

Everyone's Smart University

Project (Spring 2021)

Student Name	Ali Abdullah Alkhathami	اسم الطالب
Students I.D	2021201578	الرقم الجامعي

Section

Master

Date

Thursday

18 / 03 / 2021.

Course Code

(PMG510)

Project Risk Management

Instructions:

- اخر موعد للتسليم هو يوم السبت 08-05-2021 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 ١٢.
- 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 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 وتصنيف 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..

Project title: PROJECT OF PROVIDING RESPIRATORY DEVICES FOR HOME HEALTH CARE

My role : project manager

Introduction

Uncertainty is known that correlated with projects work so to control and mitigate the negative outcome from this uncertainty is essential and escalating, supporting and fostering the positive uncertainty is optimal¹. The project of providing home care respiratory devices in our hospital is valuable due to the goals and benefits that will be achieved from this project some of those goals is critical at this time due to the pandemic of COVID-19. The main goal is to utilize our hospital beds by the best way so it will be ready for any farther admission. Many patients can be discharged from the hospital if we give them the optimal medical device that designed for home use. Rather than, considering this project as risk control to keep hospital beds available for any indicated patients it is also considered as opportunity risk project due to decreasing the direct or indirect cost of patient's services. As any other project this project has it own risks that can affect the required goals and objectives that our project was initiated to be achieve them. The goals and objectives were explained in PMG506 research.

Literature Review

Study on contingency planning management is part of risk management this work has provided project managers an intuitive sense where to go in the face of identified uncertain risk factors in the environment.² To improve the health care work and keep enhancing the services risk management was added as one of factor that help to improve the services³. Risk management in healthcare refers to a set of clinical and administrative programs, processes, protocols, and reporting mechanisms aimed at detecting, monitoring, assessing, mitigating, and preventing patient risks.⁴

Methodology

In this project we identify many risk during the intuition phase, planning phase and execution phase but I will consider the most important of them as following :

Negative risks:

I. shortage of the requested devices over the year of 2021

In this project we estimated number of home care devices to cover all of indicated patients in year of 2021 the number which was estimated is 10 pieces of each device but this number may will not cover the needs especially with the current situation of COVID-19 pandemic.

II. delay of purchasing execution in 2021

The project was initiated in 20 / 01 / 2021 and closed in 12/ 04 / 2021 so the first quarter of 2021 was already finished before project closing and availability of the devices. However, this risk was identified early and escalated to higher authority and mitigated to the minimum.

III. specification that requested for the devices not met 100%

Device's specification in our project is vary than any other projects as known in general any device requested with very precise specification, but in those devices that included in my project some of the specification will be sized to the patient face size. Anyway, those specifications that may will not met the requirements are limited and proactively known. So, in this risk we assigned many departments to eliminate this risk at the time of providing the device to the patient.

Positive risks (opportunities) :

I. including the respiratory unit in home care services

Respiratory unit in our hospital is the department that doing this project but because of the shortage of staff in this unit that the unit wasn't participate in home health care services at the main time respiratory unit has good number of staffing and most of the requested devices are related to respiratory patients and those patients must be served by respiratory therapist. So, it is good opportunity to add one respiratory therapist to the home care team.

In the next table we consider every risk and its likelihood, impact, risk triggers risk owner and the actions that will done to mitigate or eliminate the risk:

Very High =80% -100 % High=60%- 79% medium = 40%-59% low = less than 39%

NO	Risk	Likelihood	Impact	Risk owner	Risk trigger	Action to be done
1	<i>shortage of the requested devices over the year of 2021</i>	LOW	HIGH 75%	clinical support services director	Trigger : estimated quantities is 10 when ever reach 3 from any device risk is triggered	Submit new request for new devices with same specification
2	<i>delay of purchasing execution in 2021</i>	HIGH	VERY HIGH 80%	Purchasing department	Risk is triggered by the first day in the project.	1 . devices and specification were done early in the planning and requested for purchasing were submitted. 2 . this issue escalated to higher authority.
3	<i>specification that requested for the devices not met 100%</i>	LOW	MEDIUM 50%	1.Respiratory unit 2.nursing department 3.boimedical department	Patient assessment result of fitting for the device or not	Change the original mask, tubes or catheters to the optimal size from hospital stores and followed with feedback Email.
4	<i>including the respiratory unit in home care services</i>	HIGH	HIGH 70%	Director of medical affairs	Triggered with the first day of the project (as known in home care medicine Respiratory therapist is cornerstone of home care team.	To be discussed in the future strategic plans 2022-2025

Results and Discussion

As result from risk management plan in this project the negative risks were mitigated to the minimum if not eliminated at all The Earned Monetary Value EMV were calculated for the contingency plans as the following table :

NO	Risk	Probability (P)	Cost of Impact (I)	EMV = P*I
1	<i>shortage of the requested devices over the year of 2021</i>	35 %	15400	5390
2	<i>delay of purchasing execution in 2021</i>	80%	35600	28480
3	<i>specification that requested for the devices not met 100%</i>	50%	18200	9100

Total contingency plan is 42970 RS

The opportunity risk wasn't included due to the order to delay it till the next strategical plan 2022-2025.

References

1. Exploring contextual conditions of project uncertainties and project value opportunities

Lechler, Thomas | Gao, Ting | Keeney, David | Edington, Barbara H.

2. On Uncertainty, Ambiguity, and Complexity in Project Management

Michael T. Pich • Christoph H. Loch • Arnoud De Meye

3. A framework to support risk assessment in hospitals

Gulsum Kubra Kaya, James R Ward, and P John Clarkson

4. Risk Management Event Evaluation and Responsibilities

Joel McGowan; Amanda Wojahn; Joseph R. Nicolini