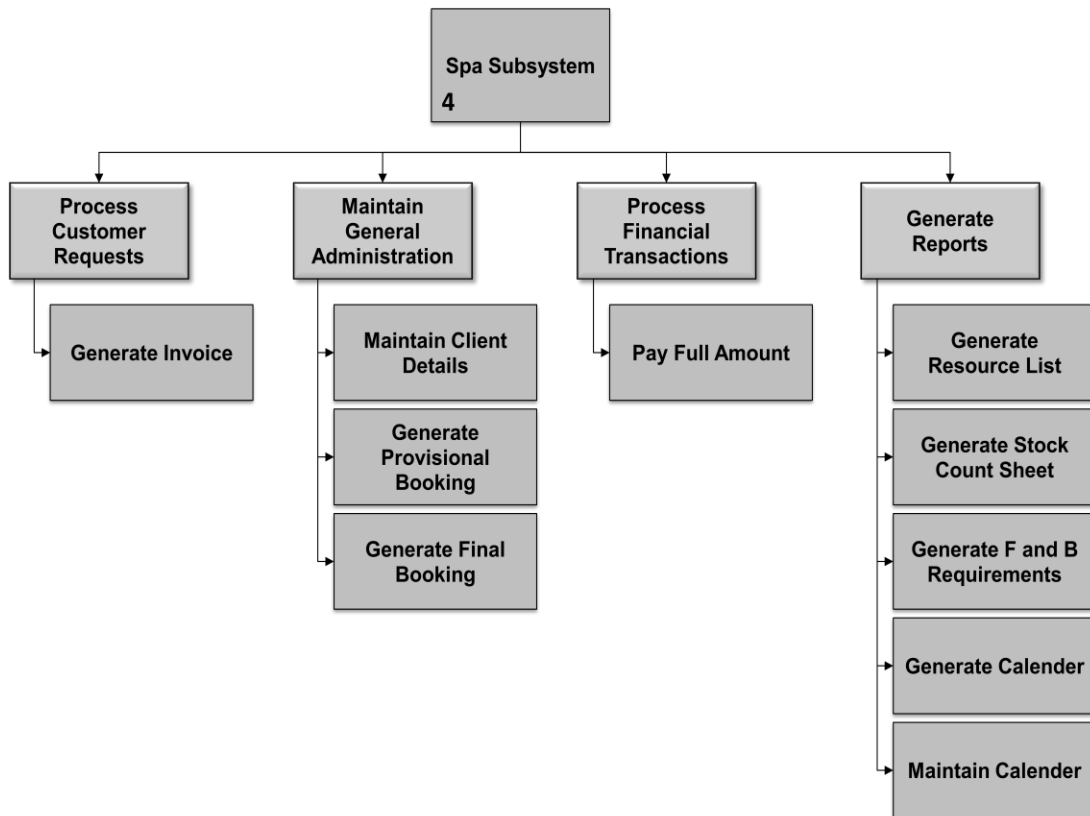


Figure 22: Spa Subsystem Event Decomposition Diagram

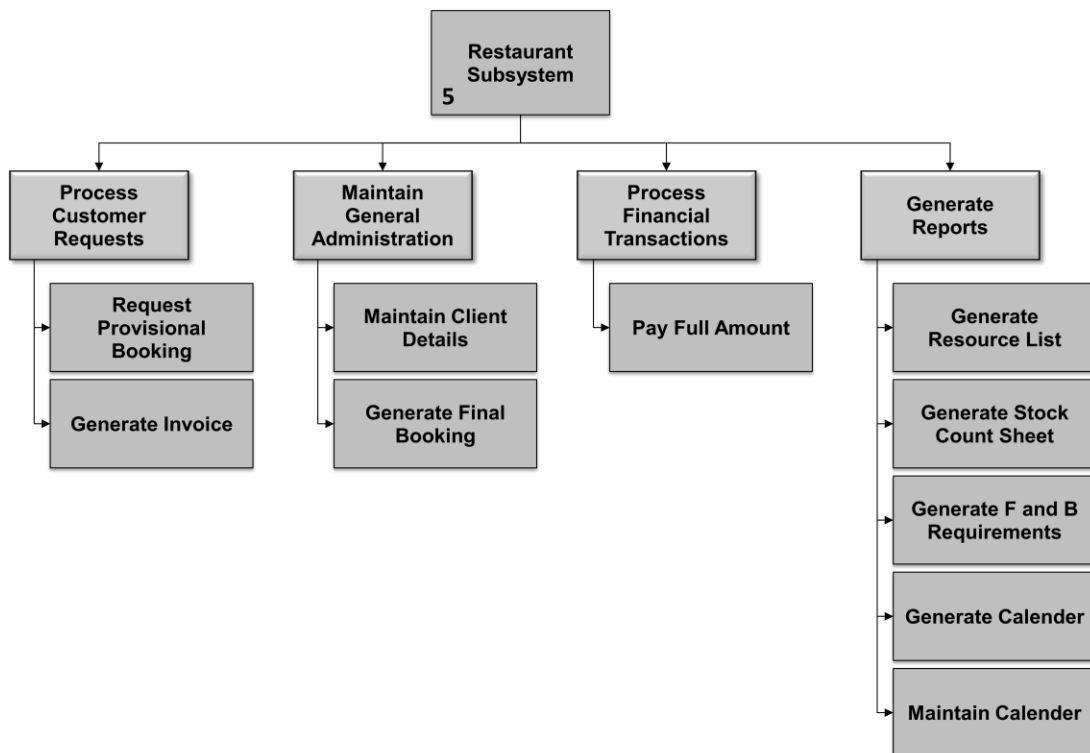


Figure 23: Restaurant Subsystem Event Decomposition Diagram

4.3 Entity Relationship Diagram (ERD)

The following data model was used to construct the information system. The ERD was broken down into each functional area. The Function and Conference processes were combined, due to their similarity, and both were included under the Function heading. The following diagram illustrates how the ERD was constructed:

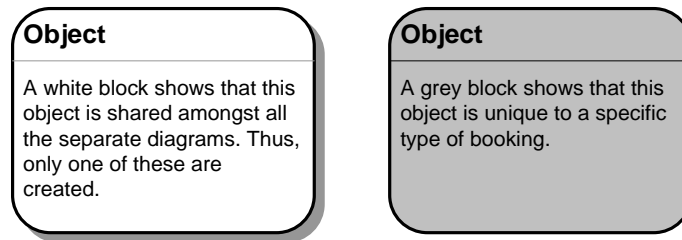


Figure 24: Examples of objects

Figure 25 shows the high-level section of the ERD. A client can make function-, outside catering-, restaurant- and spa-bookings at Champetre. Each booking type and its relationship with other objects can be seen in the figures to follow.

