A Project Sponsor's Warp-Speed Guide:
Improving project performance

Appendix G – Project management plan table of contents

This appendix contains a table of contents for a project management plan with a brief statement of the content for each item. You can compare this table of contents to the one your team has prepared to help you confirm that your project management plan is reasonably complete.

The team prepares the project management plan in the planning phase after the project charter has been approved. The purpose of the project management plan is to:

1. Elaborate on the contents of the project charter[1].

2. Reconfirm the project characteristics with the project steering committee and the stakeholders.

3. Guide the work of the team.

A project management plan contains detailed instructions on executing, managing and controlling the project. It's the go-to resource to answer questions like "how should we…?" or "what's the plan for…?"

 If your organization doesn't own a template for a project management plan, use the one in this Appendix. A Google search for templates and examples is an excellent idea source when developing this document.

---

[1] The project management plan does not simply repeat the contents of the project charter.

Document change control

This section lists the versions of the project management plan with a brief statement of the changes made to create each version.

Executive Summary

This section summarizes the content of the project management plan for presentation to senior management.

The executive summary is an overview of the project management plan, not an overview of the project. A few sentences describe the project within the executive summary.

Project introduction

This section:

1. Introduces the project and the content of the project management plan.
2. States that the project management plan elaborates on many of the topics first introduced in the project charter.

Project benefits

This section describes detailed estimates of tangible benefits and related assumptions. It also describes the intangible benefits the project's product will deliver to the organization.

This section also describes how the benefits realization will be monitored for reporting to the steering committee and stakeholders.

Project budget

The budget's main element is a detailed budget table. It will also describe how funds are allocated and reported in this project. The budget must be aligned with the fiscal year-end of your organization. This alignment is especially important if your project extends over more than one fiscal year. Will there be significant upfront costs? Do some products or services need to be paid for well before delivery?

The project budget table should include these costs that are often missed:

1. A contingency reserve amount to cover the following:

    a. Cost of underestimated task effort.

    b. Cost of mitigating high-likelihood and high-impact risks.

2. A management reserve amount to cover unanticipated costs caused by events such as strikes, weather or material shortages.

3. An allowance amount to anticipate the cost of inevitable change orders.

[Begin Boxed Text]

Over budget again?

The many references you hear in the media about high-profile projects completing materially over budget are often due to one or more of the following situations:

1. The team has been bludgeoned into accepting a lower initial budget than they proposed. Municipal infrastructure projects, like light rail transit, roads and bridges, often experience this.

2. Project stakeholders experience difficulties reaching a consensus on the crucial scope and design aspects. The delay creates rework and elongates the project schedule. The Sydney Opera House and the infrastructure for various Olympics are examples.

3. The project is, in reality, a research and development project while not being budgeted and managed as such. The Space Shuttle was an example of this. Similarly, the schedule was set for the Apollo moonshot long before even the outline of the technical methodology was determined. Fortunately for the Apollo project, the budget was almost unlimited.

The project sponsor and the project manager set themselves and the project up for failure when they fail to recognize the project's characteristics and budget appropriately. An unrecognized research and development project eventually reveals itself through an incredibly long list of risks and unknowns.

Figure 0-1 Approving unrealistic project budgets

Project schedule

The schedule's most crucial element is a detailed Gantt chart for your project that illustrates project phases, deliverables, and tasks. It also shows timelines, deliverable interdependencies, and milestones.

The schedule also describes when the project:

1. Becomes dependent on other projects that must complete first.
2. Must complete so as not to delay other projects starting.

It will also define workdays, shifts, holidays and information about how the schedule will be controlled.

> Long, multi-week taskbars tend to measure elapsed time rather than effort. Therefore, you can only have low confidence in project schedules with long taskbars on the Gantt chart. Instead, plan based on estimated effort. That will create shorter taskbars that increase confidence in project schedules.

Project scope

What are the scope elements that the project is expected to address? This section describes the major elements of the project scope. The requirements elaborate on the project scope elements.

One summer, Yogi and daughter Claire drove the Mormon Pioneer National Historic Trail from Nauvoo, Illinois, to Devil's Gate, Wyoming.

The detailed National Park Service guide defines the scope of this trip unusually well. It contains many small maps and directions to all the points of interest across four states. As a result, we laid out an exact schedule for the trip and were never lost.

Unfortunately, there's no such guide for your project. If your project goal is to complete a well-understood product such as constructing a warehouse, building a standard highway overpass or implementing a widely used software package, incorporate the prior experience into your scope statement and project plan. If your project is a greenfield endeavour, be careful about letting enthusiasm or hubris accept a fuzzy scope statement that leads to an underestimate.

Figure 0-2 Accepting a fuzzy project scope statement

Requirements overview

What are the requirements that the project is expected to address? The list of requirements is the basis for the deliverables shown in the detailed project plan.

