



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

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Section

Master

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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

Introduction:

Walid went with his father to buy a new car, and the little boy was surprised that the car showroom sold his father a five-wheeled car, but his father understood him that the fifth was an emergency. And do you remember the story of Joseph, peace be upon him, with the king of Egypt, when the latter saw in his dream a vision that there were seven fat cows to be eaten by seven lean vegetables and seven spikes of green and the other dry, so Joseph, peace be upon him, expressed this vision as stated in the Holy Qur'an, and the king informed that there is an imminent danger in the country. Create a plan to confront and manage this risk

Both of the previous stories teach that risks are present in our lives in one form or another, and are not only linked to projects; Therefore, it is necessary to know the concept of risk, and how to define, analyze and evaluate it, and prepare a plan to overcome it or benefit from it, and all these concepts we call "risk management"

Literature Review:

Writer: Farouk Ibrahim - 2010

Risk management policies vary according to the number of types of risk, and it is difficult to develop an optimal policy for managing a particular risk to be applied in all cases. It is also difficult to enumerate all the policies that can be used in risk management due to their multiplicity and mixing with each other. But it is easy to put these policies in similar groups, bearing in mind that risk management policies do not stop at a limited limit, but rather develop and are renewed from time to time and from one society to another

For ease of use, we put risk management policies in three groups: the risk assumption policy, the risk transfer policy, and the risk reduction policy

First: Insurance policy

Insurance policy is one of the most widespread and used policies in dealing with risks at the level of all countries of the world in order to face pure or net economic risks to the extent that insurance has become a science and specialty taught in all universities and higher academic institutes in most countries of the world

If the insurance policy is chosen by the risk manager in a project as a way to face the risks in this project, he should focus on the following elements

Choosing an insurance company that has a good financial reputation in the insurance market (the ideal insurer)

Using the right to choose the appropriate insurance coverage for each risk .

.Negotiate with technicians in insurance companies regarding the terms of the insurance contract. These negotiations may yield better insurance terms and prices.

Disseminating information about the program and insurance coverage to all project workers

Continuous periodic follow-up on the part of the risk manager for the insurance program chosen on his part. This follow-up may result in weaknesses in this available program, so that the change will be made for the better in the interest of the project

Pros of the insurance policy:

Reducing the risk and uncertainty of workers and decision-makers in the project, in order to help increase the productivity of these workers and take sound economic decisions for the benefit of the project

Cons of an insurance policy

The cost of insurance may be relatively high compared to the cost of other policies

The allocation of time and effort is not easy on the part of the project risk manager to discuss and negotiate with the technical officials of the insurance companies about the terms of the insurance policies

The project's risk manager's expected negligence of his responsibilities towards the prevention and loss control program, depending on the existence of insurance

Methodology:

First: the concept of risk

The Webster dictionary defines "risk" as exposure to loss, but if you carefully define risk, you will find that each person and each science knew it differently from the other. Therefore, we will rely on the risk statement here to the simplest practical definition, in which risk is defined as a future event, which may or may not occur, and in the event that this event occurs, it will have an impact, either it will be a positive or negative impact.

From the previous definition it is clearly evident that risk is not a problem as the problem is a bad event that has already happened, while risk is a future event that has not happened yet, but if it does happen, it is likely that the risk will turn into either a problem (the negative impact of the event), or an opportunity (the effect). Event positive

Risk Management

If we go back to the story of Joseph and the King of Egypt, you will find that he - peace be upon him - discovered the dangers that will occur in the future. So he prepared a strategic plan for it by placing the wheat in the spike, so that it would be preserved over time and not spoil, but is it conceivable that the solution was simply determined without measuring, analyzing and evaluating those risks?

The answer is simply no, so in order to develop a practical solution and a wise strategic plan for risk management, it is necessary first to analyze and evaluate risks with the aim of linking the likelihood of their occurrence and the impact resulting from their occurrence and how they can be controlled and minimizing their impact if the impact is bad

Second: How to determine the risks

It goes without saying that risks are identified first so that we can address them before they occur, and methods for determining risks are not numbered on the fingers of the hand. There are many strategies used to identify risks, which differ from company to company, and from person to person, and below we will outline some of the methods that can be used to determine risks:

Brainstorming

One of the most important methods used to determine risks is: It is assumed that every company holds periodic meetings on a weekly or bi-monthly basis, and in each meeting a time must be devoted to brainstorming in which all attendees participate to determine any potential risks that may occur for any reason. It is also necessary to activate brainstorming sessions in the meetings that occur at the beginning and end of each stage.

