

Module Two: Project Selection and Initiation

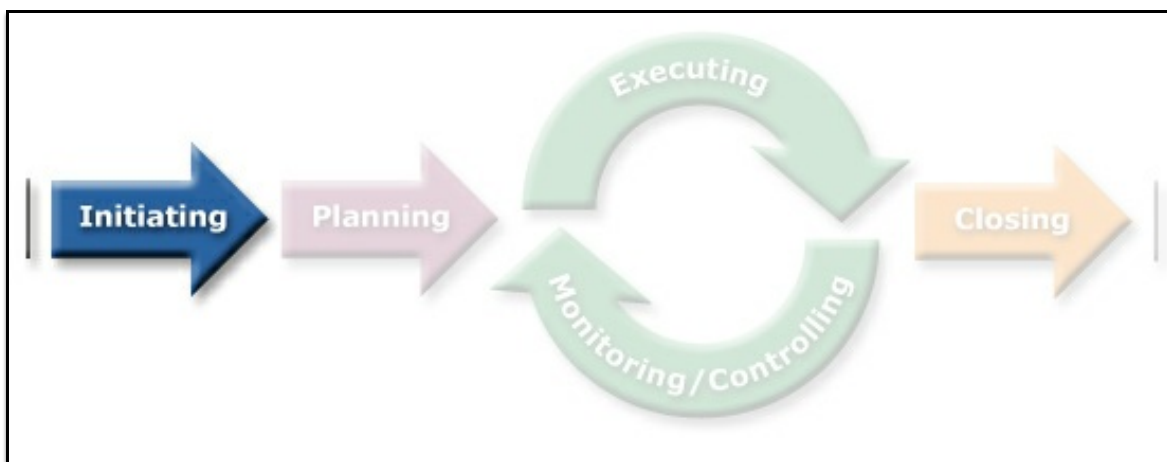
Module Two: Project Selection and Initiation



The space shuttle Discovery begins a 3.5 mile ride to its launch pad.

2.01 Learning Outcomes

Module Two: Project Selection and Initiation



In the Initiating stage of a project, the organization is primarily concerned with identifying the problem that the project will solve and setting the boundaries for the solution to that problem.

Work in the Initiating stage defines the key high-level goals that the project must meet and connects those goals to the

organization's strategic objectives. These goals are then communicated to the project manager and project team so they can begin to develop the plans they'll use to meet the project requirements.

The project charter, the stakeholder list (or a more-complex stakeholder register), and the milestone chart created in this stage will help practitioners focus on project goals and begin to secure the necessary resources to achieve the results they are looking for.

Learning Objectives

After completing this module, you should be able to:

1. Describe the elements of a project charter and how the charter helps the project manager frame a project
2. Assess how projects are aligned with business strategies

2.03 Project Selection

Project Selection

To adequately manage projects, organizations may need to be selective in the ones they pursue or fund. In some circumstances, an organization will be able to decide very easily whether a project should be pursued: for example, companies facing changing software standards may quickly decide that they should dedicate resources to technology upgrades. But when organizations need to make choices between several competing projects that seem—at first glance—to be of comparable importance, they will need to decide on a project selection process that prioritizes some projects over others.

Weighted scoring is one technique that organizations can use to select projects: by creating a scoring system based on such factors as resource availability and account economics, decision-makers can assign a weighted importance score to each factor and then tally the scores for each project.

Additionally, projects may be selected due to their ability to provide financial benefits to the organization. Financial factors to consider might include return on investment (ROI), internal rate of return (IRR), net present value (NPV), cost-benefit ratio, and payback period. Decision-makers might decide that the projects to support are those with the largest return associated with them or those with the shortest payback period.

2.03.1 Alignment With Strategic Objectives

Alignment With Strategic Objectives

In some instances, a project may be selected not because it provides financial gain but because it aligns with other strategic goals and objectives. For example, a project may be chosen because it advances customer or supplier relations, enhances operational efficiency, improves security or compliance measures, or connects with other mission- or vision-critical targets. Although such projects may not directly improve the company's bottom line, they do propel the organization forward in other important ways that benefit stakeholders, customers, and operations.

The Benefits of Strategic Alignment

Correct alignment to organizational objectives can provide several advantages for projects and project teams:

- Knowing how a project aligns with strategic aspirations may make it easier for practitioners to understand why the project was initiated (if the project's purpose is not visibly apparent).
- Knowing that a project supports organizational objectives may make it easier for project managers to recruit or negotiate for important project resources.
- Knowing how a project relates to strategy can help project practitioners uncover issues that may not affect individual project success, but will undermine organizational efficiency or operations.
- Knowing that a project reinforces organizational strategy may explain why one project was assigned a higher priority than others, or may make clear why other, less obvious decisions were made.