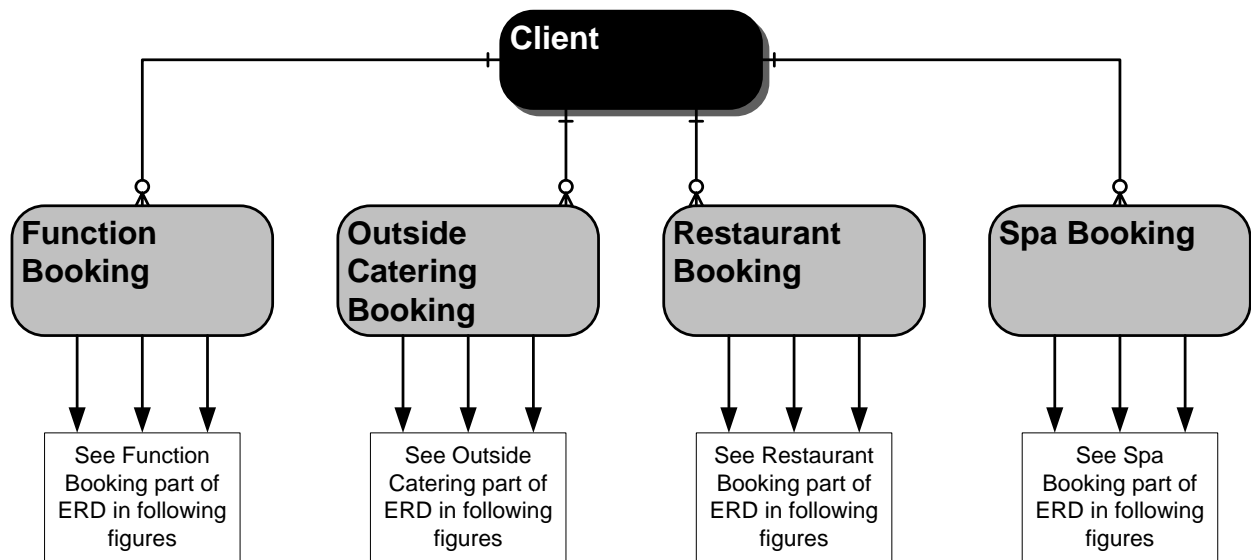


Figure 25: High-level part of ERD

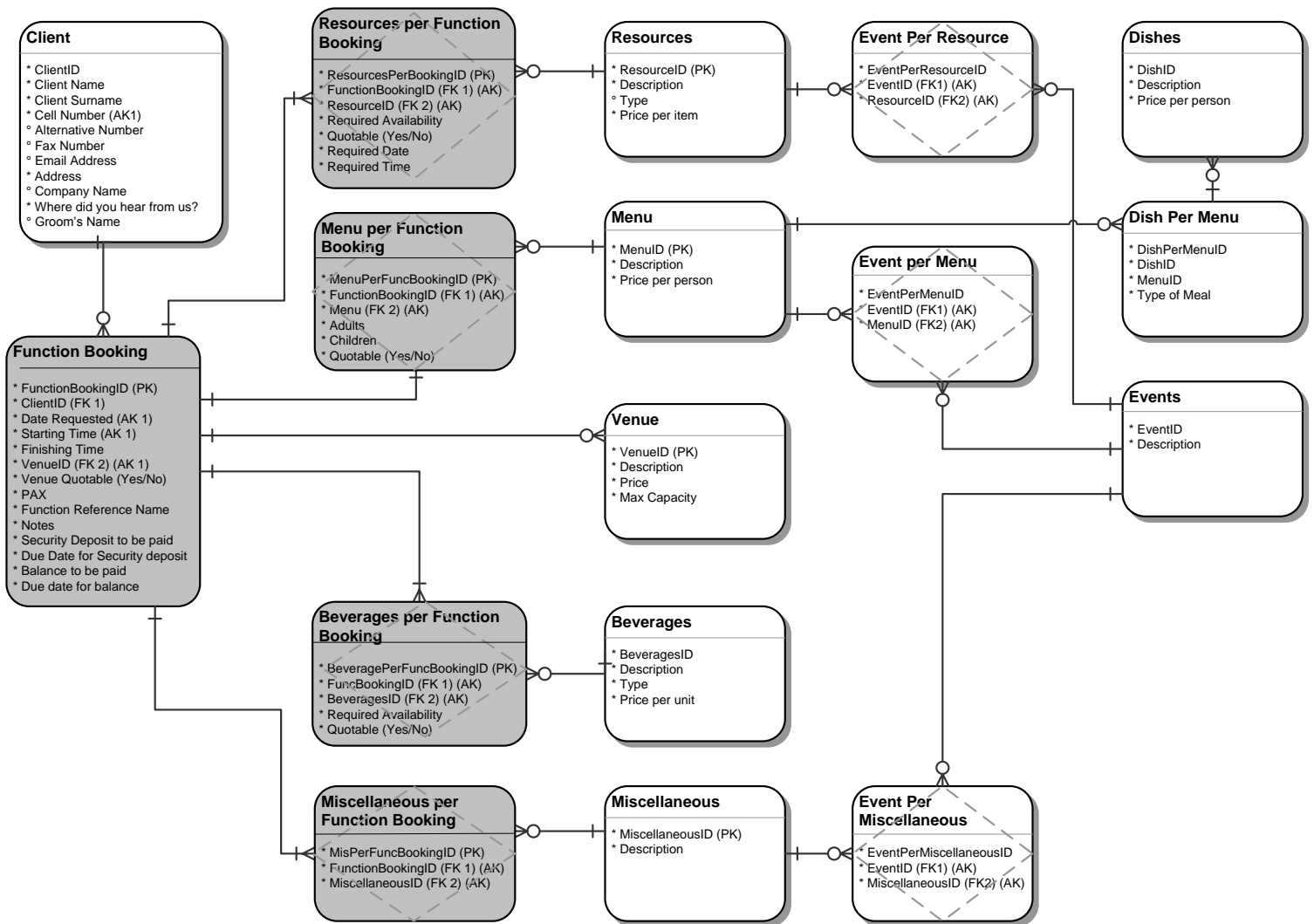


Figure 26: Function Extract of ERD

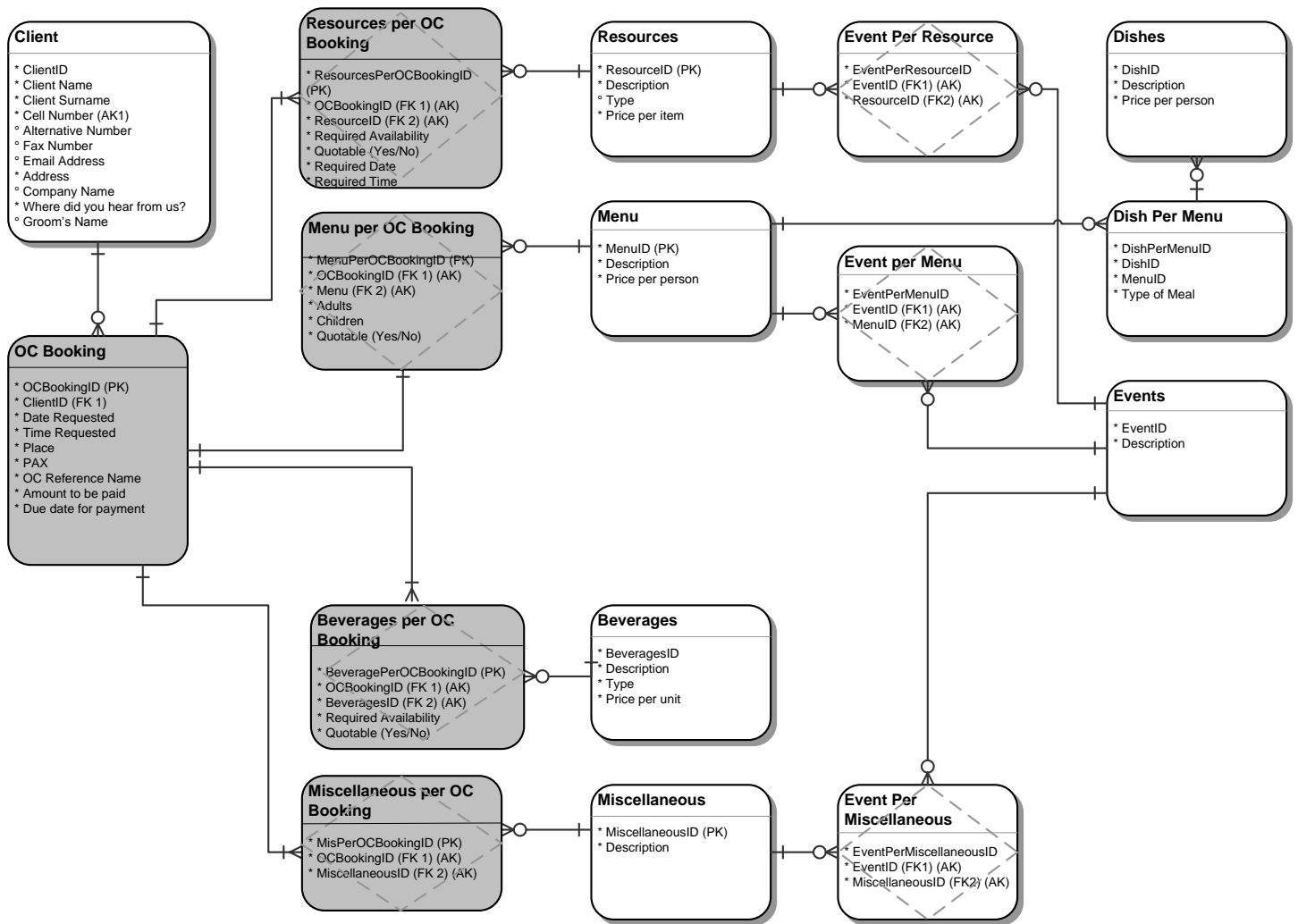


Figure 27: Outside Catering Extract of ERD

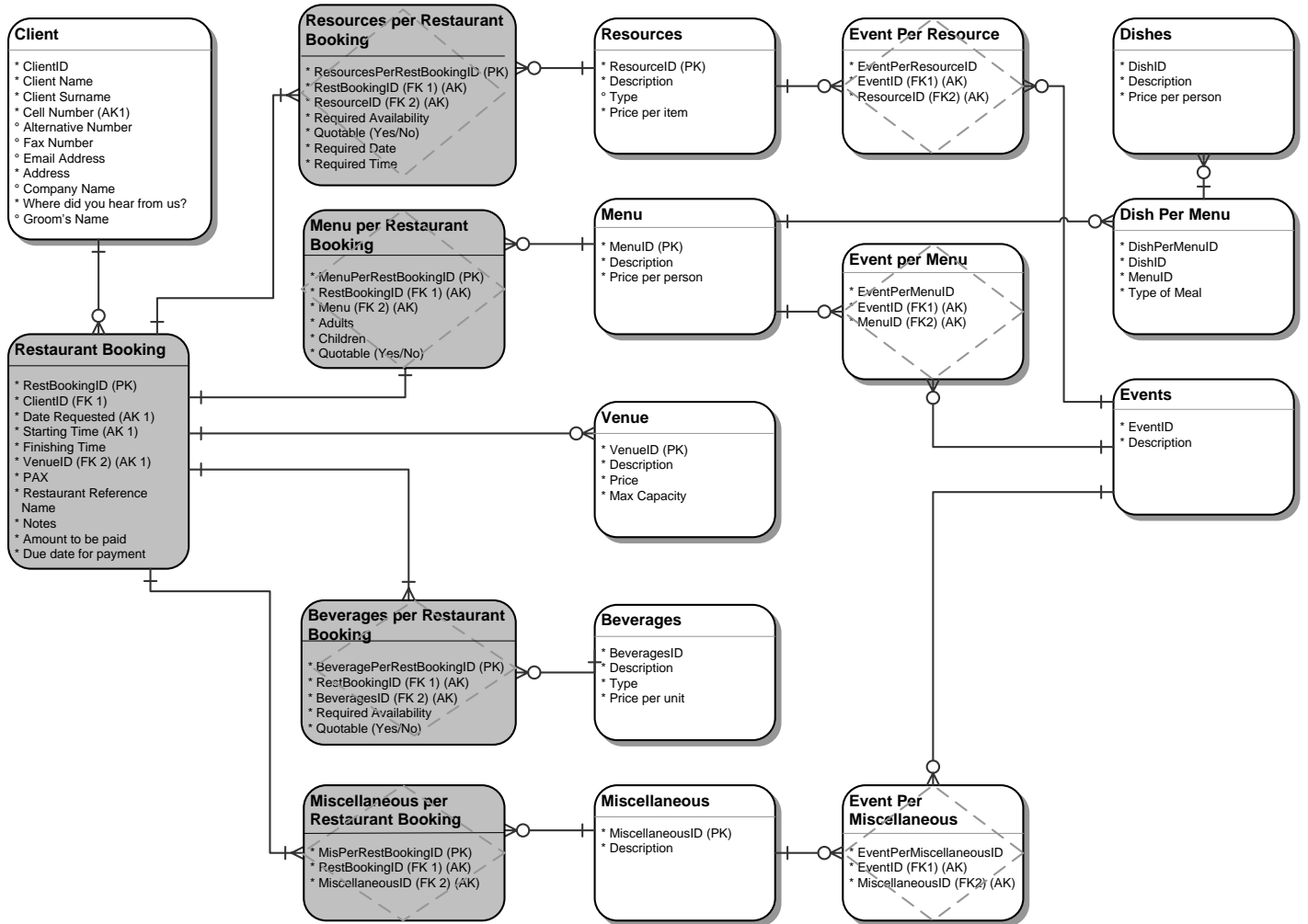


Figure 28: Restaurant Extract of ERD

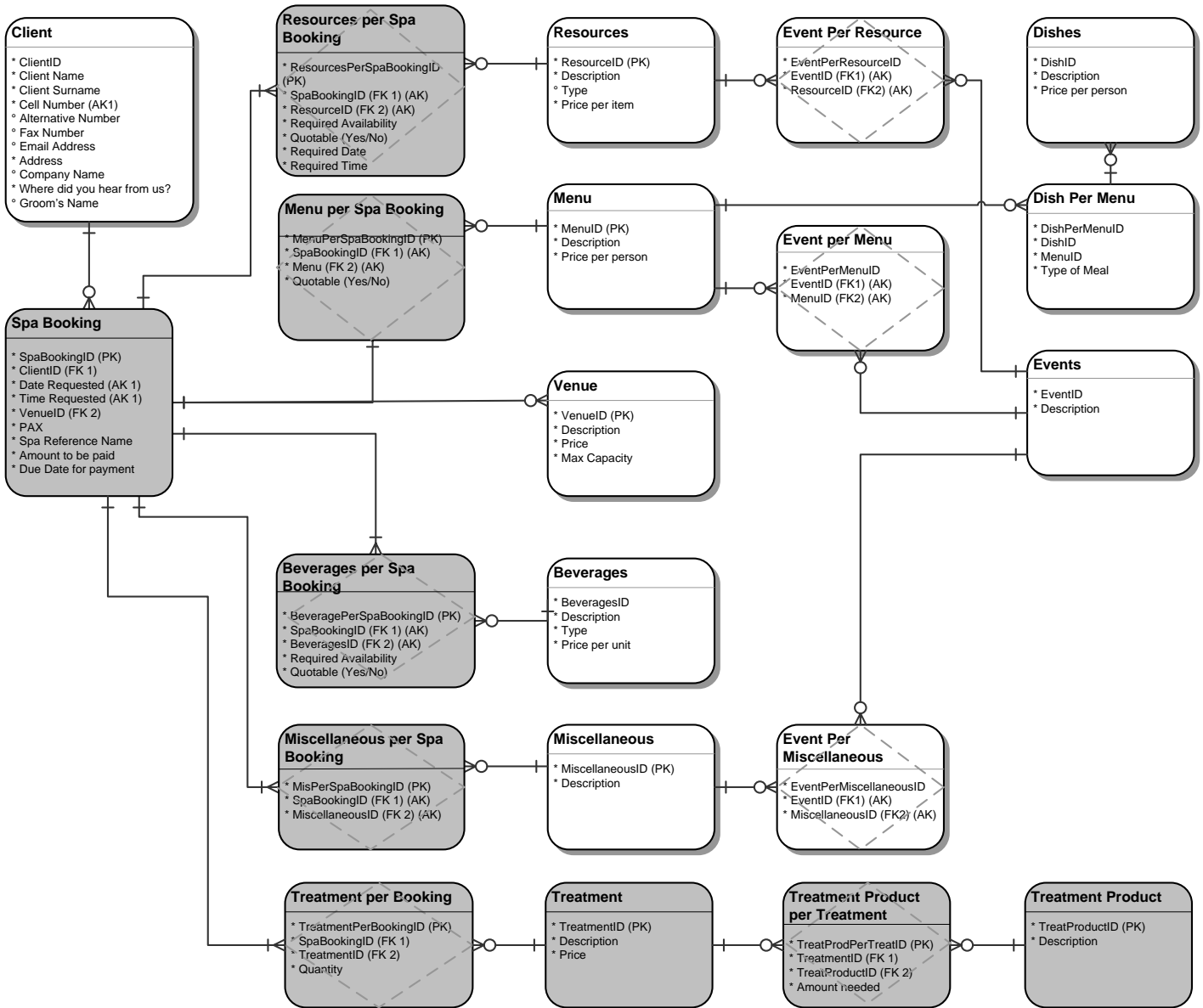


Figure 29: Spa Extract of ERD

ERD Explained

The entities depicted in the ERD are described in detail in the following tables:

Table 13: Client Entities

CLIENT	
ClientID	The unique identifier of the entity
Client Name	This is the name of the client
Client Surname	This is the surname of the client
Cell Number	This is the client's cell number
Alternative Number	This is an alternative number where the client can be contacted at
Fax Number	This is the client's fax number
Email Address	This is the client's email address
Address	This is the client's physical address (Suburb, Town)
Company Name	This is the Company's name for which the client works (if it is a company function)
Where did you hear from us?	This is for marketing purposes to know where the client heard about the venue
Groom's Name	This is the name of the groom (if applicable)

Table 14: Function, Spa, OC and Restaurant Booking Entities

[] Booking (where [] is function, spa, OC or Restaurant)	
FunctionBookingID	These are the unique identifiers for each of the booking entities
OCBookingID	
SpaBookingID	
RestaurantBookingID	
Date Requested	This is the date on which the client requests an event
Starting Time	This is the starting time for the event
Finishing Time	This is the finishing time of the event
VenueID	This is the specific venue in which the event will be held
Venue Quotable	This shows whether the venue will be charged for on the invoice
PAX	This is the amount of people who will attend the event
Reference Name	This is a unique reference name for the event
Notes	This is for any additional information
Security Deposit to be paid	This is the security deposit amount to be paid by the client
Due Date for Security Deposit	This is the due date for the security deposit
Balance to be paid	This is the balance amount to be paid by the client
Due Date for balance	This is the due date for the balance amount

Table 15: Resources Entities

Resources	
ResourceID	This is the unique identifier for the entity
Description	This is a description of the resource/equipment which can be requested by the client
