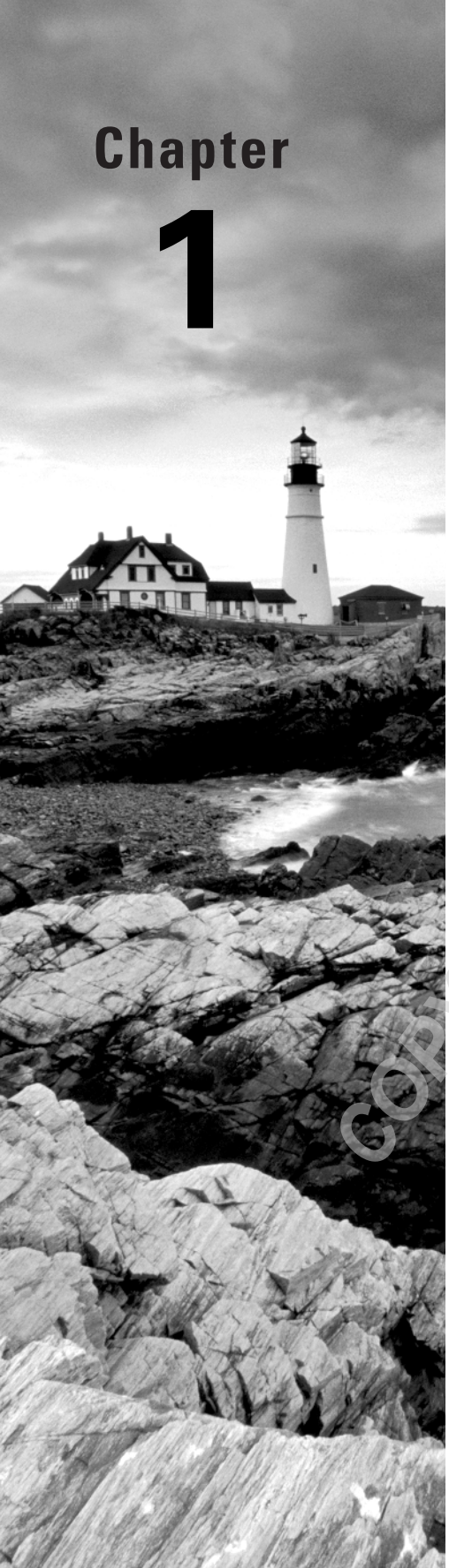


Chapter 1

Overview of PRINCE2

PRINCE2 FOUNDATION EXAM OBJECTIVES COVERED IN THIS CHAPTER:

✓ **Recall:**

- The definition and characteristics of a project
- The six aspects of project performance to be managed
- The integrated elements of PRINCE2: principles, themes, processes and the project environment
- What makes a project a PRINCE2 project

✓ **Describe:**

- The features and benefits of PRINCE2
- The customer/supplier context on which PRINCE2 is based, including considerations when undertaking projects in a commercial environment

✓ **Explain the PRINCE2 principles:**

- Continued business justification
- Learn from experience
- Defined roles and responsibilities
- Manage by stages
- Manage by exception
- Focus on products
- Tailor to suit the project

✓ **Explain which aspects of a project can be tailored, who is responsible, and how tailoring decisions are documented.**

✓ **Analyze the application of PRINCE2 principles in context:**

- Continued business justification
- Learn from experience
- Defined roles and responsibilities
- Manage by stages
- Manage by exception
- Focus on products
- Tailor to suit the project

This is a really important chapter—it sets out the overall framework of PRINCE2. You learn about the main components of the PRINCE2 model and how they all fit together. Each section of PRINCE2 often has many relationships with other parts of the methodology, so the first step in learning the approach is to understand how the structure links together. Then when I discuss a particular PRINCE2 topic, you will see how it fits into the model.

I also introduce some of the main PRINCE2 terms. You have quite a lot of terminology to learn! You might need to do some translation between the project management vocabulary you are familiar with and the PRINCE2 terms.

PRINCE2 is a management method that is used in project situations. In this chapter, you see how PRINCE2 defines a project and how it differs from "business as usual." I describe the main groups of project management activities as well as what needs to be achieved for a successful project.

The PRINCE2 model adheres to seven principles. I describe the details of these principles and show you why they contribute to successful project management.

There are many types of project situations that PRINCE2 can work within: A project might be small and simple, or large and complex; a project might involve people within only one organization or span many different commercial organizations; or a project might utilize different delivery methods, such as agile. To be successful, the project management team needs to adapt and tailor the methodology to work effectively within the environment they are faced with. In this chapter, I explain the more common situations that PRINCE2 can be adapted for and start to discuss how this tailoring is done.

Finally, I use an example project scenario to walk you through each step of a PRINCE2 project.

Project Work

In this section, you will see how PRINCE2 defines a project. This is important: Only project situations are managed with PRINCE2, so the first task is to understand whether a piece of work is a project or business as usual. You will then learn how PRINCE2 defines project management. Finally, you will see what objectives can be set for a project.

What Is a Project?

PRINCE2 is *only* used to manage projects. So the first step for a project manager is to ensure that the situation they are faced with is indeed a project. Sometimes, this is not so

easy. If an IT manager is asked to update a website, is that a project? If the update is quite small, the work might be considered a normal operational task. If it's a larger piece of work, then it might be treated as a project. At what point does the small update become too big to be business as usual?

The answer to this question relates to risk. An approach such as PRINCE2 provides a management framework that considerably increases the likelihood of project success. For small jobs, however, the framework might introduce a large and unnecessary management overhead. So deciding whether to treat a situation as a project is all about balancing the management overhead that would be introduced against such things as the decrease in the level of risk, the importance of the work, and the increase in the likelihood of success.