Understanding a project's strategic alliance may also help in ensuring that a project will be viewed as a success at its completion; demonstrating that the completed project met its specific targets *and continued to support organizational goals throughout its life cycle* will likely impress key stakeholders and management when project retrospectives are held.

Coordinating Project and Strategic Objectives

To uncover strategic goals and objectives, project practitioners can review company websites, study an organization's prospectus and publicized initiatives, or talk to project sponsors, champions, and senior management. Once these business objectives have been exposed, the project team will then need to review the *project's* objectives one-by-one to look for any areas of misalignment or discrepancy.

Discussions with key practitioners and stakeholders should be launched any time project reviews reveal misalignment among objectives. The results from these discussions should be documented to ensure that any deviations from the project's plans can be explained during closure activities.

The Requirements Traceability Matrix

To ensure that strategic alignment is continuously encouraged throughout a project, practitioners may want to create measurements or metrics that can be assessed to encourage project synergy with organizational plans. And a convenient place to document and store this information is in a requirements traceability matrix.

A requirements traceability matrix connects each and every project requirement to its source and/or its requesting party. A project's matrix can be as informal or as detailed as necessary, but should include enough information to ensure that each requirement can be tracked back to its initiator, so any additional information can be obtained if needed. The matrix also needs to be considered a "living document"—one that continues to be used and updated throughout a project (rather than created at initiation, then stored in a file or archive with little use or involvement in project execution).

A Sample Requirements Traceability Matrix

Click on each of the headings in the diagram below to explore the parts of the matrix.

Requirement ID	Description	Business Need/ Objective	Status	Assigned To	Notes

Requirement ID: A unique name or number that practitioners can use to quickly identify each requirement

Description: A brief explanation of the requirement; must be descriptive enough to differentiate each requirement from its cohorts

Business Need/Objective: The strategic objective or business need that the requirement will address; should include the name of the requesting party or source of the objective

Status: A succinct explanation of the state or condition of the requirement (e.g., "in process," "delayed," "cancelled"); may need to include descriptors if atypical terms (e.g., "red," "green," "yellow") are used

Assigned To: The person, team, or department responsible for ensuring that the requirement will be met

Notes: Any additional information that will help in understanding or tracking requirements (i.e., due dates, project stages, associated deliverables, etc.)

2.04 Quantitative Factors for Weighted Scoring

Quantitative Factors for Weighted Scoring

To help practitioners select a specific project from many possible or available projects, they often compare the possible *quantitative* outcomes of the projects under consideration. When the selection of a project is based on the maximization of a particular quantity, the following calculations can be used:

Return on investment	A dollar amount or percentage of dollars beyond an amount invested, which represents income. ROI is income divided by investment. <i>Payback</i> is the amount of time that passes before earning back the amount invested. More on ROI can be found in a Solution Matrix Limited article .
Internal rate of return	Relative to the amount invested, the rate of growth of money over time using continuous compounding (expressed as a percentage). More on internal rate of return can be found in an article Internal Rate of Return Revisited that discusses the benefits of analyses combining net present value and internal rate of return.
Benefit cost ratio	The return, or benefit, compared to dollar invested. For example, you might invest \$1 on a project. If it yields a return of \$2, you are doubling your money. This is represented as 2:1 in benefit cost ratio form.
Net present value	An amount reflecting the present difference between cash inflows and outflows. When estimating NPV in the comparison of two possible future projects, the inflation and return (again, inflows and outflows for that specific project) need to be assessed. Because an NPV factors in project duration and return versus investment, the two NPVs for the possible projects can be directly compared to determine the projects' appropriateness.

Practitioners may want to take other financial factors into account as well, as they analyze prospective projects. For example, they may want to include *life cycle costing* in their evaluations, to include the potential costs associated with the product's end use, maintenance, and/or support. Or they may want to consider the *opportunity costs* (i.e. those projects or opportunities that will have to be bypassed to make room for the desired choices) of the chosen projects.

Depreciation

Depreciation is the devaluing of something in monetary terms, and is important in determining value over periods of time. There are a number of methods for determining the depreciation of an asset.

Consider a car worth \$20,000.

Standard depreciation

Standard depreciation is the amount of depreciation per year once the starting and scrap (ending) value of something is known as well as the timeframe over which the item is being held. If the \$20,000 car has a scrap value of \$1,000 and will be held for 10 years, its depreciation is \$1,900 per year.

Baseline depreciation

Baseline depreciation value is the cost minus the scrap value. Baseline depreciation value is $\$20,000 - \$1,000 = \$19,000$.

Accelerated depreciation

Accelerated depreciation is faster than standard depreciation; it's an assumption that an asset, such as the car, loses the majority of its value in its first few years. It can be calculated a few ways.

