



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 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 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 الآن 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 ثلاث تصنيفات (عالي/متوسط/منخفض) للاحتمالية والأثر.

لاتنس استخدام أسماء تصف طبيعة المخاطر بصورة فعالة – قم باستخدام كلمات تصف الحادثة الخطرة وتشير إلى 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. INTRODUCTION

In our daily life, we are exposed to many risks, which vary from high and low risks, as well as in the field of fitness and health clubs where the health and fitness industry has become extremely diverse in the range of services and facilities it offers; varying from large scale leisure centers and gymnasiums, to individual personal trainers Wherefore it is very important to understand the actual practice of risk analysis.

In this research, we review the risks facing my project GYM Fitness and how to reduce or f damage limitation and cost containment.

2. LITERATURE REVIEW

Various authors have defined project risk in different way. Project risk has positive and negative effects on project objectives (Adedokun, Ogunsemi, Aje, Awodele, & Dairo, 2013; Wang, Dulaimi, & Aguria, 2004). It is the measure of the probability, severity and the exposure to all hazards of an activity (Sarkar & Panchal, 2015). Risk is closely connected to uncertainty and is a commonly used term in all kinds of contexts, but is often related to the negative outcome of a certain event. Moreover, risks have stochastic nature (Hamzaoui, Taillandier, Mehdizadeh, Breysse, & Allal, 2015).

Unexpected risk involves the threat of uncontrollable, unpredictable and unanticipated events, which are especially considered by the management of large-scale projects, since these unexpected risk events (Hamzaoui et al., 2015; Huang, Huang, & Hsieh, 2013). These risks have a direct influence on project success. Many projects tend to exhibit cost overruns and schedule delays (Koushki, Al-Rashid, & Kartam, 2005; Mahamid, 2011; Sarkar, 2012).

Enormous researches conducted in different part of the world revealed that risks have resulted significant cost and time overrun of the projects (Arditi, Akan, & Gurdamar, 1985; D. W. M. Chan & Kumaraswamy, 1997; Floricel & Miller, 2001)

3. METHODOLOGY

Define the list of hazards in Gym Fitness and then apply a risk matrix to know the likelihood of Probability & Impact to determine the Severity of is it High, Medium or Low, thereafter calculations the EMV cost.

4. RESULTS AND DISCUSSION.

4.1 List of risks (Table 1)

No.	List of Risk	Risk Description
1	Equipment Malfunction	Hundreds of people may use your gym's equipment every day. That can cause wear and tear to the equipment, which could lead to malfunction -- and risks to you
2	Members Data losing	Through Data security hack
3	Infections & Viruses	Germs and bacteria are found everywhere, including gyms. The last thing you want when you're trying to be healthy is to get sick because of your health club.
4	Unqualified Staff	Is the personal trainer have a degree or certificate? Or did they pay a nominal fee, take a brief online test, and, presto, became a fitness instructor?
5	Athlete's injuries	Jumping, running, and moving around various objects in the gym can increase your risk of tripping and falling.
6	Electrocution & Electricity hazards	Electrocution can cause many dangers, such as fire, or direct shock to a person

4.2 Risks matrix (determine the probability and impact of each risk), which will go after that to risk register.

Figure1

Low	Medium	High
0 to 0.29	0.3 to 0.69,	0.7 to 1

Probability	0.7-1	high	high	medium
	0.3-0.69	high	medium	low
	0-0.29	medium	low	low
		0.7-1	0.3-0.69	0-0.29
		Impact		

(Table 2- Risk's matrix):

No.	List of Risk	Probability	Impact	Severity	Response plan	Mitigate Action
1	Equipment Malfunction	0.5	0.8	High	Extra gym equipment (standard)	Taken a guarantee on the quality, lifetime of the devices against damage
2	Members Data losing	0.1	0.9	Medium	Create an account in the computerized storage service	Backup through cloud computing data
3	Infections & Viruses	0.6	0.1	Low	Cleaning workers, cleaning tools continuously	Providing all means of hygiene and sterilization
4	Unqualified Staff (trainer's)	0.3	0.9	High	The trial period prior to the approval of the trainer's contract.	The right choice of qualified coaches
5	Athlete's injuries	0.8	0.3	High	Make sure the gym staff knows where the first aid kit and AED are located, McMillan says.	Make sure team members are certified in CPR / fitness first aid and automated external defibrillator
6	Electrocution & Electricity hazards	0.2	0.7	Medium	Regular maintenance, provision of safety devices, fire extinguisher, staff training	Applying international safety standards

4.3 calculations the EMV cost. (table3).

No	List of Risk	Probability	Impact cost SR	Risk contingency
1	Equipment Malfunction	0.5	200,000	100,000
2	Members Data losing	0.1	2000	200
3	Infections & Viruses	0.6	500	300
4	Unqualified Staff (trainer's)	0.3	1000	300
5	Athlete's injuries	0.8	2000	1,600
6	Electrocution & Electricity hazards	0.2	10,000	2000
TOTAL (SAR)			215,500 SAR	104,400 SAR

The total potential impact on the plan is 215,500 SAR , while the contingency cost is 104,400 SAR.

All the numbers are not exact cost but it was evaluated based on experience.

Therefore, this method is not feasible even if compared to similar risks. The degree of risk from high to low depends on the size of the risk and the time of its occurrence as well, and this was not included in the calculations.

This method may help to identify the dangers that we face, and then make a plan to avoid them, reduce their occurrence and also reduce the losses resulting from them, but they cannot be relied upon 100%,

It is useful for estimating contingency reserves.

5.CONCLUSIONS

This research provided a list of risks encountered in the GYM Fitness project, which can be used as a guideline before an event occurs, the organization will have controls in place to achieve loss prevention. As the event develops, steps must be taken to limit the damage the event causes. After the event, cost containment controls should be put in place and more effective ways to be found through business continuity and arrangements to reduce the cost of repairs.

6 .REFERENCES

1. Paul Hopkin.(2018). Fundamentals of Risk Management (5th ed.): Understanding, Evaluating and Implementing Effective Risk Management. Kogan Page.