**Food Truck Information System**

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**MSC 545**

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# Background and Statement of Need

Alex Sanchez started his own Food Truck business in Falls Church, VA, after working in the restaurant industry for five years. He bought a used food truck and refurbished it, and installed all the necessary equipment. Roadside business is doing well, but he finds it tough to keep track of his accounting as well as supplies for his menu offerings. Furthermore, he wants to expand his operations to participate at special events like local fairs, and start doing small scale catering. To help with his business operations; he is looking at investing in a new information system. The information System needs to be designed to handle the following business needs.

This project will satisfy the following needs:

* Manage truck operation and financial transaction.
* Expand business by overseeing menu offering and providing catering services.
* Regulate employee hours/ pay.

# Project Goals

## Goal #1 – Manage truck operation and financial transaction.

Alex Sanchez currently unable to keep proper track in its new investment due to lack of some function in current information system. This food truck information system will fulfill this requirement of the company.

## Goal #2 – Expand business by overseeing menu offering and providing catering services.

Alex Sanchez is also focusing on expanding its business through catering services for this company needs information system will facilitate effective communication with its customers about their events and their expectations from the company.

## Goal #3 – Regulate employee hours/ pay.

This is the crucial requirement of this system. Currently, Alex Sanchez don’t have the system to keep track of the employee’s schedule and pay. So, this system will meet that goal in through this project.

# Project Objectives

## Manage truck operations and financial transaction.

### Goal 1, Objective 1 - Record transaction in all accounts

The existing system of Alex Sanchez doesn’t support the record of all business transaction. In some business operations they still use the paper base recording system. So, in this business it wants to create a new system that will support in recording all the business transactions such as billing and payments (POS).

3.1.2 Goal 1, Objective 2 - Categorize food truck expenses

To break down the business transaction further, using a chart of accounts. A chart of accounts will give a complete list of every account in our book. The separation of each transaction account will make easy for different department to carry out their work.

### Goal 1, Objective 3 - Schedule when bill payments are due

To have the notification feature about when the bill payments/adjustments are due. This feature will make work convenient for the company to collect the revenue and clear the payable amount in timely fashion.

## Expand business by overseeing menu offering and providing catering services.

### Goal 2, Objective 1 – Inventory of food items/ supplies

To develop the more efficient record keeping system so that company will have proper amount of supplies while providing catering services.

### Goal 2, Objective 2 – Manage and categorize recipes/ menu offerings

This new system should support updating items in the system so that whenever company wants to update their menu it becomes easy to adjust it in the current system. This will enable company in managing and categorizing menu offerings.

3.2.3 Goal 2, Objective 3 – Provide Catering services.

To have all the menu items for catering services in different sizes based on the number of people. This will set the standard for the company run the catering services.

## Regulate employee schedule/ hours.

### Goal 3, Objective 1 – Create employee schedule.

To adjust employee schedule with the shift pickup/release, day off request, request to work, messaging functions. This will make easier for the manager to manage the employee schedule for work.

### Goal 3, Objective 2 – Manage employee hours.

To create a system of notification to keep track of employee hours. Adjust employee hours (if employee forgot to clock in/out or forgot to take break. This feature will help the company control and maintain the labor cost.

### Goal 3, Objective 3 – Manage employee pay

To create a feature in the system that will calculate hours worked accurately. This feature will include pay time off and sick leave information. Reporting all hours before pay roll closes will help the company to make the accurate amount of payment for the employee efficiently.

# Project Approach

## Manage Truck Operations and final transaction

### Goal 1, Objective 1 - Record transactions in all account.

#### Approach 1 – Communicate with different department

Communicate with different department in order to identify various transactions that will be incurred in the operation of the business.

#### Approach 2 – Verify various accounts

Second approach for this objective is to identify how many accounts the company have in running right now. This account may be related with each department. So, each department will inform about types and number of accounts that they are currently using and request for new accounts if required.

#### Approach 3- Develop a proposal

Develop a proposal and submit to various department and ask for their suggestion and approval.

### Goal 1, Objective 2 - Categorize food truck expenses

#### Approach 1 – Verify the type and number of expenses

In this approach we will identify what and how many types of expenses are usually incurred.

#### Approach 2 – Get an approval with another department

Once the proposal is developed, it is sended to various department for approval together with their suggestions.

#### Approach 3 – Set an appointment with system analyst

Once we verify different type of food expenses, we will set an appointment with the system analyst about our requirement in the new information system.

### Goal 1, Objective 3 - Schedule when bill payments are due

#### Approach 1 – Collect all the payable bills

Make a system to gather all the payable bills from different departments and gather in one system.