Double-declining balance depreciation doubles the rate annually at which the item is depreciating under standard depreciation.

Sum-of-the-year's-digits is an alternative calculation that is based on multiplying the baseline depreciation value by a numerical fraction. In this method, take the number of years the car is depreciating and count out all the digits below it, down to one. Then add these digits together. If you are calculating how much the car depreciates in 10 years, add:

$$10 + 9 + 8 + 7 + 6 + 5 + 4 + 3 + 2 + 1 = 55$$

Then divide the number of years of depreciation left by the sum calculated (for example, in the first year of depreciation, the car has 10 years left of depreciation, so for year one your fraction is $10 / 55$. For year two the fraction is $9 / 55$, etc). To calculate annual depreciation from there, take the baseline depreciation value (\$19,000) and multiply it by the result of your fraction. $10/55 = 18.18\% \times \$19,000 = \$3,454$.

Notice that this value is much larger than \$1,900, the standard depreciation. Conversely, if you calculate the depreciation for the 10th year of the car's existence ($1/55 = 2\% \times \$19,000$), the depreciation is \$345, much lower than the standard depreciation.

2.05 Calculating ROI, IRR, and NPV

Calculating ROI, IRR, and NPV

The following provides brief instructions for calculating return on investment, internal rate of return, and net present value.

Return on Investment

Return on investment (ROI) is the ratio of money gained (or lost) relative to the amount of money invested. ROI is a popular metric used to compare the efficiency of an investment, or compare the efficiency of a number of investments. ROI can be calculated by dividing the income (i.e., the annual profit/loss) by the cost of the investment.

$$\frac{\text{Annual profit/loss}}{\text{Cost of the investment}}$$

ROI indicates the profitability of a project or investment, and is expressed as an annual percentage. For example, an ROI of 12% means that the annual profit is 12% of the investment.

The minimum rate of return (often called the *hurdle rate*) indicates the lowest rate of return that a company is willing to accept, given the risk of doing a project and the opportunity cost of not pursuing other options. As long as the ROI is equal to or greater than the company's minimum rate of return, the investment is attractive.

Example

If a project's potential income for the year is \$100,000 and its investment is \$800,000, should an organization take on the project if its hurdle rate is 18%?

$$\text{ROI} = 100,000/800,000 = 0.125 \text{ or } 12.5\%.$$

Because the ROI is less than the hurdle rate, the organization should not pursue the project.

Net Present Value

The net present value (NPV) of a project is the present value of all expected future cash flows (including cash inflows and outflows). NPV essentially measures the value of a dollar today versus the value of that dollar in the future. Practitioners can calculate NPV by discounting all future net cash flows (NCF) and then subtracting the net investment required in the current year.

In general, if the NPV of a project is positive (greater than 1), it should be accepted. (If the net present value is positive, adopting the project would add to the value of the company.) Likewise, if the NPV of a project is negative (less than 1), it should be rejected.

However, whether the company chooses to pursue a project with a positive net present value will depend on the firm's selection strategy as well as the project's relation to other projects (i.e., is it independent, complementary, etc?). If a firm's decision criterion is to pick all projects that add to the value of the company, then the firm would choose all projects with positive net present values, even NPVs of just \$1. On the other hand, if a firm has limited resources, it will rank projects and pick those with the highest NPVs.

Example

What would the net present value be for a project with a net investment of \$40,000 and the following net cash flows (NCF) if the company's cost of capital is 15%?

- NCF for year one = \$25,000
- NCF for year two = \$36,000
- NCF for year three = \$5,000.

To solve this problem you can use the net present value calculator from Investopedia (<http://www.calculatorsoup.com/calculators/financial/net-present-value-calculator.php>) or Microsoft Excel.

Discount Rate	15	%
Life of Project	3	years
Initial Cost	-40000.00	
Cash flow 1	25000.00	per year
Cash flow 2	36000.00	per year
Cash flow 3	5000.00	per year
Cash flow 4	0.00	per year
Cash flow 5	0.00	per year
Cash flow 6	0.00	per year
Cash flow 7	0.00	per year
Cash flow 8	0.00	per year
Cash flow 9	0.00	per year
Cash flow 10	0.00	per year
Net Present Value: \$12,247.88		
PV of Expected Cash Flow \$52,247.88		

Interpretation

With a discount rate of 15% and a span of three years, the projected cash flows are worth \$52,247.88 today, which is greater than the initial \$40,000.00 paid. The resulting positive NPV of the above project is \$12,247.88, which indicates that pursuing the above project may be optimal.

Remember that even though a project offers a positive NPV, the projected cash flows are still estimates. The accuracy of these projected figures depends on the skill and experience of the person performing the calculation, and the likelihood of these cash flows materializing depends on the financial risk associated with the type of project being pursued.

