1. **You are a manager of a small development firm that specializes in manufacturing unique, one-of-a-kind musical instruments for musicians. What do you know about your products and projects that will help guide your development work?**

In this kind of projects, customers’ satisfaction is very important element in the equation. As a manger of this kind of project, I need to know a lot of information in this kind of business in order to understand my customers’ desires. Our customers are very professional musicians. Some of them are very famous musicians, so they are very wealthy people. Defiantly, they look for a very high quality kind of instruments, and they expect to find it. Therefore, our products have to be very well manufactured, and reflect our value of providing very high quality products. We use very good components to produce our instruments. We have to reach the high expectations of our customers. Our project has to enhance our customers’ satisfaction and engagement. Instruments' price is last aspect our customers discuss with us, so they don't care how much they are going to pay for their instruments. They can offer any amount that we ask for, and they will be our references for new customers. Therefore, we need to pay close attention to their requirements and respond to their demands very promptly and efficiency. Our project has to have a mission that all employees know it and contribute to achieve it. The project has to utilize global standards for producing product, so we need to establish quietly department that can study quietly of our products and keep watching outcomes of our products. The purpose of that is to enable our project continue improving the quality of the products and hire very sophisticated employees who can work to achieve the main goal. The project needs a teamwork that can easily see by our customers’ eyes and transfer their desires to a product. They have to be very creative, and able to maintain working with same quietly or better. We need to be aware of any changing in technology or method that are used to produce and improve our instruments and adapt them in our project immediately. In addition, we have to know our competitors very closely, so that we can help our project to avoid their mistakes, and develop what they achieve in their project and adjust their idea to fit in our project.

1. **You are manager of a process development department. Your immediate supervisor, the VP of New Stuff has just informed you that the company is in financial trouble. You are instructed to reduce your costs by 40% over the next two months. Explain how you will accomplish this task with respect to**

**personnel and projects only. (Include a list of your assumptions)**

As a manger of a process development department, I have to obey upper management instructors, and I am responsible to do some changes that are necessary in following two months for company’s success. I have to recognize all activities in my department, and I have to look carefully over the costs and expenses that are associated with better financial performance of company’s production. Then I am going to decide with my employees which the most important company’s projects are. After that, I am going to prioritize some of these projects over others. Then I will look over the structured of the omitted projects’ budget as well as company s’ planning, and I will resolve the immediate reduce in cost. Resources that are available will have to be reassigning between different projects, and after making decisions I will select the projects that are necessary and financially support no matter what in the following two months. I will also have to give clear tasks to my staff, and build teamwork to make sure the projects are done even before the due dates. The communication with my stuff is very important, and they have to be fully aware about the situation, so we will not hit any misunderstandings and will continue in pursuing an effecting job in following two months.

**List of Assumptions:**

* Adapting changes for a company’s success
* Recognize the most cost activity in the department
* Look over the costs and expenses of the company
* Determining where we spending the money
* Recognizing the most cost activities in the department.
* Prioritizing the most important company’ s projects
* Restructuring budget and company’s planning
* Find the opportunity costs for the company which is there any alternative is selected over another
* Appling quality standards to reduce the errors and defects.
* Recording all processes in the department and studying their cost and try to improve them or reduce their costs.
* Reassign the resources to other possible projects
* Send some of the staff to others departments or ask them to have vacation without paying them for two months.
* Set with employees who I have layoff them and give them a time to find jobs in other companies.
* Layoff some of employees who have get high amount of wages and offer some these jobs as part time if it is necessary.