#### Approach 2 – Categorize those bills based upon the date.

All the bills which are collected from various departments are grouped according to the dates.

#### Approach 3 – Make an appointment with system analyst.

We will discuss with the system analyst about our system that will schedule the bill payments that are due through the new system.

## Goal #2 – Expand business by overseeing menu offering and providing catering services.

### Goal 2, Objective 1 – Inventory of food items/ supplies

#### Approach 1 – Set managerial meeting.

Arrange a meeting with head of the company about how to keep track of the supplies of food items and work accordingly.

#### Approach 2 -Develop proposal and get approval.

Develop proposal about how important it is to have the inventory tracking system and submit it to upper level management for the approval.

#### Approach 3 – Discuss with the system analyst.

The third approach for this objective will be to set an appointment with system analyst for his suggestion as how to set inventory of food items/ supplies in the system.

### Goal 2, Objective 2 – Manage and categorize recipes/ menu offerings

#### Approach 1 – Market research

Make a market study before adding new items in the menu.

#### Approach 2 – Get approval

Get approval with all required authorities to make a decision about adding new items in the menu.

#### Approach 3 – Make a plan with the system designer.

Share an idea how our new system should allow us in adding the new item or removing the items from the system while updating the menus.

### Goal 2, Objective 3 – Provide Catering services.

#### Approach 1- Obtain an approval

This approach will allow the company to get approval from authorized authority to allow the company to run the catering services.

#### Approach 2 – Area that will be covered by the truck.

This approach will make a decision about how far the truck will be able to provide the catering services to their customers.

#### Approach 3 – Follow up with the system designer.

This is the approach where we discuss with the system designer about our catering service facility to develop it in the new system.

## Goal #3 – Regulate employee hours/ pay.

### Goal 3, Objective 1 – Create employee schedule.

#### Approach 1 – Obtain employee schedule information.

The first approach to achieve this objective is to obtain the employee schedule information so that

#### Approach 2 – Create a proposal that will explain how it will work.

This approach will let all the high-level management know that how employee schedule system will work.

#### Approach 3 – Obtain approval from management.

Once the proposal is liked by the management, the other important approach is to get the approval from them to have this function in the new system.

### Goal 3, Objective 2 – Manage employee hours.

#### Approach 1 – Meetings in the corporate office.

Meetings regarding managing overtime/undertime employee in the company.

#### Approach 2 – Create a proposal

This approach will explain all the management that how they can easily manage hours of the employee and save the cost of the company.

#### Approach 3 – Obtain approval

Once proposal is submitted the next approach is to get the approval from the corporate about adding this feature in the new system.

### Goal 3, Objective 3 – Manage employee pay

#### Approach 1 –Meetings with human resource and account department.

This approach will allow human resource and account department to create better plan in managing employees pay.

#### Approach 2 – Write a proposal

This approach will draw the guide line that how company can manage the employee pay.

#### Approach 3 – Get an approval from the management.

Once the proposal is passed to the management it is the other approach that will allow management to invest in the system that will manage the employee pay.

# Project Risk Management

## If we fail to secure licenses then we will be delayed in opening, can get fined, or can get shut down

### Risk #1 Mitigation Strategies

#### Place one person in charge of the licensing needs/ responsibility with one person with oversight to check on them as well

If a single person is in charge of this process then there will be less confusion as to who is taking care of it so the ball doesn’t get dropped so easily. Additionally, having one person to also be in charge of ensuring that the individual is on task allows this to not all fall in the hands of one person with no oversight over their work.

#### Create license application schedule well ahead of needed dates

Creating a licensing schedule well ahead of the needed dates allows more time buffers that can allow for mistakes to be addressed.

#### Incorporate License updates into weekly meetings for group discussion

Accountability can be better handled if the individuals responsible for the licensing are required to update in a transparent manner tangible results for their efforts in a weekly setting.

### Risk #1 Contingency Plans

#### Contingency Plan 1

Have a lawyer on retainer in case fines and shut downs become a possibility so that there is a way to address it in a reasonable manner.

#### Contingency Plan 2

Contact directly with the appropriate people (have their names and titles ready in advance) of people who can be contacted for assistance if/ when this situation occurs.

#### Contingency Plan 3

Incorporate into the opening a 1-3-week delay possibility that can cushion the delay in obtaining a license.

## If we fall behind schedule then we will be delayed in our opening plans for the food truck.

### Risk #2 Mitigation Strategies

#### Cushion time into the schedule

A cushion time period needs to be set into each phase of the project to account for possible time issues

#### Have clear and accountable dates set

In addition to the cushion time to allow for issues to be addressed, there also needs to be in place a clear accountability for certain events to be reached by their time frame.

