



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

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Section

Master

Date

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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 line spacing 1.5
- 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 الاثار 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..

The Identity & Access Management project

Introduction

My project is identity access management (IAM) this solution will have many benefits to an organization for regulation compliance, prevention for any unauthorized trading, and for operation needs. This kind of software project is one of the hardest IT projects to implement because it has a high impact on all applications in an organization. Furthermore, here comes the need for a good management risk plan to deliver a successful project. The definition for risk is uncertain or condition that if occurs, has a positive or negative effect on one or more project objectives such as scope, cost & quality (PMBOK).

Methodology

In the first steps, we will use risk area knowledge from (PMBOK, and Practice Standard Project Risk Management.) By creating the Risk management plan which has all the needed information to answer these questions (how to define the risk and when I need to define a new one, where I should include all information to document, which documents, based on what I need to update the risk status). After that, I create the risk register, which has all risks and needs information for risks. Then, arrange frequent meetings to review and audit the risks. In addition, how I report and highlight the high risks. Finally, plan should include risk categories Risk Breakdown Structure (RBS) and document all information as result.

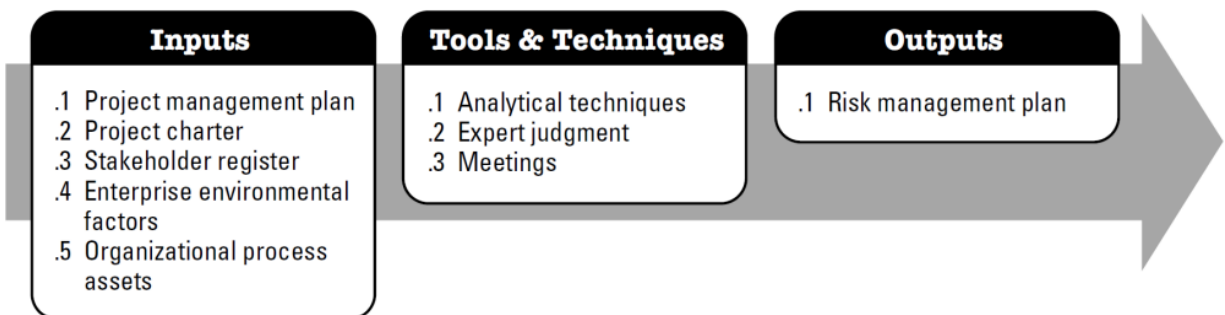
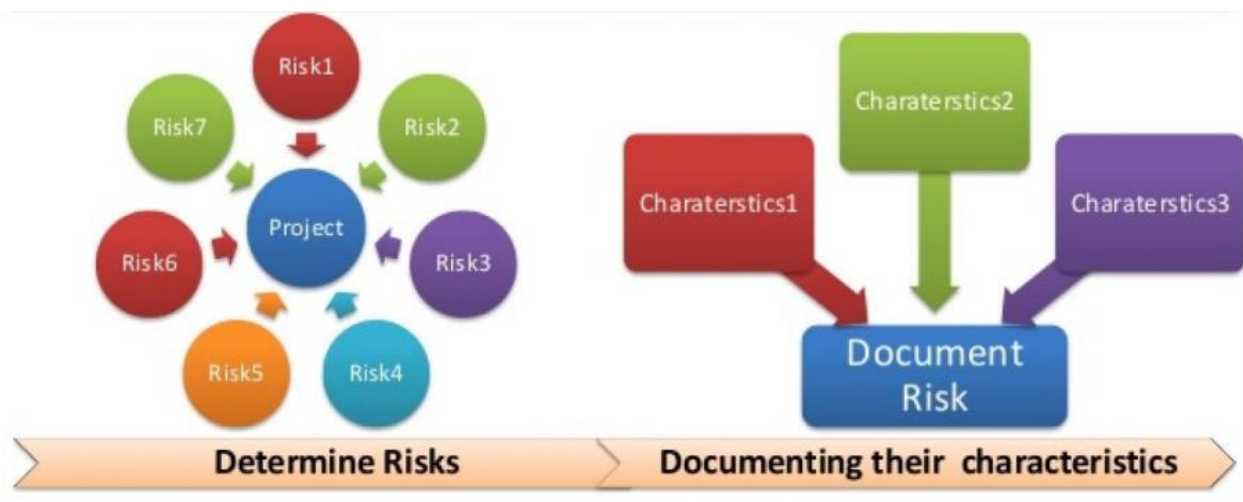


