



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

(PMG506)

Advanced project Management

Instructions:

- اخر موعد للتسليم هو يوم الخميس ٢٠-٠٥-٢٠٢١ 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 ١٢.
- 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. Amaal Aburumman

Project:

You are required to document your role in administering a project. The project may be set in a business, social, sporting, or family environment but must be of a significant size and scale. If you do not have an actual project to write about you may complete the project hypothetically. **This report will be between three to six pages in length**. This is a significant research project.

Your report must address each of the following issues:

1. Identify and describe the purpose, scope, and objectives of the project. **Display this information using an appropriate tool.**
2. Describe how the team is given an outline of the project.
3. Describe the strategies that are going to be set up to maintain communication with the team members.
4. Describe the tools that are going to be used to monitor the goals, time frames or milestones.
5. Identify project milestones and activities. **Display this information using an appropriate tool.**
6. Create a budget and link the costs to the key milestones for a project.
7. Describe how you are going to divide tasks and resources amongst a project team. **Display this information using an appropriate tool.**
8. Briefly describe how the progress will be monitored.
9. How are current project records maintained? Who has responsibility for this? provide some recommendations on how this process could be improved.
10. Describe the current procedure for finalizing projects. Create your own procedure and identify how you will evaluate the success of the project.
11. Legislation that may affect the project including health and safety, and anti-discrimination legislation.

Best of luck...

المشروع:

مطلوب منك توثيق دورك في إدارة مشروع. قد يتم تعيين المشروع في بيئة تجارية أو اجتماعية أو رياضية أو عائلية ولكن يجب أن يكون بحجم مناسب. إذا لم يكن لديك مشروع فعلي لتكتب عنه ، فيمكنك إكمال المشروع افتراضياً. سيتمكن هذا التقرير من ثلاث إلى ست صفحات .

يجب أن يعالج تقريرك كل من القضايا التالية:

١. تحديد ووصف الغرض والنطاق والأهداف من المشروع. اعرض هذه المعلومات باستخدام أداة مناسبة.
٢. صف كيف يتم إعطاء الفريق مخططاً تفصيلياً للمشروع.
٣. وصف الاستراتيجيات التي سيتم وضعها للحفاظ على التواصل مع أعضاء الفريق.
٤. صف الأدوات التي سيتم استخدامها لرصد الأهداف أو الأطر الزمنية أو المعالم.
٥. تحديد معالم المشروع والأنشطة. اعرض هذه المعلومات باستخدام أداة مناسبة.
٦. إنشاء ميزانية وربط التكاليف بالمعالم الرئيسية للمشروع.
٧. صف كيف ستقوم بتقسيم المهام والموارد بين فريق المشروع. اعرض هذه المعلومات باستخدام أداة مناسبة.
٨. صف بإيجاز كيف سيتم رصد التقدم.
٩. كيف يتم الاحتفاظ بسجلات المشروع الحالية؟ من المسؤول عن هذا؟ تقديم بعض التوصيات حول كيفية تحسين هذه العملية.
١٠. وصف الإجراء الحالي لإنهاء المشاريع. قم بإنشاء الإجراء الخاص بك وحدد كيفية تقييم نجاح المشروع.
١١. التشريعات التي قد تؤثر على المشروع بما في ذلك الصحة والسلامة ، وتشريعات مكافحة التمييز.

مع تمنياتي بالتوفيق..

Budget Risks In Advanced Project Management

Introduction:

Many project managers try to practice effectively build risk possibility into their budgets and plans without management cutting it out arbitrarily. Besides, risk management tends to be something that is done once at the start of the project to fill the checkbox and pretend it was done. Too many times, project teams lose to see the benefit of risk management which can preserve some of the usual mistakes that are made which make risk management useless. Budget risk is the potential for the estimates or assuming built into a budget to turn out to be incorrect. All budgets are based on future-looking forecasts that typically require some level of possibility. This uncertainty can be managed as a risk.

Here are 4 risks to think about when both setting your risk log together and your budget.