Internal Rate of Return

The internal rate of return (IRR) of a project is the discount rate at which the present value of net cash flows equals the net investment in the current period. In other words, the IRR is the discount rate at which the net present value of the project's incremental cash flows (including the net investment) is zero.

IRR is a metric that is used to compare the profitability of projects or investments. If the IRR of a project exceeds the firm's minimum rate of return (i.e., the "hurdle rate"), the firm can increase its value by selecting the project.

Example

A company is considering a project with a net investment of \$10,000. The project has a five-year economic life with expected net cash flows in those years of \$5,000, \$4,000, \$3,000, \$2,000, and \$1,000 respectively. Using the standard decision rule of accepting projects when $IRR > \text{hurdle rate}$, should the firm accept or reject the project in question if the

hurdle rate is 18%?

Answer: Using the IRR function in Microsoft Excel to make the calculation, enter the net investment of -10,000, and net cash flows of +5,000, +4,000, +3,000, +2,000 and +1,000. The output should be 20.3%. Because the IRR is greater than the hurdle rate of 18%, the project should be accepted.

IRR vs. NPV

Traditionally, many organizations have employed IRR to evaluate projects; however, IRR falls prey to several shortcomings that NPV does not. As such, in some cases, an organization may make sub-optimal decisions when evaluating projects using IRR instead of NPV. The problems with IRR are summarized below:

- Timing of cash inflows and outflows: IRR can yield the same value for two projects where one has a positive NPV and the other negative depending on the timing of the cash flows.
- Ambiguous results: A project may not have a unique IRR.
- Scale of investment: Because IRR is only a measure of profitability per dollar invested, it does not necessarily lead one to choose the project with the largest NPV.
- Non-uniform term structure: If the discount rate is not constant across the time periods evaluated, the result of the IRR decision criteria may not match the result of a NPV evaluation

2.06 Initiating a Project

Initiating a Project

Initiating

As a project practitioner, when you begin a project you'll need to link it to your organization's strategic objectives.

In the Initiating stage, the idea is to create boundaries for a project and set project limits for things such as scope, cost, quality, and duration. This first Initiating stage helps answer several questions:

"What are we trying to achieve with this project?"

"Who are we doing this project for?"

"What will we learn from the project?"

"What will a successful end result look like?" and

"Will the results from this project satisfy its customers?"

You should be able to explain what your organization expects from the project. This will help focus everyone on achieving the stated goals and meeting the organization's business needs. In essence, the Initiating stage creates a mission for the project's practitioners to fulfill.

One important document when beginning a project is the project charter. Among other things, the charter documents the initial scope of the project, broadly describes what the project will deliver, establishes how long the project will last, and identifies the project budget. Completing the charter means that an organization's management has committed resources--people, money, and time--to the project's completion.

As a project practitioner, you'll also want to identify project stakeholders during the Initiating stage. You need to recognize the people, agencies, and organizations that may impact--or be impacted by--the project. If you fail to identify important stakeholders or if you don't adequately address their needs, you can face significant project delays and problems later on.

In the Initiating stage you'll also want to develop milestone charts to track key project dates--especially those dates agreed to by stakeholders or where there's a contractual obligation. Milestone charts quickly and easily illustrate project progress to key stakeholders. Because you'll be communicating them to external stakeholders, the milestones used in these charts should focus on the business goals you

stakeholders care about.

Initiating is a collaborative process. As a project participant you'll need to take information from several sources and condense it into a simple format for quick reference.

This first stage gets everyone--stakeholders, management, team members, and the project manager--involved and committed to project goals. You'll find that getting commitment and acceptance during the initiating stage will prove valuable as you develop more-detailed plans later in the project.

During the Initiating stage, you'll meet with your team to develop a certain level of definition around the project. You'll establish what the project's purpose is, who will be involved, and what the project will produce. You'll answer questions like the ones below to help you better understand the project, its resources, and its constraints:

- What will project success look like? How will we know that things are "done"?
- What constraints does the project face?
- How does the charter set the boundaries for the project?
- Who are the project stakeholders? Which ones are most essential to project success?
- How will we manage expectations and resolve conflicts on the team and with stakeholders?
- Are there documents and lessons from other projects that we can use on this project?

You'll use a project charter, a stakeholder list, and a milestone chart to help you frame your project:

- The project charter formally authorizes the project and identifies any initial work you'll need to do to meet the expectations for the project.
- The stakeholder list identifies and documents relevant information about the people and organizations affected by the project.
- The milestone chart acts as a summary-level schedule that identifies the major points or events in the project.

Video Commentary

Initiating

Rich Maltzman

Here are some essential, pragmatic tools, practices, and behaviors for the Initiation portion of your project.

