SYBEX Sample Chapter

Project Manager's Spotlight on Planning

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Chapter 2: Defining Objectives, Goals, Scope, and Requirements

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CHAPTER 2

Defining Project Objectives, Goals, Scope, and Requirements

Now that you've initiated the project, the next step is to define the project objectives, scope, goals, and requirements for the project. Good project definition starts with the objectives of the project and ends with approved detailed requirements. Project objectives, goals, scope, and requirements describe the project in ever-increasing detail. But the terms overlap, and you may find it difficult to decide where you should place your statements in your project plan. For instance, is "comply with ISO 9000 standards" an objective, a goal, or a part of your scope statement? Unless you know the proper definitions for each, you may not know which it is, and if you don't know, you can mislead your team in the process.

Project objectives are the descriptions that support corporate direction, such as increased revenue and decreased expenses, and are usually realized at a future time. *Goals* are the finish-line measurements for the project that determine project success. *Scope* is the boundary of the project and is the high-level description of stakeholder expectations. And, finally, the *requirements* define the characteristics of the deliverables. Together these terms provide direction for a project team to successfully meet the stakeholder expectations.

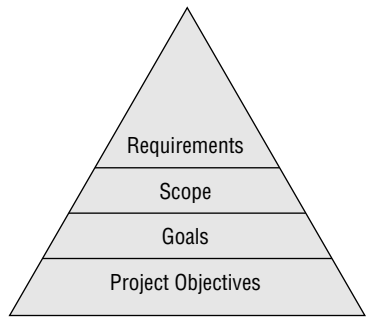
In this chapter, I'll discuss project objectives, goals, scope, and requirements in further detail, so you can understand their distinguishing features and communicate their purpose to your project teams properly.

Setting Project Objectives and Goals

Project objectives and goals are the main point at which the project success will be measured. They're usually the first items used to justify doing the project and the foundation for all descriptions of the project. Often project objectives and goals are identified by the project sponsor or other high-level stakeholders and are presented to the PM.

The pyramid in Figure 2.1 shows the hierarchy of the project descriptions. The foundation of the pyramid are the project objectives of the organization, which are a few statements that tie the project purpose to the project objectives. Next are the project goals, which are the finish-line measurements for this project that build on the project objectives. Next are the project scope statements that define the boundaries of the project and determine the project deliverables. And at the top of the pyramid are the requirements, which detail the characteristics of the deliverables defined in the scope. While each layer is built on the concepts of the previous layer, each higher layer should also have more detail and volume than the lower layer.

FIGURE 2.1: Pyramid of project objectives, goals, scope, and requirements



What's in a Name?

You wouldn't think it'd be that important, but the name or title you give a project can cause repercussions later in a project life cycle. Take, for instance, a situation I recently encountered. I was given a list of projects to prioritize. Six of the twenty-five projects were titled "Web Implementation." I had no way to differentiate one project from the next other than the name of the PM. I couldn't prioritize the projects because the titles weren't descriptive enough for me to know what they involved. No one did this on purpose to confuse management. But in this case, each PM had only one web implementation to manage, so the brief title was descriptive enough for them and their team. When you select a title of your project, it should be long enough that it differentiates similar projects but short enough that you won't mind typing it over and over and over again. You could change Web Implementation to Brown Ent. Web Implementation or Brown Ent. Web Imp 2005.

Project Objectives

It's a PM's job to make certain project goals line up with the business objectives of the organization. Project objectives define the big picture, the expected impact of the project on the business, and are the reasons for doing the project in the first place. Project objectives are often given to the PM during the project assignment. Let's say the purpose of a new project is to create a new bubble-making toy. This project was probably identified during an annual planning process to support the business objectives to increase revenue and to expand the patent portfolio. The idea appeared to have merit, and senior management decided to pursue the project.

It's sometimes difficult to ensure that the project objectives align with the business objectives. Often smaller projects have rather obscure connections with the business goals and objectives. This is where your knowledge of the organization will come in handy. You may be able to use multiple projects in conjunction to satisfy one project objective. For example, your project may improve a maintenance process that doesn't directly support any business objectives. However, one of the business objectives is to increase sales to new clients. The cumulative effect is that if you don't improve the maintenance process, the system won't be available for new clients to use; thus, sales can't be fulfilled to new clients.

