



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 2021-05-20 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 line spacing 1.5
- عدد صفحات البحث (لا يقل عن ثلاث صفحات ولا يزيد عن ست صفحات).

• **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 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. سيتمكنون هذا التقرير من ثلاث إلى ست صفحات .

يجب أن يعالج تقريرك احد هذه 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 ميزانية 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..

University Hospital Project at the University of Tabuk

purpose, scope, and objectives of the project

1.INTRODUCTION

The University Hospital project at the University of Tabuk is one of the vital mega projects that serve the university in the first place and the Tabuk region at a higher level, as it was designed at the highest levels and the latest engineering designs, The project is located on a total area of 390,000 square meters. The project consists of 7 floors containing outpatient clinics, operating rooms, intensive care rooms, hypnosis suites and research centers on an area of 186,000 square meters with a total capacity of 660 beds., and the value of the project for the first phase is 427 million riyals. The current completion rate is 75%, which includes the basic works of the concrete structure, architectural finishes and some electromechanical elements, and given the importance of the project, the university is waiting to award the second phase to complete all the elements of the project, and from here lies the main problem that we faced as a working team as the first phase of the project is nearing completion and it is not known when The second stage award will be broadcast, as many of the items in the current bill of quantities can only be implemented after a decision has been taken to award the project to the second stage. The reason for this defect is that whoever prepared the specifications did not take into account this essential point, which is to fully benefit from the items of the first phase and not link them. In the second phase, here lies the importance of the university's stakeholders' participation with the entity that set the scope, objectives and characteristics of the project for the two phases, the goal of each phase, how to benefit from the project and the possibility of operating it without the two phases being linked to items that affect the completion of one of the project's phases. My role in this project is the director of project department at the University of Tabuk, which is the department concerned with supervising and preparing bills of quantities and

designs for any project implemented by the university. The administrative structure of the administration is divided as follows:

Studies section: is concerned with preparing bills of quantities, specifications and designs for any new project.

Supervision and Implementation section: is responsible for supervising and following up the work of contractors at sites and supervising consultants.

In my research, I will focus on the scope of this project, and what are the problems that we faced as a team during the implementation of the project as a result of splitting the project into two phases, without taking into account the scope and desired goals of each phase of the project.

2.Literature Review and Conceptual framework

2.1. Project Scope versus Product Scope

The product is a separate system within the project or program system. Both project and product scope has different needs, goals, objectives, stakeholders, drivers, and interfaces. While the product will be driven by the project scope, there will be other drivers as well. A project scope deals with the required work to create the project deliverables. The scope of the project is specific to the work required to complete the project objectives. A product scope, on the other hand, is the attributes and characteristics of the deliverables in the project creation. The product scope is measured against requirements, while the project scope is measured against the project plan.

2.2. Scope of Product

The scope of the product identifies the boundaries of the solution. The decision on the product scope is concerned with determining which of the business requirements (bearing in mind the constraints) could be carried out by the solution.

2.2.1. Capturing Scope

Without an agreed upon and documented vision, there is little hope of achieving success. It is essential for each project to clearly define and document its scope so that the project can move forward in a coordinated manner and requirements can be written. Miia Martinsuo & Paivi Lehtonen [1] carried out an empirical study on a questionnaire survey throughout major projects in Finland. Through linear regression of their results, they

deduced that single project management is associated with portfolio management efficiency indirectly in form of goal setting (including scope of project). The reaching of scope goals could be considered the most important item for portfolio management efficiency since scope as the product is the practical way to implement strategy.

That can be done by following steps:

Identify Requirement

Once derived, the statement of need should not change over time. If the need is changing, we do not know what is really needed and we cannot build a product to meet a moving target. Don't let the real need be forgotten. It is the focus of our investment. The Chaos Report [2] based their results on surveys & several interviews to provide qualitative context. Some of their investigated case studies were of California (DMV) project 1993 & American Airline project CONFIRM in 1994. It was observed that incomplete requirements, changing requirements, and unclear objectives were amongst the chief reasons behind project failures. Whereas, projects of almost same magnitude HYATT Hotels, Reservation systems project 1994 & Barco Itamarati Brazilian Bank met successes due to well documented specific objectives & proper scope management.

Identify Stakeholder

Stakeholders should be accounted for and considered prior to writing requirements. Customers and users are some of the most important of the product's stakeholders. Knowing the needs of customers and users is critical to the success of the project. It is vitally important to project's success that key stakeholders are identified during the development of the project scope and are involved in the project scope definition. Robert W. Poole, Jr. & Peter Samuel [3] carried out through analysis of Boston's Big Dig Mega project along with other transportation projects. They observed that the major source of cost increases in mega-projects is project creep, adding unanticipated elements and unforeseen complexity.

Identify Project Drivers

Projects are driven by many outside influences, e.g. regulations, standards, laws, and other considerations.

A major driver for many organizations is the set of existing equipment, software, or processes. Other drivers include security and safety concerns. Early attention to drivers is important to any project. Each driver needs to be identified, assigned for tracking, and included in the analysis of what the project is and is not.

Examining the Scope Statement The scope statement provides justification for the project existence, lists the high-level deliverables, and quantifies the project objectives. Chung-Suk Cho¹ and G. Edward Gibson Jr [4] mentioned about the Construction Industry Institute (CII) funding several research projects focused on pre- project planning of 53 capital facility projects into different intensities of pre-project planning effort and compared total potential cost and schedule performance. Because of the significant savings associated with improved project predictability, the study concluded that a complete scope definition prior to project execution is imperative to project success.

