



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

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Section
Course

Code
Thursday
Master

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(PMG506)

Advanced project Management

Instructions:

- اخر موعد للتسليم هو يوم الخميس 2021-05-20 في تمام الساعة 9 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 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..

**Define and describe the purpose, scope, and goals of the project.
Display this information using an appropriate tool**

Project scope management conventionally:

The term “scope” refers to all the businesses and processes involved in producing the products of the project, and the term “introduction material” describes a product that was produced as part of the project. The materials provided can be related to the product as part of an electronic tool or program, or it can be related to operations as a planning file or meeting reports.

Project scope management includes the processes involved in determining which tasks are related to the project and which are not related to the project, thus ensuring that the project team and stakeholders have the same idea of the project's goods and the processes that will take place to produce these goods.

Project management operations:

There are five basic processes within the scope of the project:

Requirements gathering: This process includes identifying and documenting the features and functions of the goods produced in the project and the existing processes for their production. The work team creates a file for stakeholder demands, business plan requirements and a file to track what has been done and what has not yet been completed.

Defining the scope: It includes reviewing the project contract, requirement files and organizational process assets to create the scope statement, adding more information on developing requirements and changing requests after approval. The primary output of defining the scope is the project scope statement and updates to the project files.

Define a business breakdown structure (WBS): This involves dividing the project deliverables into smaller sections and contents to facilitate their management. The main outputs of this process are Business Decoding, Glossary of Business Decoding Terms, Baseline Scope and Requirement File Updates.

Scope Verification: This includes formal acceptance of project outputs. The main stakeholders of the project, such as clients and sponsors of the project, examine the specific submitted materials and then accept them formally. The primary outputs of this client are Acceptable Submissions and Change Requests.

Scope control: involves controlling changes to project scope throughout the life of the project - a challenge for many IT projects. Scope changes usually affect the team's ability to reach the time and cost targets set, so the project manager will have to carefully weigh the cost and benefits of the project. The main outputs of this process are changes to requests, measures of work performance, updates to organizational process assets, project management plan and project documents.

Growing needs:

It costs companies much more to correct errors discovered in the requirement stages than to correct errors discovered in the advanced development stages. Part of the difficulty is that many people may not agree on defining conditions (requirements), how to collect them, and how to document them.

Terms and requirements:

The IEEE 1990 Dictionary defined engineering terms for requirements as follows:

1. As the condition or ability that the user needs to solve a problem or achieve a goal.
2. As the condition or capacity that must be fulfilled, or contained in a system or part of a system, to satisfy a contract, standard, specifications, or other official documents that require its fulfillment.
3. As a documented representation of conditions or capabilities and capabilities.
4. PMBOK® Guide Fourth Edition defines the requirement with a definition close to the second definition known by the IEEE 1990 dictionary, whereby it says: "A requirement is the condition that must be fulfilled, or possessed by, a system, product, service, or final output to satisfy a contract, standard, specification, or Other official documents. It is important to document the requirements in sufficient detail in such a way that they can be measured during project implementation. After all, achieving the scope goals is often based on meeting the previously documented requirements.

Collect requirements:

There are several methods of gathering requirements, including:

- Individual interviews with stakeholders. This method is often effective, although it can be costly and time-consuming.
- Conducting focus groups or workshops. Usually, the use of decision-making techniques to gather information is the fastest and least expensive method compared to individual interviews.
- Use questionnaires to collect requirements in case the concerned authorities provide comprehensive information for all the questions asked.
- Observation is used as a method for gathering requirements, and is particularly effective for projects that involve improving processes and business processes.
- Templates are a requirement gathering technique and are usually used for software development projects.
- Among the factors that may affect the amount of effort put into gathering requirements: the size of the project, its complexity, and its importance.

Documenting requirements:

The requirements are documented by first reviewing the project contract, which includes the high-level requirements of the project, and the contract may be referred to other documents that include requirements. The registry of stakeholders is then reviewed to ensure that everyone has a say in identifying requirements.

Designing a stakeholder requirements document ranges from one to several lists. Requirements documents are often produced by software that includes text, images, graphics, video clips and other media. Often the requirements are broken down into different categories such as functional requirements, service requirements, performance requirements, quality requirements, training requirements, etc. In addition to the preparation of stakeholder requirements documents as a product of the requirements gathering process

Define the scope:

Defining scope is the second stage in the project scope management process. The success of the project depends on this stage as it helps to improve the accuracy of estimates of time, cost and resources and also establishes a baseline for measuring performance and monitoring projects, and a good definition of scope helps in communication and better understanding of business responsibilities.

Tools and techniques used in scoping include expert opinion, product analysis, identification of alternatives and workshops to facilitate the work. The main outputs of the scope definition are a statement of the project scope and updates to the pre-developed project documents.