Business Justification

The *business justification* is the reason the business took on the project . The cost estimate here will be a rather rough estimate, usually based on experience, which is used to see if the project is even worth doing. The sponsor should supply the benefit portion of the business justification. The executive managers will use these cost-benefit figures to evaluate all projects, prioritize all acceptable projects, and decide which projects to do.

Business justifications tend to be strictly the numbers end of the evaluation and may not take into account any intangible benefits that may come from doing the project. If you're lucky, you'll have a sponsor who includes quantified intangible benefits in the business justification. The bubble-making project justification might include $1 million for research and development; $500,000 for miscellaneous expenses; and $2 million in revenues for the first year. The net earnings are projected to be $500,000. This project will then be placed in the list of other potential projects and prioritized by corporate benefit. Intangible benefits may be used as tiebreakers. For example, increased company knowledge about bubble technology may place the company in a stronger competitive position that outweighs the intangible benefits of another project with the same net earnings.

Team Goals

Team goals are the results team members expect to achieve by finishing this project. As you'd expect, these goals are best if they're defined by the project team. Team goals include items such as the increased knowledge of a technology, improved knowledge of other departments, or enhanced presentation skills. These goals appear in the individual performance reviews under employee development. These goals are expectations that each team member is measured on and goals that are often missed during the creation of the project plan.

Before you can establish the team or project goals, you need to find out how the team's functional departments measure the team member's performance; otherwise, you may unknowingly be creating conflict in your team. If one of the requirements of your project is to clean inactive customers off of the database, and some of your team is rewarded by the number of customers they maintain on the database, you may get passive resistance for aggressively removing customers. Team members will be even more reluctant if bonuses are tied to these goals. If you don't identify this during the project goal setting, everyone will be surprised at the conclusion of the project. Either the project will meet its goals, with many of the team being unhappy because they don't get their bonuses, or you don't meet the project goals and some of the team is rewarded by their functional department.

Defining Project Goals

The next level of detail for the project is the project goals. *Project goals* are the ends or final purposes of the project. Think of these as the project measurements as you cross the project finish line. They're the objective measurement that determines the success of the project. Sometimes the sponsor gives the team their goals, and sometimes the team can set the project goals. A word of advice: don't select too many goals to measure, as the team

will get confused and not be able to focus on anything. I suggest you select no more than six project goals. I'm sure you've been on teams that have identified six project objectives, ten team goals, and twelve project goals. During the project they all begin to merge, overlap, and contradict one another. Then when you start to track the goals, you find the team is spending so much time on learning the technology to complete the team goal that the schedule date for the project goal is at risk.

SMART Goals

All project goals must follow the SMART criteria. I am sure you're familiar with the term, but the following is a brief refresher of the acronym:

Specific Your goal statements should be clear and concise rather than broad and vague. For example, "Deliver version 6.2 of widget product," rather than "Deliver next phase."

Measurable Your goal should have an easy-to-obtain measure to verify that you did or didn't meet the goal. This usually takes the format of a number or date. If you use a formula, keep it simple, or you'll be explaining and defending it ad nauseam.

Agreed to Your goal must have enough detail that the team can agree on whether they met the goal. If you don't get agreement on the goal, you'll most certainly not get agreement on the deliverable.

Realistic Your goal must be able to be done within reasonable limits. For example, the date must be achievable, and the deliverable must be doable. Unrealistic goals create unrealistic stakeholder expectations that may result in apathetic team attitudes. After all, why expend the time and energy on a project you know can't meet the goals?

Time-bound Your goal must have a beginning and end date, not an open-ended duration. If you can't determine an end date, you probably have an operations process rather than a project.

Pick Your Goals Carefully

Remember, you get what you measure, so think through your measurement. I knew a company that had the business objective to lower lost time injury rate. The Occupational Safety and Health Administration (OSHA) definition of Lost Time Injury (LTI) was measured by an employee missing a full shift because of an injury at work. At the end of the year, voila! The LTI rate was indeed lower. However, a closer look at the numbers showed that the number of employees who were injured was actually higher. How did the LTI number go down? The managers made sure the employees were not off work for eight hours. Some managers even drove injured employees to work and let them sleep on a cot in the corner. The corporation got what it asked for but didn't get what they wanted.

