



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

Student Name	Khaled Barjas Alenizy	اسم الطالب
Students I.D	2021200050	الرقم الجامعي

Section

Master

Date

Thursday

18 / 03 / 2021.

Course Code

(PMG510)

Project Risk Management

Instructions:

- آخر موعد للتسليم هو يوم السبت 2021-05-08 في تمام الساعة ٩ مساءً.
- الإجابة متاحة باللغة الإنجليزية أو اللغة العربية مع مراعاة أن تكون المصطلحات العلمية باللغة الانجليزية.
- يتم تسليم المشروع في صيغة ملف pdf مع الالتزام نموذج الجامعة ولن تقبل أي مستندات أخرى.
- يجب مراعاة أقسام البحث الرئيسية (مقدمة Introduction، دراسات علمية سابقة Literature Review، طريقة البحث Methodology، النتائج والمناقشة Results and Discussion، وأخيراً المراجع References. وان كان هناك ملحقات Appendices يتم إضافتها)
- يجب الالتزام بـ Theme موحد كما يلي:
- حجم الخط 12.
- نوع الخط Arial.
- لون الخط أسود.
- المسافة بين الأسطر line spacing 1.5
- عدد صفحات البحث (لا يقل عن ثلاث صفحات ولا يزيد عن ست صفحات).

Instructor's Name: Eng. Mosaab M. Hamed

Project:

Risk Identification and Analysis (Based on the project you chose in APM)

The objective of this report is to identify project risks, prepare a risk probability matrix, and carry out an analysis of selected risks. Referring to the project you select in **Advanced projects management APM course**, your task is to prepare a risk management plan that identifies potential risks in **the selected stage of the project** and identify risk management strategies.

From the course content and readings, you know that the overall purpose of risk planning is to anticipate possible risk events and be ready to take appropriate action when risk events occur—to eliminate or reduce negative impacts on the project.

You may wish to begin this exercise with a brainstorming about potential risks to get candidate risks “on the table” for consideration. And then identify and refine that wording for risks that have some realistic chance of occurring in this stage. For example, potential weather problems present a real obstacle to completing field data collection by the planned completion date. It is also an issue that the project manager will ultimately have to plan for, as opposed to other issues such as a major disaster (e.g., your office burning down), is not a high-enough probability event that requires much time in planning. As described below, you will select several of the identified risks and carry out a risk analysis.

You will use the distilled list of risks to make a risk probability/impact matrix. The matrix will have at least three categories (high/medium/low) for probability and impact.

Remember that it is important to name risks effectively—use words that describe the risk event and point to the impact on the project (e.g., “injury of field technician disrupts data installation work”).

After completion of the risk matrix, document a risk analysis for the selected risks. This detailed documentation for that selected risk will include:

- a description of the risk and potential impacts (schedule, quality of work, cost, etc.) on the project.
- indicators or triggers that would be monitored to help identify the risk as early as possible.
- specific risk response strategies to take.

Using probability and impact matrix calculate the **Expected Monetary Value (EMV)** for all risks that have the impact in terms of cost \$\$.

Best of luck...

المشروع:

التعرف على المخاطر وتحليلها (بحث مبنى على مشروعك الذي اخترته في مادة ادارة المشاريع المتقدمة)

الغرض من هذا التقرير هو التعرف على المخاطر المحيطة بالمرحلة التي تختارها المرحلة من مراحل مشروعك (نفس المرحلة التي اخترت التطرق لها في مشروعك لمادة إدارة المشاريع المتقدمة Advanced project management) حيث أن مهمتك هي تحضير خطة متكاملة لإدارة المخاطر تشمل التعريف بالمخاطر المحتملة التي تحيط بتلك المرحلة وتحضير مصفوفة احتمالية المخاطر ومن ثم القيام بالتحليل لهذه المخاطر المختارة وتحديد استراتيجيات ادارة المخاطر المناسبة لكل خطر على حدة.

من محتويات المقرر والمصادر الأخرى المتاحة أصبحت تعلم الان أن الغرض العام لمرحلة التخطيط للمخاطر هي توقع أحداث المخاطر المحتملة والتجهز لاتخاذ ردة الفعل المناسبة عند وقوع الخطر – لمنع أو تقليل الآثار السلبية على المشروع.

