

General Theme and ITP Project Requirements

The following discussion addresses the description and requirements of the weekly integrated team project assignments.

Imagine that your team works for a company that specializes in the design, development and installation of information technology (IT) systems. Your company has been asked to prepare a project plan to install an IT system for a specific client as described below. Because of your company's experience, the client has selected your company to plan, perform and manage this project.

Your project assignment will be to prepare the project plan to install an IT system needed for the client. This will be done incrementally throughout the course of this class. **The scope of the project will be identified in the ITP Project Charter (ITP-1 assignment).** The project description is deliberately generalized in order to allow your team the opportunity to use creative thinking and decision skills to **develop the specifics** of what the client needs (hardware? software? PCs? servers? networking? cabling? wireless? application systems? Web sites? Cloud storage? what?) and the scope (how many and for whom?) and extent thereof. In other words, the requirements are vague and will need to be defined and refined by the project team working with the client. By not providing a preconceived system, the team has room for ingenuity in planning the design and implementation of the IT system.

To keep the project manageable and doable in a limited-duration class, the magnitude and scope of the project must be such that it will require a project management team of **at least 6 members** and will take **at least 6 months** to complete, but no longer than 9 months. If it is less than this, then you have scoped it too small; if it is more than double that, then you have scoped it too large.

Note: Even if your class team has fewer than 6, your project management team will include at least 6 people, real and/or fictional.

Remember that you are **not** to do the hands-on technical IT work of the project in this class or as part of this ITP, but are to build a project plan that demonstrates the company's ability to plan, manage and control the project of designing and installing the IT system for this client.

Case Scenario – Marley Dental Clinic

Your team has been asked to prepare a project plan to install an IT system in a **small dental clinic**. Dr. Bob is in practice with his son, Dr. Robert Jr. The current practice and dental office is in a "store-front" in a strip-mall. The practice employs one dental hygienist, two dental assistants, and one receptionist/bookkeeper. The receptionist keeps all patient and practice records on paper in file folders. The staff of the dental clinic have no computers or other IT tools.

Drs. Bob and Robert Jr. have been offered the opportunity to expand the office into the store area adjacent to the current office. This would more than double the space for the practice. Coincidentally, two of Dr. Robert Jr.'s classmates from dental school would like to come to work for this practice. With the additional space, the office would easily accommodate these two additional dentists, with expansion room for two additional dentists in the future as the practice grows.

Bringing in the two new dentists will require hiring of 2 more hygienists, 2 more dental assistants, a full-time bookkeeper, and a part-time receptionist.

The current office has 2 dental chairs in semi-private areas, one hygienist chair in a semi-private area, the reception and waiting area, plus a private room for files and a central area for the X-ray machine, enclaves, and other dental equipment. The new area will have a similar design to provide working area for all of the new members of the dental clinic.

Dr. Bob and Dr. Robert Jr. have identified \$150,000 to provide an IT system that will be modern and will make the practice more efficient. The cost estimate is just that, an estimate.

The doctors would like to move to on-line banking capability for patient payments and payments to the practice's suppliers. They would like to allow patients to make appointments electronically. They would like to have immediate access to dental organizations to help with diagnoses, as well as to keep up to date on new dental procedures. And they would like to have an IT system that allows them to accept and process dental insurance claims and billing.

While Dr. Robert Jr. has some experience working with computers and IT systems, Dr. Bob has none. He is very old-school and old-fashioned. Unfortunately, he will be your point of contact and the person you will be working with as you "fill-in" and finalize the requirements and move to the design and implementation of the IT system. This means that you will have a need to define and explain terms as you work with him.

As you begin to plan the ITP project, keep in mind that until now the client has had no IT system and has had no IT staff. In addition, there is no networking, LAN, or Internet installed, and no productivity software or other applications. You may assume that Internet connectivity is available in the area, however (whether via ISP or satellite or whatever). Dr. Bob is the major stakeholder and your point of contact for this proposal. Your instructor will fill the role of Dr. Bob and major stakeholder. So all questions for the client should be directed to your class instructor. **Your team may consider clarifying the requirements**, including the available funding, through Private Message email interviews with Dr. Bob.