It's easy to confuse deliverable or project requirements with acceptance criteria. Deliverable requirements describe the features and functions requested by the client and other stakeholders. Acceptance criteria determine if those requirements have been met. An example function is the ability to maintain an address history for customers. The related acceptance criteria are the presence of a screen to maintain an address history, the ability to correct errors in the history, and automatically adding the current address to the history when the customer offers a new one.

Acceptance criteria list agreed-upon metrics that mean the deliverable or project is complete if met. Acceptance criteria are binary. The deliverable has met the criteria or not. If the team starts to debate whether or not a deliverable meets the acceptance criteria, the default answer is always "No," and more work is required.

Detailed project plan

This section contains the following:

1. Project work breakdown structure (WBS) that typically consists of phases, deliverables, and tasks. See Appendix J – Work breakdown structure (WBS) for a more extensive discussion.

2. Descriptions of the planned phases[2], deliverables, and tasks required to produce the project's product.

3. Tasks with descriptions, effort estimates and assigned team members for all deliverables.

4. Deliverable precedence relationships.

---

[2] A quick way to check if a detailed project plan is complete is to ensure all the project phases listed in Appendix E – Phases of projects are described in considerable detail.

Project planning, including effort estimating and team member allocation, is hard work and can seem like a tedious distraction from just getting on with it. More thorough planning always pays off in quality and improved project performance.

Most post-project reviews include an observation that more planning would have reduced the schedule and cost variance experienced by the project.

Project constraints

What constraints must the project operate under? Common constraints are:

1. The effective date of a new or revised regulatory regime.

2. Available budget.

3. Available staff.

4. The need to operate a safe work environment.

5. Weather and season considerations that affect outside work.

6. Dimension and capacity limitations of manufacturing facilities.

Describe the interconnections between the product that the project will deliver and the:

1. Other products and services.

2. Internal facilities and external vendor components.

3. Supporting resources such as the IT department and external services vendors.

Project assumptions

This section describes assumptions about topics including:

1. Definitions of deliverables.

2. Regulatory approvals.

3. Partner approval or participation.

4. Resource availability.

5. Availability of intellectual property, specialty components or facilities.

6. Definition of quality.

7. Technology maturity or lack thereof.

8. Component integration.

Risk management plan

The plan describes how risks will be identified, owned, managed, reviewed, and mitigated throughout the project's life. The risk identification topic earlier in the book shows a list of specific risk categories.

The plan also describes how the initial risks listed in the project charter will be addressed.

The evolving world of risks. Before the 9/11 terrorist attack, one couldn't buy an insurance policy covering the risk of terrorist attacks. Now, in a post-9/11 world, terrorist attack insurance is easily accessible. The same situation is now emerging for pandemic insurance. Before COVID-19, pandemic insurance was not available. Industry experts expect pandemic insurance to follow the same trend as terrorist attack insurance and become more broadly available.

These unusual, high-impact events illustrate that it's impossible to identify every possible risk to a project. But that reality shouldn't stop your team from doing as thorough a job as possible in their risk identification tasks.

Project success factors

This section elaborates on the project success factors listed in the project charter. What factors will contribute materially to the project's success? Such success factors often include:

1. Adequate team members in terms of number and experience.

2. Sufficient expertise and experience with the likely technology.

3. Contractors that can deliver products and services on time and specification.

Communication plan

How will communication take place throughout the project? Items like frequency, content, communication channels and ownership of communication tasks are listed. The plan recognizes that different audiences require different levels of detail and prefer particular communication channels.

Stakeholder management plan

How will project stakeholders be identified, communicated with, and involved in the project? This section describes the roles of stakeholder groups or departments. Stakeholders are typically represented through membership on the project steering committee.

The stakeholder and communication management plans will overlap in some areas.

Quality management plan

What does quality mean for this project? This section describes how the team will manage QA and QC in this project.