1. **Membership in your favorite local volunteer organization has been dwindling, to the degree that you are concerned with the finances of the group. You really want to get more new members involved and supporting your cause. What do you need to focus on, and how would you go about doing something about it?**

First of all, I will try to communicate all volunteers who left the organization, and ask them to tell us the main reasons that cause them have decided to leave the organization. After collecting all the information that comes from our previous volunteers, we need to study this information carefully and find the common reasons that cause volunteers to leave the organization. Then we need categorize these reasons to understand what are the most important reasons that cause volunteers to leave the organization. Then I am going to set a meeting and invite all the previous and recent volunteers since their membership is important for the organization and listen to them directly as well as discuss with them problems then ask them to give suggestions to solve the problems. We are definitely can solve the problems that are related to the organization. We need to make the environment inside the organization very attractive for volunteers. The organization has to improve the atmosphere for the worksite, and make the work more enjoyable. I believe that volunteers like employees need motivation, and we also have to show them our appreciation and value their efforts and their time. Also the organization needs to listen to their opinions and encourage them to generate new ideas, so they might a great resource for improvement. Finally, I will ask our volunteers to invite their friends because that is a great opportunity to meet new potential volunteers and promote our volunteering organization

* Making the work place enjoyable and have more fun
* Volunteers have to feel they are very important in the organization
* Make sure all the volunteers are satisfied with their jobs
* Explain the organizations’ goals and vision
* Listen to volunteers’ opinions and suggestions
* Ask the volunteer to invite their friends
* Improve the leadership skills for the organizations’ employees
* Always show the volunteer our appreciation
* Recognize their work
* Work with them as a team
* Give the volunteers more benefits
* We should be more flexible with them
* Give them flexible schedule of work
* Train them to do their work professionally
* Use the social media to find more volunteers

1. **You have been asked to create a new rustic resort on a lakeshore in Minnesota. You will need to put up four cabins and a main lodge on the site. Develop a complete plan for your effort; assuming you already own the property and all required building materials.**

In order to make this project very successful, we have to define the purpose of this project. Is it for personal using, or for investment using and if it is for investment is it for sale or for rent. Answering all of these questions is an important to know who will use this resort and knows whom our target customers. Basically, we need to know our target customers before start planning for the resort. Based on targeted customers and the purpose of this resort we can decided which location is better to build this resort and the space that we need to build our resort. Also there are other different aspects we need to pay attention for. Like how long from the resort to the Twin cities, or the Airport, and other facilities such as stores, Hospitals, etc. We assume the resort is for the rent, and our target customers are people from Middle-Class. All of that is called initiation stage or phase then we define all requirements and specifications to plan this project then execute the plan with controlling all activities to make sure the project is executing as was planed. Finally, the last phase of the project is close the project out.

**Project Phases**

1. Initiation
   * Idea
   * Purpose
   * Target Customer
   * Location
   * Space
2. Plan
   * SOW
   * Specification
   * Milestone
   * WBS
   * Task Duration
   * Network Diagram
   * Risk Analysis
   * Interdependencies
   * Budget
   * Project Charter

3- Execution

* Design Plan
* Permits
* Foundation
* Frame set
* Fence
* Walls
* Roof
* Plumbing
* Painting
* Electricity
* Heating
* Air Conditioning
* Windows
* Doors
* Flooring
* Safety
* Decoration
* Appliances
* Furniture
* Parking Lots
* Entrance and Exit
* Play Ground

4- Controlling

* + Project Management
  + Control the budget
  + Control the risk
  + Control the time
  + Control the workers
  + Update the plan

5- Closeout

* + Recording
  + Document
  + Learning form the project
  + Archive

Creating the project plan needs to define the following elements (SOW, Specifications, Milestone, WBS, Network Diagram, Budget, Analyze the Risk of Project)

**Project Planning**

1-Project Mission

Build a new rustic resort on lakeshores in Minnesota for tourism purposes, and the resort contains four cabins and a main lodge on the site.

2- Statement of work

The project is going to take about 172 days as the project manager estimated after considering the risk that may face the project executing, and it is going to cost 131.080.00 US dollar for executing the project.