PRINCE2 defines a *project* as "a temporary organization that is created for the purpose of delivering one or more business products according to an agreed business case." The definition mentions a temporary organization. In PRINCE2, a group of people called the *project management team* comes together for the duration of the project. Business products are ones that will ultimately deliver some return for the organization running the project. Also note that the definition mentions a business case. PRINCE2 places a great deal of importance on the justification of the project. Anyone involved with the project should be able to justify why they are doing it.

The following characteristics of project work distinguish it from business as usual:

Change The organization will be different after the project. For example, if the project implements a new invoice-processing system, the finance department will be working in quite a different way after the project than it did before it.

Temporary Projects don't go on forever (although a few I've worked on have felt as if they have). They should have a start point and an end point. The end point occurs when the desired change has been implemented.

Cross-Functional *Cross-functional* projects often involve a collection of people drawn from many different sets of skills, different departments, and sometimes even different organizations. Often each group of people has different perspectives on the project and different motivations for getting involved. When these perspectives and motivations do not align, this can cause strain and sometimes conflict among the different groups.

Unique To some extent, all project work is unique. On the one extreme, the project could be completely unique, such as the 1960s Apollo missions to send a man to the moon. Alternatively, the project could be just slightly different from what has been done before. For example, the installation of a new version of office software might be similar to the installation of the last version; however, this time the software is a little different and maybe new people are involved.

Uncertainty The previous four characteristics introduce a great deal of uncertainty into project work. It is not quite clear how things will turn out. All sorts of unforeseen threats might occur. This uncertainty introduces a lot more risk compared with business as usual.

Real World Scenario

Cross-Functional Aspect of Project Work

My consultancy was involved in a project that was a good example of one with cross-functional characteristics. The project's objective was to install a new Internet system in a UK government education department. The site was to hold examination syllabus information for the various national curriculums. Within the government department, two main divisions were involved: the IT division and an information division. There were also a number of senior managers. The website was being built by a third-party software house. The teaching unions were represented because they needed to specify their informational requirements. There was a government quality assurance group who audited the project to ensure it met UK government standards. We all came from different backgrounds, saw the project with different perspectives, and had our own way of working. All these parties had to come together and work as a unified team on a temporary basis. They did, and the project was a success, although at times it was difficult. The key was to pay particular attention to how we all communicated with each other throughout the project. I talk about how PRINCE2 meets this challenge in Chapter 3, "Organization Theme."

What Is Business as Usual?

PRINCE2 is not used to manage situations that could be regarded as *business as usual*. Business as usual is any work that is part of an organization's normal operations—for example, supporting a company's IT systems, cleaning the rooms of a hotel, or running a call center. It has no predefined end. It usually involves people from the same area of the business and doesn't introduce any major change into the organization. It isn't unique—what was done last week is pretty much what will be done next week. Therefore, far less uncertainty exists regarding the work.

Project work often leads to business-as-usual work. For example, if there is a project to build a hotel, once that hotel opens, there will be a lot of business-as-usual work. This normal operational work might consist of a range of activities, including supporting the hotel's IT systems, manning the reception desk, dealing with clients' queries, running the restaurant, and so on.

What Is Project Management?

There are four main areas of *project management*: plan, delegate, monitor, and control. The four areas ensure that the specialist work of the project is co-coordinated in an effective way so as to deliver what is required within certain constraints, such as budgets and delivery dates. For example, if the project is to build a hotel, it ensures that all the hundreds

of tasks, people, and resources work together to produce a hotel of the right quality. Following are some brief descriptions of each area of project management:

Plan The first area is to plan what needs to be created and how this will be done. This ensures that all the work is coordinated effectively. In the hotel example, it stops situations such as the painters arriving on site before the builders have finished building the hotel walls.

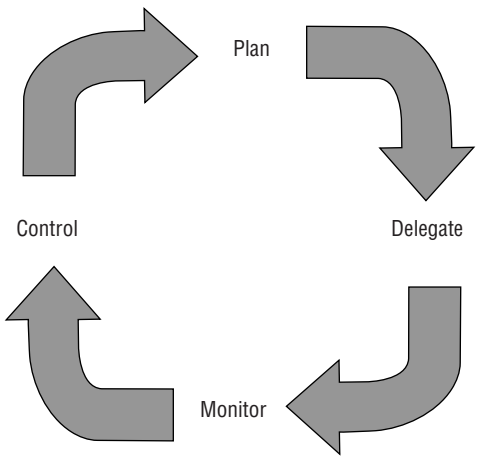
Delegate Effective delegation by the project manager ensures that the right people do the right work at the right time. When delegating, the project manager must communicate all the information that the person doing the work needs to know, such as what to create, how much time they have, what budget that have, how often to report progress, and so on. (In PRINCE2, the project manager uses work packages to delegate work—more on this in Chapter 10, "Managing the Middle of a Project Successfully with PRINCE2.")

Monitor It would be a naïve project manager who believes that once the work has been delegated, it will all be completed to plan. The project manager needs to constantly monitor the ongoing progress of the project, spotting problems that might delay things as well as opportunities to move the project forward.

Control Through the previous three areas, project management exerts *control* over the project. It controls all the work of all the people involved. It ensures the right activities occur at the right time to create the right products. Control is also about taking corrective action when the project looks like it will go off course.

Figure 1.1 shows the four areas of project management in a wheel, to signify that they will need to be done again and again throughout a project.