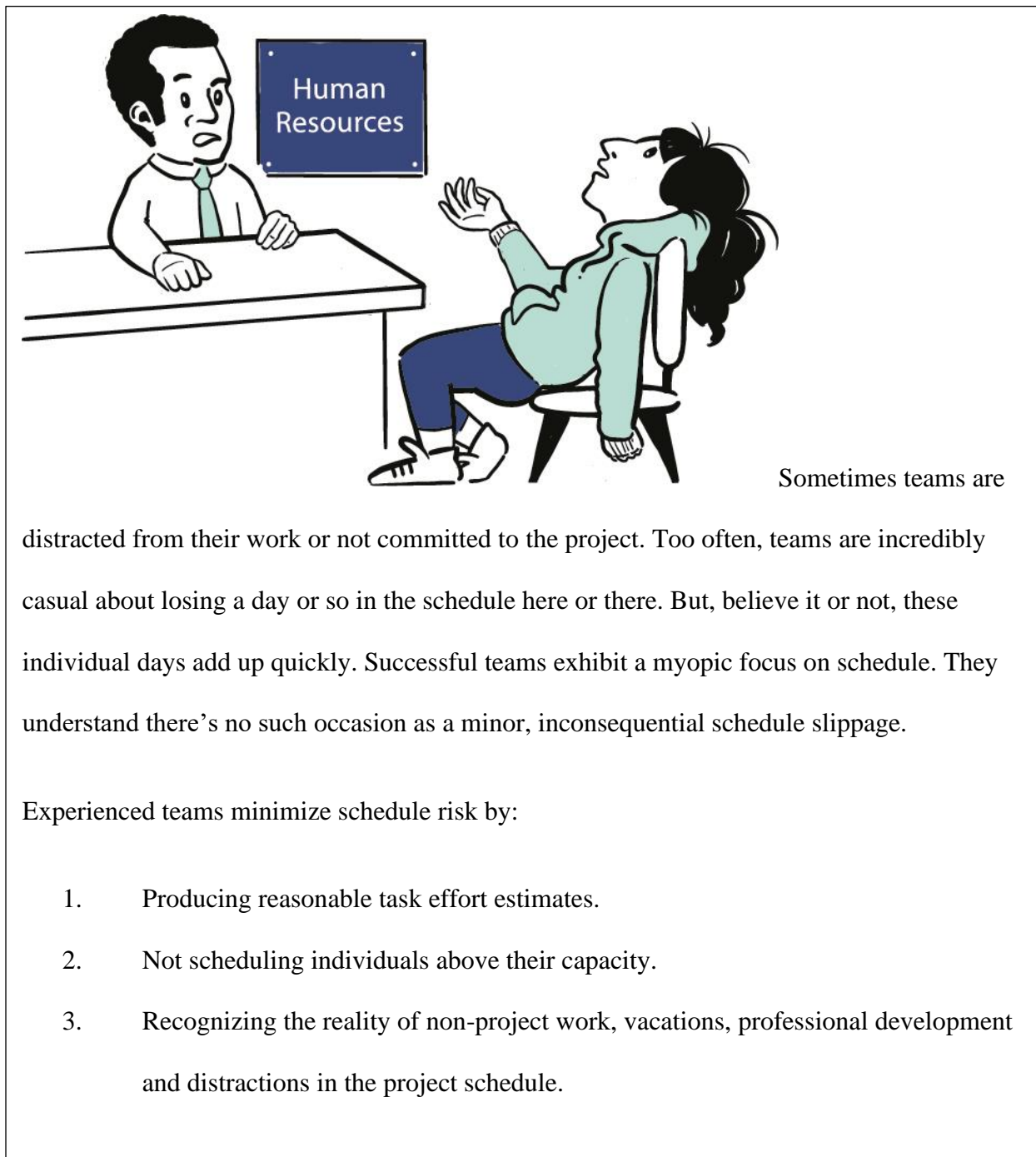> What's the difference between QC and QA? Quality control is performed during tasks to maintain quality. Quality Assurance is conducted when a deliverable is deemed complete and may occur between tasks to confirm adequate quality.

Resource management plan

This section defines how people and materials will be used throughout the project. Resources management and schedule management will have some overlap.

How does a project become a year late? One day at a time

Sometimes teams are distracted from their work or not committed to the project. Too often, teams are incredibly casual about losing a day or so in the schedule here or there. But, believe it or not, these individual days add up quickly. Successful teams exhibit a myopic focus on schedule. They understand there's no such occasion as a minor, inconsequential schedule slippage.

Experienced teams minimize schedule risk by:

1. Producing reasonable task effort estimates.

2. Not scheduling individuals above their capacity.

3. Recognizing the reality of non-project work, vacations, professional development and distractions in the project schedule.

Figure 0-3 Focusing the team on the project schedule

Scope management plan

How will the scope be managed? What is the process for describing the scope and monitoring the project work to avoid scope creep?

Change control plan

Project change will happen. Who holds the authority to submit, review, and approve change requests? Are there special considerations for change requests that affect the final deliverable versus change requests that affect project management functions?

Procurement management plan

Are there any special considerations for buying stuff, renting things, or hiring people? This plan will be essential in large construction projects where you must source diverse materials. This plan is less critical for projects that only use internal resources.

Unique requirements

Are there any unique or highly specialized skills, resources, services, or subcontractors required to produce the project's product? Sometimes projects require new or emerging technologies or must navigate delicate political situations. Typically, unique requirements can only be fulfilled by one or two individuals or vendors. These situations add to project risk.