

BUSINESS ANALYSIS WORK PLAN

FOR

CANYON RANCH DATABASE

Overview

A Business Analysis Work Plan states the selected business analysis approach and planned business analysis activities for the IT system development project. It covers the following aspects:

- i) project description;
- ii) scope of business analysis work;
- iii) business analysis approach;
- iv) work schedule;
- v) target deliverables;
- vi) stakeholder list.

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1. PURPOSE

The purpose of this project is to design and deploy a database that would be capable of supporting the objectives described in the attached case study. In essence, the design will be able to track customer activities as they visit and stay in one of Canyon Ranch's locations.

2. PROJECT DESCRIPTION

The project will tentatively plan to start from mm/yyyy until mm/yyyy including project initiation, project planning, systems analysis and design, implementation to the funding approval.

- a) Description of the business problem and the proposed database
- b) ER Diagram describes the database
- c) Data dictionary

3. ASSUMPTIONS & CONSTRAINTS

Company will build the database to use customer information effectively.

Guest information will be recorded in a separated table with ID, Name, Address, Gender, Phone Number information.

There are three kinds of services built in the database: Spa, Training Session and Hotel. Each service will be recorded with information such as ID, Price, Name, Schedule,

The information of relationship between Guest and services will be recorded with criteria such as: Check In Time, Check Out Time, Reserved Method.

Department will manage services, facilities, and employees. Employee information are ID, Name, Address and Phone Number. Facility includes Center ID and Center Name.

4. PROPOSED BUSINESS ANALYSIS APPROACH

4.1 BUSINESS ANALYSIS APPROACH

The business analysis approach for the IT system development project will divide the development process into different phases according to the System Development Life Cycle (SDLC). Each phase will be performed one by one in sequential order such that a new phase will not commence until the completion of all key tasks in the previous phase.

4.2 ROLES AND RESPONSIBILITIES OF BA

The planned scope of work for the BA in the project should be clearly defined. The major role of BA is to liaise between the end-user side and IT side to help identify and analyze business problems and needs and facilitate the development of IT systems to achieve the business goals.

The roles and responsibilities of BA for the project are stated as follows:

- a) Contribute to the Development of Business Case

Assist users in identifying business problems, needs and functions, understand stakeholders' concerns and requirements, identify improvement opportunities, and contribute business input for developing the business case for the IT system development project.

- b) Facilitate the Elicitation and Analysis of Requirements

Collaborate and communicate with stakeholders to elicit, consolidate, analyze, and prioritize requirements, manage their expectations and needs, and help to ensure the requirements are

complete, unambiguous and map to real business needs.

- c) Assess Proposed System Option and Organization Readiness for System Implementation