FIGURE 1.1 Project management



Measuring the Performance of a Project

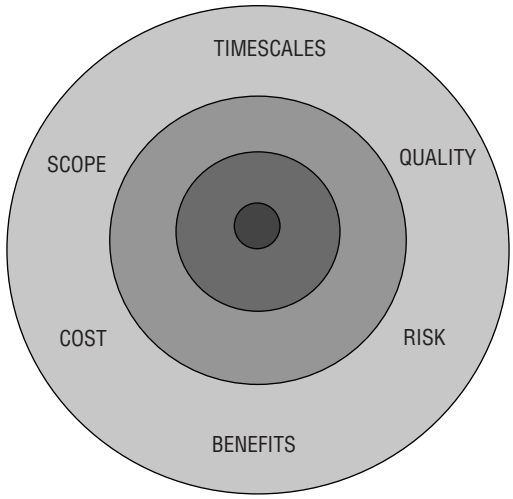
A project's performance can be measured in six areas:

- How much money it spends; this relates to a project's costs.
- How ahead or behind schedule it is; this relates to a project's timescales.
- How well the project's products meet the required specification; this relates to a project's quality.
- How many of the required products have been delivered and whether any products have been delivered that were not asked for; this relates to a project's scope.
- How much uncertainty the project has that might lead to the project being negatively impacted; this relates to the level of project risk.
- How much value a project has delivered to the organization either during or after the project; this relates to a project's benefits. This is the most important performance objective because the ultimate point of any project—its raison d'être—is to deliver benefits.

It may be not possible to judge how well a project has performed against its benefits' targets until sometime after the initiative has finished. For example, if the project were to build a website to sell a company's products, online sales can't be measured until after the website has been launched.

Figure 1.2 shows these six different areas. PRINCE2 calls these areas the six aspects of project performance that need to be managed.

FIGURE 1.2 Six aspects of project performance



Real World Scenario

The Six Aspects of Performance for the London Crossrail Project

How do the six aspects of performance relate to a real project? I will use a project from London in the UK as an example. (Sharp-eyed readers might challenge me on calling Crossrail a project and tell me it would probably be classed as a programme. You are right, but let's pretend it's a project for now since it will help me explain the six aspects of project performance.) The London Crossrail project is a major initiative to upgrade the rail infrastructure of the capital. The project is building two enormous rail tunnels that will stretch across London from east to west. The new railway will link up to the existing network and provide much-needed new train capacity for the busy capital. After it has been built, travellers will be able to take a train nonstop from Heathrow (London's main airport in the west of the city) to Canary Wharf (the capital's major financial centre in the east of the city), thereby substantially cutting down commute times.

Will the project be successful? To answer that question, you need to consider the project's performance against the six aspects of project performance: cost, time, scope, quality, risk, and benefits. First, there is the cost aspect. The budget was £15 billion and, at the time of this writing, the project looks like it will deliver the system within budget. Second, the first trains are scheduled to run in 2019. Once again, at the time of writing, it looks likely that this target will be hit.

The scope of the project contains all the different products that need to be delivered, including the trains, tunnels, new stations, staff uniforms, and so on. Closely linked to the scope objective is the quality objective. In PRINCE2, a quality product is one that will be fit for its purpose. For example, a train in the Crossrail project will be fit for purpose if it can reach the right speed, have the right number of seats, be able to run without any breakdowns for the right amount of time, and so on. Before the product is created, the project management team needs to define what characteristics will make it fit for purpose. Then once it has been created, the product needs to be quality-checked to ensure it is indeed fit for purpose. At the time of writing, it looks like the Crossrail project will be able to deliver a full scope of quality products.

For any project, risk is involved. The commissioning organization will need to identify the major risks to the project, establish to what extent the risks can be mitigated, and decide whether they are comfortable with the risk situation. One key risk for the Crossrail project was that the tunnel might cause instability above ground and damage some of London's key buildings. The project management team devised an effective way to respond to this risk. Any key building above the path of the tunnel was rigged up with a laser-measuring device. The device could detect if the building has moved by the tiniest amount. If this occurred, the team could dig a shaft near the building and then inject a concrete-like substance called grout into the ground under the building that, when set, would stop any further movement.

The final aspect of project performance is benefits. The business case for the Crossrail project highlights a whole range of benefits. For example, during construction, the project has helped support 55,000 jobs, both within the project team itself and throughout the supply chain of companies that have provided products and services for the project. Once the project has finished, it will add approximately 10-percent extra capacity to London's rail network and help to increase the appeal of London as a global capital of business, culture, and tourism. Whether the project will hit all its targets for benefits remains to be seen. It has certainly delivered on the target of supporting jobs across the capital, but the post-project benefits will need to be measured over a period of time after the project has completed.

Introducing PRINCE2

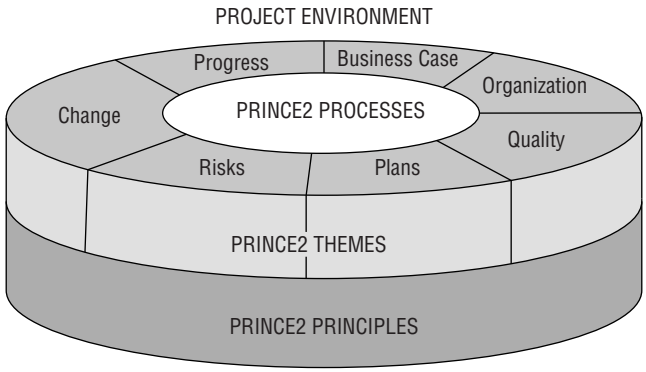
The previous section looked at projects. I explained that project work involves a lot of uncertainty and risk. When a project is started, it can be difficult to see ahead, to know what to do next. Where PRINCE2 helps is that it says no matter what project you are involved with, certain steps must be carried out to ensure success. Many of these steps are just common sense. For example, at the outset of all projects, those involved should agree on its objectives. Then at the end of the project, everyone should meet again to decide whether the objectives have been met. Another set of commonsense steps is that all projects should involve those who will ultimately use the project products, so that they can define what they require and later can verify that the products that have been created are fit for their purpose. There are many other commonalities in how all projects are managed, such as general approaches to managing areas like risks, changes, quality, and communication.