Type	This is the detailed type of a specific resource which can be selected
Price per item	This is the price to hire/buy a specific resource

Table 16: Beverages Entities

Beverages	
BeverageID	This is the unique identifier for the entity
Description	This is a description of the beverages which can be requested by the client
Type	This is the size or form in which beverage can be presented
Price per item	This is the price to buy the beverage

Table 17: Miscellaneous Entities

Miscellaneous	
MiscellaneousID	This is the unique identifier for the entity
Description	This is a description of the types of miscellaneous tasks which must be performed

Table 18: Menu Entities

Menu	
MenuID	This is the unique identifier for the entity
Description	This is a description of the types of menus from which the client can select
Price per person	This is the price per person for a specific menu

Table 19: Venue Entities

Venue	
VenueID	This is the unique identifier for the entity
Description	This is a description of the venue in the form of a name
Price	This is the price to hold an event in a specific venue
Max Capacity	This is the maximum capacity a venue can cater for

Table 20: Dish Entities

Dishes	
DishID	This is the unique identifier for the entity
Description	This is a description for a type of dish
Price per dish	This is the cost price to make a specific dish

Table 21: Events Entities

Events	
EventID	This is the unique identifier for the entity
Description	This is a description of the different events that can be held

Table 22: Treatment Entities

Treatment	
TreatmentID	This is the unique identifier for the entity
Description	This is the description of the treatment
Price	This is the quoted price for a treatment

Table 23: Treatment Product Entities

Treatment Product	
TreatmentProductID	This is the unique identifier for the entity
Description	This is a description of the product type

Table 24: Resource per Booking Entities

Resources per [] Booking	
ResourcesPer[]BookingID	This is the unique identifier for the entity
Required Availability	This is the required amount of a specific resource which must be available
Quotable	This shows whether the resources will be quoted on the invoice
Required Date	This is the date on which the resource must be available
Required Time	This is the time on which the resource must be available