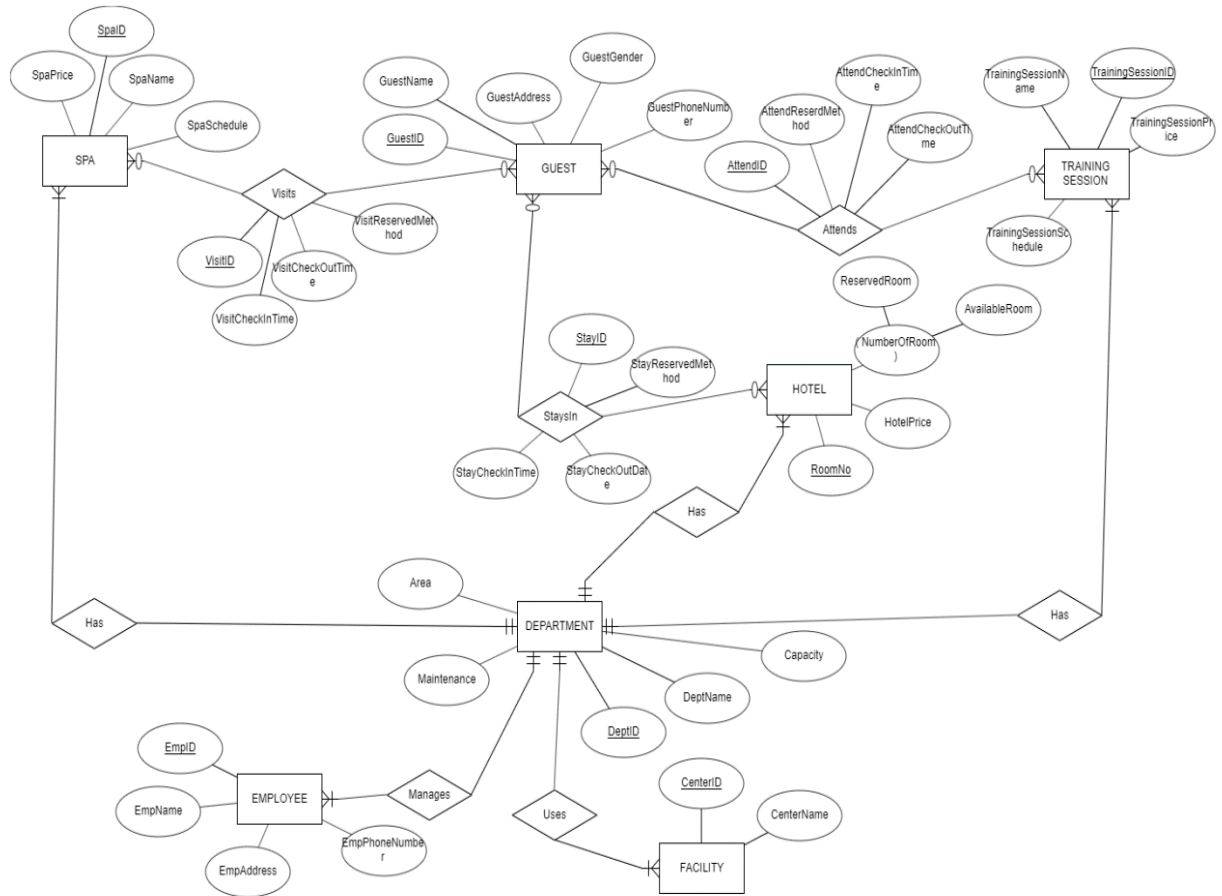
Provide support to users and coordinate with IT staff to help review the IT system from the business perspective, resolving issues/conflicts among stakeholders, organize UAT and training with the aim of ensuring the deployed IT system is capable of meeting business needs and requirements as well as realizing the anticipated benefits.

- d) Plan and Monitor the Business Analysis Activities

Plan the scope, schedule, and approach for performing the activities related to business analysis for the IT system development project, monitor the progress, coordinate with the Internal PM and report to PAT or PSC on changes, risks, and issues wherever appropriate.

4.3 BUSINESS ANALYSIS TECHNIQUES TO BE USED

- a) Elicitation techniques including interviews, focus group discussions, workshops, structured walkthrough, and site visits will be used to collect requirements and identify real needs and desires of users.
- b) IT staff will help to develop prototypes, screen mock-ups, wireframe, or sample functions/features for demonstration during interviews, discussion meetings, workshops, and structured walkthrough sessions with stakeholders to let them gain early user experience in look and feel and functions of the new IT system.
- c) Context diagrams, use cases, process flow diagrams and other charts/tables/diagrams may be used to identify and model the interrelationships and dependencies of requirements.



5. DELIVERABLES

The following are the proposed business analysis deliverables. The proposed target completion dates will be further revised when preparing the funding application or project management plan. Any details about the deliverables, e.g., proposed table of contents/layout may be supplemented as annexes if necessary.

The expected benefits when I built this database is first knowing how often and where guests will go most, defining strategy marketing around that place and time. Identifying the age range and gender, defining service in which age range and gender the guest tends to use most to offer packages wisely and may develop this service more as well. Besides, based on Guest ID of spa, training session and hotel to record who is old or new customer and finalize, invest more in which service (for instance: if old customers come back and continue using his/her used service and if there is a large of customers use this service, we can develop it. Or if new customers usually use which service, we can catch this trend and develop). As a result, we can record guest preference and purpose (relieve stress, skin care, ...) based on Guest ID.

