# CSSE 372 – Software Project Management

## Homework 4 – Risk Management (Table and Sheets)

### Objective

To develop a risk table listing identified risks from a scenario, determine the risk impacts and exposure, and prioritize order the lists. For those risks that exceed the threshold (>1.0, that is at least three risks), develop a risk sheet according to the templates supplied.

This exercise is designed to have you reflect on what we covered in class using a quassi-real world example. From this, you should understand what constitutes a software project risk, how to organize them, how to detail them for monitoring and control. Good luck and have fun!

### Due Date

11:55 p.m., Tuesday, Week 5, October 2nd, 2012.

### Abbreviated Project Scenario

A software project team is starting a new project developing an iPad application for the medical community to view medical records (named “iMedView@Rose”). The application is being patterned after a similar one developed for a pen-based tablet PC/laptop platform. Over 90% of the functionality will be from the previous platform. Both the previous platform computers, a set of five fully loaded MacBook Pro laptops and a testing server will be provided by the client.

The team of five software developers is new and they have not worked together before. The project manager has over ten years experience, but none on a project with an iPad. One of the programmers owns an iPad and has done some minor applications work for the iPhone. The average number of years of software experience per person for the team is six.

While the team is new, the market for iPad developers is hot. It is hard to acquire more people. The members of the team are clamoring for training on the iPad software development kit. The cost of training is high since it is in high demand.

The client would like to get an early prototype of the system within two months. The final delivery of the software product has been agreed to be in seven months. Since the application is for the medical community, the Health Insurance Portability and Accountability Act (HIPAA) requirements apply (meaning more stringent documentation and testing). The first build (two months) is to build client confidence and will not be judged according to the HIPAA. However, the final product will need to be demonstrably HIPAA compliant.

The contract for the project is develop the new iMedView@Rose application for $720,000 if delivered on time. If the application is delivered a month early, there is a bonus of $150,000. If it is delayed, there is a $10,000 per week penalty.

### Tasks

1. Read through the abbreviated project scenario above and identify the potential risks that may become reality in the iMedView@Rose project.
2. Using the Template/Example that follows this task description, develop a risk table that includes the above risks, a short description of each, their impact, their probability of occurrence, and their resulting risk value. List the risks in highest risk score order.
3. For those identified risks in the risk table that have a risk value (RV) over 1.0, develop a risk sheet with the information that is cited in the example provided (if you do not have three, you should select the first three for this part of the exercise).

### Submitting Your Work

Please submit your assignment as a single document to the Angel Homework4 Dropbox on Angel under “../Lessons/Homework Dropboxes/HW4: *Risk Table and Sheet*”. Please submit a **pdf** file with a cover page containing your Name, Assignment Title, Date, and email address. Please name the document:   
<your last name>*HW4-RiskMgt.pdf   
 (e.g., Bohner-HW4-RiskMgt.pdf)*.

# Risk Management

<I put this as an example for your exercise. While I have left a minor example, you will need to put your own information in the relevant sections. Please use your own work in this exercise. >

## Scope and intent of RMMM activities

For this project, the software team has a proactive approach to risk. For those risks that become a reality, a risk management and contingency plan will be developed to manage the risk. ... etc.

## Risk Categorization

### Description of Risk Categories

1. ***Performance Risk*:**

This risk concerns whether software will meet its requirements and fit for its intended use.

1. ***Cost Risk:***

This risk concerns whether budget will be maintained for project.

1. ***Support Risks:***

This risk concerns whether end product will be easy to maintain.

1. ***Schedule Risk:***

This risk concerns whether project schedule will be maintained and deadline met.

…

## Risk Table

The following table lists the top 12 risks associated with the iMedView@Rose project. Each risk has been categorized with its probability of occurrence (P) and impact (I) on project and sorted by its risk value (RV = P\*I).

|  |  |  |  |
| --- | --- | --- | --- |
| **Risks** | **Probability of Occurrence** | **Impact** | **Risk Value** |
| Problems importing and scrubbing Database **(RS1)** | 40% | 4 | 1.6 |
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**Table 1- Risk Analysis Table**

|  |  |
| --- | --- |
| **Impact Values** | **Description** |
| 4 | Catastrophic |
| 3 | Critical |
| 2 | Marginal |
| 1 | Negligible |

Discuss the assumptions and factors leading to the above table…

## Risk Sheets for Managing Risks

From the Risk table above, the project has developed Risk Information Sheets for the risk with a risk value of greater than 1. The other risks were deemed less than the cost of risk mitigation, therefore mitigating the risk is not warranted. Risks with a value of 1 or less will monitored and if their risk value becomes greater than 1, the project will develop a Risk Information Sheet.

### Risk Information Sheet for RS1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Risk ID: RS1** | **Date: 11/20/02** | **Prob: 40%** | **Impact: Catastrophic** | **Risk Value: 1.6** |
| **Description:** | | | | |
| Correctly importing Medical Database into the system is critical to getting symptoms, diagnosis and treatment. The database will need to be scrubbed and imported into tables. | | | | |
| **Refinement/context** | | | | |
| Subcondition 1: Database may not be in SQL standard format. | | | | |
| Subcondition 2: Database vernacular not understood correctly by software engineer. | | | | |
| Subcondition 3: Database may not have direct symptom/diagnosis/treatment linkage necessary to support requirement R2. | | | | |
| **Mitigation/Monitoring** | | | | |
| 1) Contact Database owner to determine format of database | | | | |
| 2) If format is not SQL based, determine if conversion is possible to a relational database | | | | |
| 3) Upon receipt of database from vendor, run preliminary data checks and reports to ascertain integrity of data | | | | |
| 4) Have all members of project attend one day seminar on canine medical terms | | | | |
| 5) Contact Database owner to determine if there is symptom/diagnosis/treatment linkage | | | | |
| **Management/Contingency Plan/Trigger** | | | | |
| If the understanding of the database is proceeding slowly (longer than a week), hire expert Veterinarian to help understand database. The risk exposure cost is approximately $2000 (RE=40%\*$5000). $5000 is the cost of obtaining the services of veterinarian for 5 days. Allocate this amount into project contingency cost. | | | | |
| If transition of data over to new system database is bogged down, have 2 developers attend needed training to import non-standard formatted database into system database. | | | | |