ISTANBUL TECHNICAL UNIVERSITY

Project Management in Engineering

Homework - 2
Due Date: 14.04.2020

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PROJECT RISK MANAGEMENT

Project Name: Consulting Platform Establishment

Project Managers: Cihat Akkiraz, Esin Ece Aydın

Five Potential Risks of The Project:

1. The resources required for the project have not been adequately identified. - Project Management Risk

2. The project cannot be carried out in a disciplined way. - Project Management Risk

3. Defects in design and some features not working properly for devices of different sizes(Mobile Devices, Tablets, PC etc.). - Technical Risk

4. The necessary equipment and other resources to support the project may not be provided on time. - Organizational Risk

5. Video call service provided by another company is not working efficiently. - External Risk

Risk Register:

Project Management Risks

- **Risk Description:** *The project purpose and importance are not well-defined.*
  Impact: High
  Possibility of the Occurrence: Medium
  Action Owners: Project manager
  Mitigation Action: To determine the project definition and importance by analyzing the articles in the experts of the subject so as not to cause any hesitation.
  Contingent Action: Change purpose and importance of the project on the project plan with comparing similar projects.

- **Risk Description:** *The purpose and need for the project are not fully understood.*
  Impact: <mark>High</mark>
  Possibility of the Occurrence: <mark>Medium</mark>
  Action Owners: Project Sponsor
  Mitigation Action: To fully understand the project purpose and needs by conducting meetings with the project manager, and by conducting research.
  Contingent Action: A quick review can be done to explain the project's purpose and necessity.

- **Risk Description:** *The resources required for the project have not been adequately identified.*
  Impact: <mark>High</mark>
  Possibility of the Occurrence: <mark>Medium</mark>
  Action Owners: Field researcher
  Mitigation Action: To learn the resources used in similar projects and to compare them with alternatives, to search for new resources that are needed.
  Contingent Action: Getting support and research from experienced people in a similar project.

- **Risk Description:** *The steps to be followed in project construction are not properly scheduled.*
  Impact: <mark>High</mark>
  Possibility of the Occurrence: <mark>30% possible</mark>
  Action Owners: Project managers
  Mitigation Action: To create a detailed business plan for every work to be done. Paying attention to the order of importance in steps.
  Contingent Action: The steps rearranged again. If necessary, new steps can be added or removed from the project.

- **Risk Description:** *The project cannot be carried out in a disciplined way.*
  Impact: <mark>High</mark>
  Possibility of the Occurrence: <mark>High</mark> (Here is Turkey. People always take time to escape from work)
  Action Owners: Team leaders
  Mitigation Action: Continuously requesting reports from the team members, giving the necessary warnings in order to complete the work on time.
  Contingent Action: To warn employees to finish their work on time and to reward those who finish on time.

Technical Risks

- **Risk Description:***The design may become complex instead of being user friendly.*
  Impact: <mark>Medium</mark>
  Possibility of the Occurrence: <mark>Low</mark>
  Action Owners: Front-end developers and testers
  Mitigation Action: Getting feedback from the test team during development about complexity of design and making changes according to these feedbacks.
  Contingent Action: Professionals knowledgeable about the customer experience can be consulted.

- **Risk Description:** *The used technologies in the project such as database, software and design technologies used cannot be scaled.*
  Impact: <mark>High</mark>
  Possibility of the Occurrence: <mark>Medium</mark>
  Action Owners: Technical team leader
  Mitigation Action: Analysing and comparing alternative databases, software and design technologies and choosing the best and scalable technology for each one.
  Contingent Action: Changing the technology used in the project fast and secure way to the more scalable technology.

- **Risk Description:** *Defects in design and some features not working properly for devices of different sizes(Mobile Devices,Tablets, PC etc.)*
  Impact: <mark>Medium</mark>
  Possibility of the Occurrence: <mark>High</mark>
  Action Owners: Front-end developers and testers
  Mitigation Action: Using ui kits with responsive items, making sure that there are no major problems with different devices with the changes made
  Contingent Action: Fixing css, sass files that caused defects in design via debugging.

- **Risk Description:** *Cannot embed video call system into the website properly*
  Impact: <mark>Medium</mark>
  Possibility of the Occurrence: <mark>Medium</mark>
  Action Owners: Developers
  Mitigation Action: To understand the documentation of the company that provides the video call system and to contact the company for any questions.
  Contingent Action: To get the cause of error by following the documentation step by step. Ask questions to the video call company's help desk.

