



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

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Section	Date	Course Code
Master	Thursday 18 / 03 / 2021	(PMG510)

Project Risk Management

Instructions:

- اخر 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 الإنجليزية.
- 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 **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 إدارة 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 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, 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..

Risk Identification and Analysis

for

The Flower Restaurant Project

1. Introduction

Risk management is the process of identifying, assessing, and mitigating risks to an organization's capital and income. Financial uncertainty, legal responsibilities, strategic management mistakes, accidents, and natural disasters are all potential sources of these threats or hazards. For digitized businesses, IT security vulnerabilities and data-related risks, as well as risk mitigation strategies to mitigate them, have risen to the top of the priority list. As a result, risk management systems are increasingly incorporating companies' frameworks for identifying and tracking threats to their digital assets, such as sensitive business data, a customer's personally identifiable information (PII), and intellectual property. Any company or organization faces the risk of unforeseeable, disruptive events that may cost them money or cause them to close permanently. Risk management allows companies to prepare for the unexpected by reducing risks and costs before they arise.

By implementing a risk management plan and anticipating several risks or accidents, an organization can save money and protect its future prospects. This is because a good risk management approach will help a company create plans to avoid potential threats, minimize their impact if they do happen, and cope with the consequences. If organizations can understand and manage risk, they can be more confident in their strategic decisions. Furthermore, good corporate governance practices that focus on risk management can help an organization achieve its goals.

2. Literature review:

The foundations of risk management are probability theory and decision-making under uncertainty. The predicted utility principle, bounded rationality theory, and prospect theory had a significant influence. People make choices based on the expected utility of different

options, according to the principle of expected utility theory. Multiple results and their probabilities are difficult to grasp in the real world, according to the bounded rationality principle. The effect of human experience on decision-making can be simulated using prospect theory (Misra, & Kumar, 2006).

The art and science of recognizing, assessing, and reacting to risk over the life of a project in the best interests of achieving project goals is known as project risk management (Schwalbe, 2006).

Risk evaluation has been conducted informally by everyone since the dawn of time, whether they are aware of it or not. Modern risk management has its roots in insurance, with which it has been closely associated for more than three decades (Snider, 1991). Risk management hasn't always been a happy story, and evidence indicates that it's still failing to deal with unpredictably occurring events. Project management was heavily chastised in the 1960s for failing to deliver projects due to technological complexity, contact strategy, citizen resistance, and project environmental impacts (Morris, 1997). A project manager can also contend that the last two are external project considerations that are outside their direct influence (Ibid), and it is generally believed that these would be moved up the chain to higher management levels (Chapman & Ward, 1997).

The main objectives of risk management include (Yee et al., 2001):

- To allow for more organized and less discretionary decision-making.
- By assessing threats and solution situations, a better view of the risks that a project faces can be gained.
- To assist in determining which threats demand immediate intervention and which can wait.
- To let managers aware that a project will have a variety of effects, and that reasonable action can be taken to mitigate any negative repercussions.

3. Methodology:

This research follows the descriptive approach. We concern study risk management through collecting data from previous studies and literature. We will give further application risk management applied on a project in the discussion.

4. Results and discussion

Risk analysis

Market Development Risk: People do not know what flora products are and therefore may not try them, which is a significant danger. To lead consumption ideas, we must use marketing, public relations, and advertising.

Competitors Risk: Since this is a new industry with a bright future, there will be many rivals or imitators in the process. As a result, it is critical to maintain core competencies, continue to innovate, retain existing customers, create a strong reputation and influential brand, and improve the company's image.

Operation Risk: Many risks may arise during the process, such as supply issues, public events failing to achieve the desired result, a lack of funds, and so on. To prevent these dangers, we must take appropriate precautions, such as training employees, establishing a learning organization, and ensuring funding. Furthermore, it is critical to connect with customers and partners, improve HR management, and develop a corporate culture that gives workers a sense of pride, belonging, and freedom. By doing so, we will minimize risks.

Financing Risk: Since funds are scarce at the start of a venture, it is critical to establish credit and a reputation in order to obtain capital from a variety of sources.