Table 25: Menu per Booking Entities

Menu per [] Booking	
MenuPer[]Booking	This is the unique identifier for the entity
Adults	This is the amount of adults at the event
Children	This is the amount of children at the event
Quotable	This shows whether the menu will be quoted on the invoice

Table 26: Beverages per Booking Entities

Beverages per [] Booking	
BeveragesPer[]Booking	This is the unique identifier for the entity
Required Availability	This is the required amount of a specific beverage which must be available
Quotable	This shows whether the beverage will be quoted on the invoice

Table 27: Miscellaneous per Booking Entities

Miscellaneous per [] Booking	
MisPer[]Booking	This is the unique identifier for the entity

Table 28: Event per Resource Entities

Event per Resource	
EventPerResourceID	This is the unique identifier for the entity

Table 29: Event per Menu Entities

Event per Menu	
EventPerMenuID	This is the unique identifier for the entity

Table 30: Event per Miscellaneous Entities

Event per Miscellaneous	
EventPerMiscellaneousID	This is the unique identifier for the entity

Table 31: Treatment Product per Treatment Entities

Treatment Product per Treatment	
TreatProdPerTreatmentID	This is the unique identifier for the entity
Amount Needed	This is the amount of product needed for a treatment

Table 32: Treatment per Booking Entities

Treatment per Booking	
TreatmentPerBookingID	This is the unique identifier for the entity
Quantity	This is the number of treatments required for the booking

Chapter 4: Further Analysis, Design and Implementation

1. Decision Analysis

Software

During the decision analysis phase, the appropriate software for building the information system was chosen. Research revealed that MS Access 2007 is the best candidate software solution to use. This decision is based on the facts that it is:

- Financially feasible
- Readily available
- Easy to use
- Easily maintainable
- Sufficient to meet Champetre's functional requirements

Technical Provisions

A network computing system is a requirement for efficient functioning of the system. Fortunately, Champetre has a network computing system in place. Management will have to invest in more computers as soon as their budget allows for this, as all the identified users will need access to the information system. MS Access 2007 should also be installed on all these computers.

2. Physical Design

The system users identified interface requirements, and focus was placed on constructing a user friendly system. The interfaces were designed in correspondence to Champetre's image and look. The users can thus automatically recognize and identify the system. Tab stops were organized in such a way as to ensure that users can move between input blocks with ease. Combo boxes, automatic calculations and command buttons were also included in the designs. These will ensure that the minimum amount of time is spent in making bookings.

Data capturing methods were designed for inputs, and relevant output reports and display screens were designed.

Security

The users will be able to access the information system on a password basis from the main menu. Each user has a unique password which allows him/her access to specific areas and functions, as is depicted in Table 33.

Symbols:

- C: Create
- R: Read
- U: Update
- D: Delete
- X: No Access

Table 33: Areas to which users have access to

<i>System Components</i>				
<i>System Users</i>	Booking	Client Correspondence	Forms	Reports
Owner and General Manager	R	CRUD	RU	CRUD
Function Coordinator	CRUD	CRUD	RU	CRUD
Function Assistant	CRU	X	R	R
Operations Manager	R	X	R	R
Financial Manager	R	X	R	R
F and B Manager	R	X	R	R
Spa Therapists	R	X	R	R
General Staff	X	X	X	R

3. Construction and Testing

This phase involved the:

- Development of the system using the appropriate software
 - As mentioned, MS Access 2007 was used to construct the information system.
 - **Only the Function Subsystem Part of the ERD was constructed for a conceptual system.**
 - Relevant tables were created from the Function part of the ERD, and furthermore queries, forms and reports were also constructed according to the client’s functional and non-functional requirements.
- System installation
 - As the constructed system was only a conceptual system, it was not installed at Champetre for daily use. Champetre will require external IT-support to build the entire system as specified in this report.
 - A conceptual database was constructed using different supposed scenarios.

- Testing of system components.
 - The constructed scenarios were carefully tested and showed no errors regarding system functionality, viability and reliability.
 - The outputs generated by the system should be accurate and precise. By implication data should be uploaded accurately, inputs should be calculated correctly, and data must be checked and confirmed continuously.

- A **User Guide** was constructed containing all the interfaces, forms and reports, as well as how these should be used (refer to Appendix E).

4. Installation and Delivery

As the information system is only a conceptual system, it will not be physically implemented at Champetre. A formal meeting will be held in which this partly-built system will be demonstrated to management and system users by illustrating how it functions and how it could benefit their company. Management can then decide whether they have adequate resources to fully implement the system.

Research was conducted on implementing change and efficiently maintaining a new system. Pendlebury et al's (1999) 10 keys to change will be implemented to assist in the transformation process.

The following section provides a brief overview of the most important aspects to consider when implementing the information system:

- The business' vision and purpose regarding the implementation of a new booking and managing system should be clearly stipulated and discussed with the employees. This should compliment and even exceed the business's overall mission and vision.
- Appropriate mechanisms must be set up during early stages of development to support the change process.
- Expert and support teams should be included in the process.
- Validation of decisions must take place on a regular basis to ensure consistency with the original vision and purpose of the system.
- Employees should be appropriately informed of progress.
- Training workshops can assist in helping staff members to become comfortable with the new system. These workshops will be facilitated by expert teams.
- High level participation, trust and commitment of management will be crucial throughout the transformation process.
- Management should aim to succeed in releasing initiatives amongst individuals and departments to sustain the business's vision and purpose.
- Management should encourage accountability and anonymity amongst employees.
- Management should also adopt a positive attitude towards employees when dealing with any issues.

Conclusion

A need to improve certain processes at Champetre was identified. Management realized that their current booking, resource management and control management processes are not carried out efficiently.

It was decided to design a system and custom build a conceptual system which will aid in improving Champetre's booking procedure as well as managing and controlling resources more efficiently.

In the first chapter, baseline problem areas and areas of opportunity were discovered from which a project aim could be identified.

In Chapter 2 it was discovered that Champetre's budget will not allow for the purchasing of a commercial information system solution. Thus a custom-built system will be designed, constructed and implemented. The FAST methodology was used to analyse Champetre's current processes as well as design, construct and implement the system.

Chapter 3 contains the analysis and design phases which have been completed. A more detailed problem description was conducted as well as a thorough requirements analysis. Logical models were built from which further designing and construction will be possible.

Chapter 4 discusses the steps involved in executing the project from this point forward. A detailed description was given on tools and techniques which will be used to achieve the aim of the project.

This project will benefit Champetre in providing them with an automated information system. Some of the benefits include cost savings, improved resource management and control, a client database and in turn an increase in profit.

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Appendix A: Hospitality Property Management Software Finder Filtered Results

- **Execu/Suite by Execu/Tech Systems**

All-in-one hotel software suite- reservations, front desk, sales and marketing, catering/event management, restaurant/gift shop POS, GDS/CRS, online booking, PCI compliant payment processing. Luxury inns, resorts, conference centers. Solid, smart, affordable products from dedicated people who...

- **UniResMan by UniDevCo**

UniResMan is a full-featured booking, reservation and property management system for the lodging industry. The intuitive user interface facilitates a smooth workflow from availability inquiries through to guest billing and comprehensive reporting. UniResMan is a scalable application with optional...

- **Atrium by ICSS**

Atrium Property Management and Vacation Ownership systems is designed to grow as the hotelier's business grows. ICSS has 25+ years experience as PM system developers. atrium includes enhanced Rate Management with Yield Controls, Groups, City Ledger, Travel Agents, Housekeeping, Maintenance,...

- **Rezware XP7 by iRez Systems**

iRez Systems has developed a reservations system that is openly definable and customizable to match your unique and specific business needs. Rezware XPO has state of the art features developed with industry standard tools, for a variety of platforms ranging from multi-user Windows based computers,...

- **Aaxsys Technology by Aaxsys Technology**

Aaxsys is a new system that enables you to market and manage bookings of your furnished and unfurnished accommodations. Since Aaxsys technology is internet-based, and requires no extra hardware or software of your own, you can use it anywhere, anytime and from any computer with a web browser. There...

- **ResortSuite PMS by Enablez**

An Oracle-based, fully integrated Property Management System built from the ground up for maximum efficiency and exceptional Guest Service. Its integrated, customer-centric design ensures all areas of your property (Operations, Sales, Marketing, Management, IT, and Finance) operate in complete...