The PRINCE2 model combines all these commonsense ideas about managing projects. It gives a range of processes with steps to ensure the right management activities are done, defines roles to ensure the right people take responsibility for doing the steps, and suggests a range of management documents to hold and report on useful management information. It supports everyone on the project to follow these commonsense ideas by appointing assurance roles, which checks whether the steps are being followed.

The Structure of PRINCE2

PRINCE2 is made up of four main parts, or what PRINCE2 refers to as *integrated elements*. These are the *principles*, the *themes*, the *processes*, and the *project environment*. These integrated elements are shown in Figure 1.3.

FIGURE 1.3 The structure of PRINCE2



The Principles

The first integrated element of PRINCE2 is the principles. You can think of these as the core concepts that the rest of PRINCE2 adheres to. If a project management team is not practicing all of the principles, it is not a PRINCE2 project. There are seven PRINCE2 principles, which are described in detail later in this chapter. An example is "learn from experience," which means (rather obviously) that before anything is done to manage a project, it is always worth considering any prior experience that might be useful.

The Processes

The second integrated element of PRINCE2 is the seven processes, all of which provide a set of activities showing how to manage various parts of a project. The processes cover the management work from the time just before the project starts (when the question is whether the project should be done) to the end of the project. The processes show which roles should be responsible for each activity and which management documents (such as plans or reports) would be useful to create, review, or update at this time.

Each process covers a specific time during the project. For example, the starting up a project process gives six activities that should be considered for a successful start to a project. The closing a project process, as the name suggests, covers the management activities that need to take place at the end of the project.

I describe the seven PRINCE2 processes in more detail in the "An End-to-End Walk-Through of PRINCE2" section later in this chapter. In the meantime, here's a brief overview of each process:

Starting Up a Project *Starting up a project* covers the activities you use to investigate whether to start the project. I describe this process in detail in Chapter 2, "Starting a Project Successfully with PRINCE2."

Directing a Project *Directing a project* covers the activities of the *project board*, which is the main decision-making body on a PRINCE2 project. It includes making decisions such

as whether the project should start, whether to move on to the next stage of the project, and whether the project can close. I describe this process in detail in Chapter 2, Chapter 10, "Managing the Middle of a Project Successfully with PRINCE2", and Chapter 11, "Managing the End of a Project Successfully with PRINCE2."

Initiating a Project *Initiating a project* covers the planning activities done at the beginning of the project. I describe this process in detail in Chapter 2.

Controlling a Stage *Controlling a stage* covers the project manager's day-to-day work, such as delegating work, reporting, and dealing with issues and risks. I describe this process in detail in Chapter 10.

Managing Product Delivery *Managing product delivery* covers the day-to-day work of the people creating products in the project. The activities detail accepting work, creating it, reporting progress, and delivering work. I describe this process in detail in Chapter 10.

Managing a Stage Boundary *Managing a stage boundary* covers the work of the project manager at the end of a major part or stage of the project. It involves activities such as reporting on the achievements in the last stage and detailed planning for the next stage. I describe this process in detail in Chapter 10.

Closing a Project *Closing a project* covers the work that the project manager does to prepare for the end of the project. It involves work such as preparing the end project report, handing the products to the operational teams, and archiving project documents. I describe this process in detail in Chapter 11.

The Themes

The third integrated element of PRINCE2 is the themes. The themes describe how PRINCE2 recommends carrying out various aspects of project management. The risk theme, for example, describes how PRINCE2 recommends managing risk throughout a project, and the organization theme describes how PRINCE2 recommends defining the project management team's roles and responsibilities.

Each of these themes may be useful throughout all the processes. For example, the risk management approach described in the risk theme is used in all the processes. And any one process may use numerous themes. For example, in the starting up a project process, the project management team is appointed (the organization structure and the accompanying roles are described in the organization theme), risks for the project will need to be identified (risk identification and estimation approaches are described in the risk theme), and the outline business case is created (the composition of the business case is described in the business case theme).

There are seven themes in PRINCE2, and this study guide has a chapter explaining each one. Here's a brief overview of each theme:

Business Case The *business case theme* describes how to ensure the project has a solid justifiable reason to exist, not just at the outset of the project, but throughout its life. It shows how to create a business case and how to plan the tracking of the project's benefits using a benefits management approach. It sets out various activities related to justifying the project and shows which roles should be responsible for them. I describe this theme in detail in Chapter 4, "Business Case Theme."

Organization The *organization theme* defines the project management team structure. It describes the various roles within the structure and sets out their responsibilities. I describe this theme in detail in Chapter 3, "Organization Theme."

Quality The *quality theme* describes how to ensure that the project's products are fit for the purpose for which they will be used. I describe this theme in detail in Chapter 6, "Quality Theme."

Plans The *plans theme* describes how to plan which products to create and which activities are needed to build those products. I describe this theme in detail in Chapter 5, "Plans Theme."

Risk The *risk theme* describes how to manage potential threats and opportunities to the project. I describe this theme in detail in Chapter 7, "Risk Theme."

Change The *change theme* describes how to control and manage changes to the project's products. I describe this theme in detail in Chapter 8, "Change Theme."

Progress The *progress theme* describes how to track the progress of a project, which mechanisms to use to keep the project on track, and what to do when things go astray. I describe this theme in detail in Chapter 9, "Progress Theme."

The Project Environment

The fourth integrated element of PRINCE2 is the project environment and how to tailor PRINCE2 to that situation.

There are many types of projects and many environments in which they might run. Examples include very large, complex initiatives, involving various organizations and running over many years, as well as much smaller activities, involving only a few people over a number of days. Every possible industry you could think of runs projects, each creating very different products or services. Some projects run in the private sector, others in the public sector, and still others in charities. Some projects use a variety of specialist approaches alongside PRINCE2, such as the one set out in the Project Management Institute's (PMI) *A Guide to the Project Management Body of Knowledge* (2017) or the agile approaches used in many different industries.