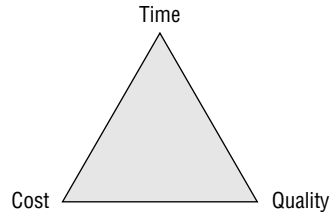
Measuring Your Goals

The *triple constraint* is a widely used set of project goals: time, cost and quality. Usually the triple constraint is used company-wide, as it can be used to compare results of dissimilar projects.

The triple constraint, illustrated in Figure 2.2, is often shown as a triangle to demonstrate how all three are tightly bound. If you want high quality, it will cost you time and dollars. If you want it quicker, that will also cost you more, and you risk lowering quality. If you want it cheap, it may take longer, and the quality is again at risk.

Over time, PMs have commonly included two additional measurements of project goals: scope and client satisfaction. These ensure that the project delivers the product as defined by the scope statements and that there's an effort to meet client expectations. Otherwise, it's fairly easy to deliver something that works perfectly, meets the budget and schedule, but doesn't do anything the client expected.

FIGURE 2.2: The triple constraint



The tricky part with using quality, scope, and client satisfaction as project goals is that the project team will have to define what will be used to measure these goals. These can all be tough items to measure and will most likely be a source of team debate. For example, how do you know that the stakeholders are pleased with the project deliverables? Do they attend meetings with smiley happy faces, or do they sign off on the project? Neither may be clear indicators that the project met the stakeholders' expectations. Why? Because the happy faces may be that they enjoy attending team meetings because they like interacting with the team. The subsequent sign-off may mean that they're eager to end the relationship with the team. Briefly, let's review the most common five goals:

Time Time can be measured in duration, hour estimates, or dates.

Cost The cost of the project is the budget of the project. This will include any approved increases resulting from scope changes.

Quality The team will have to determine the quality measurement of the project. Quality can be measured by defects, bugs, or rejected product.

Scope This goal is the measurement of whether the project delivered what was expected. To help define the scope goal, you may want to refer to the change management process. The team may use the number of approved change notices or the number of requirements added after the baseline approval.

Client satisfaction Project success is measured primarily by meeting stakeholder expectations. This is a slippery goal, as you can meet the

time, cost, quality, and scope goals and still not satisfy the client. The team will have to define how to measure this goal. Surveys or interviews are often the method used to collect this data.

NOTE Keep the goals on everyone's radars by posting them in either the physical or virtual project team room or by reporting on the status weekly.

Goal Overload

Have you ever worked with a company that requested you develop personal goals to support the business objectives, behavior/value goals, and department goals? This would all be great if the personal goals were built upon the behavior goals, which were built upon department goals, which were built on the business objectives. In many cases, the goals aren't in sync but rather are independent, nonrelated goals. I worked with a company, and we were required to come up with 18 independent goals. At the end of the year the employees used their creative-writing skills to generate the story about how they met their goals.

Critical Success Factors

Critical success factors are what you absolutely positively must have in place for the project to be successful. This is another list you need to keep to a minimum to manage effectively. Make sure you have these items identified in your risk plan, including the corresponding mitigation strategies. As you're creating the list of critical success factors, you may think you're repeating yourself because the same list may also appear in the project plan

as assumptions and goals. As an example, requiring a project sponsor, having realistic defined expectations, or having no new legislation impact the product, are all statements that can show up under several sections of the project plan. If an item keeps showing up in different sections as you draft your plan, make sure you keep it on your radar throughout the project, as it may be the item that needs the most care. In the bubble-toy project, a critical success factor may be that the patent investigation doesn't show potential patent infringements.

Assumptions

We all know what *assume* means. However, to accurately define a project it's imperative that the PM lists the *assumptions*. Assumptions are things that are taken for granted, and consequently they aren't easy to gather. Why spend the time to collect assumptions? You should do this to identify potential disconnects by the stakeholders. You'll find that these disconnects generally fall into two categories: definitions and understanding.

Different groups have different interpretations for the same term. If the team has a definition disconnect early in the project, everyone is going to be surprised by the final product. A simple example is that programmers define user-friendly screens as they comply with current web standards. On the other hand, user-friendly screens to a customer service representative include features that a non–web user can intuitively follow.