Appendix B: Problem Analysis Tools

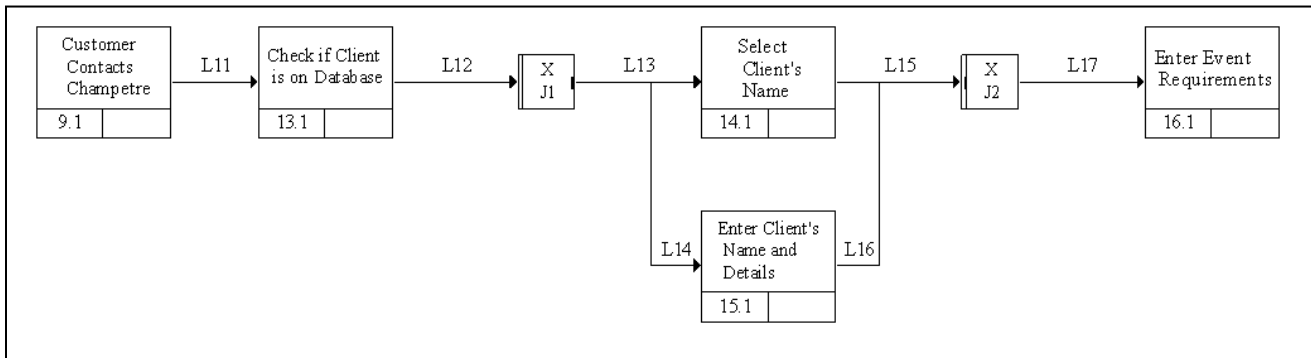
Problem Analysis Tool	Function
Appreciation	Extracting maximum information from facts
5 Whys	Quickly getting to the root of a problem
Cause and Effect Diagrams	Identifying possible causes of problems
Affinity Diagrams	Organizing ideas into common themes
Appreciative Inquiry	Solving problems by looking at what's going right
Flow Charts	Understanding how a process works
System Diagrams	Understanding the way factors affect one-another
Risk Analysis	
SWOT Analysis	Analyzing Strengths, Weaknesses, Opportunities and Threats
PEST Analysis	Understanding the big picture
The Marketing Mix	Understanding how to position your market offering
The Ansoff Matrix	Understanding the different risks of different options
The Boston Matrix	Focusing effort to give the greatest returns
Porter's Five Forces	Understanding where the power lies
Core Competence Analysis	Get ahead. Stay ahead
USP Analysis	Crafting your competitive edge
Critical Success Factors	Identifying the things that really matter for success
The Greiner Curve	Surviving the crises that come with growth

Table: Problem Analysis Tools

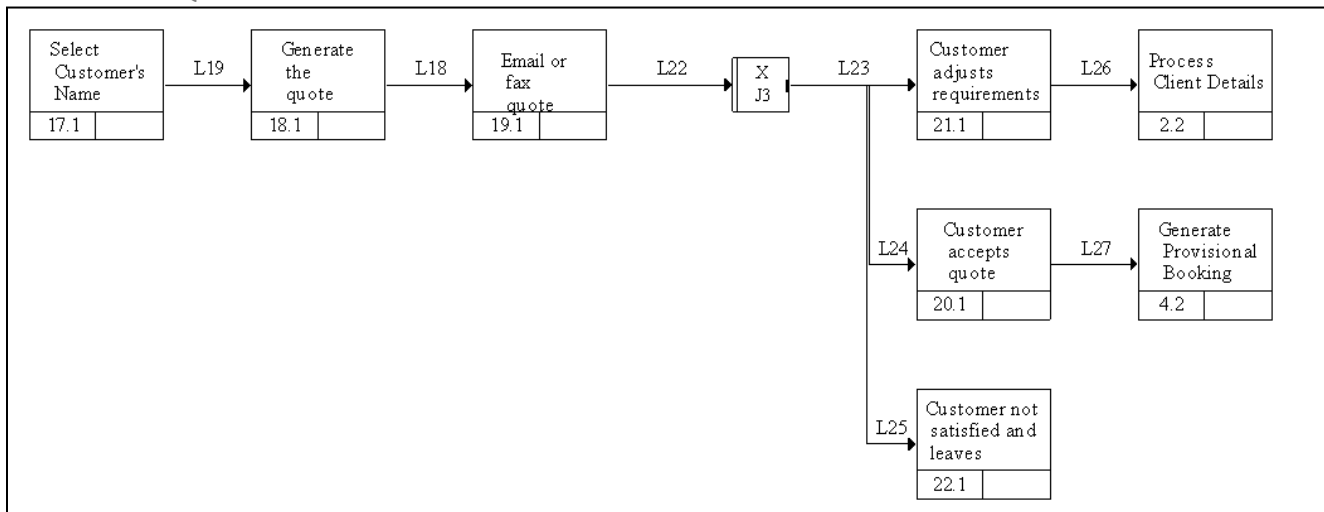
Appendix C: Decomposition of Process Flow Diagrams