Identifying Operational Risks:

Description	Risk			How to prevent and mitigate the risk
	P	S	P*S	
1. Fire damage to property and life	3	5	15	Regularly check and test smoke alarms and fire extinguishers to ensure that they are in good working order. Staff must be trained in the event of a fire, including how to evacuate. Purchase insurance to adequately cover the detrimental effects of fire on life and property.
2. risk of cuts, burn and injuries	2	3	6	The best restaurant kitchen layout can be found here. By teaching kitchen staff how to properly handle knives and sharp tools, you can have cut-resistant gloves to protect their hands and fingers.

				Non-slip mats should also be put under cutting boards. Require employees to wear long trousers, closed-toed shoes, and long sleeves to avoid stumbling into stoves and ovens. Keep clutter and debris out of the area around hot equipment.
3. Hygiene of food is not ensure or food is poisoning	2	4	8	Always utilize the most quality ingredients and ensure the hygiene of food preparation by providing training to staff. Manage the expiry date of the inventory in a timely manner.
4. Suppliers do not fulfil their obligations of supplying	2	4	8	Prepare a list of more than one supplier for more choices. Also, substitute products should also be taken into account.
5. cyber-related attacks	1	3	3	Create a system for keeping track of all paperwork and documents, including contracts, receipts, and billing statements. To ensure that all of your data is backed up and secured, use a cloud-based POS system, and restrict access to sensitive data to those who need it.
6. Key staff resigns or takes maternity leave	2	2	4	Let experienced staff train other less-experienced one in terms of knowledge and skills.

Risk Matrix

Risk probability	Risk severity				
	Catastrophic 5	Hazardous 4	Major 3	Minor 2	Negligible 1
Frequent -5					
Occasional-4					
Remote -3	15				
Improbable-2		8 8	6	4	
Extremely improbable-1			3		

EMV:

No. risk	P	i	EMV
1	30%	10000	3000
2	20%	6000	1200
3	20%	8000	1600
4	20%	8000	1600
5	10%	6000	600
6	20%	4000	800
Total EMV			8800

Record of the risk:

The project manager and project committee issued the continuity of event preparations and evaluating further, the basic review and recommendation for the prospect of setting the counter date. Opportunity and keeping an eye out. Time is one of the four key choices. At the right time, the better solution. Both threats will be communicated to the project manager, who will directly notify stakeholders.

Risk and triggers:

risk	source	prevention	response	impact
Fire	Unattended cooking	supervision	Fire alarm	Smoke inhalation and death
poisoning	Unhygienic workplace	hygienic terms and conditions	Manage expiry dates	Stomached or death
Insufficient materials	Suppliers do not fulfil their obligations of supplying	Make plan B or alternative list of suppliers	Use substitute products	It will stop working/ profit reduction
cyber-related attacks	Hackers	cloud-based POS system	Track documents	Stolen information and data
Key staff resigns	maternity leave	training	Train other key staff	shortage

Risk contingency plan:

Risk description	Grade	Mitigation action
Fire damage to property and life	A	After the fire damages, the restaurant must immediately rebuild and re-operate the business as quickly as possible whilst waiting for insurance payments.
Suppliers amend their terms and conditions of supply	C	opt for alternative suppliers or increase working capital via personal cash reserves.
Hygiene of food is not ensure or food is poisoning	B	Promptly investigate on the grounds of the food poisoning. Support the affected customers as much as possible. Enable the complaint handling process.
risk of cuts, burn and injuries	B	Require employees to wear long trousers, closed-toed shoes, and long sleeves to avoid stumbling into stoves and ovens. Clear the area around hot equipment of any debris or clutter.
cyber-related attacks	D	Hire IT engineer to create strong information& POS system
Key staff resigns or takes maternity leave	D	Offer short term contract for suitable replacement (until the permanent staff can do the job).

A= Mitigation actions, to reduce the likelihood and seriousness, to be identified and implemented as soon as the project commences as a priority.

B= Mitigation actions, to reduce the likelihood and seriousness, to be identified and appropriate actions implemented during project execution.

C= Mitigation actions, to reduce the likelihood and seriousness, to be identified and costed for possible action if funds permit.

D= To be noted - no action is needed unless grading increases over time.

Summary and recommendations:

Project risk analysis and management is a continuous process that can start at any point in the project cycle and last until the costs of using it outweigh the possible benefits. As the project progresses, the risks decrease, and therefore the efficacy of risk analysis and management decreases, so it's best to use it early in the project life cycle. There is no such thing as a risk-free project; all projects have risks, and assessing these risks after

finding them and then handling them is an essential part of project management; without it, the project would fail.

References

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Thank you and best regards
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