Based on the recorded check in and check out time, defining when or which season guests usually use services for efficient offering and advertising. Identifying peak day/month/season for planning strategy wisely such as proposing a wise schedule in convenient date and time. From the Reserved Method, proposing the way to approach guests effectively (for example: by email, social network, agent, ...). In

addition, getting to know when there are available rooms in Hotel and planning to apply for a decreased price, ...

Besides, controlling facility and employee to maximize productivity through department (for example: maintenance for facility and appropriate working shift for employee)

Logical database model

(i.e., relational schema that can be directly obtained by transforming your ER diagram in ERDPlus).

Business database description:

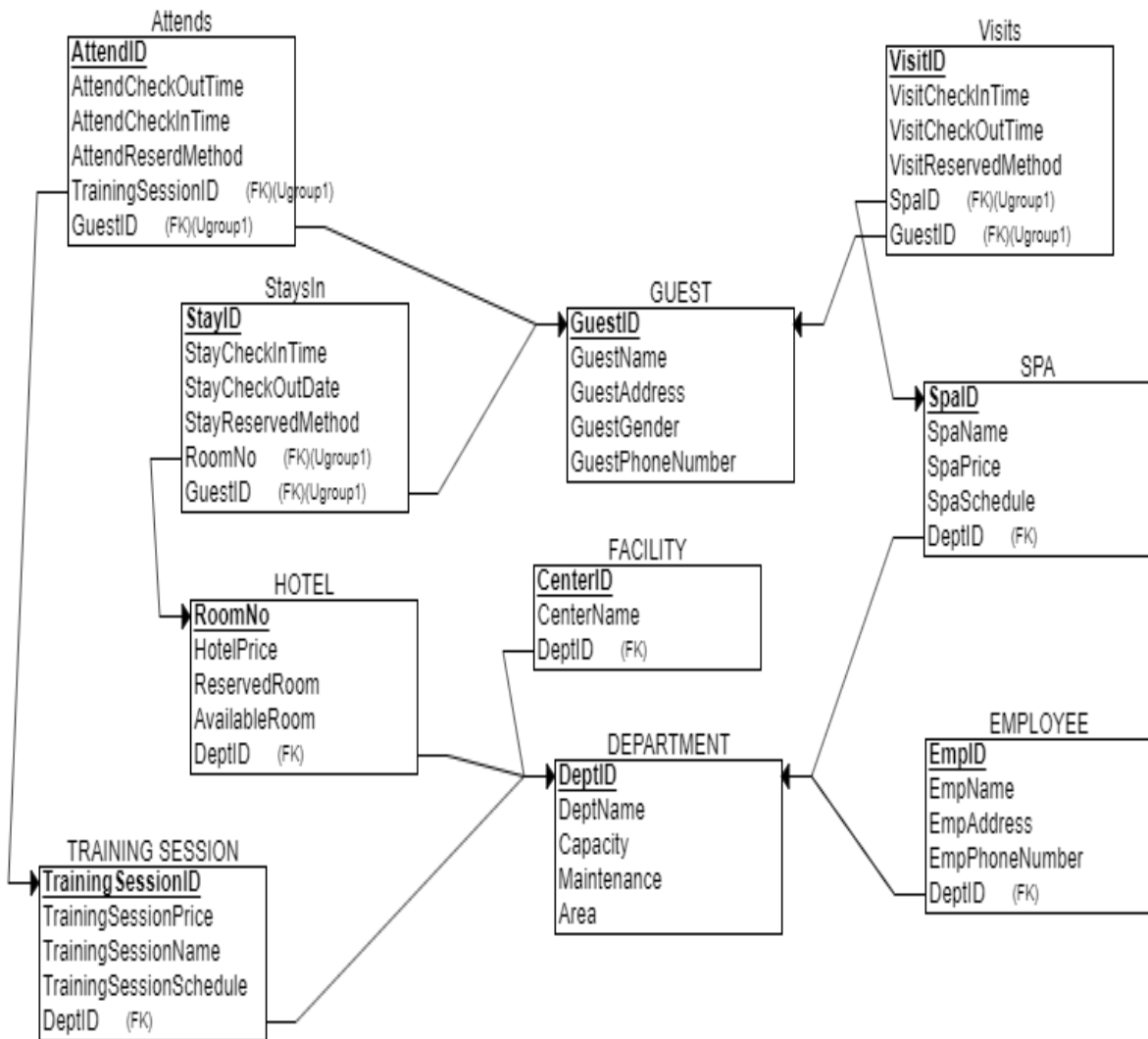
When a guest arrives, the database will record guest information by unique Guest ID with guest information about: Guest Name, Guest Address, Guest Gender, Guest Phone Number. There are three services for guests: Spa, Training Session and Hotel. When guests choose a Spa, Training Session or Hotel, information about Visit ID (or Attend ID), Check In time, Check Out time, Reserved Method will be recorded.