#### Midpoints in the schedule

There will be a need for clear midpoints to be had in each phase/ stage so that the team can see if delays are coming up and how to address them before getting too close to definitive dates things need to be done by.

### Risk #2 Contingency Plans

#### Contingency Plan 1

Having cushion times will allow for delays to have been pre-incorporated into the time frame

#### Contingency Plan 2

Remain less transparent on definitive open dates/ launch dates to clean up potential delays that get out of hand

#### Contingency Plan 3

Create in advance and then utilize planning contingencies for most likely areas of delays so that if it does happen, then the contingency plan and additional outsourced help can be quickly called in for help.

## If we fail to conduct the correct research into suppliers and trends, then we will miscalculate the market needs and demands and not have productive sales and reach of consumers.

### Risk #3 Mitigation Strategies

#### Market research needs to be pre-planned

Long-term planning of this issue is needed with market research being conducted well in advance of the solidification of any planning on menu/ suppliers/ locations to park the truck in

#### Professional Research

Professional research and marketing firm can be hired to conduct research for the food truck to supplement their own research.

#### Preplan creative alternatives

Within the overall vision and mission, alternative lists of menus and suppliers can be created in advance to use as well as a list of multiple parking/ locations so that they can be used quickly as alternatives if needed (be proactive versus reactive with suppliers, menus and locations)

### Risk #3 Contingency Plans

*5.3.2.1 Contingency Plan 1*

Utilize preset contingency plans for menus/ suppliers and locations

#### Contingency Plan 2

Utilize social media outreach for fast reaction and communication with trends that were not foreseen

#### Contingency Plan 3

Utilize the assistance of a professional marketing company to quickly try and change course to fit the market needs

# Project Communications Management

## Description

The grid below serves as a communication matrix which details out the points of contacts, the reasons why they should be contacted, the preferable contact method, how often they should be contacted and who is responsible for contacting the specific individual(s)

## Communications Matrix

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Audience**  **(Who)** | **Message**  **(What)** | **Objective**  **(Why)** | **Delivery Method**  **(How)** | **Delivery Frequency**  **(When)** | **Person (s) Responsible** |
| Project Manager | General Status Update | To oversee all processes/duties and manage the resources both internal and external pertaining to the project | Email | Weekly | Project manager |
| Supervisor | Review of ongoing items | To provide guidance with respect to the many other audience on site | Conference call | Weekly | Project manager |
| Financial Team | Manage Capitals, loans, credit report request and review billing and invoice. | Ensure the project is within budget and all invoice and billings are being properly handled on a timely matter | Email ,call or in person as needed | Weekly | Accounts payable/ Business Management |
| Tech Support | Resource/Status update | To provide technical support of all technical difficulties( software/ hardware) | Email/ call or in person as needed | Ongoing | IT Manager |
| Quality Control | Status Update | To make sure quality of the food truck output is being evaluated (food, wait service, cleanliness) | Email/ In person | Bi- Monthly | Supervisor |
| Record Keeper | update of record keeping | To make sure Food manufacturers, processors, packers, transporters, distributors, receivers, holders, and importers are kept in a record | Email | Weekly | Senior Management |
| Engineer | Resource update | Responsible to install and properly configure the data base management system used for this project | Email (call or in person if needed) | Ongoing | Project Manager |
| Security Administrator | Status update | Responsible for protecting the systems from any exploitable vulnerabilities and keeping systems updated with the latest patch. | Call/ Email / Onsite | Ongoing | IT Manager |
| Chef/ Lead cook | Resources and Status update | Responsible for all products and recipes, usage, ordering details, updating menu and cooking. | In person | Ongoing | Chef/ Owner |
| State  Inspector | Status Update | To make sure that we are compliant with the rules and regulations of state such us labeling, recordkeeping, preventive controls. Reporting, good manufacture practice requirement and etc… | Call/In person | Monthly | Project manager |
| Sales Specialists | Status Update | Handles the recording of the order, calculating change, print receipt, manages online ordering and catering | In person | Daily | Supervisor |
| Food Vendors | Resource Update | Order Inventory of foods/ supplies. Food supplier/ Drink supplier. Deliver requested order at the scheduled time. | Email/in person | Biweekly | Supervisor |
| QA | Status update | Oversees work being done to verify that the requirements are properly addressed. This means that it checks whether the right task is being performed. Doesn’t report to the project manager but works with him/her. | Call | Biweekly | Supervisor |
| Housekeeping | Status update | To clean up daily | In person | Ongoing | Supervisor |