1. Gold plating

Gold plating is where the project team adds stuff into the project field without the clients asking for it. It often happens on software design projects, where the producers know they can attach extra functionality to develop the product, so they do. Even if the client didn't want it, and didn't know they could ask for it, the team does it. You'd be excused for thinking that gold plating is a great thing. After all, what project client isn't going to want more for their money? It's the bells that set your project team apart from any other project team.

2. Scope creep

Scope creep is something that all project managers have come across at some time in their jobs. You start with a small, well-defined scope and by the end of the project, it's become a rambling beast of requirements. This is distinctive from gold plating – the team is working on things that are accepted, it's just that the recommended work stretches the scope way behind what was originally agreed.

Scope creep takes many forms and can be through a poor change control method.

3. Failed QA systems

Quality Assurance (QA) makes sure that your deliverables are appropriate for your goal. Poor QA indicates that deliverables will make it through to the client only to be refused.. This will decrease the amount of testing needed and also give you more of a possibility of your deliverables being accepted by your client.

4. Currency fluctuation

Not all projects will suffer from currency fluctuation, but if you are working with a global team, this could happen to your project. The difficulty comes when your budget at a certain exchange rate but of course are charged the exchange rate of the day when the bills come in. In some matters, the discrepancy between what you had designed to pay and what you pay can be much money.

Budget Risk Impact:

- High = Project goal is at risk (necessary change to one or more of scope, schedule, and resources).
- Medium = Project goals are okay but important re-planning is needed.
- Low = No main plan changes; the risk is a difficulty or it will be handled through minor overtime work.
- Very low = Less than 1 percent influence on scope, schedule, cost, or Quality
- Low = Less than 5 percent influence on scope, schedule, cost, or quality
- Moderate = Less than 10 percent influence on the scope, schedule, cost, or quality
- High = Less than 20 percent influence on scope, schedule, cost, or quality
- Very high = 20 percent or more influence on the scope, schedule, cost, or quality

The project budget is necessary for the following reasons:

- ☐ **Planning validator**

Since the project schedule is a central driver for the project budget, the budget can serve as an outstanding cross-reference for the validity of the schedule and vice versa.

By looking at the schedule from a cost perspective, you may see resource or budget matters that were not visible before. Inversely, the schedule input is key for validating the project budget, because the budget demands to account for all the time a resource is needed on the project.

☐ **Performance measurement**

By measuring project growth against a cost baseline, you can better measure the true production of your project along the way, and in most cases, identify results and risks much sooner. This is the basis for an advanced project controlling system called earned value management.

☐ **Managing expectations**

The budget affects stakeholder expectations in many ways. The original budget sets the expectation on what the total project costs should be. If the budget is not promoted properly then you are bound to have an expectation issue. If the project budget is pre-defined and helps a cost ceiling for the project then it helps you to set stakeholder expectations concerning project schedule and project scope.

☐ **Cash flow management device**

Your schedule pushes the timing of your resource needs. Particularly in organizations where resources are shared across projects or centrally controlled, the accuracy of the schedule is key to effective resource management.

☐ **Justifying project investment**

With more projects accountable to a project choice process and financial return on investment expectations, it is more important to set the cost baseline for the project and monitor closely. Project risk is a critical part of estimating the project budget.

Previous studies:

Literature review:

Previous studies on this topic have only directed estimation methods that consider project budget reserves against known risks. As a result, project managers still meet the challenge of finishing projects within given budgets but without the proper tools to deal with unknown risks.

This study proposes a method for estimating resources for both known and unidentified risks separately. The study also recommends using the three-point estimation technique and R-value determination for estimating risk costs, which can increase budget accuracy and precision. The construction of residential building projects in South Korea proves the advantages of the proposed approach compared with previous methods.