قد تحبذ بداية هذا البحث بعصف ذهني عن ماهية المخاطر التي قد تحيط بتلك المرحلة من مراحل مشروعك, وذلك للحصول على قائمة بتلك المخاطر. ومن ثم تحديد وتصفية هذه القائمة للوصول إلى قائمة مختصرة بالمخاطر التي لها فرصة واقعية أكبر في الحدوث. على سبيل المثال: المشاكل الجوية المتوقعة والتي تمثل عقبة حقيقية أمام اكتمال جمع البيانات من المواقع في أو قبل الوقت المحدد، هذه تعتبر مشكلة على مدير المشاريع أن يضعها في الحسبان. من ناحية أخرى، فإن المخاطر غير الواقعية مثل الكوارث الطبيعية والأعاصير (تلك التي تسبب حريقاً بمكتبك وفقدان الأوراق المهمة) ليست لها احتمالية وقوع عالية وبالتالي لاتستدعي تضيق الكثير من الوقت في التخطيط لها. كما سيتبين لك، ستقوم باختيار عدة مخاطر من تلك التي قمت بالتعرف عليها لتحليلها.

ستقوم باستخدام هذه القائمة المختصرة لعمل مصفوفة المخاطر (الاحتمالية/الأثر). المصفوفة ستحتوي على الأقل على ثلاث تصنيفات (عالي/متوسط/منخفض) للإحتمالية والأثر.

لاتنس استخدام أسماء تصف طبيعة المخاطر بصورة فعالة – قم باستخدام كلمات تصف الحادثة الخطرة وتشير الى أثرها على المشروع (مثل: إصابة أحد الفنيين في الموقع مما يؤثر على أعمال التركيب).

بعد انتهاءك من مصفوفة المخاطر، قم بتوثيق تحليلك للمخاطر المختارة. هذا التسجيل المفصل للمخاطر يجب أن يتضمن:

- وصف للخطر واثاره المحتملة (الجدولة، جودة العمل، التكلفة، الخ)
- المؤشرات والمحفزات التي يجب مراقبتها للمساعدة في التعرف على هذا الخطر قبل وقوعه
- تفصيل للاستجابة المقترحة للتصدي لهذا الخطر

باستخدام مصفوفة الاحتمالات والتأثير ، احسب القيمة النقدية المتوقعة (EMV) لجميع المخاطر التي لها تأثير من حيث التكلفة \$\$.

مع تمنياتي بالتوفيق..

Risk Identification and Analysis

Khaled Alenizy

Project Risk Management

Mosaab M. Hamed

Everyone's Smart University

08/05/2021

2. Risk Analysis			
Risk		Probability	Impact
1	Covid-19 health regulations disrupt the data collection process since the researchers maybe limited from accessing some participants face-to-face.	LOW 30%	MEDIUM -\$3000
2	Additional obligations present a financial risk which may disrupt the completion of the objectives	HIGH 80%	HIGH -\$1500
3	Unplanned tasks that may arise and must be accomplished prolong the time to finish the project	MEDIUM 60%	LOW -\$2000
4	Lack of effective communication may cause confusion and lack of clarity	MEDIUM 70%	MEDIUM -\$2500
5	Conflicts among the team members may limit communication and delay the project	LOW 30%	MEDIUM -\$1700
6	Legal requirements or actions may pause or delay the project	MEDIUM 30%	LOW -\$1000
7	Technological issues may limit the level of communication among the team members	MEDIUM 45%	HIGH -\$2900

Risk Analysis

Health Regulations

Covid-19 health regulations disrupt the data collection process since the researchers maybe limited from accessing some participants face-to-face. The data collection process will involve visiting some participants in their offices for interviews in cases where more detailed data is required. However, the regularly changing health

regulations may limit researchers from accessing this information, especially in situations where some participants may not respond to the questionnaires. This issue will also affect the schedule since the analysis process heavily relies on the information provided by some specific project managers, senior managers, project team members, and junior workers who have participated in different projects in the selected organizations.