I'd like to start with the charter. The charter is a document. It's a very short, practical document. It's a summarization of some of the key points of your project. But it's a really important one because, on it, you'll have items that provide you with a source of power.

For example, the authorization level for the project--how much money can you spend, how long does this project take--in summary form. And this document can be used by you as a source of power, a source of authority, a reference point to go back to and say, "How does this project connect with the rest of the company's goals? How is it meaningful to our enterprise?"

And in some cases, where you're not given direct, legitimate authority over your project team, you can refer to that charter as the source of meaningfulness, as the source of connectedness, and as the source of power, as well as the basic facts about the project. So although it's a short document, it is one that you should have, and one that you can make use of in a very pragmatic way.

The next piece I'd like to talk about is stakeholder identification. This is a portion of work that you do when you're initiating the project. And it's really important that you think deeply and broadly about the people and organizations and entities of any kind that are contributing to the project or care about the project in any way. And when you do this, you need to think not only about the project's final product but about the project

while it's in operation.

If it's a construction project, for example, you need to think about the people who live nearby. Are they gonna care about the noise and disruption while the project is in the construction phase? Even if it's a very short phase, they could actually upend your project. In fact, this ties in pretty deeply with risks and risk identification. If you leave out a stakeholder group, you leave out an entire source of risk. And if you leave out a source of risk, you're not going to treat that risk at all.

And that risk is going to--if it's a threat--is going to just come right into the project, as opposed to being treated and handled in some way. So stakeholder identification is very, very important. Another pragmatic tip is if you don't identify a stakeholder or stakeholder group and you don't communicate with them, the lack of communication is usually considered a negative. It's like a snub. So you want those people to be, at least, acknowledged upfront, and you communicate with those folks.

So you'll create from this a stakeholder list, or it could be as formal as a stakeholder register. It's really just a simple table of all the people as well as entities--so I mean by that organizations or enterprises that care about this--and how you'll deal with them. Who's their main representative? How often will you talk with them? Again, it can be as formal as you need for the level of discipline on your project. But you should have a stakeholder list of some kind.

The last piece in Initiation that I'd like to talk about is the milestone chart. This is a list of key anchor dates to your project--dates that can't change. They're usually zero duration events. But they're very, very important. Just because they take no time doesn't mean that they're not important. It's not your whole schedule. It's a simple list or table of the dates that are important to your project. What has to turn over when? Are there certain imposed dates by regulatory agencies when something has to be done?

Maybe you're responding to an RFP, and there's a particular date by which that RFP has to be back. These deliverables, or imposed dates, are how you can communicate with some of the important people on your project in a special way. For example, the leaders, senior leadership, in the project.

You want to communicate with them this level of detail, and that does a couple of things: it makes sure they know what you think is important and where they need to contribute, and it avoids giving them the detail--the Gantt chart, the schedule (in detail), network diagrams--because, as we know, if a senior leader gets a hold of that kind of detail, they'll ask questions that they don't even need to ask. And you want to control as a project manager; you want the proprietary control over the background of the project, and yet you need their support for some of these deliverables.

This is also true for external stakeholders. You want your external stakeholders, suppliers, regulatory agencies to know how you're working and to what dates you're working without revealing the why or the how, as to how you're getting to those dates. So use the milestone chart as a way, just like with the charter, to communicate with the more powerful people, or the more important people to your project, what's important, what needs to be delivered, and when, and also what dependencies there are, if you're to get to those milestone dates.

Rich Maltzman, PMP®, is the Learning and Professional Advancement Leader at a major telecom supplier. A contributor to the *PMBOK® Guide*, 4th Edition, he has co-authored PMP® Exam study guides. He is co-founder at EarthPM, LLC, and along with co-founder David Shirley, PMP®, has authored the book, *Green Project Management: Planet, Projects, Profits, and People*, published in September 2010. He received a BSEE from the University of Massachusetts in Amherst and has a graduate degree in industrial engineering from Purdue University.

To ensure a successful project, you'll want to focus on the most important project goals and avoid the mistakes that past projects have made.

To help you stay focused on important project objectives, ask key stakeholders and company executives what they think a successful project would look like. Also ask for their thoughts on the most important constraints (project scope, budget, schedule, quality, etc.) that the project must work within. Collecting and analyzing this information will help you ensure that your project meets the most important requirements of key stakeholders and agrees with important strategic objectives.

Also remember to review any records and documentation from previous projects to help you avoid the traps that those projects fell into and to recognize successful actions and activities that you can use in your own work. By incorporating the lessons learned from other projects, you'll ensure that your project proceeds with as few problems and delays as possible.