Spa, Training Session and Hotel data will be recorded by ID, Price, Name, Schedule in database for management.

Department will manage Spa, Training Session, Hotel data.

In addition, the Department will also manage information about employees and facilities.

Relational schema:



List of ALL functional dependencies.

GUEST table:

- GuestID -> GuestName, GuestAddress, GuestGender, GuestPhoneNumber

DEPARTMENT table:

- DeptID -> DeptName, Capacity, Maintenance, Area

SPA table:

- SpaID -> SpaName, SpaPrice, SpaSchedule, DeptID

Partial functional dependency:

- + SpaName -> SpaID

Visits table:

- VisitID -> VisitCheckInTime, VisitCheckOutTime, VisitReservedMethod, SpaID, GuestID

TRAININGSESSION table:

- TrainingSessionID -> TrainingSessionName, TrainingSessionPrice, TrainingSessionSchedule, DeptID

Partial functional dependency:

- + TrainingSessionName -> TrainingSessionID

Attends table:

- AttendID -> AttendCheckInTime, AttendCheckOutTime, AttendReservedMethod, TrainingSessionID, GuestID

HOTEL table:

- RoomNo -> HotelPrice, ReversedRoom, AvailableRoom, DeptID

StaysIn table:

- StayID -> StayCheckInTime, StayCheckOutTime, StayReservedMethod, RoomNo, GuestID

EMPLOYEE table:

- EmpID -> EmpName, EmpAddress, EmpPhoneNumber, DeptID

FACILITY table:

- CenterID -> CenterName, DeptID

Database model normalized to Boyce-Codd Normal Form (BCNF)

SPA table:

- SpaID -> SpaName, SpaPrice, SpaSchedule, DeptID

Partial functional dependency:

- + SpaName -> SpaID

Database model normalized to Boyce-Codd Normal Form (BCNF):

- SpaID -> SpaName, DeptID
- SpaName -> SpaID, SpaPrice, SpaSchedule

TRAININGSESSION table:

- TrainingSessionID -> TrainingSessionName, TrainingSessionPrice, TrainingSessionSchedule, DeptID

Partial functional dependency:

- + TrainingSessionName -> TrainingSessionID

Database model normalized to Boyce-Codd Normal Form (BCNF):

- TrainingSessionID -> TrainingSessionName, DeptID
- TrainingSessionName -> TrainingSessionID, TrainingSessionPrice, TrainingSessionSchedule

The database will not change for simplify the recorded data.

