Assignment 4

SE329 - Risk Planning

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6/24/2019

Potential Project Risks

1. **Budget is exceeded** - *The project costs more than the projected value*
    a. Category: *Cost Risk*
    b. Occurrence: *0.01 - Unlikely but possible*
    c. Impact: *Critical - Pace slowed significantly*
    d. Exposure: *High*
    e. Response Type: *Risk Avoidance*
    f. Response Strategy: *Spend lots of time planning to ensure that this doesn't happen as it will be difficult to resolve later in the project timeline*
    g. Trigger of Response: *N/A*
2. **Insufficient resources** - *The resources planned for this project end up not being enough to satisfy the build until the end*
    a. Category: *Scheduling Risk*
    b. Occurrence: *0.01 - Unlikely but possible*
    c. Impact: *Critical - Very important to have the proper resources to ensure stability*
    d. Exposure: *High*
    e. Response Type: *Risk Avoidance*
    f. Response Strategy: *Spend lots of time planning out resources to ensure that this doesn't happen later on in the project*
    g. Trigger of Response: *N/A*
3. **Unreliable technological components** - *The chosen components for the project are faulty or they are not suitable for the project functionality*
    a. Category: *Technical Risk*
    b. Occurrence: *0.07 - Could and might happen if not cautious*
    c. Impact: *Serious - Functional components are very important for project success*
    d. Exposure: *High*
    e. Response Type: *Risk Mitigation*
    f. Response Strategy: *Find new components to use that are more reliable*
    g. Trigger of Response: *Indications that components are faulty*

4. **Poor communication amongst team** - *The developers and other team members have trouble with interpersonal communication skills and organization*
    a. Category: *Contractual Risk*
    b. Occurrence: *0.10 - Expected to happen at least once*
    c. Impact: *Negligible - Does not affect longevity of project if resolved promptly*
    d. Exposure: *Low*
    e. Response Type: *Risk Reduction*
    f. Response Strategy: *Hold regular meetings with the team to ensure that everyone is on the same page and is able to work successfully and effectively*
    g. Trigger of Response: *Deadlines are not met for project timeline*
5. **Regulations for the local government change** - *Changes in local laws create new requirements for the project to meet before it can be finished and deployed*
    a. Category: *Scheduling Risk*
    b. Occurrence: *0.00 - Very unlikely to happen if local authorities have been informed about the plan*
    c. Impact: *Critical - Government regulations must be met*
    d. Exposure: *High*
    e. Response Type: *Risk Acceptance*
    f. Response Strategy: *In the unlikely event that this happens, meet with customer and anticipate a new timeline, as government decisions sometimes cannot be accounted for*
    g. Trigger of Response: *N/A*
6. **Customer dissatisfaction with project** - *The individual(s) that are providing funding for the project are not satisfied with the outcome and your team's performance*
    a. Category: *Contract Risk*
    b. Occurrence: *0.01 - Unlikely but possible*
    c. Impact: *Catastrophic - Customer is the most important entity to satisfy since they are paying you*
    d. Exposure: *High*
    e. Response Type: *Risk Avoidance*
    f. Response Strategy: *Communicate periodically throughout the project with the customer to receive feedback on the progress of the final product*

   g. Trigger of Response: *Loss of interest and excitement of customer*
7. **Worker availability** - *You have trouble arranging the times that team members are supposed to work*
   a. Category: *Scheduling Risk*
   b. Occurrence: *0.06 - May happen at some point*
   c. Impact: *Negligible - If resolved quickly, does not affect longevity*
   d. Exposure: *Low*
   e. Response Type: *Risk Mitigation*
   f. Response Strategy: *Find available times for employees to complete their work that still fit with the overall schedule of the project*
   g. Trigger of Response: *Schedule changes*
8. **Inadequate training for installation of devices in homes** - *Workers that install hardware are inadequately trained and failed to properly install the components in homes*
   a. Category: *Contractual Risk*
   b. Occurrence: *0.05 - Unlikely but possible*
   c. Impact: *Minor - Time will be needed to properly train the workers*
   d. Exposure: *Medium*
   e. Response Type: *Risk Transfer*
   f. Response Strategy: *Hire a third-party contracting company to install the devices in homes and ensure that their staff is properly trained*
   g. Trigger of Response: *N/A*
9. **System outages** - *Any occurrence that might affect the main infrastructure and will require a system reboot such as a city power outage*
   a. Category: *Technical Risk*
   b. Occurrence: *0.10 - Expected to happen at least once*
   c. Impact: *Serious - Can become a serious problem if consistent*
   d. Exposure: *High*
   e. Response Type: *Risk Mitigation*
   f. Response Strategy: *Monitor the probability and frequency of outages so that they can be anticipated*
   g. Trigger of Response: *System outage occurs frequently and/or randomly*

10. **Integration failure** - *Hardware and software have trouble communicating with each other as they are supposed to*
    a. Category: *Technical Risk*
    b. Occurrence: *0.11 - Expected to happen during testing*
    c. Impact: *Critical - Software and Hardware must be in sync if the system is to work*
    d. Exposure: *High*
    e. Response Type: *Risk Mitigation*
    f. Response Strategy: *Ensure that this is not a problem with the developers and conduct more frequent testing of integration*
    g. Trigger of Response: *Software and hardware seem to have frequent incompatibilities that generate problems*