PRINCE2 can be applied to all of these types of situations for two reasons. First, as I discussed earlier in the chapter, no matter what type of project you are running, there will be a common set of management activities that need to be done, which are set out in PRINCE2. Second, the framework is flexible—that is, it can be tailored in many ways to suit the various situations described previously.

I look at tailoring PRINCE2 to the project environment in more detail in the section "Tailoring PRINCE2 to Different Project Types and Environments" later in this chapter.

Other Parts of PRINCE2

In addition to the four main integrated elements of PRINCE2 (processes, themes, principles, and the project environment), there are two other main parts to PRINCE2: the roles and the management products.

Exam Spotlight

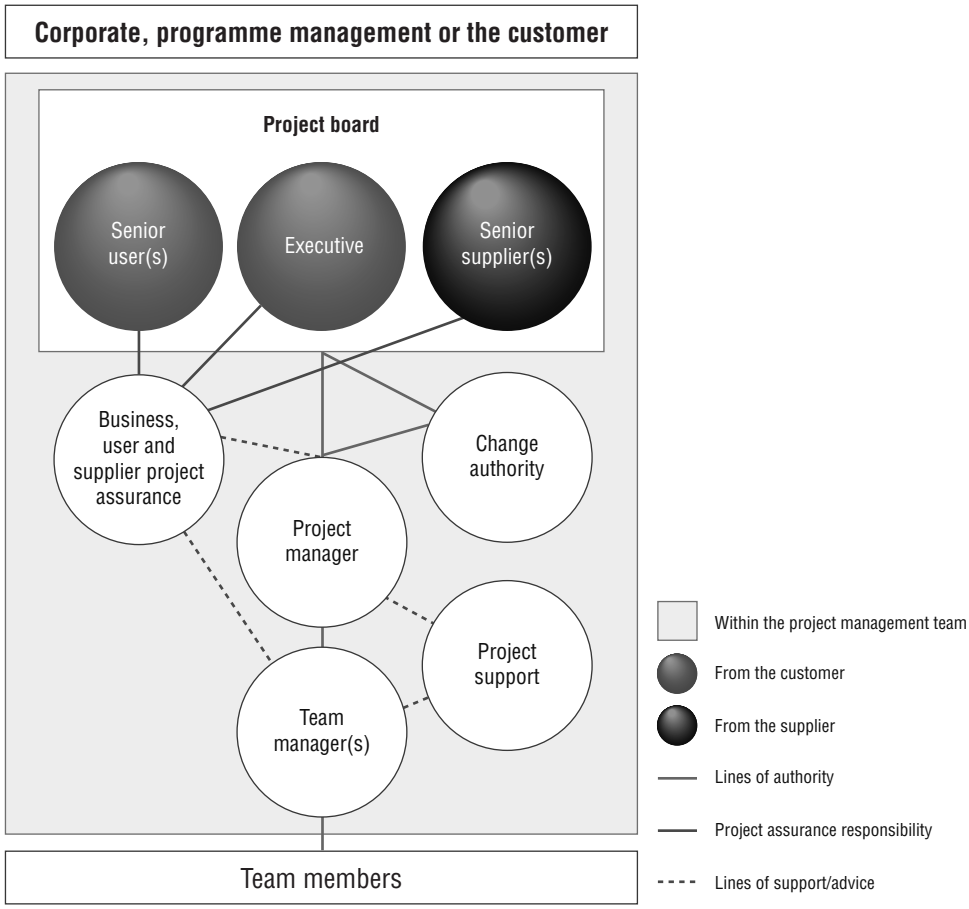
There are four integrated elements to PRINCE2: the principles, the themes, the processes, and the project environment. The roles and the management products are also important parts of the method, but PRINCE2 does not define them as integrated elements.

Roles

I discuss the PRINCE2 management roles in more detail in Chapter 3, but it is important to understand the basic details at this point.

PRINCE2 gives a recommended project management team structure. It looks like a company organization chart, as shown in Figure 1.4.

FIGURE 1.4 Project management team structure



The four levels of hierarchy in the PRINCE2 project management structure are as follows:

Corporate, Programme Management, or the Customer This level sits outside and above the project management team.

Directing Level The project board is responsible for this. It is the top level of the project management team.

Managing Level The project manager is responsible for this, the middle level of the project management team.

Delivering Level The team manager and their teams are responsible for this. It is the bottom level of the project management team.

At the top of the project organization structure is *corporate, programme management, or the customer.* (A *programme* is a collection of related projects being run in a coordinated way.) This consists of a rather ambiguous group of people. All we know about them is that they are "high up"—that is, they have enough authority to start a project. How "high up" they are in their organizations depends on the size of the project and how much authority is needed to start it. If it is a very large project, corporate, programme management, or the customer might be the board of directors of the company; if it is a smaller project, they may be the head of a department. It is important to note that they trigger the start of the PRINCE2 process model, but corporate, programme management, or the customer is *not* part of the project management team. All the management levels below corporate, programme management, or the customer, however, *are* part of the project management team.

Below corporate, programme management, or the customer in the project management structure is the directing level. The project board is responsible for this level. The project board is given authority for the overall direction and management of the project by corporate, programme management, or the customer. They are the main decision-making body on the project. They make key project decisions, such as whether the project should start, whether it should go on to its next major part, and finally, whether it is ready to close. They need to be high enough up in their own organization's hierarchy so as to have the authority to make these decisions.

A number of people make up the project board. Between them, they must represent three key perspectives on the project: the business perspective, the user perspective, and the supplier perspective.

The *business perspective* focuses on the returns the project will give their organization. For example, if the project were to build a hotel for a leisure company, the business perspective would be concerned with factors such as the potential sales of rooms. They also would be interested in how much investment would be needed to get those returns—in other words, what value they might get for their money. This business view is represented by the *executive* role. The executive sits on the project board. There is always *only* one executive, who is considered the leader of the project.

