



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

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Section

Master

Date

Thursday

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Course Code

(PMG510)

Project Risk Management

Instructions:

- اخر موعد للتسليم هو يوم السبت 2021-05-08 في تمام الساعة 9 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 1.5 line spacing

- 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 مبني على مشروعك الذي اخترته في مادة ادارة المشاريع المتقدمة)

الغرض من هذا التقرير هو التعرف على المخاطر المحيطة بال**المرحلة** 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 حريقا 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..

1.0 Introduction

A new project with small limited is exposed to multiple risks more than large projects, as the risk faced by small project may lead to leave the market due to limited range and your weaknesses, potential and the inability to face the risks.

The risks facing to the small project may change in terms of the timing dimension, some of which occur at the beginning of the project, some of which occur during the whole project life cycles, some of which occur when the project attempts to spread in the local markets, and some of them occur when goods or services are provided. (Ray, Feb 26, 2021)

The risks that may faces to the small project can be classified into two **types**:

Risks can be expected: which we are talking here about the safety of employee and cost of materials and as well costing of marketing the materials to distributed in market.

Risks are difficult to expected: competitor and how they will affect the market, financial losses during the project.

1.1 Project objective

I have been assigned by company to manage project of recycling the plastic as Plastic waste is harmful to the ecosystem and company may change this loss of environment materials to produce the same material and reducing the wasting of cutting the tree in forest which will guide to global warming and may lead to make other side effects to our health. although Trying to find another source to use instead of plastic will save our materials for next generation.

1.2 Scope of the project

To reduce the huge risk that our planet will face, we are implementing our Project to provide the needs to services all cites of Saudi Arabia and customer need to be advised to reduce the wasting of raw materials so we can save our resources.as our goals is not

easy to achieve, as we need to confirm that we are starting the project in arranged time to reduces the losses of materials and budgeting in general.

2.0 Literature Review

there are many different study belong to manage the recycling the plastics and other different materials but we are discussing here about our land which is Saudi arabia , we are one the most country who is using the plastic and we are not recycling it to use for other different resource.

2.1 Study of (Ali/Ali/2007) study about (the availability of using the wasting from grass and the plastics around the country)

Result of this study

- to find another source of power and find the best way to recycling the materials which may be source of power or electricity.
- government need to help such project to implement and start saving cost of wasting to produce the power and invest in many different major. (Britannica, 2009 feb 24)

2.2 Study of (abdozomaia/2014) a whole management and strategies for the city of country to use the wasting materials.

Result of this study

- Study the cost of wasting the materials instead of recycling it and how its effecting our environment in way the increase the pollution around the cites
- As well study the comparison between the number of peoples in the city and number of wasting materials. (Oldenziel, August 2013)

3.0 Methodology of the project.

Our project stakeholder and his partner are preparing meeting in the past 3 month from today and during the meeting we are discussing the news about the project.

As well we have visited two factors in Saudi Arabia and check if the market accepting third competitor. And to check the market is growing or not.

Interview with expert person from outside Saudi Arabia and get more knowledge regarding the impact of the recycling and profit/ losses.

Mailing different company and meeting them as well stakeholder traveled to check the resources, machine, the expert, as well the engineer who can manage the project.

3.1 Risk register

We have shown the type of risk will be face during the project life cycle and what the Probability during the risk, impact of the risk which will effect the cycling while we have high percentage impact and low, severity of the risk is highlighted with different color to show how the risk effected the project

Name of risk	Risk description	Probability	Impact	severity	How to mitigate the risk
Cost of recycling	Its need to know that some materials recycling costing more than it original cost	25 %	70 %	Medium	Need to segregate the items which need recycle by company with low cost and high impact.
Location of factory	Location of factory should be far from the city center.	65 %	80 %	High	Factory location should be away from the city or in desert to reduce the effect of the air pollution.
producing low quality product	Some of materials when you recycle it will not be the perfect materials.	30%	40%	Medium	Trying to improve the quality of recycling the materials, and find way to meet customer requirement,
low of sells the product	Customer not preferring the recycled materials as they have bad idea about it.	46%	80%	High	Trying to reduce the Chemicals materials to make the product fresh and does not has any side effect
Highly temperature used in the factory	Sometimes we are using high temperature with machine to melt the materials which will make the area too hot.	30%	60%	Medium	Need to ensure that all employee and labors are not affected by this process
Transportation delay	Transportation sometimes delays for the materials as we are outside the country	70%	80%	High	Production team will stop working which will affect huge losses.

3.2 Risk matrix

Risk matrix used here as table to give the risk faces during the project the priority so the project manager or risk responsible person will handle it easily.

Medium	High	High	70 to 100	Probability
Low	Medium	High	30 to 69	
Low	Low	Medium	0 to 29	
0 to 29	30 to 69	70 to 100		
Impact				

3.3 EMV Calculation

Expected monetary value is used here to show how expected the risk before it occurs and know from the bottom how to deal with it will reduce the impact when the risk occurs, as well will save the cost to know from where the risk occurs.

Name of risk	Probability	Cost of impact	Emv
Cost of recycling	25%	10,000	2500
Location of factory	65%	420,000	273,000
producing low quality product	30%	33,000	9900
low of sells the product	46%	18700	8602
Highly temperature used in the factory	30%	3900	1170
Transportation delay	70%	84,000	58,800

Result and discussion

- We have noted that from the above table that the value of the impact resulting from the occurrence of risks is 569,600 riyals, and in the event of applying risk management and applying the plan in place to reduce or prevent the impact of risks, we notice the reduction in the cost of risks to 345,062 riyals, which is equivalent to 60% of the actual cost of risks, and from this it becomes clear to us the importance of the risk management process In our practical life
- We also must be aware during the whole project life cycle about the risk will be faces.
- Analysis of the project and know more about the risk faces is long process will need to monitor during the project life cycle.
- We need to monitor the project monthly so we can avoid the wasting of the cost for no purpose.
- As well risks should be informed and studied, known before the project start so it will be easy to avoid.
- There is no project has zero cost except the failed project or non benefit project.

References

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