Indicators

- The current health information posted on health and government agencies will be monitored regularly to determine the regulations put in place.
- The selected participants will also be regularly contacted to determine possible regulations in the companies that may limit face-to-face contact.

Risk Response

- Alternative data collection methods such as telephone calls and online questionnaires will be issued to the participants
- The researcher will try and schedule an outdoor meeting in places with fewer restrictions

Financial Risks due to additional obligations

Additional obligations present a financial risk which may disrupt the completion of the objectives since these factors require extra finances that were not planned for in the initial budget. This issue will increase the initial costs and also reduce the quality of work since the extra funds may have to be taken from other activities such as reducing the level of technology or the number and the scope of the location.

Indicators

- Failure of some team members to finish their responsibilities in time
- Participants' failure to respond
- Conflicts among team members

Risk Response

- Ensure the budget is more than the initial budgeted costs
- Find additional stakeholders/sponsors
- Close monitoring of the team
- Changing the objectives and scope

Unplanned Tasks and Resources

Unplanned tasks and resources that may arise and must be accomplished prolong the time set to finish the project and also increase the costs beyond the planned budget. During the course of the project, new tasks needed to be conducted to successfully complete the project such as the need for new technology and equipment, may arise meaning that the project manager will have to find ways to cover for the extra costs and time consumed.

Indicators

- Technical degradation
- Added workload
- New Legal requirements

Risk Response

- Conducting more research on the inputs required to meet the objectives
- Asking research experts to analyze and vet the overall project plan

Ineffective Communication among the team members

Effective communication remains one of the most critical factors that guarantee the success of a project. Lack of effective communication may cause confusion and lack of clarity among the team members leading to issues such as delayed operations which lead to the team members' failure to complete the required tasks in time or as per the schedule, and also make the members to lose morale since the project manager cannot

communicate instructions with the team members. This issue may lead to the delay of the project or its overall failure.

Indicators

- Conflicts among team members
- Lack of effective communication channels and tools
- Poor team work
- Project manager has no control over the team

Risk Response

- Analyze the most preferred means and tools of communication among different team members, stakeholders, and current projects that are underway.
- Involve the team in the communication plan: Involving the entire team helps in determining possible issues that may deter the communication process and also share their insights on the best steps to take to ensure an effective communication process during the project.
- Share the risk: To put an effective communication channel in place needs the participation of all the team members. For instance, the stakeholders can increase the finances provided to purchase better communication tools needed for effective communication. The project manager needs to analyze their leadership communication skills and improve them where necessary.

Legal requirements or actions may pause or delay the project

There are many instances where the governing authorities enact laws that limit the planned or normal activities required by the team members. For instance, due to the Covid-19 crisis, many governments have continued to restrict movements and traveling, a factor that makes it hard for the researchers to visit the selected locations and collect the require data.

Indicators

- High rise of infected number of people
- Increasing demand by people and organizations for the government to close specific borders
- A trend of boarder closure across the country's States

Risk Response

The best response strategy in this case is to accept the risk because there is nothing one can do to influence the government's decisions. Therefore, it's better to accept the cost, schedule, scope, and quality impacts if the risk event occurs

Technological Risks

Technological issues may limit the level of communication, access to data, and the data analyzing process mostly due to the insufficient advanced equipment and lack of knowledge and skills needed to operate different tools and equipment. For instance, some stakeholders prefer maybe willing to communicate or share information using Internal Project Website but may not have the skills needed to navigate and use the technology. Such issues may cost precious time since the project manager will have to communicate to the same information multiple times using different communication channels and tools.

Indicators

- Low technical skills
- Usage of analogue equipment

Risk Response

- Deferring the response; in cases involving external stakeholders and participants, it's better to defer the response and determination on how to

handle the risk because it's not yet clear how these individuals may respond to different approaches due to factors such as occupational level, age-group, and time among other factors.

- Training team members: Internal team members will go through simple training sessions to enable them use different technologies needed in the project.

Expected Monetary Value (EMV)

Risk	Probability (%)	Impact (\$)	EMV
1	30%	-3000	-400
2	80%	-1500	-120
3	60%	-2000	-120
4	70%	-2500	-175
5	35%	-1700	--590
6	30%	-1000	-300
7	45%	2900	1305
-8800			\$400