For a Function

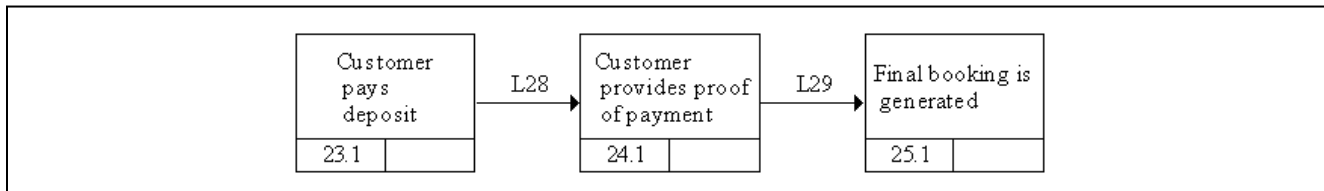
Request a Quote



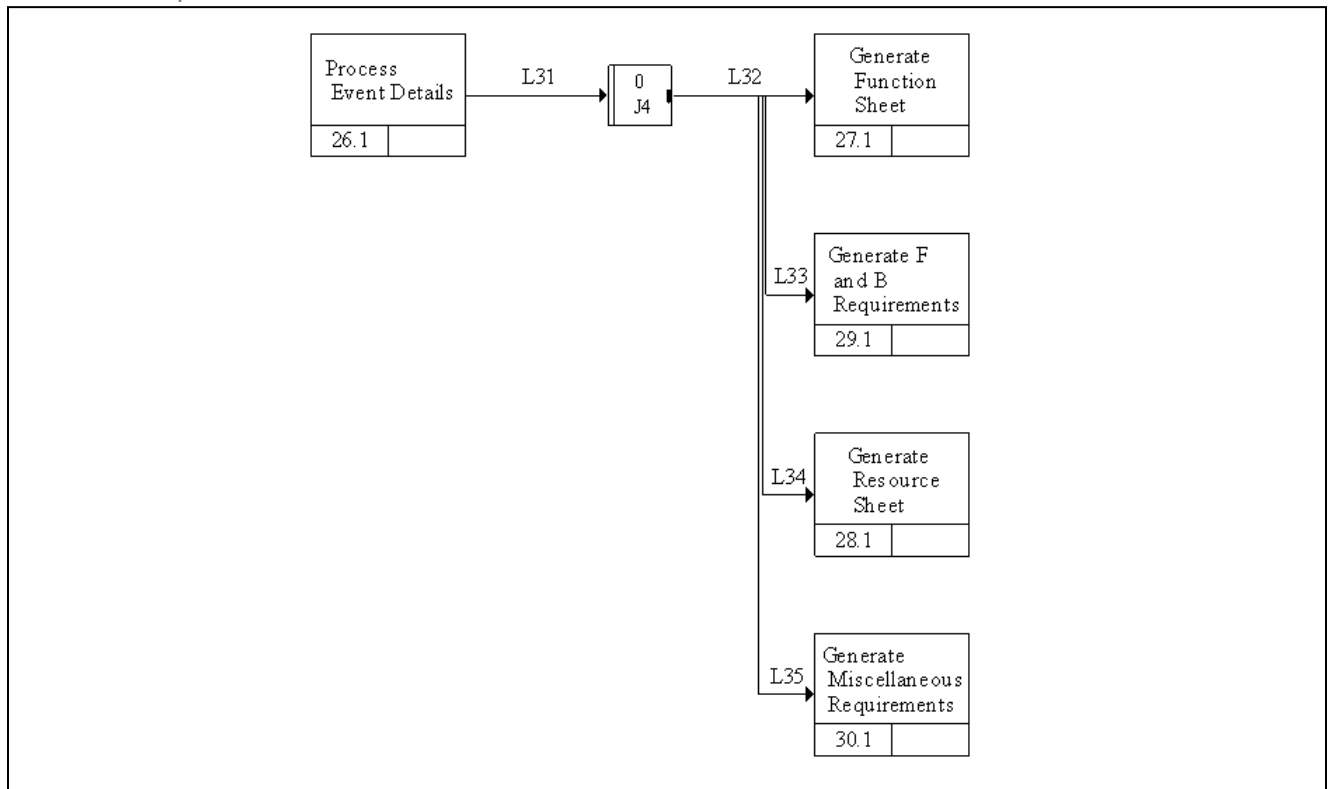
Generate Quote



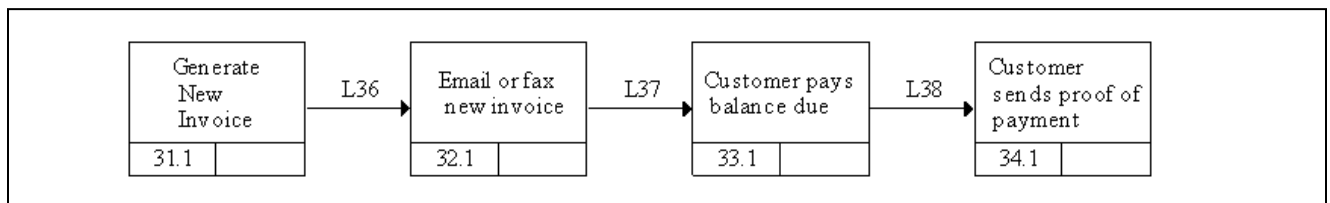
Generate Final Booking



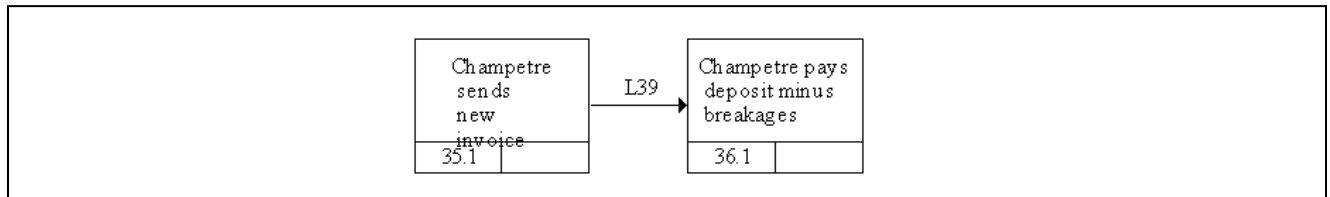
Generate Reports



Pay Balance Due



Repay Deposit

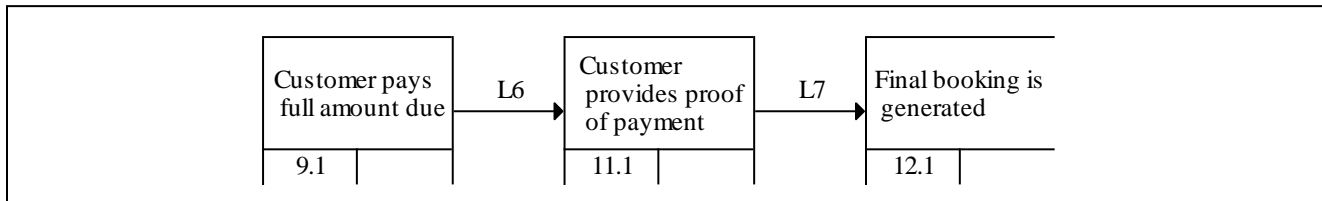


For Outside Catering, Restaurant Event and Spa Event

See Decomposition Diagrams of a function for:

- Request a Quote
- Generate Quote
- Generate Reports

Generate Final Booking



For A Function Booking

Appendix D: Use Case Narratives

Use Case	<i>a. Request Quote [1,2]</i>
Description	A client requests a quote for a function
Actors	Client (Primary) Function Coordinator
Steps	1. Client Contacts Champetre 2. Client provides personal details 3. Client requests event specifications
Variations	#1. Client may phone in or Send an email or Visit the premises
Non-functional	Time to service: The time to capture client details and event specifications should not take longer than 10min, depending on the level of detail and method of communication.

Use Case	<i>b. Generate Quote [3,4]</i>
Description	A quote is generated according to the client's request
Actors	Function Coordinator (Primary) Client
Steps	1. REPEAT 1.1 The function coordinator enters additional information onto the information system. 1.2. The system generates a quote 1.3. The function coordinator sends the quote to the client UNTIL the client is satisfied or the client is not interested
Variations	#1. The quote is sent via email or The quote can be faxed
Non-functional	Time to generate quote: The time to enter additional data, generate the quote, and send it should take place within a reasonable amount of time (Not longer than 15min)
Issues	The initial quote may not contain every single detail, thus accuracy of the billing is questioned. It is also not certain whether the client will be satisfied with the quote.

Use Case	<i>c. Generate Provisional Booking [5]</i>
Description	The client accepts the quote and initiates a provisional booking
Actors	The client (Primary)
Steps	1. The client approves the quote 2. A provisional booking is made on the system
Variations	#1. The client confirms via telephone or Via email or Via fax

Use Case	<i>d. Generate invoice [6,7,15,16]</i>
Description	An invoice containing all the details including balances and due dates is generated and sent to the client
Actors	Secretary (Primary) Client Function Coordinator
Steps	1. Additional information is entered into the account section 2. The invoice is generated and sent to the client
Variations	#1. The invoice can be an intitial invoice or A after deposit payment invoice or A balance to be paid back to the client invoice
Non-functional	Time to send invoice: This must happen immediately after the client approves of the quote

Use Case	<i>e. Pay Deposit [8,9]</i>
Description	The client pays the deposit as indicated on the invoice
Actors	Client (Primary) Financial Department
Steps	1. The client makes a payment into Champetre's account 2. The client sends a proof of payment to Champetre. 3. The Financial Department receives the proof 4. The Financial Department notifies the Function Coordinator that the deposit has been paid.

Use Case	<i>f. Generate Final Booking [10]</i>
Description	After proof of payment has been received, the secretary or function assistant generates the final booking
Actors	Secretary/Function Assistant (Primary)
Steps	1. The final booking is generated on the system

Use Case	<i>i. Generate Resource List [13,14]</i>
Description	The client requirements are used to generate a resource list which contains all resources required.
Actors	Function Coordinator (Primary) Operations Manager
Steps	1. The Function Coordinator enters additional information onto the system 2. The resource list is generated by the system

Use Case	<i>g. Pay Outstanding Balance [11,12]</i>
Description	The outstanding balance according to the invoice is paid
Actors	Client (Primary Actor) Financial Department
Steps	1. The client receives the new invoice (see Use Case d) 2. The client makes a payment into Champetre's account 3. The client sends a proof of payment to Champetre. 4. The Financial Department receives the proof 5. The Financial Department notifies the Function Coordinator that the deposit has been paid.

Use Case	<i>j. Generate Food and Beverage Requirements [13,14]</i>
Description	The client's menu requirements are used to generate a food and beverage requirements sheet.
Actors	Function Coordinator (Primary) F and B Manager
Steps	1. The Function Coordinator enters additional information onto the system 2. The resource list is generated by the system

Use Case	<i>h. Generate Function Sheet [13,14]</i>
Description	The client requirements are used to generate a function sheet which contains information necessary for the event to take place
Actors	Function Coordinator (Primary) Operations Manager
Steps	1. The Function Coordinator enters additional information onto the system 2. The function sheet is generated by the system

Use Case	<i>k. Repay Balance [17,18]</i>
Description	The security deposit less breakages are paid back to the client after the event took place.
Actors	Financial Department (Primary) Client
Steps	1. The client receives the new invoice (see Use Case d) 2. The financial department makes a payment into the client's account
Non-functional	Time of payment: The repayment of the deposit should take place within one 5 working days after the event.

For A Conference Booking

Use Case	<i>a. Request Quote [1,2]</i>
Description	A client requests a quote for an outside catering event
Actors	Client (Primary) Function Coordinator
Steps	1. Client Contacts Champetre 2. Client provides personal details 3. Client requests event specifications
Variations	#1. Client may phone in or Send an email or Visit the premises
Non-functional	Time to service: The time to capture client details and event specifications should not take longer than 10min, depending on the level of detail and method of communication.

Use Case	<i>b. Generate Quote [3,4]</i>
Description	A quote is generated according to the client's request
Actors	Function Coordinator (Primary) Client
Steps	1. REPEAT 1.1 The function coordinator enters additional information onto the information system. 1.2. The system generates a quote 1.3. The function coordinator sends the quote to the client UNTIL the client is satisfied or the client is not interested
Variations	#1. The quote is sent via email or The quote can be faxed
Non-functional	Time to generate quote: The time to enter additional data, generate the quote, and send it should take place within a reasonable amount of time (Not longer than 15min)
Issues	The initial quote may not contain every single detail, thus accuracy of the billing is questioned. It is also not certain whether the client will be satisfied with the quote.

Use Case	<i>c. Generate Provisional Booking [5]</i>
Description	The client accepts the quote and initiates a provisional booking
Actors	The client (Primary)
Steps	1. The client approves the quote 2. A provisional booking is made on the system
Variations	#1. The client confirms via telephone or Via email or Via fax

Use Case	<i>d. Generate invoice [6,7]</i>
Description	An invoice containing all the details including balances and due dates is generated and sent to the client
Actors	Secretary (Primary) Client Function Coordinator
Steps	1. Additional information is entered into the account section 2. The invoice is generated and sent to the client
Non-functional	Time to send invoice: This must happen immediately after the client approves of the quote

Use Case	<i>e. Full Payment [9,10]</i>
Description	The balance according to the invoice is paid
Actors	Client (Primary Actor) Financial Department
Steps	1. The client receives invoice 2. The client makes a payment into Champetre's account 3. The client sends a proof of payment to Champetre. 4. The Financial Department receives the proof

Use Case	<i>f. Generate Final Booking [10]</i>
Description	After proof of payment has been received, the secretary or function assistant generates the final booking
Actors	Secretary/Function Assistant (Primary)
Steps	1. The final booking is generated on the system

Use Case	<i>h. Generate Resource List [11,12]</i>
Description	The client requirements are used to generate a resource list which contains all resources required.
Actors	Function Coordinator (Primary) Operations Manager
Steps	1. The Function Coordinator enters additional information onto the system 2. The resource list is generated by the system

Use Case	<i>g. Generate Function Sheet [11,12]</i>
Description	The client requirements are used to generate a function sheet which contains information necessary for the event to take place
Actors	Function Coordinator (Primary) Operations Manager
Steps	1. The Function Coordinator enters additional information onto the system 2. The function sheet is generated by the system

Use Case	<i>i. Generate Food and Beverage Requirements [11,12]</i>
Description	The client's menu requirements are used to generate a food and beverage requirements sheet.
Actors	Function Coordinator (Primary) F and B Manager
Steps	1. The Function Coordinator enters additional information onto the system 2. The resource list is generated by the system

For An Outside Catering Booking

Use Case	<i>a. Request Quote [1,2]</i>
Description	A client requests a quote for a conference event
Actors	Client/Company (Primary) Function Coordinator
Steps	1. Client Contacts Champetre 2. Client provides personal details 3. Client requests conference specifications
Variations	#1. Client may phone in or Send an email or Visit the premises
Non-functional	Time to service: The time to capture client details and event specifications should not take longer than 10min, depending on the level of detail and method of communication.

