



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 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..

Introduction:

Risk is an uncertain event or condition that, if it occurs, has a positive or negative effect on one or more objectives Positive risks are opportunities, while negative risks are threats [1].

Due to the technical revolution that we are currently witnessing and the technical development in banking and money transfers between banks, especially in currencies, on the other hand, there are investment opportunities in cryptocurrencies such as like Bitcoin (which is the latest technology that lead to the role of cash).

There are many major companies that have started investing in digital currencies, especially Bitcoin and Ethereum, such as Tesla and some major insurance companies in the United States, and from here it has been observed that there is an investment opportunity in digital currencies that our organization would have an appetite to invest in, which is 2% of the profits in digital currencies(cryptocurrency), based on In this we will study the expected risks in investing digital currencies.

Literature Review:

➤ **Risk identification**

The risks that are expected to affect the project are identified and the risk is distinguished separately. The team usually consists of risk management, the project team, stakeholders, experts and customers moreover the diagnostic process is a procedural process that can pass through three stages [2].

➤ **Risk qualitative analysis and assessment**

Risk qualitative It is the size of the risks in terms of the potential impact, and the risks must be arranged according to the goals, hence the qualitative assessment It has high importance in identifying risks, how the risk is treated, and any treatment precedes the other. The evaluation also depends on mathematical and graphical tools and one from the tools used is the matrices risk of probability and consequence [2].

Methodology:

As we mentioned above, there is an investment opportunity, but the currency market is considered an emerging and new market for an age of fewer than ten years, so the risks are very high. Therefore, an expert will be assistant with us especially in cryptocurrency to identify and evaluate risks in digital currencies, and then meetings will be held for each level of the organization from higher levels to subordinates to review the expected risks, and we will apply the qualitative risk analysis method.

After that we are identified the risk category and score range based on below table:

Category	Score Range
Severe	0.4 to 0.56
Moderate	0.07 to 0.3
Mild	0.01 to 0.06

The below table illustrates the probability and impact moreover the score for each risk identified

List of Risks	Probability	Impact	Score
Digital currency price volatility	0.70	0.80	0.56
Regulations and Legislation	0.70	0.60	0.42
Hacking and stealing digital currencies	0.50	0.80	0.40
Loss of digital password key for the wallet	0.50	0.60	0.30
Hacking and theft from cryptocurrency platforms	0.30	0.80	0.24
Terminate specific digital currency from the market	0.30	0.60	0.18
The disappearance of the cryptocurrency technology	0.10	0.80	0.08
scam in the cryptocurrency	0.70	0.10	0.07
Loss of the digital currency when transferring to the wallet or to another organization	0.10	0.60	0.06
Limited information available to investors	0.50	0.10	0.05
Legitimacy of the cryptocurrency projects	0.30	0.10	0.03
Buying in currencies that do not have any clear projects	0.10	0.10	0.01

The below table illustrates the risk matrix

probability	The Score of risk (the risk coefficient)=P x I		
0.7	0.07	0.42	0.56
0.5	0.05	0.3	0.4
0.3	0.03	0.18	0.24
0.1	0.01	0.06	0.08
	0.1	0.6	0.8
	Impact		

The below table illustrates how can prevent and mitigate each risk

Risks	Probability	Impact	Score	Prevent and mitigate
Digital currency price volatility	0.70	0.80	0.56	We will put stop-loss after buying.
Regulations and Legislation	0.70	0.60	0.42	All sell or buy must be through platform deliberate.
Hacking and stealing digital currencies	0.50	0.80	0.40	Save the cryptocurrency on a (cold wallet)*
Loss of digital password key for the wallet	0.50	0.60	0.30	The retrieval number is kept with the bank in a safe deposit box.
Hacking and theft from cryptocurrency platforms	0.30	0.80	0.24	Save the cryptocurrency on a wallet.
terminate specific digital currency from the market	0.30	0.60	0.18	Investment in the projects that have started in the market and have a clear and useful project in the future.

The disappearance of the cryptocurrency technology	0.10	0.80	0.08	The profits of the digital currency are converted into immovable assets or gold.
scam in the cryptocurrency	0.70	0.10	0.07	The purchase when will made should on trusted platforms.
Loss of the digital currency when transferring to the wallet or to another organization	0.10	0.60	0.06	A very little amount transfer is done to ensure the arrival of the currency transfer to the intended account and then the transfer amount which you need to transfer into the intended account.
Limited information available to investors	0.50	0.10	0.05	The purchase is made on currencies that have a period of more than one year and have a clear project and objectives.
Legitimacy of the cryptocurrency projects	0.30	0.10	0.03	No digital currency is purchased until after reviewing the project's white paper and the project's goals to ensure legitimacy it.
Currencies that do not have any clear projects	0.10	0.10	0.01	It is assumed that the purchase is not made in these currencies and if the purchase is made, the purchase will be made for a limited period and the sale will be carried out immediately with the option of stop loss.

The below table illustrates the EMV

Risks	Probability	Impact	EMV
Digital currency price volatility	0.70	22,000	15,400
Regulations and Legislation	0.70	14,000	9,800
Hacking and stealing digital currencies	0.50	22,000	11,000
Loss of digital password key for the wallet	0.50	14,000	7,000
Hacking and theft from cryptocurrency platforms	0.30	22,000	6,600

Terminate specific digital currency from the market	0.30	14,000	4,200
The disappearance of the cryptocurrency technology	0.10	22,000	2,200
scam in the cryptocurrency	0.70	2,000	1,400
Loss of the digital currency when transferring to the wallet or to another organization	0.10	14,000	1,400
Limited information available to investors	0.50	2,000	1,000
Legitimacy of the cryptocurrency projects	0.30	1,500	450
Buying in currencies that do not have any clear projects	0.10	1,500	150
Total		151,000	60,600

Discussion:

Based on what has been identified from the risks in investing in digital currencies, it is necessary to focus on severe and moderate risks, which are of high probability and impact. The focus is also on preventing and mitigating risks such as price volatility, as they are considered higher risks in digital currencies than in any other stock market investment. On the other hand, we note that the high costs are associated with fluctuating digital currency prices and protecting currencies from hacking or theft as well, so we need a high strategy as like stop loss in the marketing and putting cryptocurrencies in a cold wallets.

***cold wallet mean:** is a way of holding cryptocurrency tokens offline.

References:

- [1] PMI (2019). THE STANDARD FOR RISK MANAGEMENT IN PORTFOLIOS, PROGRAMS, AND PROJECTS.
- [2] Ahmed Mohamed Keshk*, Ibrahim Maarouf, Ysory Annany (2017). Special studies in management of construction project risks, risk concept, plan building, risk quantitative and qualitative analysis, risk response strategies.