



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project(Spring 2021)

Student Name	Mohammad Alswadany	اسم الطالب
Students I.D	2021203215	الرقم الجامعي

Section

Master

Date

Thursday

18 / 03 / 2021.

Course Code

(PMG510)

Project Risk Management

Instructions:

- آخر موعد للتسليم هو يوم الخميس 20-05-2021 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 **each 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 project. 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 مبني على مشروعك الذي اخترته في مادة ادارة المشاريع المتقدمة)

الغرض من هذا التقرير هو التعرف على المخاطر المحيطة بكل مرحلة من مراحل المشروع, تحضير مصفوفة احتمالية المخاطر ومن ثم القيام بالتحليل لهذه المخاطر المختارة. مهمتك هي تحضير خطة متكاملة لإدارة المخاطر تشمل التعريف بالمخاطر المحتملة التي تحيط بكل مرحلة من مراحل مشروعك (نفس المشروع الذي اخترته في مادة إدارة المشاريع المتقدمة Advanced project management). ومن ثم القيام بتحديد 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 الاثار السلبية على المشروع.

قد تحبذ بداية هذا البحث بعصف ذهني عن ماهية المخاطر التي قد تحيط بكل مرحلة 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، سنقوم باختيار عدة مخاطر من تلك التي قمت بالتعرف عليها لتحليلها.

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

لانتس 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..

Description of the risk and potential impacts:

Our project is a set of actions that are planned in order to achieve a goal previously established, which requires a quantity of human, material and economical. It is a temporary effort that takes place to create a product, service or unique result. The temporary nature of projects indicates a beginning and an end definite, but does not necessarily mean short-lived. On the other hand, projects can have long-lasting social, economic and environmental impacts more than the projects themselves. Due to the unique nature of projects, there may be uncertainty regarding the products, services or results that the project generates. Project tasks can be new to the project team, which requires more planning dedication than if it were a routine job. In addition, projects are carried out at all levels of an organization. A project can involve only one person, a single unit or multiple units within the organization.

The public works contracts applied in our project are:

- ☐ Unit Prices: in which case the amount of the remuneration to be covered at the contractor will be:
 - ☐ In the case of work, per unit of finished work concept.
 - ☐ In the case of services related to public works, per unit of concept of service performed.
- ☐ Lump Sum Price: in which case the total fixed payment amount that must be covered at the contractor will be for progress or completed activities. Lump sum contracts may not be modified in amount or term, or will be subject to cost adjustments (with some exceptions stipulated in the contract and in agreement with both parties).

Service Provision Projects (PPS):

The characteristics are that:

- ☐ The sponsor assigns a contract to the private investor to provide certain services for a long period of time (greater than 15 years).
- ☐ The ownership of the assets with which the service is provided may be of the private or government investor.
- ☐ Only once services are provided and it is determined that the performance is adequate, the sponsor will make the corresponding payments.

Indicators or triggers that would be monitored to help identify the risk:

It is the act by which the sponsor grants an individual the right to create a public commercial artwork and to avail public domain interest, for a time determined, subject to various conditions that are intended to preserve the public. More specifically, the "Creation of commercial painting" is a concept that includes the investment, conservation and managerial management of the art work by a short-term, for which the concessionaire is rewarded through the collection of stage by stage contribution, in some cases.

Life cycle is understood as the set of phases that the project goes through from that is born until it ends. Our projects, no matter how small or large Artwork is , or how simple or complex they are, can be configured within the following.

- ☐ Initiation: defines a new project or a new phase of an existing project, by obtaining authorization to start said project or phase.
- ☐ Planning: establishes the scope of the project, refines the objectives and defines the course of action necessary to achieve the objectives for which achievement was undertaken the project.
- ☐ Execution: the work defined in the plan for the management of the project is carried out in order to meet the specifications of the same.

- Monitoring and Control: refers to the monitoring, analysis and regulation of the progress and to project performance, to identify areas where the plan requires changes and to initiate the corresponding changes.
- Closure: process to end all activities across all groups of processes, in order to formally close the project or a phase of it.

A project risk is an uncertain event or condition that, if it occurs, has a negative effect on at least one project objective. If any of these occur uncertain events, there may be an impact on cost, schedule, quality, or project performance. Risk conditions can include environmental aspects project or organization that may contribute to project risk, such as poor project management practices, lack of integrated management systems, multiple concurrent projects or reliance on external participants who do not can be controlled. The risks of the project have their origin in the uncertainty that is present in all the projects. Known risks are those that have been identified and analyzed, which makes it possible to plan responses to such risks. The unknown risks specific requirements cannot be proactively managed, suggesting that the project must create a contingency plan. A project risk, which has occurred can also be considered a problem.

Specific risk response strategies:

During the development of our project there are a series of inconveniences that they negatively affect and are often associated with risks when their true cause lies in bad practice. For example:

- Failure to control the budgeted, planned, estimated and bid cost.
- Failure to control the time stipulated for approvals, designs, construction and occupation.
- Non-compliance with the technical standards required for quality, function, aptitude for your use, safety and preservation of the environment.

These are aspects that have to do with poor planning and monitoring of the draft. Whose effects would be an excessive growth in time, human resources and capital with incorrect planning reduces development efficiency. A bad practice can cause a delay in

the delivery of an urgent project, loss of contracts for the company, or in the worst case the total failure of the project with economic losses of a magnitude proportional to the importance of the project. It is essential for the elaboration of a project to carry out a deep analysis of itself, because the investment of the projects is mostly high, it is at stake many aspects, not only economic, but time, human effort, resources materials, etc. Because of this, it is important to foresee from the beginning and during the development and in the implementation of the project some complex situations that may present, if they occur, create the necessary conditions to be able to solve or minimize the difficulty. Good project planning is the basis for the fulfillment of tasks assigned, therefore, it is extremely important to take into account the tools, and information available regarding this topic. Good planning translates into, compliance with delivery dates, elimination of idle time, etc.

Expected monetary value (EMV):

We have identified risk with a 30% chance of occurring because of time constraints and skilled painter availability. If this risk occurs, it may cost you 500 USD. Expected monetary value (EMV) for this risk event.

The probability of risk = 30%

Impact of risk = – 500 USD

We know that: Expected monetary value (EMV) = probability * impact

$$= 0.3 * - 500$$

$$= - 150$$

The expected monetary value (EMV) of the risk event is –150 USD.