Data dictionary

Table Name	Column Name	Data Type	Data Length
DEPARTMENT_CYC	DeptID	Char	3
DEPARTMENT_CYC	DeptName	VarChar2	25
DEPARTMENT_CYC	Capacity	VarChar2	25
DEPARTMENT_CYC	Maintenance	VarChar2	25
DEPARTMENT_CYC	Area	VarChar2	25
GUEST	GuestID	Char	10
GUEST	GuestName	VarChar2	25
GUEST	GuestAddress	VarChar	100
GUEST	GuestGender	text	
GUEST	GuestPhoneNu	VarChar2	20
SPA	SpaID	Char	3
SPA	SpaName	VarChar2	25
SPA	SpaPrice	money	
SPA	SpaSchedule	VarChar	max
SPA	DeptID	Char	3
Visits	VisitID	Char	10
Visits	VisitCheckInTi	VarChar2	50
Visits	VisitCheckOut	VarChar2	50
Visits	VisitReservedI	VarChar2	50
Visits	SpaID	Char	3
Visits	GuestID	Char	10

Projected risks

However, there are some projected risks in this database. Firstly, the data we get may too be scattered to form trends. The result is not suitable with the situation in some cases (for instance, the database conveys that service is used most and brings many profits. However, this service is costly to invest in and another reason that guests are willing to pay just for this service one time (because customers can use this service once in 3 years and does not lose its effect). Thus, if we invest much in this, we cannot get enough payback or capital.)

The system may be too rigid that if there is any incidence, flexible solutions cannot apply (For example, employee want to change their shift)

One more certain risk that we can face is cyber threat. Hackers can attack and get the guest information if we do not have good security.

6. WORK SCHEDULE

No.	Phase	Planned Activities	Start Date	End Date
1.	Project Planning	Plan business analysis activities	dd/mm/yyyy	dd/mm/yyyy
2.	Project Funding Request	Assist in identifying business needs and defining project scope	dd/mm/yyyy	dd/mm/yyyy

		and approaches		
3.	SA&D Phase	Facilitate the elicitation and analysis of requirements, and help users to assess the proposed system option for System Implementation	dd/mm/yyyy	dd/mm/yyyy
4.	Implementation Phase	Assist users to perform UAT, and coordinate pre-production and roll-out activities	dd/mm/yyyy	dd/mm/yyyy
5.	Post-Implementation Phase	Evaluate the system against business needs and benefits	dd/mm/yyyy	dd/mm/yyyy

7. STAKEHOLDER

Stakeholder Group	Project Role(s)	Expectations /Concerns (if any)	Influence Rating	Impact Rating	Commitment Level	Remarks
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Project Owner	Project Owner	<p><u>Expectations:</u> The system can meet the project objectives, comply with Stores & Procurement Regulations, and achieve the anticipated benefits.</p> <p><u>Concerns:</u> Quality of deliverables Address concerns of stakeholders</p>	High	High	<p>Current Level: Ownership</p> <p>Fund Request (Target): Ownership</p> <p>SA&D(Target): Ownership</p> <p>Implementation (Target): Ownership</p>	
Supplies Section	Members of PSC/PAT	<p><u>Expectations:</u> The system can meet the project comply with Stores & Procurement Regulations, and achieve the anticipated benefits. A complete set of system documentations and training materials are provided.</p>	High	High	<p>Current Level: Understand Fund Request (Target): Buy-in</p> <p>SA&D(Target): Buy-in</p> <p>Implementation (Target): Adoption</p>	...

IT Staff	IT Project Team	<p>Concerns: Next year's annual inventory check can be completed before system roll- out.</p> <p>Usability, performance and reliability of the system</p> <p>Changes can be made during SA&D.</p> <p>Expectations: The system can meet the project objectives and business needs, and deliver on schedule and within budget.</p> <p><u>Concerns:</u> User requirements are clear, and requirements changes can be managed.</p>	Medium	Medium	<p>Current Level: Aware</p> <p>Fund Request (Target): Understand</p> <p>SA&D(Target): Buy-in</p> <p>Implementation (Target): Buy-in</p>	...
Section Heads	User Representatives	<p>Expectations: The system is user friendly and system response time is acceptable.</p> <p>Concerns: No additional resources</p>	Low	Medium

		required after roll-out.				
Section Users	User Representatives	<p>Expectations: The system is user friendly and system response time is acceptable.</p> <p>Concerns: No additional resources required after system roll-out.</p>	Low	Medium