Figure 11-2. Plan Risk Management: Inputs, Tools & Techniques, and Outputs

Definition of impact Scales for Three Project Objectives			
Relative or numerical scales are show			
project Objective	Low(0 to 0.2)	Moderate (0.21 to 0.6)	High (0.61 to 1)
cost	less than 10%	between 11% to 40%	upper than 41%
time	one day of work	3 days of work	more than 5 days
scope	scope decrease darely noticeable	Minor ares of Scope affected	Mojer area of scope affected

Identify the Risks

Process will use a lot of tools and tech, for example brainstorm, SWOT, meeting, chick list & SME.



Please, find list of them below

#	Risk list
01	Choose one of the IAM solutions on the market that does not fit or align with every application in an organization (not have flexibility). There are many solutions with more features with variance cost. However, some solutions costly and need many custom works to be used with a limited list of applications and need large team to operate the solution.
02	The project team did not have enough experience to implement the solution decently.

03	The organizational structure is not stable or might change more than twice every year, which will affect the core functions of the solution. Such as, create a new department with new job title names, and new functionality.
04	The HR system is under upgrade or change that will have a high impact on the core function of the solution. The system will not be fed with clear information as expected if the HR system with this case.
05	Any change on structures at the HR system must be reflected as well as active directory system (AD). IAM solution needs to be fed from the HR system and push the information to AD system, if they don't match, some of its functions would get wrong. For instance, if department X has a new member and that department is not reflected on both systems the new employee can't have user access to his/her PC.
06	This kind of system requires integration with all core systems, which sometimes need to raise the change request to modify some change on the target system that can cost money and time filed to meet Due date.
07	The main stakeholders not aware of the benefit of this solution (Resists change)
08	The sponsor requested to finish the project in 6 months with a limited budget (not enough time). The project may take more than plan.
09	The role and authority matrix * for all applications are not ready yet, that responsible for defining each job title with what kind of authority and which apps needed to do his/her duty.
10	The policy and procedures of work-approved need to be submitted to be reflected on the IAM solution and enable it. For example, who will approve the creation of a user for the x system?

Preform Qualitative & Quantities Risk Analysis

Both of these processes are used to classification and categories the identified risk, which have a few tool and tech, such as More Carle, sensitive analysis & probability and impact assessment. In addition, we will use probability and impact assessment here. The table below will include this tool and tech:

#	Risk name	Probability	Impact
01	Choose one of the IAM solutions on the market that does not fit or align with every application in an organization (not have flexibility). There are many solutions with more features with variance cost. However, some solutions costly and need many custom works to be used with a limited list of applications and need large team to operate the solution.	0.44	0.75
02	The project team did not have enough experience to implement the solution decently.	0.23	0.45
03	The organizational structure is not stable or might change more than twice every year, which will affect the core functions of the solution. Such as, create a new department with new job title names, and new functionality.	0.56	0.75
04	The HR system is under upgrade or change that will have a high impact on the core function of the solution. The system will not be fed with clear information as expected if the HR system with this case.	0.37	0.69
05	Any change on structures at the HR system must be reflected as well as active directory system (AD). IAM solution needs to be fed from the HR system and push the information to AD system, if they don't match, some of its functions would get wrong. For instance, if department X has a new member and that department is not reflected on both systems the new employee can't have user access to his/her PC.	0.38	0.71