Cost is the most critical parameter (Becker, Jaselkis, & El-gafy, 2014; Ke, Ling, & Ning, 2013; Sweis, Sweis, Rumman, Hussein, & Dahiyat, 2013) within the approved success criteria of cost, schedule, and performance targets—often called the —iron triangle (Pfleeger & Atlee, 2006; Williams, 2016)—on managing projects. However, in fact, project cost overruns and scope creep are normal phenomena in infrastructure and construction projects carried out in both advanced and developing countries (Bhargava, Anastasopoulos, Labi, Shiha, & Mannering, 2010; Doloi, 2013; Enshassi, Al-Najjar, & Kumaraswamy, 2009; Frimpong, Oluwoye, & Crawford, 2003; Sambasivan & Soon, 2007; Smith, 2014). Flyvbjerg, Holm, and Buhl (2002) found that 90% of building projects underestimated costs, which resulted in cost overruns of between 50% and 100%.

It is very hard to estimate project budgets correctly before executing the projects due to a lack of information and risks. Thus, a project management program including cost estimation is developed at an early stage before projects are constructed. So, it is very hard to accurately estimate the project budget due to loss of information or data (Creedy, Skitmore, & Wong, 2010; Koushki, Al-Rashid, & Kartam, 2005; Oberlender & Trost, 2001) and is required for the justification of projects on economic grounds and efficient capital planning and financing (Baccarini, 2006; Caron, Ruggen, & Merli, 2013).

Recommended Method for Estimating Project Budget

Accuracy and exactness are important factors to consider when determining project budget to reduce cost variances by cost overrun or underrun. The proposed project budget estimation method is an innovative one that promotes budget accuracy using the probabilistic estimate (Book, 2007; Garvey, 2008), and budget accuracy using the three-point estimation method and R-value determination.

Methodology:

Cost Estimation Methods

Estimating a specific project budget is challenging for project managers, because of the random risks concerning how big the influences on construction project results are and when they will occur.

Furthermore, budget estimation is conducted during the planning phase (Caron et al., 2013; Koushik et al., 2005; Sato & Hirao, 2013; Xenidis & Stavarakas, 2013), which is an early stage of the design life cycle, when there is a lack of data and information. Project managers need a budget estimation plan to respond to risks as accurately and precisely as possible to prevent cost overruns. In response to changes and risks, Project Management Institute (PMI) (2013) defined reserves that are composed of a contingency reserve for identified risks (known-unknowns) and a management reserve for unidentified risks (unknown-unknowns). Previous researchers have presented several methods to estimate cost reserves but those are not enough to cover all types of risks. One method is the traditional percentage model (Moselhi, 1997), which is arbitrary and difficult to explain or defend (Thomson & Perry, 1992); another method is Monte Carlo simulations (Barraza & Bueno, 2007; Clark, 2001; Eldosouky, Ibrahim, & Mohammed, 2014); and a third method is the regression model (Adoko et al., 2016; Kim, Kang, & An, 2004). These models are used for estimating total project costs and are powerful statistical tools used for analytical and predictive goals in forecasting the total final cost of the project. These methods lack consideration of estimating risk costs because they are used to estimate the total project budget without risk analysis.

If a single project is executed many times, the possibility density function (p.d.f.) can be obtained. The probability of the project cost can be measured by the probability density function so that the possibility that the actual cost can exceed the established target cost can be obtained on the probability density function during project execution (Garvey, 2008; Zhu, Zhang, & Wang, 2011). Thus, any type of risk can be estimated to a monetary value, which can be included in project cash flow as well (Halawa, Adbelalim, & Elrashed, 2013).

Results and discussions:

The results of previous research do not estimate resources for unidentified risks, because unknown-unknown risks were excluded from the research due to assumption by the author (Baccarini, 2006) or unmanageable (Chapman, 2000). Furthermore, contingency resources estimated to handle unknown risk cases cannot be justified because these could not be known and estimated (Kitchenham & Linkman, 1997). Besides, these are events not known to the project team before they occurred or viewed as impossible in a special project situation. By definition, unknown-unknowns are not foreseeable and thus cannot be dealt with proactively (Smith & Merritt, 2002; Thamhain, 2013). Although risk cost estimation techniques for known risks have been presented by previous researchers, the reserves for unknown risks have not been enough examined. The rare studies on estimating reserves against unidentified risks cause large cost changes and difficulty for sponsors or project managers in making decisions properly to provide benefits from the project results.

References

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