The *user perspective* focuses on how the project's products will be used post-project. This perspective is represented on the project board by the *senior user* role. In the hotel

example, the senior user role could be carried out by representatives of those who will stay in the hotel or who understand these travelers' needs, such as a tourist board or a market research person specializing in tourism. There might be a number of people on the project board who share the senior user role.

Finally, the *supplier perspective* focuses on creating the project's products. This is represented on the project board by the *senior supplier* role. In the hotel example, the senior supplier role could be taken by operational managers from architectural or construction firms. Like the senior user role, there might be a number of people who share the senior supplier role.

Below the project board in the project management structure is the managing level. It is the responsibility of the *project manager* to manage the project on a day-to-day basis and within the constraints set by the project board. There is only *one* project manager in a PRINCE2 project. This individual is responsible for planning the project, delegating work, reporting on the project's progress, managing risks and issues, and creating and updating the project management documents.

At the bottom of the project management structure is the delivering level. This is the responsibility of the *teams* that create the products of the project. In the hotel project, there could be teams of architects, builders, electricians, plumbers, and so on. In some cases, such as a small project, the project manager might manage the teams directly. In other, larger projects, the project manager might delegate work to several *team managers*, who, in turn, delegate work to the teams.

As illustrated earlier in Figure 1.4, there are several other roles, such as project assurance, change authority, and project support. I explain these roles in Chapter 3.

Management Products

Management products are things that help the project management team manage the project, such as plans, registers, logs, and reports. They are a means to an end, not the end itself. Although you might think of these items as management documents, PRINCE2 calls them *management products* because the management information could be communicated verbally. In fact, you could run a PRINCE2 project without any documents at all.

Examples of PRINCE2 management products include the *project plan*, which is used to track and monitor the work of the project; *product descriptions*, which help specify the products to be delivered; and the *risk register*, which contains information on all the identified risks to the project. There are 26 management products in all—you can find further information on each one throughout this study guide as well as in Appendix C, "Management Products in PRINCE2."

PRINCE2 defines three types of management products: baselines, records, and reports.

Baseline management products might go through a number of versions during the life of a project. If someone needs to make an update to a baseline management product, the amendments are made to a new version of the document. Then at the end of the project, the project team can review all the versions of the document (the latest and all the old ones) and see how the information has evolved. An example of a baseline management product is a plan.

Records are the registers and the logs that the project manager uses to record information on things such as risks, issues, and lessons. An example of a record is the issue register. As with all records, there is only one issue register document; new versions of the document are not made when it needs to be updated. The updates are just added to the bottom of the register as a new line.

Reports are … well, reports. They are the progress reports that are sent during the project to update various people of the latest situation on the project. An example of a report is the highlight report that the project manager sends to the project board on a regular basis.

Specialist Products

In addition to the management products, there is another type of product called *specialist products*. These are the deliverables from the project. A project to build a hotel, for example, has numerous deliverables, such as the architectural plans, the rooms, the furniture, the swimming pool, and a hotel brochure, to name a few.

What PRINCE2 Does Not Cover

A whole range of skills and approaches are needed to manage projects successfully. PRINCE2 by no means covers them all. It does not focus on any specialist techniques that might be needed in specific industries, such as an IT project as opposed to a construction project. The framework does not provide all of the specific project management techniques that might be used, such as stakeholder analysis, critical path analysis, or risk identification techniques. An organization can use its own recommended techniques alongside PRINCE2. In some cases, PRINCE2 explains and recommends using certain techniques (for example, the risk management procedure), but an alternative approach can be used as long as it meets the requirements set out in PRINCE2. It also does not cover motivational approaches, team building, or leadership development.

Benefits of Using PRINCE2

The benefits of using PRINCE2 to manage a project include the following:

- The ideas in PRINCE2 have been developed over many years and tested successfully on many types of projects. It is highly likely that any project will benefit from these ideas, and organizations that adopt the method as a standard can improve their project management capability.
- PRINCE2 has been designed to be used on any type of project in any type of industry. It focuses on the management activities that are common to all projects rather than how to do specialist work that would be particular to one type of industry.
- PRINCE2 can be tailored and adapted to suit many different types of projects. For example, it can just as successfully be applied on a small project as to a large one, or to a project within one organization as well as to a project that spans many different commercial entities.

- PRINCE2 provides a common vocabulary of project terms. This makes it easier to communicate on projects, especially when several different organizations and people are involved.
- PRINCE2 defines specific project management responsibilities and shows how a project management team should be structured. This ensures that those involved in the management team are clear on their responsibilities. It also ensures that all the people who are needed to manage a project are included in the management team.
- PRINCE2 focuses attention on what needs to be created. This ensures there is clarity and agreement on the outputs from the project.
- PRINCE2 provides a range of reports and plans as well as other management documents to meet the needs of different levels of management.
- The PRINCE2 management-by-exception approach ensures the efficient and economic use of management time. (I describe management by exception in more detail in the next section.)
- Before, during, and after a project, PRINCE2 focuses attention on the justification for undertaking that project. This ensures that projects are run as a means to an end rather than as an end in themselves. It also ensures that organizations take on projects that provide value.
- Adopting PRINCE2 allows people within an organization to learn how to improve their management skills. It provides consistency in project work, which means that project management assets can be reused, and reduces the impact of changes in management personnel. Many PRINCE2-accredited consultants and project managers are available around the world.
- PRINCE2 provides a theoretical management framework through which actual projects can be viewed. This helps organizations identify problems and missing elements of the project's approach to management.

PRINCE2 Principles

I introduced the seven PRINCE2 principles earlier in this chapter. These are guiding concepts that the rest of the model adheres to. All the other elements and parts of PRINCE2 ensure that one or a number of these principles are implemented.