- **Risk Description:** *Colors in the design are incompatible with each other*
  Impact: <mark>Medium</mark>
  Possibility of the Occurrence: <mark>Low</mark>
  Action Owners: Frontend Developers
  Mitigation Action: Choosing a main color for the site and using colors that are compatible with these colors for the components.
  Contingent Action: The designer reviews colors and creates a suitable design.

Organizational Risks

- **Risk Description:** *Some phases of the project may reveal incompatibility with internal policies.*
  Impact: <mark>Low</mark>
  Possibility of the Occurrence: <mark>Low</mark>
  Action Owners: Project manager and executive management team
  Mitigation Action: A meeting can be held before the starting of the project with the department that prepares the policies. Without any incompatibility, the project cannot be delayed.
  Contingent Action: The project is reshaped in accordance with company procedures or a meeting is held with the people who set the procedures.

- **Risk Description:** *The budget allocated for the project is not sufficient.*
  Impact: <mark>High</mark>
  Possibility of the Occurrence: <mark>Medium</mark>
  Action Owners: Financial manager
  Mitigation Action: Using the budget allocated for the project economically and reporting and keeping track of expenses.
  Contingent Action: To apply to the sponsors or investors for help.

- **Risk Description:** *The necessary equipment and other resources to support the project may not be provided on time.*
  Impact: <mark>Medium</mark>
  Possibility of the Occurrence: <mark>High</mark>
  Action Owners: Supply chain manager
  Mitigation Action: To clarify the issue of time with the provider and record the independent works that can be done with the available resources against the situation that delay occurs.
  Contingent Action: To warn provider of equipment and resources. Reporting situation to project manager to lead execution of other tasks.

- **Risk Description:** *Personal problems may occur, such as disease of a key team member or unexpected termination.*
  Impact: <mark style="background-color: red">High</mark>
  Possibility of the Occurrence: <mark style="background-color: green">Low</mark>
  Action Owners: Team leaders
  Mitigation Action: Regularly asking for detailed reports and documentation for the work done from the team members.
  Contingent Action: A new employee can be hired. Reports and documents are useful for the new employee to learn about past work immediately.

- **Risk Description:** *The decision to cut the budget allocated to this project due to external risks.*
  Impact: <mark style="background-color: red">High</mark>
  Possibility of the Occurrence: <mark style="background-color: green">Low</mark>
  Action Owners: Financial manager
  Mitigation Action: To make clear agreements with the project sponsor about the continuity of the budget.
  Contingent Action: A meeting can be held with the executive management team to convince them to give priority for this project.

External Risks

- **Risk Description:** *Video call service provided by another company is not working efficiently.*
  Impact: <mark style="background-color: red">High</mark>
  Possibility of the Occurrence: <mark style="background-color: yellow">Medium</mark>
  Action Owners: Purchasing manager and Developers
  Mitigation Action: Choosing the best provider as a result of searching and comparing video call service alternatives and testing them before purchasing.
  Contingent Action: Understanding why it doesn't work well via testing. If the reason for this is not either adequacy of the server or the bug on the code, asking help from the help desk of the provider company.

- **Risk Description:** *Economic upheaval or wars.*
  Impact: <mark style="background-color: red">High</mark>
  Possibility of the Occurrence: <mark style="background-color: green">Low</mark>
  Action Owners: IT Department and financial manager
  Mitigation Action: Backing up project files, codes and documents to a safe place. Having an agreement with a bank to avoid problems occurs if the budget runs out.
  Contingent Action: Work model is changed to work from home or furlough work.

- **Risk Description:** *Project may contrast with a new legal or regulatory, as a result, the project may be delayed or paused.*
  Impact: High
  Possibility of the Occurrence: Low
  Action Owners: Legal Department
  Mitigation Action: To follow the new regulations continuously, to get counseling from lawyers when necessary.
  Contingent Action: The project is reshaped in accordance with new legal or regulatory.

- **Risk Description:** *Crimes such as theft of intellectual property or equipment.*
  Impact: High
  Possibility of the Occurrence: Medium
  Action Owners: Cyber security expert
  Mitigation Action: Installing necessary preventive applications to prevent employees from infecting their computers and controlling the data flow in the network.
  Contingent Action: Notifying the cyber security police. To determine how much damage to the project. To inform project managers.

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