2.3. Project Success Factors

Kaufmann, Daniel & Kraay, Aart & Mastruzzi, Massimo [5] used the earned value method in quantifying scope change magnitude for cost adjustments. Based on surveys, Chan and Kumaraswamy [6] mentioned impractical design, labor shortages, poor performance, unforeseen conditions, and poor communication. Shenhar [7] classified technological uncertainty into four levels, correlating them with overall project duration. Levy and Globerson [8] implemented concepts from queuing theory for reducing the impact of waiting periods of critical work packages on the delivery times of projects executed in parallel. Scope and objectives are the guiding principles that direct the efforts of the project team. They determine a project's success or failure Ward [9]. Without a well-defined scope, the objectives of information system development can be vague and people may start to lose sight of what they are trying to develop Clarke [10]. Breaking large projects down into sub-projects or work packages is regarded as one of the most important tasks in new or development projects.

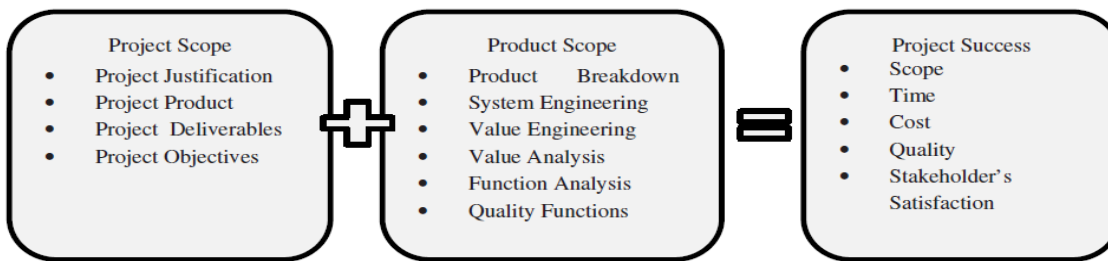


Fig. 1. the combination of project and product scope having impact on project success.

3.Methodology

In my research I will use the WBS (WORK BREAKDOWN STRCTURL)technique ,but in 1st let us make our project charter to know our projects as well :

Company	University of Tabuk
Project Name	The project of establishing a university hospital at the University of Tabuk, the first phase
Project Scop	A university hospital that serves graduates of health colleges at the university and serves the Tabuk region to provide the best health service in the region
Project Parous	• Rehabilitation and training of graduates of health colleges at the university in the region. • Attracting high scientific competencies in the medical fields. • Providing a high health service to the residents of Tabuk. • Developing the university's medical and scientific research centers.
Project Deliverables	• Outpatient clinics of all specialties and their accessories • Operating rooms • Oncology and Cancer Center • Research and Studies Center • Childbirth and childbirth center

	• Inpatient wards • Emergency department and first aid
Project Benefits	• Provide medical service and high-level members of the community • Scientific and practical center for the people of the region for graduates of health colleges • Provide scientific research and scientific studies in the medical fields • Prosperity for the University of Tabuk by providing medical services to members of the community
Project Risks	• The implementing contractor for the project has failed. • Renewed poetry, regulations and decisions. • High prices for building materials. • Lack of financial resources or delaying payment of the contractor's dues. • Delayed external supplies due to the Corona pandemic. • The second phase of the project is not approved, or its approval has been delayed. • Safety and health accidents at the work site.
Project Budget	420 Million SR
Project Milestones	• Project start: March 2015. • Project end: March 2022. • To start implementing the second phase: not decided yet. • Operation of the first phase: depends on the completion and approval of the second phase of the project.

Project Team Members	• Director of projects department : eng.Mojahed alali • Project manger: eng.Abdulrhamn alhawity • Supervising Consulting Office: Saud Consult • Contractors: Altaeafuf company
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After we doing the project charter for our project we will start to use the WBS technique for the 1st & 2nd phases :



4.Results and Discussion

After we made the project's charter, scope, objectives and the work of WBS S, we notice through the project segmentation scheme that there is a defect in the segmentation of the project's work and not taking into account the continuation of the work and the hierarchy of the items and their connection to each other, as it is noticed that the project items were divided randomly, which led to a defect in the items of the first phase. Example We note the following items:

number	Work package	Analysis
1	1.2.4 Installing windows and doors	The installation of doors of all kinds in the first phase is other than others, and since it is not known when the second phase will be awarded, which exposes it to damage and deformation.
2	1.4.5 Supply and installation of BMS system	The BMS system cannot be implemented in the current period due to the absence of the main air conditioning units at this stage to connect them to the system, as well as the absence of elevators and pumps in the current stage
3	1.2.3 Installation of suspended ceilings	Installing false ceilings in the current period exposes them to damage in the later stage as a result of not installing the internal air conditioning ducts at the current stage
4	1.4.6 IT systems installation	The installation of IT systems in the current stage is not important and not of priority and may expose the devices to damage and theft as a result of not benefiting from the building

5	2: 2.3.1 Supply and installation of air conditioning units (chillers)	Air-conditioning units are supposed to be installed in the first phase, due to the subsequent work that follows them, the effect of not mentioning them on the completion of many activities related to this system
6	2.2.2 Extension of medium pressure cables for the electrical station	It is assumed that these works will be placed in the first phase until the stations and electrical systems in the building are tested as a result of the presence of most of the electrical work items in the first phase.

It is noted from the above table that some works were placed in an early stage that was supposed to be postponed to the second phase of the project and some items were submitted in the second phase to the first phase. The reason for this may be the failure to use effective tools in project management for the planning stage and the failure to involve the university and its technical apparatus in decision-making, as the project designer was the Ministry of Higher Education at that time. This situation negatively affected the performance of the project, and accordingly some items were canceled and some items were added, which required the work of a change order that raised the cost of the project to try to complete the current stage as required. An additional 720 days, as a result of this, the value of the project became 427 million Saudi riyals, and the project period after the additional period became 2970 days

5. References

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