2.07 Best Practices: Initial Preparations

Best Practices: Initial Preparations

Initiating a new project can present challenges. Even if you are an experienced project practitioner, you may have new team members who have not worked together before, or new methodologies and approaches that need to be incorporated into your work. To help you avoid the problems that commonly occur and to pave the way for successful project launches, consider the following suggestions as you begin your project:

Select the Right People for the Team

Build the team with key people first, then supplement the group with members who are motivated to learn. As much as possible, recruit generalists (people who can complete multiple types of tasks) as well as specialists, to ensure that any necessary tasks can be successfully completed by several members of the team. Engage critical stakeholders early in the process and ensure their commitment throughout the project.

Video Commentary

Selecting Team Members

Richard Maltzman

Selecting team members. This may unfortunately not be a problem for you because you may not get to select the members, especially if you're in a functional organization--they'll just be assigned to the project. Assuming that you do, alternatively, have this opportunity, the focus should be on their availability. It's great to have a talented team member but if they're not really going to be able to contribute more than three percent of their time, not such a great person for the project, so availability is key.

Specific talent for this project, so not just the fact that they're the best designer but the fact that they have design skills for the specific deliverable of your project. And--and this is very important--the ability to work together with a team. So you can have an individual contributor who's great and talented but also disruptive. I'd rather have a less-talented designer or contributor who's a better team player that will contribute to a higher chance of success.

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Train the Team

Evaluate the team's skills and plan additional training to account for any gaps. Consider several ways (formal, informal, on-site, job shadowing, etc.) to add training and skills to team members.

Clarify the Boundaries of the Project

Explain the project's boundaries so everyone involved understands the project. Explicitly define the acceptance criteria to avoid surprises, and set a release date to prevent unlimited revisions to the project scope. Clearly define what it means for the project to be "done" (especially when there are multiple teams).

Communicate Expectations Clearly

From the start, it is crucial to clarify project requirements and expectations for the team. Team members should be empowered to develop innovative solutions to problems (while, of course, staying within the project boundaries) and to collaborate to find their own way of meeting goals.

Create a Culture of Trust

Encourage team members to explore options, to uncover problems or issues, and to work together to resolve conflicts. Ensure that management is committed to the project to see it through to its completion, and is willing to expend the necessary resources on training, mentoring, and coaching to help the team.

Keeping these suggestions in mind as you begin new projects will improve the odds for project success.

2.08 The Project Charter

The Project Charter

The project charter formally authorizes the existence of a project and provides the project manager with the authority to use resources to complete project activities.

The project charter outlines the project's scope, goals, and deadlines at a high level. It is generally issued by someone outside of the project team in a higher-level position within the organization (like a project sponsor, project initiator, or a senior executive).

Video Commentary

Why Do You Need a Project Charter?

Richard Maltzman

Why do you need a project charter? Well, to understand why you need a project charter, think about what happens without one. You now have no single document to wave in the air that helps people understand your authority (people, by the way, including yourself).

If signed by the sponsor as it should be at a high level, it's your way of answering the "You're not the boss of me" assertion and reminding you and the team members, what it is that you're up to and that you indeed have the power to control the project team while it's active.

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University.

Elements of the Project Charter

Page 1

Project

Project Title

Date

Preparation Date

Business Case

Business Reason

Project Purpose

Summary of Scope

Project Objectives

Strategic Alignment

Project Deliverables

Interim and Final Deliverables

Project Personnel

Internal, External, and Third-party Resources

Page Number

The *Project* title should be unique enough to separate the project from other projects in the organization.

The *Date* field shows the date that the project charter was prepared.

The Business Case section provides the rationale, from a business standpoint, for pursuing the project. It explains why the project is worth its required investment.

A business case is usually created as a result of one of the following:

- A market demand
- An organizational need
- A customer request
- A technological change
- A legal requirement
- An environmental impact
- A societal need

The business case should be reviewed periodically to ensure that the project is on track to deliver its intended benefits and to confirm that the project is still needed.

The *Project Purpose* section summarizes the project scope. The purpose is generally described as a problem that needs to be solved and explains how the project will solve it.

The *Project Objectives* section describes how the project aligns with the organization's strategic objectives. Project objectives are frequently described in terms of sales quotas, quality goals, customer satisfaction, etc.

The *Project Deliverables* section explains the interim and final products or services that the project will produce. It may be easiest to record the deliverables as a list of bullets.

The *Project Personnel* section lists all of the people who will be involved in project activities. It may again be helpful to provide this information as a bulleted list.

Remember to include all external resources and third-parties along with all internal resources and team members who will work on the project.