The second cause for many disconnects is the level of understanding by the stakeholders. A stakeholder may not know they don't know, so they can't ask the clarifying question. As the PM, you'll need to try to think like all the stakeholders to ask as many questions as you can. For example, if you're running the project to rewrite a human resource system, you need to ask the detailed questions about converting current human resource records, data entry, and record retention.

Stakeholders may have vastly different responsibilities, such as operations, maintenance, and engineering, with no understanding of each other's perspective. The disconnect happens here because one group assumes the

other group understands the impact of a joint decision. For example, in building a garage, the project team is notified that the concrete vendor is going to be delayed for a week. The construction team knows this means the entire project has now slipped a week because the concrete must be poured prior to building the garage. But the homeowner may think it's just another piece of the project that can be worked around that will not impact the end date.

NOTE Assumptions are often recording the obvious, because the obvious isn't always readily apparent to all stakeholders.

The following are some assumptions that the PM should understand. This isn't an exhaustive list but rather a list of items that can be "gotchas":

Priority Know where your project stands in the priority line. Otherwise you'll be surprised when your resources are pulled from your project to support another project with higher priority. Also, you'll need to monitor the progress of higher priority projects so that you can be ready to make adjustments in your project in case you need to support other teams.

Regulatory environment The PM needs to know the regulatory environment in which they're working. Do you work for a company that requires Federal Drug Administration (FDA) approval for their products? Or does your company have to work with the Environmental Protection Agency (EPA) or OSHA guidelines? Not only do you need to be aware of the current regulations but also the company policies used to meet those regulations. Depending on your industry, you need to be aware of pending regulations or legislation that may impact your project.

Team stability Since most company reorganizations are "hush-hush" until the ax falls, you have to assume that no company reorganizations will impact the resources of the project. You may be thinking, "Well, of course reorganizations would impact the project, why should I write down this obvious assumption?" But your sponsor may be aware of a pending reorganization and hadn't thought about how that could

impact this project. You're stating the obvious in order to remind them that you may need to regroup if this comes to pass.

Team scope You must assume that all stakeholders agree to the project scope, goals, charter, and project plan. Write this down, because you'll be surprised at the number of times that someone comes in at the end of the project with several additional requirements they knew were necessary but "forgot" to share. For the bubble-toy project, someone may have forgotten to disclose that the current bubble formula patent has a pending infringement claim. This impacts the scope of the project, as one of the assumptions may be that you're going to use the company's current bubble formula.

Other pressures on the project This is where you identify the miscellaneous pressures on the project. Does the project have critical timing assumptions, such as the product must be ready for Christmas sales? Or is this the CEO's pet project? I didn't believe this was possible, but I worked on a project that the CEO thought was a great idea. We delivered the product as required, but no one bought it. This was a difficult project to finish because the entire team knew instinctively it wouldn't fly, but the CEO held firm on his decision. We met the project goals, but the project objectives never came to fruition.

The last thing that you need to do before you delineate scope is to validate the project assumptions. Assumptions are often collected during a brainstorming session. One of the brainstorming rules is that you gather all statements and validate them later. If you do not validate the assumptions, you may find errors during the project and not have sufficient time to respond effectively. For example, you may assume that the project is the number one priority. This assumption impacts the ability to keep skilled resources working on the project. Let's say the PM obtains a copy of the annual budget to validate the assumption and they find that the project is a high priority but not the top priority. The project team can adjust the assumption statement and develop risk management plans before another project takes critical project resources.

Delineating Scope

Once you have defined the project objectives and goals, it is time to delineate the project scope. *Scope* defines the project by describing the limits of activities and deliverables. This section of the project plan is where you delineate what you'll be providing and what your team will be doing. The project scope and subsequent deliverables will be the basis for your requirements, schedules, and budgets.

The sponsor and stakeholders create the *scope statements*, which are the project boundaries. Refer to Appendix B for a Project Scope Statement template. These boundaries need to be clear enough to be the basis of all project decisions and be what you'll use to manage the project and its deliverables. I've seen projects that have a one-line scope statement, but that's never enough information to completely describe the project. You need to have enough description of the scope so you can tell whether something is within the scope of this project or whether you need to put it on the future phase list.

Once you have the initial set of scope statements, it's helpful to run this by the team to make sure you haven't missed anything. The team scope review meeting will not only improve the completeness of the project scope but also validate that the team understands the project.

