



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

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Section

Course

Code

Thursday

Master

Date

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(PMG506)

Advanced project Management

Instructions:

- اخر موعد للتسليم هو يوم الخميس 2021-05-~~820~~ في تمام الساعة 9 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. Amaal Aburumman~~ **Eng. Dr. Akram M. S. Ali**

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~~ **ONE** 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. سيكون هذا التقرير من ثلاث إلى ست صفحات.

يجب أن يعالج تقريرك ~~كل~~ **احد** القضايا التالية:

1. تحديد ووصف الغرض والنطاق والأهداف من المشروع. اعرض هذه المعلومات باستخدام أداة مناسبة.
2. صف كيف يتم إعطاء الفريق مخططاً تفصيلياً للمشروع.
3. وصف الاستراتيجيات التي سيتم وضعها للحفاظ على التواصل مع أعضاء الفريق.
4. صف الأدوات التي سيتم استخدامها لرصد الأهداف أو الأطر الزمنية أو المعالم.
5. تحديد معالم المشروع والأنشطة. اعرض هذه المعلومات باستخدام أداة مناسبة.
6. إنشاء موازنة وربط التكاليف بالمعالم الرئيسية للمشروع.
7. صف كيف ستقوم بتقسيم المهام والموارد بين فريق المشروع. اعرض هذه المعلومات باستخدام أداة مناسبة.
8. صف بإيجاز كيف سيتم رصد التقدم.
9. كيف يتم الاحتفاظ بسجلات المشروع الحالية؟ من المسؤول عن هذا؟ تقديم بعض التوصيات حول كيفية تحسين هذه العملية.
10. وصف الإجراء الحالي لإنهاء المشاريع. قم بإنشاء الإجراء الخاص بك وحدد كيفية تقييم نجاح المشروع.
11. التشريعات التي قد تؤثر على المشروع بما في ذلك الصحة والسلامة ، وتشريعات مكافحة التمييز.

مع تمنياتي بالتوفيق..

Dam Construction Project

1. Introduction

Studies have shown that most people in developing countries have no access to adequate safe and clean water. The problem has forced the government in those countries to develop ways to install, operate, and manage water supply in those areas (Levy, 2019). One of the methods that this target is reached is constructing dams to help with water supply in those parts. Through these projects, there is sustainability regarding the provision of water to households and other places.

In all dam construction projects, safety is paramount. One way to ensure that dam is safe is to maintain a 5m distance from the finished crust level to the scrambled surface. We will also involve the services of hydrologists to design the spillways since the dam has a volume of 50 000m³. The spillways are 10 m wide and 1.5m wide since the dam is constructed in a deep catchment area.

The project's commencement date was on Jan 20, 2021, and is expected to be completed by mid-July. This time is mostly the beginning phase where we are engaged with planning and researching activities such as site preparation. The project is handled by a team of 50 people, including project managers and laborers. There is also a financial manager who ensures that all activities occur within the budget scope. A contour survey helps in outlining the dam to assist the managers in monitoring the project's progress.

2. Literature Review and Conceptual Framework

A dam construction project involves various processes to ensure all the activities are completed effectively. Once all of the preliminary investigations have been conducted, and a suitable site is located, make precise estimates of quantities and provide the data needed to carry out design work. This survey aims to present a contour map of the reservoir on paper to the highest flood level and give details of where the drilling, spill,

and drainage work is located (Levy, 2019). Constructors measure the capacity of the pool for different dam heights from the contour map. Then a depth curve can be established to give the dam designer a quick and easy option to determine the total capacity.

Another reason behind the construction of dams is that they help curb flooding in rivers when it rains. Instead of the water causing damages, it is harnessed in these dams and is supplied to homesteads. The government may also use the dams to set up hydropower generation plants. Sand dams are also common water catchment facilities (Levy, 2019). In that case, water is available for people to use, and the amount of sand is collected depending on the amount of water harnessed in the dams.

During the construction of a dam, it is essential to consider the environmental issues associated with the project. In this project, the dam's size is considerably tiny, which means the costings and quantities of materials required are relatively low. This dam construction aims to provide people with adequate and safe drinking water (Sears *et al.*, 2018). Therefore, it is essential to ensure that the target is not met at the expense of other purposes. The other activities involved in the project are shown in the Gantt chart below according to each last.

3. Methodology

The study of advanced project management is qualitative since the data gathered is not numerical but instead describes the qualities of a project manager. Thus, the best methods of data collection used in the project were questionnaires and direct interviews. Secondary sources of data such as books and the internet were also used to provide more information on project management. Data collected was analyzed and evaluated using statistical methods.

4. Results and Discussion

4.1 Project Schedule and Activities

The dam project starts with setting the dam site to ensure that there is no unnecessary clearing. All these activities are involved in site preparation. Ensuring the site is ready before commencing the project will save on extra costs involved during the project. The site is then marked using pegs and benchmarks to indicate various features such as spillways and the dam center. The lack of the pegs would lead to the loss of the dam center, which would affect the whole project. These preparations were done during the first months of the year. The next phase involved extensive research in coming up with an appropriate design for the dam. From the start of April, the plan's implementation phase commenced, where the design was put into use. During the later periods of the year, there would be follow-ups to ensure that the projects meet the expectations when implementation is complete. The project activities are shown in the Gantt chart below:

Figure 1: Gantt chart of the project activities

Activity	Jan 21	Feb 21	March 21	April 21	May 21	June 21
Planning						
Research						
Design						
Implementation						
Follow up						

4.2 Project Financing

The construction of a dam depends on either the costs of similar dams constructed in the area or the ratings of the local constructors or government departments. When the tender is prepared for the project, it is essential to include all the quantities (Ferguson, 2018). The project manager provided the estimates based on the forecast as shown in the table below:

Table 1: Quantities and Cost Estimates in Dam construction project

Item	Description	Unit	Quantity	Priority	Amount (\$)
1	Site investigation	Sum	3	High	5000
2	Engineer fees	Sum	2	High	1500
3	Movement charge	Sum	2	Medium	2000
4	Clearing site	Hours	5	High	4500
5	Exaction cutoff	M3	6	High	3500
6	Backfilling	M3	7	Low	2700
7	Embankment work	M3	56	Medium	5600
8	Training banks	M3	24	Medium	7700
9	Spillways	M3	25	Low	8200
10	Topsoil return	M3	12	High	2300
11	Trimming/tidying	M3	13	High	3450
12	Other	Hours	40	Medium	12400
				Total	\$54000

The dam construction project is cost-intensive. Thus, it is essential to outline all the costs involved before beginning the project. In Table 1 above, the various expenses in the project are listed based on their priorities. It is important to note that each part of the project must be completed, and it has its cost. Therefore, the project manager needs to ensure that the available budget is adequate to finance various activities.

4.3 Conclusion

Project management is a broad scope that ensures all aspects of the project are available to ensure it is completed on time. In this case, the dam construction project is more complicated. The project manager has to find the right balance to ensure the available resources are adequate to complete the project. The resources that tend to vary in this project are time and cost. Time is managed using a work schedule that was designed from the beginning of the project. After determining the various activities and the duration they take, the next step is to determine how much they will cost. Therefore, we can see that lack of proper project management will fail.

5. References

- Ferguson, J. (2018). Managing and minimizing construction waste: a practical guide. Thomas Telford.
- Levy, S. M. (2019). Construction process planning and management: An owner's guide to successful projects. Butterworth-Heinemann.
- Sears, S. K., Clough, R. H., & Sears, G. A. (2018). Construction project management: a practical guide to field construction management. John Wiley & So