06	This kind of system requires integration with all core systems, which sometimes need to raise the change request to modify some change on the target system that can cost money and time filed to meet Due date.	0.64	0.84
07	The main stakeholders not aware of the benefit of this solution (Resists change)	0.32	0.46
08	The sponsor requested to finish the project in 6 months with a limited budget (not enough time). The project may take more than plan.	0.73	0.49
09	The role and authority matrix * for all applications are not ready yet, that responsible for defining each job title with what kind of authority and which apps needed to do his/her duty.	0.33	0.39
10	The policy and procedures of work-approved need to be submitted to be reflected on the IAM solution and enable it. For example, who will approve the creation of a user for the x system?	0.23	0.56

For calculate the result we will use the Risk matrix below :

probability	0,61 to 1	medium	high	high
	0,21 to 0,6	low	medium	high
	0,0 to 0,2	low	low	medium
		0,0 to 0,2	0,21 to 0,6	0,61 to 1
		Impact		

The risk table

#	Risk name	Severity	Probability	Impact
1	Choose one of the IAM solutions on the market that does not fit or align with every application in an organization (not have flexibility). There are many solutions with more features with variance cost. However, some solutions costly and need many custom works to be used with a limited list of applications and need large team to operate the solution.	0.33	0.44	0.75
2	The project team did not have enough experience to implement the solution decently.	0.10	0.23	0.45
3	The organizational structure is not stable or might change more than twice every year, which will affect the core functions of the solution. Such as, create a new department with new job title names, and new functionality.	0.42	0.56	0.75
4	The HR system is under upgrade or change that will have a high impact on the core function of the solution. The system will not be fed with clear information as expected if the HR system with this case.	0.26	0.37	0.69
5	Any change on structures at the HR system must be reflected as well as active directory system (AD). IAM solution needs to be fed from the HR system and push the information to AD system, if they don't match, some of its functions would get wrong. For instance, if department X has a new member and that department is not reflected on both systems the new employee can't have user access to his/her PC.	0.27	0.38	0.71
6	This kind of system requires integration with all core systems, which sometimes need to raise the change request to modify some change on the target system that can cost money and time filed to meet Due date.	0.54	0.64	0.84
7	The main stakeholders not aware of the benefit of this solution (Resists change)	0.15	0.32	0.46

8	The sponsor requested to finish the project in 6 months with a limited budget (not enough time). The project may take more than plan.	0.36	0.73	0.49
9	The role and authority matrix * for all applications are not ready yet, that responsible for defining each job title with what kind of authority and which apps needed to do his/her duty.	0.13	0.33	0.39
10	The policy and procedures of work-approved need to be submitted to be reflected on the IAM solution and enable it. For example, who will approve the creation of a user for the x system?	0.13	0.23	0.56

Responsible plan:

This process will include identifying the risk owner and risk action owner to get all need information about risks. And set the each trigger for each one.

The response plan table:

#	Risk name	Severity	Response plan	Mitigate Action
1	Choose one of the IAM solutions on the market that does not fit or align with every application in an organization (not have flexibility). There are many solutions with more features with variance cost. However, some solutions costly and need many custom works to be used with a limited list of applications and need large team to operate the solution.	0.33	Assess and consultate for all applications on environments and Category the top solutions in the market by using the decision tree to choose which one will meet the requirements.	There more than solution can be chosen based on our requirements.
2	The project team did not have enough experience to implement the solution decently.	0.10	provide a training course for the team after the solution been chosen, or add the training on the contract as items	try to hire one or two that have experience in the identity and access industry
3	The organizational structure is not stable or might change more than twice every year, which will affect the core functions of the solution. Such as, create a new department with new job title names, and new functionality.	0.42	update and audit the organizational structure on both system every 6 months,also set the trigger with a date for this exercise	inform the responsible department to reflect the new organizational structure about it and follow up
4	The HR system is under upgrade or change that will have a high impact on the core function of the solution. The system will not be fed with clear information as expected if the HR system with this case.	0.26	arrange the meeting with sponsor and HR team to get the correct information about the HR system and get the final decision from sponsor	escalate the risk to the PMO if the HR not respond and collaborate.
5	Any change on structures at the HR system must be reflected as well as active directory system (AD). IAM solution needs to be fed from the HR system and push the information to AD system, if they don't match, some of its functions would get wrong. For instance, if department X has a new member and that department is not reflected on both systems the new employee can't have user access to his/her PC.	0.27	review and audit the organizational structure on AD system every 3 months.	inform the responsible department to reflect the new organizational structure about it and follow up