3- Specifications

All components that we need to execute the project:

* Property
* Workers
* Materials
* Tools

4- Milestone

* Foundation
* Frame set
* Fence
* Walls
* Roof
* Plumbing
* Painting
* Electricity
* Heating
* Air Conditioning
* Windows
* Doors
* Flooring
* Safety
* Decoration
* Appliances
* Furniture
* Parking Lots
* Entrance and Exit
* Play Ground

4- Work Breakdown Structure (WBS)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | |  | | **Designing plan** | | |  | | | |  | | | |  |
|  | |  | |  | | | | |  | | |  | |
|  | |  | |  | |
|  | |  | | **Permits** | | |  | | | |  | | | |  |
|  | |  | |  | | |  | | | |  | | | |  |
|  | |  | |  | | |  | | | |  | | | |  |
|  | |  | | **Foundation** | | |  | | | |  | | | |  |
|  | |  | | |  | | |
|  | | **Fence** | |  | | | **Frame Set** | | | |  | |
|  | |  |
|  | |  | | **Roof** | | |  | | | | **Wall** | | | |  |
|  | |  | |  | | |  | | |
|  | | **Plumbing** | |  | | | **Electricity** | | | |  | |
|  | |  | |  | | |  | | | |  | |
|  | |  | |  | | |  | | | |  | |
|  | | **Air Conditioning** | |  | | | **Heating System** | | | |  | |
|  |
|  |
|  | | **Flooring** | | **Windows** | | | **Doors** | | | | **Entrance & Exit Gates** | | | |  |
|  | |  | |  | | |  | | | |  | | | |  |
| **Appliances & Furniture** | | **Safety System** | | **Decoration** | | | **Parking lot** | | | | **Sidewalk** | | | | **Playground** |

5- Network Diagram

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Permits |  | Foundation |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  | Fence |  | Frame Set |  |
|  |  |  |  |  |  |  |
|  |  |  |  | Wall |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  | Roof |  |  |
|  |  | Plumbing |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  | Electricity |  |  |  |
|  |  |  |  |  |  |  |
|  |  | Heating |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | Air Conditioning |  |  |  |  |
|  |  |  |  |  |  |  |
| Flooring |  | Doors | Windows | Entrance | Exit |  |
|  |  |  |  |  |  |  |
| Safety System | Decorating | Parking Lots | Playground | Sidewalk | Appliance | Furniture |

Network Development

|  |  |  |  |
| --- | --- | --- | --- |
| Task Name | Duration | Start | Finish |
| Initiation | 14 days | Thu 10/30/14 | Tue 11/18/14 |
| Designing Plan | 15 days | Mon 11/10/14 | Tue 12/2/14 |
| Permits | 20 days | Mon 12/1/14 | Mon 12/29/14 |
| Clean the site | 3 days | Mon 12/29/14 | Wed 12/31/14 |
| Excavation | 6 days | Thu 1/1/15 | Thu 1/8/15 |
| Installing water & sewerage pipes | 13 days | Fri 1/9/15 | Tue 1/27/15 |
| Framing | 15 days | Wed 1/28/15 | Tue 2/17/15 |
| Walls | 12 days | Wed 2/18/15 | Thu 3/5/15 |
| Roofs | 13 days | Fri 3/6/15 | Tue 3/24/15 |
| Plumbing | 15 days | Wed 3/25/15 | Tue 4/14/15 |
| Electricity | 11 days | Wed 4/15/15 | Wed 4/29/15 |
| Flooring | 3 days | Thu 4/30/15 | Mon 5/4/15 |
| Doors & Windows | 10 days | Tue 5/5/15 | Mon 5/18/15 |
| Heating & Air conditioning | 4 days | Tue 5/19/15 | Fri 5/22/15 |
| Install Safety system | 3 days | Mon 5/25/15 | Wed 5/27/15 |
| Decorating | 6 days | Thu 5/28/15 | Thu 6/4/15 |
| Appliances & Furniture | 2 days | Fri 6/5/15 | Mon 6/8/15 |
| Asphalt street & parking lots | 2 days | Tue 6/9/15 | Wed 6/10/15 |
| Install sidewalks | 3 days | Thu 6/11/15 | Mon 6/15/15 |
| Install playground | 2 days | Tue 6/16/15 | Wed 6/17/15 |