Use Case	<i>b. Generate Quote [3,4]</i>
Description	A quote is generated according to the client's request
Actors	Function Coordinator (Primary) Client
Steps	1. REPEAT 1.1 The function coordinator enters additional information onto the information system. 1.2. The system generates a quote 1.3. The function coordinator sends the quote to the client UNTIL the client is satisfied or the client is not interested and leaves
Variations	#1. The quote is sent via email or The quote can be faxed
Non-functional	Time to generate quote: The time to enter additional data, generate the quote, and send it should take place within a reasonable amount of time (Not longer than 15min)
Issues	The initial quote may not contain every single detail, thus accuracy of the billing is questioned. It is also not certain whether the client will be satisfied with the quote.

Use Case	<i>c. Written Confirmation [5]</i>
Description	The client sends a written confirmation to accept the quote
Actors	Client (Primary)
Steps	1. The client sends the confirmation via fax

Use Case	<i>d. Generate Final Booking [6]</i>
Description	After the written confirmation has been received, the secretary or function assistant generates the final booking
Actors	Secretary/Function Assistant (Primary)
Steps	1. The final booking is generated on the system

Use Case	<i>e. Generate invoice [7,8]</i>
Description	An invoice containing all the details including balances and due dates is generated and sent to the client
Actors	Secretary (Primary) Client
Steps	1. Additional information is entered into the account section 2. The invoice is generated and sent to the client
Non-functional	Time to send invoice: This must happen immediately after the client sent a written confirmation

Use Case	<i>f. Full Payment [9,10]</i>
Description	The balance according to the invoice is paid
Actors	Client (Primary Actor) Financial Department
Steps	1. The client receives new invoice 2. The client makes a payment into Champetre's account 3. The client sends a proof of payment to Champetre. 4. The Financial Department receives the proof

Use Case	<i>h. Generate Resource List [11,12]</i>
Description	The client requirements are used to generate a resource list which contains all resources required.
Actors	Function Coordinator (Primary) Operations Manager
Steps	1. The Function Coordinator enters additional information onto the system 2. The resource list is generated by the system

Use Case	<i>g. Generate Function Sheet [11,12]</i>
Description	The client requirements are used to generate a function sheet which contains information necessary for the event to take place
Actors	Function Coordinator (Primary) Operations Manager
Steps	1. The Function Coordinator enters additional information onto the system 2. The function sheet is generated by the system

Use Case	<i>i. Generate Food and Beverage Requirements [11,12]</i>
Description	The client's menu requirements are used to generate a food and beverage requirements sheet.
Actors	Function Coordinator (Primary) F and B Manager
Steps	1. The Function Coordinator enters additional information onto the system 2. The resource list is generated by the system

For A Restaurant Booking

Use Case	<i>a. Provisional Booking Request [1,2]</i>
Description	The client requests a restaurant booking
Actors	Client (Primary) Secretary
Steps	1. Client Contacts Champetre 2. Client provides personal details 3. Client requests restaurant specifications
Variations	#1. Client may phone in or Send an email or Visit the premises
Non-functional	Time to service: The time to capture client details and event specifications should not take longer than 10min, depending on the level of detail and method of communication.

Use Case	<i>b. Generate Invoice [3,4]</i>
Description	The invoice is generated according to the client's request
Actors	Secretary (Primary) Client
Steps	1. The secretary enters additional information onto the information system. 2. The system generates an invoice 3. The secretary sends the invoice to the client
Variations	#1. The quote is sent via email or The quote can be faxed
Non-functional	Time to generate quote: The time to enter additional data, generate the quote, and send it should take place within a reasonable amount of time (Not longer than 15min)

Use Case	<i>c. Full Payment [5,6]</i>
Description	The balance according to the invoice is paid
Actors	Client (Primary Actor) Financial Department
Steps	1. The client receives invoice 2. The client makes a payment into Champetre's account 3. The client sends a proof of payment to Champetre. 4. The Financial Department receives the proof

Use Case	<i>d. Generate Final Booking [7]</i>
Description	After proof of payment has been received, the secretary or generates the final booking
Actors	Secretary/Function Assistant (Primary)
Steps	1. The final booking is generated on the system

Use Case	<i>e. Generate Resource List [8,9]</i>
Description	The client requirements are used to generate a resource list which contains all resources required.
Actors	Secretary (Primary) Spa Therapists Operations Manager
Steps	1. The Secretary enters additional information onto the system 2. The resource list is generated by the system

Use Case	<i>f. Generate Food and Beverage Requirements [8,9]</i>
Description	The client's menu requirements are used to generate a food and beverage requirements sheet.
Actors	Secretary (Primary) F and B Manager
Steps	1. The Function Coordinator enters additional information onto the system 2. The resource list is generated by the system

For A Spa Booking

Use Case	<i>a. Provisional Booking Request [1,2]</i>
Description	The client requests a spa treatment booking
Actors	Client (Primary) Secretary
Steps	1. Client Contacts Champetre 2. Client provides personal details 3. Client requests treatment specifications
Variations	#1. Client may phone in or Send an email or Visit the premises #2. Treatment details can be found from the website or From advertisements or From a flyer or Telephonically
Non-functional	Time to service: The time to capture client details and event specifications should not take longer than 10min, depending on the level of detail and method of communication.

Use Case	<i>b. Generate Invoice [3,4]</i>
Description	The invoice is generated according to the client's request
Actors	Secretary (Primary) Client
Steps	1. The secretary enters additional information onto the information system. 2. The system generates an invoice 3. The secretary sends the invoice to the client
Variations	#1. The quote is sent via email or The quote can be faxed
Non-functional	Time to generate quote: The time to enter additional data, generate the quote, and send it should take place within a reasonable amount of time (Not longer than 15min)

Use Case	<i>c. Full Payment [5,6]</i>
Description	The balance according to the invoice is paid
Actors	Client (Primary Actor) Financial Department
Steps	1. The client receives invoice 2. The client makes a payment into Champetre's account 3. The client sends a proof of payment to Champetre. 4. The Financial Department receives the proof

Use Case	<i>d. Generate Final Booking [7]</i>
Description	After proof of payment has been received, the secretary or generates the final booking
Actors	Secretary/Function Assistant (Primary)
Steps	1. The final booking is generated on the system

Use Case	<i>e. Generate Resource List [8,9]</i>
Description	The client requirements are used to generate a resource list which contains all resources required.
Actors	Secretary (Primary) Spa Therapists Operations Manager
Steps	1. The Secretary enters additional information onto the system 2. The resource list is generated by the system

Use Case	<i>f. Generate Food and Beverage Requirements [10,11]</i>
Description	The client's menu requirements are used to generate a food and beverage requirements sheet.
Actors	Secretary (Primary) F and B Manager
Steps	1. The Function Coordinator enters additional information onto the system 2. The resource list is generated by the system

General Use Cases

Use Case	<i>Maintain Client Details</i>
Description	Throughout the process, the client's personal, account and event details need to be maintained.
Actors	Secretary (Primary)
Steps	1. The secretary captures and changes client details on the system
Non-functional	Accuracy: The details must be updated as soon as changes are made. This is a continuous process.

Use Case	<i>Generate Stock Count Sheet</i>
Description	Each department must fill out a stock count sheet at the end of each month.
Actors	Secretary (Primary) Function Coordinator Operations Manager F and B Manager Finance Department
Steps	1. The forms are filled out by each department 2. The Financial Department receives the sheets and does the necessary bookkeeping.

Use Case	<i>Generate Calender</i>
Description	The calender/schedule is automatically generated when bookings are made.
Actors	Time (Primary)
Steps	1. The system generates the calender when bookings are entered.

Use Case	<i>Maintain Calender</i>
Description	The calender needs to be maintained when changes are made, or when scheduled meetings take place.
Actors	Secretary (Primary)
Steps	1. The secretary makes changes to the calender when required

Appendix E: User Manual and Reports

Getting Started

1. Open the Information System from the desktop
2. The user will be prompted his/her password
3. The Main Menu will appear (Figure B)
4. Figure A illustrates the main toggle buttons
 - The first button navigates you to the previous record
 - The second button navigates to the next record
 - The third button creates a new record/entry



Figure A: Main Buttons



Figure B: Main Menu Form

Maintain Client Details

1. Click once on the “Maintain Client Details” Block (Figure B)
2. This will open a new interface (Figure C)
3. A new client’s details can be entered onto the form or a current client’s details can be changed
4. Return to Main Menu by clicking on the “Main Menu” Block

The screenshot shows a web application interface titled "Client Details". It features three main sections: "Client", "Additional Information", and "Contact Information".

- Client Section:** Contains fields for ClientID (1), Name (Pietra), and Surname (Abbott).
- Additional Information Section:** Contains fields for Company Name (Schindler's Attorneys) and Where did you hear from us? (Website).
- Contact Information Section:** Contains fields for Cell Number (082 354 7654), Alternative Number (011 324 5434), Email Address (pietra@schindlers.co.za), Address (Fourways, Johannesburg), and Fax Number (011 345 3642).

At the bottom right, there are navigation buttons: a left arrow, a right arrow, a home icon, and a "Main Menu" button.