It's the PM's responsibility to make sure you don't *gold plate* the deliverables. What's gold plating? It's the process whereby you deliver more than what's needed to have a successful product. There's continual pressure to unintentionally gold plate a deliverable to keep the stakeholders happy. Gold plating leads to scope creep, which may make it difficult or impossible to reach your project goals.

Scope creep. The term conjures visions of zombies slowly creeping out of their graves, slowly, almost imperceptibly, slithering forward along the ground beneath the field of vision of its victim, until quite unexpectedly it grabs its victim. That is exactly what scope creep does to a PM. Little tasks are added to the scope of the project, almost imperceptibly, until quite unexpectedly you find your delivery date has slipped.

As the PM, you don't intentionally let the scope creep. You may have an opportunity to stop it, or you may not see it happening. For example, your project is to revise the website to match the new-and-improved trade marking for the company. While the web designers are revising the trademarks and colors on the screen, one of the stakeholders points out that they've been collecting criticisms about the site since it was launched two years ago. Do you add the changes? You probably don't, because it's clear that the request is out of scope. But what about if the project scope allows for the button color changes to match the look and feel of the home page of the current site? While changing the buttons, you're asked to change the verbiage on the buttons to be more user-friendly and descriptive. This seems like a trivial change. So you let it in. Then the button language changes take longer than expected, and the next thing you know you've added 40 hours to the project. Was the language change in scope? It's easy to say "no" to this decision in hindsight, as it's out of scope. Both of these decisions aren't so easy while you're managing the project.

What's Not in Scope?

If you're having a tough time trying to identify what's in scope, then try the reverse approach. Define what's *not* in scope. Like in art, this will put the boundaries around the project, and then you add the detail of what's left. For example, you're *not* revising the base product, you're *not* including international addresses, and you're *not* delivering context-sensitive help screens. What's left? A website with no screen flow changes and U.S. addresses with the current help functionality.

This is also a useful technique to collect requirements for future projects or phases. You can include all those items that come up during the project that are defined as out of scope. You'll have given yourself a head start on scope and requirements for the next release and phase of the product.

Baseline Deliverables List

Define the baseline *deliverables*. I intentionally use the term *baseline*, as you'll often identify additional deliverables as you work through the project.

Deliverables can easily become your first list of *milestones,* as deliverables are easy to identify as complete. Most people think the product is *the* deliverable. But you may also have some other features that will be delivered as part of the project. Some typical things you may want to include in the deliverables list are new procedures, product documentation, client training, new forms, marketing collateral, and interim versions of any major deliverable (prototypes, pilot versions, and so on). For the bubble-toy example, in addition to the actual toy, you'll need advertising, a manufacturing plan, a distribution strategy, approved trademarks, and patent applications.

NOTE You need to clearly define the acceptance criteria of each deliverable because the word *complete* to one person may be incomplete to another.

Requirements

A PM will spend a significant part of their time collecting and managing requirements. And yet, at the end of a project, if anything has gone awry, the root cause is almost always that there wasn't enough time spent on requirements. Since I'm talking about smaller projects, there's usually little time between project initiation and product launch. The parties usually have little time to let the ideas percolate to collect all the requisite requirements. The following ideas should help remedy those problems.

Requirements Collection

Requirements aren't deliverables but characteristics that allow you to validate that the deliverables meet the needs of the stakeholders. The bubble toy is the deliverable, and the requirements include that it's made of colorful plastic, that there are no small detachable parts, and that the toy is dishwasher

safe, all of which are characteristics of the toy. It's the responsibility of the stakeholders to create requirements, and it's the PM's job is to facilitate the collection of these requirements.

Ridiculous Brainstorming Suggestions

Brainstorming rules encourage everyone to state everything that comes to mind, regardless of how ridiculous the idea appears. Some of the best solutions will be stimulated by the ridiculous idea. I was part of a brainstorming session on reducing injuries. One of the workers joked that it must be the noise and vibration of the tools that was causing injuries. Initially, everyone thought that was ridiculous. However, we checked with an occupational therapist who explained segmental vibration, which can cause repetitive injuries to hands, wrists, and elbows. We purchased newer tools that did not vibrate as much, thus reducing the injuries. A joke lead to the eventual solution.