Job Safety Analysis (JSA)

One of the oldest methods used to identify risks; Where the project or phase is divided into several activities, then each activity is studied separately in order to extract the risks from it as much as possible and study them.

Scenario achieving the goal

The risk can be known from the goal, where the scenario followed to achieve this goal is studied and all risks that may prevent it from being achieved are extracted, as well as the opportunities that help to achieve the goal in a time or at a lower cost

List of previous risks

It is possible that you did the same project before and faced many risks, or at least you know people who have implemented the same project before, and by asking these people about the record of previous risks that their project went through, you will have a large list of risks

Field Tours

In the event that your project has sales on the ground, field trips may be right, as you will notice many errors that will help you quickly devise risks

Assumptions the source of risk

As you prepare the basic plan for your project, you may have assumed things, or your plan may have been based on a set of assumptions; For example, if you assumed a specific price for the raw materials and found that the price is different, or you assume that the design of your new site template will take a maximum of a week, but you are surprised that the design of the template takes a whole month, or you assume that the hosting company that deals with it has servers that bear the influx of large number of visitors, but you are surprised The site started to stop repeatedly with the large number of visitors, so every assumption I made was a potential risk

Participation of the work team

It is important that you push the team to inform you of the potential risks in the project when they sense them using an organized and available reporting mechanism, as the team is actually practicing the required work and thus it is sure that it will discover risks that you as an owner or as a project manager cannot easily know

Question by experts

We mean here by non-working experts who have experience with such projects, and certainly with the size of their experience, they will add a lot of risks that you did not think of at all

Third: assessment and ranking of risks

After identifying the risks we will have a large number of them, and it may become impossible to deal with them all at once; So it will be imperative to assess the risks and then rank them in order to deal with the most severe ones first

Risk analysis and assessment

We can evaluate the risk by describing it according to two factors, namely the likelihood of the risk occurring, and the extent of its impact if it occurs, and each of the two factors can add 5 options below it (very high, high, medium, low, very low), and it is possible to reduce the five elements to Only three and they are (high, medium, low)

Ranking of risks

The risk is placed in the appropriate box for each of the two factors, for example the second risk in the previous example, it was placed in the average column for the likelihood of occurrence, and it was placed in a low row for the extent of the impact of the risk

After evaluating all the risks in the previous way, it will be clear from the existing colors which risks you must deal with first, and thus we have a complete table in which the risks are arranged with a serial number for each risk facing the project

Fourth: the mechanism of dealing with risks

Now we move to another important part, in which we learn about the mechanism of dealing with risks with the aim of influencing their impact. If the impact of risk is bad, we will have four different methods that we use one of them, and if the effect of risk is positive or can be converted into something positive then we will have three other methods that we use

Managing risks with a positive impact on the project (opportunities)

In the event that the risks have a positive impact on the project, or if it is possible to convert the negative risk into positive, just like the second risk that we mentioned in the previous example, we will have three methods to obtain this opportunity:

Exploitation of the opportunity: The second risk, which is the increase in the number of visitors by 20% over the permissible number, is negative on the status of the project because it may lead to the stopping of the site from working, but it can be transformed into a complete positive opportunity that can be exploited, for example we may take advantage of the presence of an offer with a company We can compete and book with a better hosting plan in capabilities at a lower price, or we will review the financial portion

allocated for emergencies in preparation for upgrading hosting and taking advantage of the increased number of visitors to make more money.

Share the opportunity: We may have an alternative solution if you do not have money allocated for emergencies or if you are unable to take advantage of the opportunity by the first method, and this is done by sharing the opportunity with another person, for example asking the hosting company to upgrade the account for you for free in exchange for placing an advertising banner for it In a good place on the site or you use ads on your site, then the person interested in advertising pays you an appropriate amount of money in exchange for publishing his ad on your site, and in this way I mention what you can do.

Enhancing the impact of the opportunity: in risk, we were trying to avoid and avoid the risk, but in the opportunities we try to enhance its impact, as the opportunity to increase the number of visitors means more profit, and therefore we will endeavor to try to increase the number of visitors more than this according to our plans

Results and Discussion

All risks that you know must be recorded in a risk register, so that this record contains the risks and assesses each risk in relation to the likelihood of its occurrence or its impact, and some increase two additional factors, namely the timeframe and the status of activities, as well as with each risk the method used to deal with it is written with the need to appoint a person Responsible for every risk.

A different person can be appointed for each risk or a fixed risk management team can be appointed depending on the status of each project, but it is necessary to specify in the risk register the responsible person and assign him the appropriate plan that he should follow with the risks or opportunities

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