Figure C: Client Details Form

Edit

1. Beverage, Menu, Dishes, Resources and Miscellaneous tasks can be edited by clicking on the “Edit” Block (Figure B)
2. Click on the appropriate block in order to edit information (Figure D)
3. Enter the required inputs in a new space (Figures E,F,G,H)
4. Return to the Main Menu by clicking on the “Main Menu” Block (not included in figures)



Figure D: Edit Form

The image shows a software interface titled "Edit Beverages". It features a light green background with a black header bar containing a leaf icon and the text "Edit Beverages". Below the header, there is a table with the following data:

BeverageID	Description	Type	Price per unit
1	Coke	330ml Can	R 7.00
2	Drostdy Hoff Wine	750ml Bottle	R 50.00
3	Mixed Fruit Juice	2l Bottle	R 18.00
4	Champane	750ml Bottle	R 60.00
(New)			

Figure E: Edit Beverages Form

EventID	Description
1	Function
2	Spa
3	Outside Catering
4	Restaurant
(New)	

Figure F: Edit Events Form

MenuID: 1
Description: Menu A

ID	Event Type
1	Function
###	

ID	DishID
1	Chicken Breast
2	Mushroom Sauce
3	Sweet Potato
4	Chocolate Mousse
###	

Record: 1 of 2 | No Filter | Search

Record: 1 of 4 | No Filter | Search

Figure G: Edit Menu Form

DishID	Description	Price per person	Type of Meal
1	Chicken Breast	R 15.00	Main Course
2	Mushroom Sauce	R 1.00	Main Course
3	Rice	R 3.00	Main Course
4	Spinach	R 8.00	Main Course
5	Sweet Potato	R 8.00	Main Course
6	Shrimp	R 6.00	Starter
7	Crumbed Mushrooms	R 4.00	Starter
8	Chocolate Mousse	R 5.00	Dessert
9	Ice-Cream	R 2.00	Dessert
10	Chocolate Sauce	R 1.00	Dessert
11	Assorted Sandwiches	R 3.00	Snack

[Edit Dishes Per Menu](#)

Figure H: Edit Dishes Form

Bookings

1. Click on the appropriate booking type blocks on the Main Menu (Figure B)
2. For purposes of this project, only the Function Booking was focused on (Figure I)
3. Enter the required details for the event in the blocks down the left-hand side of the screen
4. There are 4 tabs in which requirements must also be entered (Figure I,J,K,L)
5. Return to the Main Menu by clicking on the "Main Menu" Block

Function Booking

FunctionBookingID: 2
 ClientID: Pietra Abbott
 Type of Function: Wedding
 Date Requested: 2009/11/29
 Starting Time: 04:00:00 PM
 Finishing Time: 12:00:00 PM
 Venue: Old Barn
 Venue Quotable:
 PAX: 150
 Type of Booking: Final
 Function Reference Name: Abbott Wedding
 Notes: Pietra is getting married to Jaco Fourie. His contact number is 0823465871.

Menu | Beverages | Resources | Miscellaneous

Menu Requirements

ID: 1
 Menu Selection: Menu A
 Adults: 120
 Children: 30
 Quotable:
 Edit Menu

Navigation: [Previous] [Next] [Print] Main Menu

Figure I: Function Booking Form and Menu Tab

Menu | **Beverages** | Resources | Miscellaneous

Beverage Requirements

ID: 2
 BeverageID: Coke - 330ml Can
 Required availability: 50
 Quotable:

Navigation: [Previous] [Next] [Print]

Figure J: Beverages Tab

Menu Beverages Resources Miscellaneous

Resource and Equipment Requirements

ID 1

Resource Selection Projector -

Required Availability 1

Quotable

Required Time 04:00:00 PM

Required Date 2009/11/29

Navigation buttons: Previous, Next, Refresh

Figure K: Resources Tab

Menu Beverages Resources Miscellaneous

Miscellaneous Requirements

MisPerFunctionBookingID 2

MiscellaneousID Clean Parking Lot

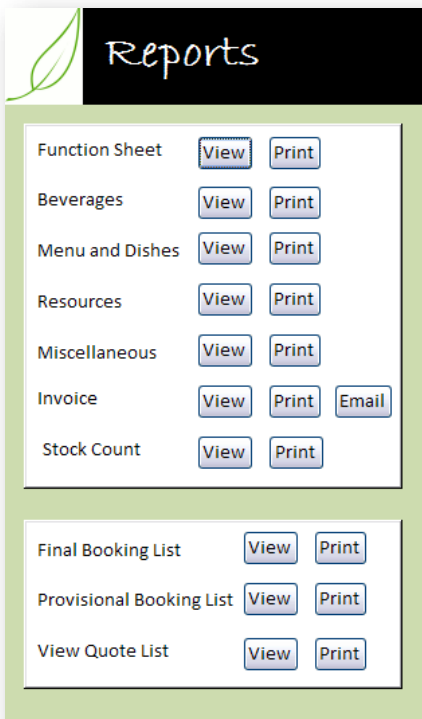
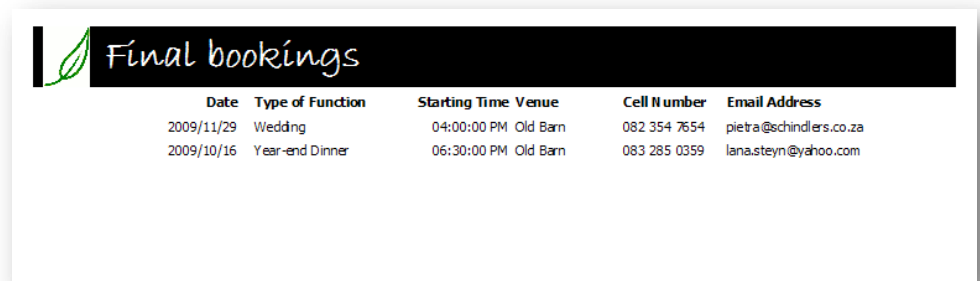
Navigation buttons: Previous, Next, Refresh

Figure L: Miscellaneous Tab

Reports

1. Click on the “Reports” block on the Main Menu (Figure B)
2. This will open a new form (Figure M)
3. Select to view, print or email a specific report
4. The user will be prompted to enter the Function Reference Name in order to view the reports for a specific event

Examples of reports can be seen in Figures N,O,P and Q. Other reports will also be generated, but as they are very similar, only the basic types of reports were included in the report.

Date	Type of Function	Starting Time	Venue	Cell Number	Email Address
2009/11/29	Wedding	04:00:00 PM	Old Barn	082 354 7654	pietra@schindlers.co.za
2009/10/16	Year-end Dinner	06:30:00 PM	Old Barn	083 285 0359	lana.steyn@yahoo.com

Figure N: Final Bookings Report



Function Reference Name	Menu	Adults	Children	Quotable	Dishes	Cost Per Person
Abbott Wedding	Menu A	120	30	<input checked="" type="checkbox"/>	Chocolate Mousse Sweet Potato Mushroom Sauce Chicken Breast TOTAL	R 5.00 R 8.00 R 1.00 R 15.00 R 29.00

Figure O: Menu and Dishes Report

Figure M: Reports Form



Personal Details

Client Name and Surname	Janneke Pieters
Cell Number	083 456 2456
Alternative Number	012 345 3423
Email Address	jane@gmail.com
Address	Hatfield, Pretoria
Company Name	Private
Where did you hear from us?	Word of Mouth
Fax Number	

Event Details

Type of Function	Birthday
Date Requested	2009/10/27
Starting Time	06:00:00 PM
Finishing Time	11:00:00 PM
Venue	Dobb's House
PAX:	30
Notes:	Janneke wants an old english themed birthday party.

Beverages

Qty	Beverages
10	Mixed Fruit Juice - 2l Bottle

Menu

Menu	Adults	Children
Menu C	30	0

Resources

Qty	Resources
3	Table Cloth - Grey
30	Chair -
5	Fairy Lights - Coloured

Miscellaneous

Miscellaneous Description
Clean Parking Lot

Figure P: Function Sheet



09 October 2009
01:56:03 AM

P.O. BOX 38 Modderfontein, 1464
Tel 011 0214567 Fax 086 345 3456
information@champetre.co.za
www.champetre.co.za

Client Details

Name	Pietra	Date Requested	2009/11/29
Surname	Abbott	Ref Name	Abbott Wedding
Cell Number	082 354 7654		
Email Address	pietra@schindlers.co.za		

Venue

Old Barn R 5,000.00

Menu

Menu A	Qty	Description of Dish	Price Per Person	Total
	150	Chicken Breast	R 45.00	R 6,750.00
	150	Mushroom Sauce	R 3.00	R 450.00
	150	Sweet Potato	R 24.00	R 3,600.00
	150	Chocolate Mousse	R 15.00	R 2,250.00
				R 13,050.00

Beverages

Qty	Beverage	Price per unit	Total
50	Coke - 330ml Can	R 7.00	R 350.00
30	Drostyd Hoff Wine - 750ml Bot	R 50.00	R 1,500.00
			R 1,850.00

Resources/Equipment

Qty	Description	Price per item	Total
1	Projector -	R 100.00	R 100.00
150	Chair -		
150	Table Cloth - Grey	R 10.00	R 1,500.00
			R 1,600.00

TOTAL AMOUNT DUE **R 21,500.00**

Figure Q: Invoice/Quote Report