Explanatory Notes and Tips

For those not intimately familiar with dental offices, they are rather similar to medical clinics or doctor's offices -- something that everyone *has* experienced -- and there are some level of complex government health care regulatory requirements and privacy requirements to deal with. So you may need to address some basic privacy requirements.

Reminder: The project scenario was purposely designed to leave some things up to you -- for a reason -- so that you can make it whatever inspires you about the dental clinic and its automation and sounds fun to do.

Other things were omitted in order to both minimize the length of the assignment document so that you don't bite off more than you can chew, and to be realistic. In real world project management, it is very typical for the clients to be experts in their own business areas but have little knowledge of IT or especially of projects. Consequently they have little understanding of what kinds of information are needed to do a project, and especially of what levels of detail are needed. They also have little knowledge of technical IT details that may be important for an IT project but aren't their field of expertise. The clients often genuinely don't know what they want or need. They don't know what IT can and can't do for them, so they don't know what to ask for or what's reasonable or unreasonable to request. They also speak a different language than we do. The result is that their requests are often quite vague from our point of view (even on the occasions that they seem specific from their point of view). This will be the case with Dr. Bob!

So what happens? The project team must ask. The project team has to spend a lot of time eliciting requirements, assumptions, constraints, business rules, and so forth; especially requirements. This is usually iterative, takes a lot of time, and continues (though hopefully decreasing) throughout the project. I'll try to reduce the iterative and incremental nature a bit in order to speed things up a bit for this class. Nevertheless, we intentionally want the project management experience to be realistic, so there are a lot of open ended things in the project scenario that the teams will simply have to ask about.

Who does the team ask? The client, of course. In this ITP class project, the professor serves in the role of instructor and also in the roles of the client, project sponsor, and functional business stakeholders. So when you need more information than you are given -- which will occur, especially during the project charter and WBS phases -- don't guess, please ask!

ITP-1 - Project Charter (Team project)

(PMBOK 2, 3.3, 9)

Addresses Course Outcomes #4a and 1b

Please be sure to read the Team Contribution Assessment and Grading of Team Assignments and the Project Documentation Requirements sections of this ITP Master Document.

The instructor will assign students to work together as project teams. You all should have access to your corresponding team *LEO Group* in LEO. If you do not see yourself and your team in the LEO Group area, please contact the instructor. Also contact if you are assigned to two or more teams.

Assignment for the ITP-1 Project Deliverable

First, read the Overview of the Integrated Team Project (ITP), of which this is the first ITP deliverable.

Then in your project teams:

- Determine the initial project management roles of each team member as a member of the IT project team for planning, designing and installing the IT system.
- Some team roles might include
 - Project Manager
 - Functional or technical managers, such as telecommunications, application software designer, database developer, Web page designer, etc.
 - Budget/Finance
 - Project Management Support such as procurement or human resources
- Discuss the approximate **project scope** you anticipate for the project, what the IT needs of the client organization might be, what to include and what to omit, etc. Scope provides the boundaries of *the project*. Your discussion should include what is included in the project scope as well as what is not included in the project scope.
- Please use the textbook and other academically credible sources, as a minimum, to define an IT System and then to determine the scope for this project. For example, including a scheduling software package for the client's use may be within the scope. Providing a learning applications for new employees might be not be within the scope of this IT project.