This is where you may want to use the sticky-note brainstorming process. Give everyone a pad of sticky notes, and have them write requirements on the pad, one requirement per page. Then, each person presents their collection of requirements. The presentation of ideas often stimulates ideas of other team members. Another advantage to the sticky-note process is that as you redefine the categories of the requirements, you can easily move them around on the wall. Pulling them off the wall and keeping them intact is another story. You may want to use a piece of butcher paper as the backdrop for your requirement collage.

Reason for Requirements

Requirements are also helpful to remind stakeholders of the agreed-upon project. The further you get from the kickoff meetings, the more creative

their memories become. Imagine if at the last hour one of the stakeholders remembers that you promised to have the manuals spiral bound, not stapled. More than likely this wasn't identified as a requirement for the manuals in the meeting. This falls into one of those understanding disconnects because the stakeholder thought everyone knew it was the company standard to spiral bind books, and no one else in the room had ever published a company manual.

Your quality group or test group will appreciate detailed requirements, as they can easily roll into test plans. Requirements that start with a phrases such as "The product shall…" are easily reusable and can be converted to pass or fail product tests.

As hard as you work to collect all the requirements, inevitably a stakeholder will bring up items that weren't previously identified "that we absolutely need to launch the product." When this happens, you flash back to the requirements-gathering meetings. You remember all the people in the room, you recall the requirements discussion, you know the stakeholders approved the plan, and yet here is another surprise. What happened? I call this the *awakening* portion of the project, where the stakeholders finally become mentally engaged in the project and have really begun to think through the scope of the project. I don't think most people do this intentionally. Somehow they think there would be more time before the product is launched to think through the details. They thought the project would never really come to fruition. Either way, you need to try to push these requirements to the next portion of the project. If the item must be done now, follow the change notice process to roll it into this phase. Make sure you clearly identify the impact to the project; otherwise, as the PM, you'll take the hit.

Approval for Scope

Who should approve the scope? First and foremost, the sponsor should. You need their approval of the scope for buy-in and commitment to the project. You also need to make sure you're all on the same page so that you

have their support in the decisions you make during the management of the project.

More and more companies are following quality processes, which I'll discuss in more detail in Chapter 7, "Defining the Quality Plan." Every one of these processes has an auditing feature, which emphasizes formal approvals as a check and balance throughout the project. This is a logical place in the project planning process to obtain approvals. The last reason to have approval at this point in the project is to be able to show the approved direction of the project. This not only helps the PM manage the project but also lets the team members know the "whats" and "whys" of the project.

Approvals can either be by e-mail or with a signature. Make sure you keep approvals with the project documentation so that you can produce approvals during any potential audit.

One last note: verbal approvals will always get you in trouble. It's tough enough to manage a project with formal approvals. If you choose to manage projects with verbal direction, you also choose to be responsible for the consequences of that action. The PM will be held responsible for the miscommunications with regard to the product deliverables.

Scope Management Plan

Typically, the project objectives will stay relatively steady during the course of the project. Most companies don't drastically change their business objectives from year to year much less during the short duration of a project. But the goals, scope, assumptions, and requirements will most likely change throughout the project. I know all project managers wish that once they have project plan approval that the requirements never change. If we were all omniscient like Jean-Luc Picard, that might be possible. But we are not all Starfleet captains, we are PMs who have our memories and thoughts triggered as we move through the project. Some of the issues raised during the course of the project will just clarify questions. But some of the issues will result in scope changes that impact the schedule, cost, and resources. The PM is responsible for identifying the impact and managing these changes.

Refer to the *Project Manager's Spotlight on Change Management* book for methodologies and additional tricks to keep the scope on track. Document your scope management process, and include it in the project plan. You'll need to follow a disciplined approach to encourage the stakeholders to formally submit the changes as they're identified throughout the project. It's worthwhile to take some time to define the scope management plan, as it's one of the areas that may remain consistent from project to project. See Appendix B for a template to help you create your project scope statement.

NOTE Make sure you revise goals, scope documentation, and requirements as changes are approved for the project.

In closing, remember that the project objectives, goals, scope, and requirements build and support each other. Each contributes to the definitions of the project and the deliverables.