Risks

Threats and Opportunities

Schedule Summary

Due Dates and Milestone Dates

Budget Summary

Cost Boundaries

Measurable Success Criteria

Success Metrics

Other Project Limitations

Additional Factors or Constraints

Project Approval

Signature

Date

Page Number

The *Risks* section shows any potential risks *to* the project and any risks *caused by* the project. Risks should be described at a high level in the project charter; they will be further defined in the project's risk register at a later date.

Again, it may be helpful to record the separate risks in a bulleted list.

The *Schedule Summary* section provides a high-level description of the project due dates, including any known milestone dates. The schedule summary should also include the amount of schedule variance the organization will tolerate, as well as who would need to authorize the variance.

A detailed schedule will be developed later in the project as the project plan is created.

The *Budget Summary* section explains the boundaries that the organization has set for costs on the project. It should also include the amount of cost variance allowed for the project and directions as to who can authorize any budget changes.

The *Measurable Success Criteria* section should explain the standards or metrics that stakeholders will use to mark the project as successful. The criteria should be clearly defined and specifically measurable.

The *Other Project Limitations* section includes any additional factors that could constrain the project or cause project risks. Limitations are generally described in terms of resource constraints such as a lack of qualified personnel, a shortage of materials, or unmovable schedule dates.

The charter should include the signature of the person who can authorize the project to begin. This could be the project sponsor or some other member of management who can verify that the charter adequately frames the project.

The charter should also include the date that the charter was approved by the appropriate person.

To help you launch your project, we have created a [project charter template](#) that you can download and use on your project.

2.08.1 Exercise: The Elements of the Project Charter

This assignment does not contain any printable content.

2.09 The Stakeholder List

The Stakeholder List

The Importance of Identifying Stakeholders

Project stakeholders can take many forms—they may be people working on a project, suppliers to the project, or company managers or customers who are impacted by the project's activities or deliverables. In fact, a project stakeholder could be anyone who has something to gain or lose by the project's execution or completion.

Stakeholders may be inside or outside of the organization that is conducting the project. If the project is delivering a product or service to an external client or vendor, there could potentially be many project stakeholders outside of the organization that is performing the project work.

Stakeholders may possess differing levels of authority and as such, they may be in position to exert influence over your project and its deliverables. For example, a divisional executive and a technical expert may both represent valuable stakeholders to a project but their ability to influence the project may vary significantly.



It is essential to project success that you identify stakeholders early on in the project and that their interests and influence over the project be carefully considered to avoid disrupting project work.

Developing the Stakeholder List

Video Commentary

The Stakeholder List

Richard Maltzman

Why do you need a stakeholder list? The number one job of a project practitioner is the conductor or—as I've said earlier—the animator of a project. Think of the stakeholder list as: a list of instruments, the players, the songs you'll play, the types of attendees, and the people sponsoring the concert. You can see how that will be important to your deliverable—the music, right?. The same thing for a project. It's absolutely critical to know about anyone who contributes to the project or is affected in any way by the project or its result.

Rich Maltzman, PMP®, is the Learning and Professional Advancement Leader at a major telecom supplier. A contributor to the *PMBOK® Guide*, 4th Edition, he has co-authored PMP® Exam study guides. He is co-founder at EarthPM, LLC, and along with co-founder David Shirley, PMP®, has authored the book, *Green Project Management: Planet, Projects, Profits, and People*, published in September 2010. He received a BSEE from the University of Massachusetts in Amherst and has a graduate degree in industrial engineering from Purdue University.

To run a project effectively, you must identify key stakeholders and consider their impact on the project. If you do not identify and consult with a high-power/high-interest stakeholder early in the process, you may be forced to respond to potentially project-changing suggestions late in the process, threatening project delays and budgetary overages. Not adequately identifying and managing negative stakeholders (who may benefit from the project's failures) may also endanger the project.

For this reason it is especially important to develop a project stakeholder list that includes any and all of these important individuals. By identifying project stakeholders, you will then be in a position to design an effective strategy for involving them in ways that maximizes positive benefits and minimizes conflict that could derail project progress.

Stakeholder lists may vary greatly in the information they contain but, at a minimum, they should include the following information:

- the names of project stakeholders
- their roles in the project or organization
- their interest in the project
- their power or ability to affect project work
- a classification that shows whether they support the project, are neutral about the project, or oppose the project

This information is often compiled into a table like the one below:

Name	Role	Interest	Power	Classification
Roman Whyte	Project Sponsor	High	High	Supports project
Marian Martinez	Chief Financial Officer	Low	High	Neutral
Joyce Samuel	Project Team Member	High	Medium	Supports project
Gerald Washburn	Local Government Official	High	Medium-High	Opposes project

By placing this important information into a table, you'll provide project participants with a quick and easy reference that they can use to access information.