- Please be sure you are clear on the basic requirements for this project so you can determine the scope. What will you provide if the proposed plan is accepted? You may email the client/stakeholder (your instructor) to further define requirements, if you find that you do not have enough information. You will most likely have many questions about the requirement. Please be sure to ask the client your questions to help define and refine requirements for the IT System. As in many real-world projects, the **requirements are the weakest part of the project**. The lack of detail is deliberate to encourage the team to work together to share knowledge and experience; and then to work with the client/customer to obtain and fill in what might be missing. To complete the project plan successfully, you WILL need to solidify the project requirements!
- Note: Recall that the magnitude and scope of the project must be such that it will require the work of **at least 6 people** who will constitute the project management team (even though your own team might be smaller, you MUST include roles for at least 6 people. These additional "virtual" people will be responsible for accomplishing the work or tasks to complete the project) and will take **at least 6 months** to complete (for a total of a minimum of 3 person-years). If it is less than this, then you have scoped it too small; if it is more than double that, then you have scoped it too large. This is regardless of how many people are assigned to your class *LEO Group*.
- After researching project charters in our textbook and credible Web site and/or the www.pmi.org website or other professional PM site (e.g., valid, academic-type research), **prepare a Project Charter** for your project. This document becomes the basic AGREEMENT to describe the project and what it entails with enough detail that the approximate scope and magnitude is clear and understandable by both the team and the client/customer or executive sponsor. The Project Charter will include an estimated cost and an estimated schedule. Your charter must include signature blocks of the appropriate parties that are agreeing to the charter.
- You may use templates or formats that you find in your research so long as the source is credible, identified as a source, and includes at the least the following:
 - An Executive Summary that summarizes the purpose of the document, the problem statement or need for the project, the solution or approach (a high level description of the IT system, which might include a graphic), and conclusion of the document. The Executive Summary should be consistent through the semester with the same basic information plus improvements, additions and/or changes as determined by the assignment(s). ALL assignment questions should be answered in a way that provides the reader with enough background and information to understand the answers.
 - Defined scope of the project that addresses what is in scope and what is not in scope for the project.
 - An estimated schedule and estimated cost
 - Project success criteria
 - Project Management and Technical Approach

- Project objectives (business objectives, organizational objectives, client objectives, etc.) and a discussion of the alignment with the business strategy and goals
- Project constraints and most obvious risks.
- Project team roles and responsibilities
- Identification of primary stakeholders
- Communication methodology
- The threshold for change. In other words, at what point would the Project Charter need a new agreement and signatures? This might be a change to the project that results in an additional 30 days on the schedule or 10% of the cost.
- The DEFINED end of the project

The document should provide a **rough estimate** of the project, scope, and rough order of magnitude of the cost and time required to accomplish the project. The charter should provide enough detail for the client / stakeholder to make a decision about proceeding with the project planning. The **document should provide the definition of the END of the project.** In other words, at what point would the project be considered OVER, and how would we recognize success project success when we see it.

The project team is responsible for determining whatever information the team needs from the stakeholders and soliciting it from the stakeholder and customer. The stakeholders will rarely volunteer information, since this is not their field and they do not know what you need. This includes time/schedule, funding, and the system requirements.

To determine the requirements and proposed scope of your project, *you may need to interview the stakeholders* more than once (represented by the instructor). You may ask questions, use questionnaires, conduct interviews, etc. Since this is a global virtual project team, the stakeholders may not be available face-to-face. You may use e-mail, invite the stakeholders (instructor) to LEO Group Conferences, or (subject to mutual arrangement of acceptable times) to LEO Group, Chat sessions, etc. You may, in the spirit of twenty-first century global projects, consider teleconferences using various tools such as WebEx or Go-To-Meeting. The team would hold responsibility for setting up these virtual meetings.

Team member roles should be realistic and demonstrate an understanding of the types of functions that are performed on an IT project team. The Project Charter should demonstrate an understanding of the ITP project. Perhaps most importantly, the scope should be clear and appropriate and **the scope should accomplish the given problem statement**. As a hint: the project team should agree on what the problem statement is and it should be included in the text portion of each assignment to help keep the team, stakeholders and customer focused on what problem the project is intended to solve.

The project description and high-level requirements should be clear, reasons for project should be stated, IT needs of client should be included, high-level business objectives or strategic vision of the client should be summarized, assumptions and constraints should be summarized, and major stakeholders (both internal and external) should be identified.

The project charter should be relatively brief: Just 2-5 pages (not including front and back matter such as the title page, references page, etc.). The format of the project charter should be consistent with formats provided or used by other academic credible sources (with appropriate credit).