As you work through this study guide and learn about the different parts of the PRINCE2 model, ask yourself which principle each part is supporting. This will help you answer the exam questions about the linkages between the various parts of PRINCE2. For example, Chapter 4 covers the business case theme, which helps implement the principle of continued business justification.

Continued Business Justification

The principle of *continued business justification* ensures there is a documented justification for starting a project. It ensures this justification is reviewed and possibly updated

throughout the life of the project. You should use the latest version of the justification to decide whether to move on to each major stage of the project. Often, this justification is written up in some form of business case.

It is important that the justification for a project aligns with the overall business strategy of the organization that is commissioning the project. If this is not the case, an organization could end up running multiple projects that are inconsistent with one another and start to work against each other.

Even projects that are driven by legislation changes or the need to be compliant with a new regulation should have a business case. In this case, the business case should show that the project is delivering compliance in a value-for-money way.

PRINCE2 provides a range of activities with associated responsibilities to ensure continued business justification. These are described throughout the process model and also in the business case theme. PRINCE2 provides two important business-related management products: the business case, which documents the justification for undertaking the project, and the benefit management approach, which plans the reviews of the project's benefits.

Learn from Experience

When you're managing a project, it is a good idea to take into account the good practice and the mistakes made in past projects. It is also a good idea to collate the lessons learned during the management of the current project and pass them on to teams managing subsequent projects. During many of the management activities throughout the process model, PRINCE2 constantly highlights the need to take account of past experience and collate new knowledge. It provides two important management products to help implement the *learn from experience* principle: the *lessons log*, which is used to record both previous and current experience, and the *lessons report*, which is used to pass on experience from the current project to those who will manage subsequent projects. The progress theme (covered in Chapter 9) describes how to control the flow of experience.

Defined Roles and Responsibilities

It is important that each role in the project management team be performed by someone who understands what is expected of them and who is willing to take on that role. This is the PRINCE2 principle of *defined roles and responsibilities*. The project management team must include people from a broad range of stakeholder perspectives, especially those viewing the project from business, user, and supplier perspectives. The project management team should include appropriate roles for the various management levels of the organizations involved.

PRINCE2 provides a project management team structure. For each role within the structure, it sets out a range of responsibilities. For each activity in the process model, there is a defined role (or roles) responsible for that activity. The project management team structure and the associated roles are first set out in the project brief and then in the project initiation documentation (PID). The communication management approach (covered in Chapter 3) describes how the communication between these people will be managed.

Manage by Stages

The *manage by stages* principle ensures that PRINCE2 projects are divided into a number of time periods, called *management stages* (or often just called *stages*). These stages could last days, weeks, or even months (or, in some of the military projects I've been involved with, years). A collection of products is created within each stage. The project board gives the project manager the authority to manage one stage at a time. After a stage is complete, the project manager must report back to the project board members, who then review the stage's performance and other factors, such as the current state of the project's business case, and decide whether to authorize the next stage. The project management team decides *how* to divide the project into stages when preparing the project plan at the outset of the project.

A project to build a hotel, for example, could be divided into the following four stages:

- During stage one, the project is planned.
- During stage two, the hotel is designed.
- During stage three, the hotel is built.
- During stage four, the interior of the hotel is decorated and fitted with electricity, plumbing, furniture, and so on.

This approach has two benefits. First, it helps with planning. There is always a planning horizon beyond which it is difficult to forecast. For example, at the beginning of the designing work in stage two, it is impossible to plan in detail the building work of stage three, because at this point, the specification of the hotel has not been decided. With the PRINCE2 manage-by-stages approach, the detailed stage plan for each stage is not created until the end of the previous stage. The project plan, which covers the whole project and is created at the outset, is done from a high-level perspective.

The other major benefit is that the senior managers taking on roles in the project board do not need to get involved with the day-to-day management of the stages. However, they can retain control of the project by authorizing progress a stage at a time. This is an efficient way of using senior management time. Senior managers can also vary the amount of control they have by shortening or lengthening the stages.

Every PRINCE2 project always has at least two stages: a planning stage (or what PRINCE2 calls the *initiation stage*) and at least one other stage where specialist products are delivered.

Manage by Exception

In PRINCE2, each management level manages the level below using the *manage by exception* principle. As I discussed in the "Roles" section earlier in this chapter, the PRINCE2 project management structure has four levels of management. At the top is a group called corporate, programme management, or the customer, who instigate the project. Below them is the project board, the main decision-making body on the project. Then comes the project manager, who manages the project on a day-to-day basis. Finally, at the bottom, are the team managers and their teams, who create the project's products. So corporate,

programme management, or the customer manage the project board by exception, then the project board manages the project manager by exception, and, finally, the project manager manages the team manager by exception.

Manage by exception means that the upper level of management gives the level of management below them a piece (or all) of the project to manage on their behalf. The upper level of management also sets certain boundaries around the lower level of management's authority. The lower level of management then needs further authorization from the level of management above them in only one of two circumstances: either they have finished delivering their piece of the project and they want to move on to a new piece of work or they realize that a situation has arisen that breaches the boundaries of their delegated authority.

The upper level of management defines the authority they give to the level of management below them by setting constraints around six areas: time, cost, scope, quality, risk, and benefits. A certain amount of leeway, or what PRINCE2 calls *tolerances*, may be allowed around these constraints. If at any time it appears these constraints may be breached, the lower level of management must escalate the situation to the level of management above them. This situation is called an *exception*. Here are some examples of the six areas where constraints can be set:

Time The upper level of management gives the level of management below them a certain amount of time to carry out their work within certain tolerances. For example, the work must be finished in six months, with a permissible early delivery of two weeks and late delivery of one week. If the lower level of management believes they cannot deliver the work within this three-week range, they must escalate the situation to the level of management above them.