# Project Quality Management

< Provide 2 or 3 sentences that describe your approach to handling project quality management on your project as is described in the text and the “Insights” document. >

# Project Organization

## Organization Chart

## 

## C:\Users\Smitty Single\Documents\IT 552\IT 545\Inverted Org Chart (5).png Project Roles & Responsibilities

|  |  |
| --- | --- |
| **Resource Name** | **Job Description** |
| Project Manager | Oversees the whole project, makes decisions on what the direction and is responsible for contacting and hiring the right people |
| Supervisor | Oversees the project operations, makes sure the project is going as smooth as possible, Reports directly to the project manager |
| QA | Oversees work being done to verify that the requirements are properly addressed. This means that it checks whether the right task is being performed. Doesn’t report to the project manager but works with him/her. |
| QC | Oversees the work is being done according to the standards set in the beginning of the projects. This means it oversees that the task is performed the right way. Works together with the project manager. |
| Engineer | Responsible to install and properly configure the data base management system used for this project |
| Security Administrator | Responsible for protecting the systems from any exploitable vulnerabilities and keeping systems updated with the latest patch. |
| Tech Support | To provide technical support of all technical difficulties( software/ hardware) |
| Housekeeping | To clean up daily |
| Record Keeper | To make sure Food manufacturers, processors, packers, transporters, distributors, receivers, holders, and importers are kept in a record |
| Financial Team | Ensure the project is within budget and all invoice and billings are being properly handled on a timely matter |
| Food vendor | Order Inventory of foods/ supplies. Food supplier/ Drink supplier. Deliver requested order at the scheduled time. |
| Chief/ lead cook | Responsible for all products and recipes, usage, ordering details, updating menu and cooking. |
| Sales specialist | Handles the recording of the order, calculating change, print receipt, manages online ordering and catering |
| State inspector | Makes sure that we are compliant with the rules and regulations of the county |

# Task Responsibility Matrix

## RACI Chart

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| RACI Chart | Person | | | | |
| Activity | Project Manager | HR | Engineer | Security Administrator | Tech Support |
| Review quotes and references, make contractor selections | R | A | C | C | I |
| Arrange for contractor visits and quotes | A | R | C | C | I |
| Provide database management system | I | I | R | A | C |
| Oversee project and ensure it is done on time | R | A | C | C | C |

## Comparison – RACI Matrix and Roles & Responsibilities

< Provide a brief 1 or 2 sentence description of your comparison of the RACI matrix and the roles & responsibilities document - - what might be similar, or what might be different and WHY).

# Work Breakdown Structure

< Provide a 2 or 3 sentence description of what the work breakdown structure is and WHY it is important to have. Please do NOT include a picture or a listing of your tasks here – this should be a “description” instead. >

# Critical Path

< Provide a 2 or 3 sentence description of what the critical patch is within a project and WHY it is important to KNOW what it is and HOW to manage your time using the critical path as your guide. Please do NOT include a picture or a listing of your tasks here – this should be a “description” instead. >

# Cost Plan

## Costs by Phase

|  |  |
| --- | --- |
| **Athletics Locker Room Renovation Project** | **Cost** |
| Project Award | $2400.00 |
| Initiating | $4480.00 |
| Planning | $46000.00 |
| Executing | $28600.00 |
| Monitoring and Controlling | $25800.00 |
| Closing | $13600.00 |
| Total | $120280.00 |

## Costs by Resource

|  |  |  |
| --- | --- | --- |
| **Resource Name** | **Work** | **Cost** |
| Project Manager | 336 hours | $33600.00 |
| Supervisor | 240 hours | $15,600.00 |
| Financial Team | 192 hours | $8,640.00 |
| Tech Support | 168 hours | $10,080.00 |
| Record Keeper | 264 hours | $6600.00 |
| Security Administrator | 96 hours | $3,840.0.00 |
| Chef/Lead Cook | 24 hours | $720.00 |
| State inspector | 24 hours | $720.00 |
| Sales Specialist | 168hours | $5,040.00 |
| Food Vendor | 48 hours | $1200.00 |
| Tech Vendor | 72 hours | $4680.00 |
| House Keeping | 24 hours | $600.00 |
| QC1 | 168 hours | $4200.00 |
| QC2 | 264 hours | $6600.00 |
| QC3 | 96 hours | $2400.00 |
| QA1 | 144 hours | $3600.00 |
| QA2 | 192 hours | $4800.00 |
| QA3 | 120 hours | $3000.00 |
| QA4 | 96 hours | $2400.00 |
|  |  |  |
| Total | 2736 hours | 118320 |