6	This kind of system requires integration with all core systems, which sometimes need to raise the change request to modify some change on the target system that can cost money and time filed to meet Due date.	0.54	prepare document business requirements (BRD) for each target application and make cost estimate for all application add on project budget, set the due date for each apps and reflect it to project plan	prioritize all target application
7	The main stakeholders not aware of the benefit of this solution (Resists change)	0.15	make a few workshops before the project start for present the solution and what is benefit from it	inform the stakeholder about the solution
8	The sponsor requested to finish the project in 6 months with a limited budget (not enough time). The project may take more than plan.	0.36	share the assessment result for the solution and provide the business case about the best practice for implement the solution	prepare the solution plan with subject matter expert (SME) on the industry ,and present it to him/ her
9	The role and authority matrix * for all applications are not ready yet, that responsible for defining each job title with what kind of authority and which apps needed to do his/her duty.	0.13	request Role Matrix from responsible team and side the due date from that	get the old one if available and update it later
10	The policy and procedures of work-approved need to be submitted to be reflected on the IAM solution and enable it. For example, who will approve the creation of a user for the x system?	0.13	request and collect the all policy and procedures from governance and risk compliance (GRC) team and ssite the due date get the document	prepare the few meeting with GRC team

The result

Finally, find the below table which include (EMV) amount 238,090.00. Moreover, this contingency reserve will add to the total project budget. And the total impact is 561,000.00 SR.

#	Risk name	Severity	Probability	Impact
1	Choose one of the IAM solutions on the market that does not fit or align with every application in an organization (not have flexibility). There are many solutions with more features with variance cost. However, some solutions costly and need many custom works to be used with a limited list of applications and need large team to operate the solution.	132,000.00	0.44	300,000.00
2	The project team did not have enough experience to implement the solution decently.	2,760.00	0.23	12,000.00

3	The organizational structure is not stable or might change more than twice every year, which will affect the core functions of the solution. Such as, create a new department with new job title names, and new functionality.	22,400.00	0.56	40,000.00
4	The HR system is under upgrade or change that will have a high impact on the core function of the solution. The system will not be fed with clear information as expected if the HR system with this case.	19,980.00	0.37	54,000.00
5	Any change on structures at the HR system must be reflected as well as active directory system (AD). IAM solution needs to be fed from the HR system and push the information to AD system, if they don't match, some of its functions would get wrong. For instance, if department X has a new member and that department is not reflected on both systems the new employee can't have user access to his/her PC.	7,600.00	0.38	20,000.00
6	This kind of system requires integration with all core systems, which sometimes need to raise the change request to modify some change on the target system that can cost money and time filed to meet Due date.	22,400.00	0.64	35,000.00
7	The main stakeholders not aware of the benefit of this solution (Resists change)	1,600.00	0.32	5,000.00
8	The sponsor requested to finish the project in 6 months with a limited budget (not enough time). The project may take more than plan.	2,190.00	0.73	3,000.00
9	The role and authority matrix * for all applications are not ready yet, that responsible for defining each job title with what kind of authority and which apps needed to do his/her duty.	19,800.00	0.33	60,000.00
10	The policy and procedures of work-approved need to be submitted to be reflected on the IAM solution and enable it. For example, who will approve the creation of a user for the x system?	7,360.00	0.23	32,000.00

Discussion

In the response table, you will find all risk with repose plan and the risk with low impact will add it on watch list to be **monitor and control** process during the project life cycle. Secluded the occurrences meeting to make the audit and review the list of risk during the project. Furthermore, last table you will find the contingency reserve for all risks and for this kind of project I recommended to focus on the risk all time to avoid any delay on the project.

References

- PMBOK 6th edition
- Practice Standard Project Risk Management