The key inputs to preparing a project scope statement include: the project contract, requirements documents and assets used in company operations such as policies and procedures related to scope data as well as project files and lessons learned from previous similar projects.

Although the contents differ, the project scope statement should include, at a minimum, a description of the project scope, user acceptance criteria for the product, and detailed information on all project deliverables. It is also useful to document other information relevant to the scope, such as project boundaries, limitations, and assumptions made about it. The scope of the project must also have a supportive reference for the information related to it, such as product specifications that would affect what is produced or purchased.

Many IT projects require detailed design and functional specifications for software development, which also must be referenced in a detailed text. Over time, the scope of the project should become clearer and more specific.

The project team must update the project scope statement, and these updates may also require changes to other project documents.

An updated project scope statement is an important document for developing and confirming a common understanding of project scope. This statement describes in detail the work that has been completed on the project and is an important tool for ensuring customer satisfaction and preventing scope creep.

Create a WBS:

A work breakdown structure (WBS) is an output-based grouping of businesses involved in the project that defines the overall scope of that project. And because most projects involve many workers and many different accomplishments, it is important to organize and divide the work into logical sections based on how the work will be done. The WBS is the foundation document in project management because it provides the basis for planning schedules, project management, costs, resources, and changes.

- Key inputs to creating a WBS: Statement of project scope, stakeholders, documents and assets used to do the business
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- The structure is organized by using the project products and project phases, or by using the project management process groups. Also, it is very important to involve the entire business team and the client in creating and reviewing the WBS. And the people who will do the work must help with the task planning by creating the WBS.

Methodologies for developing a work breakdown structure:

1- Using guidelines: Some organizations, for example the US Department of Defense, provide guidelines for preparing a (WBS).

2- Measurement Approach: Review (Work Distribution Structure) of similar projects and allocate them to the project.

3- A top-down approach: It starts with the largest project items and divides them.

4. A bottom-up approach: where you start out with specific tasks and roll them up.

5- Mind map approach: Mind mapping is a method that uses branches stemming from the basic idea of structuring ideas and opinions, as it enables people to write and even draw their ideas and this can increase creativity, participation and morale in the team.

Dictionary of Work Breakdown Structure:

It is a document that describes detailed information about each element in the work breakdown structure so that it is easy to understand the methodology involved in completing the work.

Errors:

The scope of a project when it is too large and costly at the same time can cause serious problems. Here, the overemphasis on technology to keep up with it has bankrupted the big pharma company, FoxMeyer Drug, which is based in Texas. In 2001, fast food chain McDonald's began a project to create an intranet network that connects its headquarters with each of the restaurants to provide detailed operational information in real time. After spending \$ 170,000,000 on consultants and initial implementation planning, McDonald's realized the project was too big to handle and terminated it.

Scope Verification:

Creating a good project scope and WBS for a project is difficult, as it is difficult to verify project scope and minimize scope changes.

Even when the project scope is well defined, many projects suffer from scale creep - the tendency of the project scope to have greater and greater scope. It is very important to verify project scope with users from all parts of the project and develop a process for controlling changes in scope. Scale creep can also be a good thing, if managed well. Scope validation involves formal acceptance of completed project outputs, acceptance verification often verified by clients and then final signature of key accomplishments.

To gain formal acceptance of the project scope, the project team must develop clear documentation of products and procedures for the project to assess whether it has been properly and satisfactorily terminated.

Scope management plan and baseline for scope, requirements documents, matrix traceability requirements, validated outputs, and business performance data are the key inputs for scope verification.

The main tools to perform validation are the scope of inspection and decision-making techniques.

The main results from the scope validation are the accepted outputs, change requests, work performance information, and project updates documentation.

Global issues:

There are many countries that have difficulties controlling the scale of large projects, especially those that involve advanced technologies and have a number of users.

Domain Control:

Scope control involves controlling changes to the project scope with the project objectives and business strategy in mind.

Domain control goals:

- Influence on factors that cause range changes. Ensure that changes are addressed according to procedures established as part of integrated change monitoring, and that changes are managed as they occur. The main inputs for scope control are the project management plan, requirements documentation, requirements matrix tracking, business performance data, and organizational process assets. Variance analysis is an important tool for controlling scope as variance is the difference between planned and actual performance.

Best practices for avoiding problems with scope:

- Maintain realistic range. Not to make the project so large that it cannot be completed.
- Break down the large project into chains.
- Involve users in managing project scope.
- Assign primary users to the project team and give ownership of requirements definition and scope validation.
- Use ready-made hardware and software whenever possible. Many business and enterprise owners in the field of information technology are looking for the

latest and best technology, but the necessity of taking into account business needs, not technology trends that take priority.

Following good project management procedures, good specific processes for managing project scope and other aspects of the project.

Sources:

Information Technology Project Management, Sixth Edition, Course Technology 2010, Kathy Schwalbe.