NOTE For more information about keeping the scope on track, see Claudia Baca's *Project Manager's Spotlight on Change Management* (Sybex, 2005).

Case Study

The PM, Patricia, pulled up her template for the scope statement and began to collect data from the previous similar conversion. Patricia met with Jeff, and they found some of the old project documentation, meager as it was. All that was left was the contract, schedule, and several weekly reports. She was able to identify the original budget and resource estimates from the weekly reports. Patricia validated that the implementation and conversion can be done in eight months with similar requirements. The previous contract can be used as the first draft of the contract between Volte Corporation and Brown Enterprises.

Patricia began to interview people to collect information about the current project. Her first interview was with the salesman, Troy. He confirmed that there's reluctance by several members of Brown Enterprises to convert to Volte. Troy said he shared with Brown Enterprises management that he has a new management team that has perfected the conversion process. However, Troy casually mentioned he promised that the voice-recognition product would also recognize Spanish. As this isn't a current feature of the product, Patricia will have to investigate where the code is in the development cycle. Troy also promised the product would be able to support the functionality to collect five random questions for voice matching within a year. Patricia flinched at that point, knowing that the multi-question technology hasn't been prioritized to be included in next year's development plan.

Next Patricia met with Laurie to draft the project objectives and scope. Laurie pulled the annual company business objectives from her desk drawer. They discussed and drafted the project and team goals. Laurie reviewed the current corporate plan, which included goals on supporting values, project objectives, and personal development. Patricia was adamant they keep the list to a small number of goals for the project so that she could keep the team focused on a few SMART goals.

Patricia used the old weekly reports to start the assumption and deliverables list. The rest of the team contributed to the scope, assumptions, deliverables, and requirements. Laurie reviewed and approved the project plan scope descriptions. The following sections review some of the key parts of the project plan.

Project Objectives

The project objectives that Patricia is focusing on are to increase market penetration by adding one of the top five users, to improve standard processes for configuration and conversion, and to increase revenue with the new end users.

Goals

Patricia has developed the standard goals into SMART goals for her project. They are as follows:

Cost The project estimate is $450,000 billable to the client within 30 days of projection completion.

Schedule The project will be completed within eight months beginning with the executed contract and ending with client acceptance.

Quality The conversion will be completed with fewer than 15 bug reports from the quality assurance testing process.

Scope There will be no more than three change notices identified and approved during the duration of the project.

Customer satisfaction Customer satisfaction will be defined as zero customer impacts for conversion, measured at the end with a project survey sent to 10 percent of the converted customers selected randomly.

Scope

The high-level boundaries for the project are to convert approximately 10,000 customers to the new voice-recognition hardware for Brown Enterprises in eight months, to configure hardware to support implementation, to add Spanish to the voice-recognition software, to print branded user guides and collateral, and to have an executed contract with Brown Enterprises prior to customer conversion.

Not in Scope

Patricia has identified the following features as not part of the scope of this phase of the project: the ability to collect five questions for random matching, no new customers, no changes to current product flow, and no changes to language on user guides or marketing collateral.

Deliverables

The primary deliverable for the project is the configuration of hardware and conversion of 10,000 customers for Brown Enterprises. In addition, the product must have Spanish as part of the recognition product. This conversion project is expected to be the first of many conversions. So an added expectation is that there will be significant process improvements for configuration and conversion.

Requirements

Patricia held two meetings with the stakeholders and collected a rather extensive list of requirements that defines the characteristics of all the project deliverables. The list has been shared with the project team and SMEs to ensure that the answers to all their questions have been given in the requirements. In addition, the list has been sent to the quality department for review.

Assumptions

Patricia uncovered several assumptions during the scope and requirements collections meetings. First, the project can't begin using resources until the contract is executed. Second, the project will follow current corporate QA and scope change management procedures.

The team is aware of two other projects that have a higher priority than this project. No team members are working on either of these projects. However, Jay is considered the corporate subject matter expert for one of the projects and may be called upon for some support.

No new legislation/regulation will impact the project. In addition, no company restructurings have been identified at this time. This means that there's no expected team turnover once the project has begun.

Patricia is confident that the identified stakeholders will agree to project goals, scope, requirements, and the project plan. However, she plans to review the requirements at several intervals during the projects to encourage uncovering "unknown" requirements.