Does it seem as though perhaps there is not enough information to complete the project and the charter? If so, please ask the client/customer (your instructor).

Important Notes

NOTE: If any team members drop the course or simply quit participating, then please try to contact them, but **please notify me as soon as possible**. I will deal with it. I don't expect it to come to this, but I don't want to have one team with only one or two people left and another team with a surplus of members. I will re-allocate members to balance teams if necessary in order to prevent this.

Please remember my emphasis on this class as a SHARED learning environment. One member of your team (the team PM or designee) should post your first ITP assignment in the Discussion Topic SHARED LEARNING ENVIRONMENT – Project Charter. I'm EXPECTING you all to look at what the other teams have posted and MY comments to those teams. You are free to use this to improve your own team efforts on subsequent assignments and deliverables as we go along. So, for example, if Team 4 does a particularly good job with the Project Charter, your team may decide to make revisions, as we move on, based on what you have learned from Team 4's work.

However, if you use any text verbatim in a Word document, then give credit where credit's due by properly citing it in accordance with APA standards. If you use something in MS Project or in Excel, then that's not as easily done. In that case, make note of the use of the reference (and how it was used in your Excel or Project document) in the Word portion of the assignment when you post it so that we'll know how your research and resources helped you.

Grading for the ITP-1 Project Deliverable

Please be sure that you are familiar with ALL of the requirements.

As you know, projects are completely dependent on the ability of the project team to work together. Each of you has a skill or knowledge that will help your teammates. I'm counting on you to bring those abilities to your team during these efforts.

Grading Approximate breakdown by areas include:

- General: Structure, Format, Mechanics, Style (~10%)
- Project Charter (~30%)

- Charter Scope (~60%)

Rubrics and Grading for the ITP-1 Project Deliverable

To earn 90-100% of the points available on this deliverable -

All team activities must be completed. Team member roles must be realistic and demonstrate an understanding of the types of functions that are performed on an IT project team. The Project Charter must demonstrate an understanding of the ITP project, reflect an understanding of the textbook discussion and weekly Module about project charters, and include information and references from a professional source such as PMI and at least two other real projects or academically credible sources. The scope should be clear and appropriate, accomplish the given problem statement, be doable in approx. 6+ months by 6+ project team members. Rough estimates of cost and schedule are provided with some comparison to other projects or substantiations of the estimates (how did you arrive at these estimates?). The project description and high-level requirements should be clear, reasons for project should be stated, IT needs of client should be included, high-level business objectives should be summarized, assumptions and constraints should be summarized, and major stakeholders (both internal and external) should be identified. Benefits of the project are discussed and some basic trade-off analysis among cost, schedule and scope is provided. The files have 0-2 punctuation, grammatical, and/ or spelling errors. The class textbook and at least two other academically credible sources (with appropriate citations) are used to develop the charter.

Please note that academically credible sources are from OBJECTIVE, FACTUAL PUBLICATIONS. Wikipedia, newspapers, and other similar sources are NOT academically credible. Objectivity and factuality are the critical measures. This requirement will apply to all assignments through the semester.

To earn 80-89% of the points available on this deliverable -

All project team efforts must be completed. Team member roles must be realistic and demonstrate an understanding of the types of functions that are performed in projects. The Project Charter must demonstrate an understanding of the ITP project, reflect an understanding of the textbook discussion or the weekly Module about project charters. The scope should be clear and appropriate, accomplish the given problem statement, be doable in approx. 6+ months by 6+ project management team members. A rough estimate of schedule and cost is provided with a brief discussion of how the estimates were derived. The project description and high-level requirements should be clear, reasons for project should be stated, IT needs of client should be included, high-level business objectives of the school should be summarized, assumptions and constraints should be summarized, and major stakeholders (both internal and external) should be identified. At least 2 references (the textbook and 1 academically credible references) are included and used to develop the charter. The project team efforts and the project charter have 3 punctuation, grammatical, and/or spelling errors.

To earn 70-79% of the points available on this deliverable -