**Managerial Level**

**Tasks Subtasks**

1-Design plan (120h)

* Milestone Schedule
* Network Diagram
* Risk Analysis
* Task Duration
* Interdependencies
* Budget
* Project Charter

2- Obtain Permits (150h)

* Submit papers

**Technical Level**

**Tasks Subtasks**

1-Foundation (180h)

* Clean the site are
* Excavation
* Installing water & sewerage pipes

2-Framing (130h)

* Main Structure
* Substructure

3- Walls (100h)

* Install Coroners
* Install Walls

4- Roofs (100h)

* Install Roofs
* Install Chimneys

5- Plumbing (125h)

* Kitchens
* Bathrooms

6- Painting (60h)

* Inside Cabins
* Outside Cabins

7- Electricity (90h)

* Inside Cabins
* Outside Cabins

8- Flooring (25h)

* Install Floors
* Install stairs

9- Doors & Windows (75h)

* Install doors
* Install windows

10- Heating & Air conditioning (32h)

* Install heaters
* Install Air conditioning

11- Install Safety system (20h)

* Main entrance
* Exit
* Inside cabins

12- Decorating (50h)

* Inside decorating
* Outside decorating

13- Appliances & Furniture (12h)

* Install appliances
* Furniture

14- Space (54h)

* Asphalt street & parking lots
* Install sidewalks
* Install playground

6- Budget

Task Duration Worksheet by Hours

|  |  |
| --- | --- |
| Task | Duration |
| Designing The project Plan | 120h |
| Obtain permits | 150h |
| Set The location | 20h |
| Foundation | 160h |
| Framing | 130h |
| Install the Walls | 100h |
| Install the Roofs | 100h |
| Plumbing | 125h |
| Electricity | 90h |
| Install the Windows | 35h |
| Install the Doors | 40h |
| Install the Floors | 25h |
| Painting | 60h |
| Install Heating & Air conditioning | 32h |
| Asphalt Parking Lots | 18h |
| Install play Ground | 14h |
| Install sidewalks | 22h |
| Decorating | 50h |
| Safety System | 20h |

Cost Estimating Worksheet (Workforce)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Job title | Qty | Rate/Hours | Hours | Total ($) |
| Project Manager | 1 | 70 | 550 | 38500 |
| Engineer | 1 | 50 | 530 | 26500 |
| Plummer | 1 | 36 | 125 | 4500 |
| Electrical | 1 | 33 | 90 | 2970 |
| Carpenter | 2 | 40 | 330 | 26400 |
| Architect | 1 | 45 | 150 | 6750 |
| Labor | 4 | 13 | 420 | 21840 |
| Painter | 1 | 22 | 60 | 1320 |
| Decoration Designer | 1 | 27 | 50 | 1350 |
| Safety Specialist | 1 | 38 | 25 | 950 |
| Total | 13 |  |  | 131,080 |

7- Preliminary Assessment

Risk Analysis Worksheet

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Risk Area | What is likely to go wrong | Impact | Probability  (1-10) | How and when will we know | What will we do about it |
| Poor Planning | Inaccurate Assumption of Time & Cost | Delay | 7 | Execution Stage | Revise the Plan |
| Permits | Requirements | Reject  Delay | 2 | Before Start Project | Resubmit Requested Paper |
| Location | Restricted area of trucks | Delay | 3 | Execution Stage | Miss Timeline |
| Weather | Rain, Cold, Storm | Delay | 5 | Forecast | Miss Timeline |
| Holidays | Stop working | Delay | 10 | Planning Stage | Miss Timeline |
| Misunderstanding | Installation Incorrectly | Delay | 3 | Execution Stage | Miss Timeline |