Managing Stakeholders

The number of stakeholders on a project may vary (depending on the size or scope of the project), but most projects will have a large number of stakeholders. Because your time as a project practitioner is limited and must be used as efficiently as possible, classifying stakeholders according to their level of interest, influence, and involvement on the project will help you keep essential stakeholder relationships in focus and allow you to treat similar stakeholders in a similar fashion to help ensure project success.

Be sure to closely monitor those stakeholders who have significant power; keep them informed to avoid surprising them with unexpected results. Their influence and power give them a significant ability to help your project succeed—or fail—if they are not

handled appropriately.

To avoid interruptions by individuals who are looking for project information, make sure that you keep highly interested stakeholders updated on project work, preferably with documents, reports, and visual displays that they can access directly without bothering team members. Providing information that interested stakeholders can access independently gives them the data they are looking for without interrupting project work.

And consider recruiting those stakeholders who support the project to help you interact with stakeholders who oppose the project. Stakeholders who support your work can be valuable allies to help offset those who may oppose the project.

Also remember to review your stakeholder list periodically throughout the project so that you can adjust to any changes that occur. New stakeholders may appear or the status of existing stakeholders may change, which may necessitate new actions on your part.

To assist you in managing your own projects, we have made [a stakeholder list template](#) available for you to download.

2.09.1 Exercise: Using the Stakeholder List to Plan Engagement Strategies

This assignment does not contain any printable content.

2.10 The Milestone Chart

The Milestone Chart

A milestone chart is a high-level chart that shows the completion of project activities or product increments. The milestones on the chart show clearly marked project points where activities have been carried out or a part of a product or deliverable has been completed.

Customers and external stakeholders make decisions based on summary information, making the milestone chart a very effective tool. Because milestones show the completion of important project segments or amounts of work, they help summarize important project activities and events. As the project manager, you can use milestones and milestone charts to show project progress to customers and external stakeholders in a way that leaves out the details that they do not need (or want) to know about.

In addition, milestone charts enable a team to review project progress to determine if the project is proceeding as planned or if changes need to be made.

Video Commentary

Communication and the Milestone Chart

Richard Maltzman

Why is it sometimes better to use a milestone chart instead of a more detailed Gantt chart or schedule to show project progress to certain stakeholders? Well, a milestone chart brings just the right amount of detail to the stakeholders with whom a lot of detail would be boring or dangerous--boring for a technical contributor, for example, and dangerous for a senior manager who would use that information, perhaps, to micromanage your project. So a milestone chart provides just the right information at just the right time.

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Developing the Milestone Chart

Milestone charts are simple tables that list the activities (or product increments) to be completed and the completion dates for those activities or increments. The chart uses "empty" diamonds to mark the expected completion dates, and "filled" diamonds to show actual completion dates—the diamonds are placed into columns to graphically show the expected and actual completion times.

If an activity (or increment) is completed as expected, the empty diamond is replaced by a filled one. If the actual completion date differs from the expected completion date, both diamonds appear on the chart to show that a discrepancy exists.

Activity	Activity Name	Expected Completion Date	1 st Quarter			2 nd Quarter			3 rd Quarter		
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Design body	Feb 4		◆							
2	Build engine	Feb 27		◆							
3	Install tires	May 19					◇	◆			
4	Install engine	Jul 22							◇	◆	
5	Select color	Aug 15								◇	
◇ = Expected Milestone Completion Date ◆ = Actual Milestone Completion Date											

Milestone Charts and Interdependencies

Keep in mind that a milestone chart does not show dependencies between the different activities or pieces of the final project deliverable; the chart simply lists the individual activities and the completion dates for each activity.

Activities in subsequent rows of the milestone chart may be related but they may not be. (The interdependencies will be shown in the network diagram that you'll create in the project's Planning stage.) For example, look at the milestone chart in the example above. The chart shows the activities "Build engine," "Design body," "Install engine," "Install tires," and "Select colors." These activities *may* be interdependent (you can't install an engine until after you build it) but they don't *have to be* (you don't need to build the engine before you install the tires).

The chart doesn't indicate whether certain pieces need to happen before, after, or maybe at the same time as other events—it just lists the activities that need to be done.

2.10.1 Exercise: The Milestone Chart Crossword Puzzle

This assignment does not contain any printable content.

2.11 Capstone Case Study: Initiating

This assignment does not contain any printable content.

2.11.1 Capstone Case Study 1: Creating the Project Charter

This assignment does not contain any printable content.

2.11.2 Capstone Case Study II: Identifying and Communicating with Stakeholders

This assignment does not contain any printable content.

2.11.3 Capstone Case Study III: Communicating Progress with a Milestone Chart

This assignment does not contain any printable content.

2.12 Discussion Board

This assignment does not contain any printable content.

2.13 Journal

This assignment does not contain any printable content.

Module Feedback

This assignment does not contain any printable content.