Cost The upper level of management gives the level of management below them a certain budget to spend, possibly with some permissible leeway. For example, the budget could be $10,000 with an allowable under-expenditure of $1,000 and no allowable over-expenditure. If the lower level of management forecasts that they cannot deliver their work for $9,000 to $10,000, they must escalate the situation to the level of management above them.

Scope The upper level of management gives the level of management below them a set of products that need to be delivered with any possible variation allowed. For example, the product could be a website with pages that contain information on all the company's primary services and, if time permits, the secondary services. If the lower level of management realizes they will not be able to deliver even the primary service pages, they must escalate the situation to the level of management above them.

Quality The upper level of management gives the level of management below them a set of specifications for all the products that should be created. These are specified in an appropriate manner to an appropriate level of detail for that management level. Any tolerance around the specifications will also be shown—for example, create an Olympic stadium 50–60 meters high. (Obviously you'd have a few more details to work with than this.) If the lower level of management cannot deliver products within these specification ranges, they must escalate the situation to the level of management above them.

Risk The upper level of management gives the level of management below them a threshold level of aggregated risk. An example is that expected costs of the predicted threats must not exceed $20,000. (For more information on risk tolerances, see Chapter 7, "Risk Theme.") If the lower level of management realizes this threshold level of risk will be breached, they must escalate the situation to the level of management above them.

Benefits The objectives for the project's benefits may also be given some allowable deviation by corporate, programme management, or the customer. For example, sales from the project must be in the range of $500,000 to $600,000. If this forecast looks as though it won't be possible, the situation should be escalated back to corporate, programme management, or the customer.

Management by exception provides for efficient use of the senior managers' time. They don't have to get involved in the day-to-day work of the level below. However, they can control the work of the level below by setting tolerances around these six areas.

Focus on Products

A product can be tangible like a train or intangible such as trained staff. They are always inputs or outputs from a series of activities. For example, if my project were to develop a training course and train a group of staff, the products might include the existing corporate training standards that my training course needs to comply with, the set of slides that I need to create to show during the course, and the final product, which is a group of trained staff. In PRINCE2, products are sometimes referred to as *outputs* or *deliverables*.

The principle of *focus on products* ensures that through every step of the project, what the project is creating is clearly defined and agreed to. In PRINCE2, these product specifications are set out in product descriptions. The product descriptions are then used as the basis of planning the activities needed to create the products, manage proposed changes to the products, and verify approval and acceptance of the products once they have been built. This seems like a rather obvious thing to do. However, many projects miss this simple approach, and as a result, disputes occur over the acceptance of the products, uncontrolled changes are introduced, or the wrong outputs are created. Also, when a project management team is not focused on the end goal of the project's activities, which is to create the agreed products, they sometimes do unnecessary work or start to create products that were not agreed to.

Tailor to Suit the Project

I provided an overview of how the project management team can *tailor PRINCE2 to suit the project* environment in "The Project Environment" section earlier in this chapter, and, as mentioned, I discuss this topic in more detail in the next section of this chapter. In addition to defining this important approach as an integrated element of the model, PRINCE2 restates it as one of the seven principles.

Tailoring PRINCE2 to Different Project Types and Environments

Projects come in many different shapes and sizes. There are small projects, large projects, engineering projects, construction projects, public sector projects, and so on. The key to using PRINCE2 successfully is to tailor the method so that it suits the situation.

What Is Tailoring?

When you are managing a small project, it is important not to overburden the team with unnecessary management documents and processes. In this case, you might want to cut back how you apply PRINCE2. However, you would need to be careful—if you cut it back too much, you might not adequately cover important project management activities, such as planning, risk management, and project governance. This will probably lead to a chaotic situation in which, instead of project managing, you end up with a highly uncoordinated and incohesive initiative where all your time will be spent dealing with problems and issues. When applying PRINCE2, it is important to apply just enough of the approach that avoids the chaos of no management but does not overburden the project with unnecessary bureaucracy.

PRINCE2 is a flexible model. A project management team should always consider how to tailor PRINCE2 to best suit the particular project situation they face.

What Cannot Be Tailored?

Before I show you what parts of PRINCE2 can be tailored, the best place to start is to show you what cannot be tailored.

You learned earlier in this chapter about the seven PRINCE2 principles. Every PRINCE2 project, no matter how small, must abide by the principles. For example, even a tiny project should have a clear description of the justification for the work in order to adhere to the PRINCE2 principle of continuing business justification.

Each theme might be tailored by the project management team; however, each theme has a set of minimum requirements that must be applied. I explain each of the seven themes in Chapters 3 through 9 in this book. In the tailoring section of each of those chapters, I describe the minimum requirements for that theme. For example, when you learn about the plans theme in Chapter 5, you will see that PRINCE2 says every project must have at least two management stages.

PRINCE2 places some limits on how you might tailor what it calls techniques. There are a number of places in the PRINCE2 model where you are told to do something such as investment appraisal, estimating or reviewing a product, but you are not told exactly how to do it. This is because, although the activity must be done to be PRINCE2-compliant, the technique you might use to do it would vary widely, depending on factors such as the

industry, the company, or the country your project is operating within. For example, the technique you use to appraise an investment would be very different in a small venture capital–funded company than in a large public-sector organization; or the technique you might use to quality-review an IT system would be quite different from how you would review a document. PRINCE2 often suggests a technique, but it is not mandatory that you use that technique. However, when the project management team is considering how to tailor PRINCE2, they must make sure to swap the PRINCE2-recommended technique with another, more-appropriate approach, rather than not doing the activity at all.

The "An End-to-End Walk-Through of PRINCE2" section later in this chapter takes you through the process model; and in Chapters 2, 10, and 11, you learn more about these processes. Each process has a number of key purposes and objectives that you will find in the Exam Essentials sections of Chapters 2, 10, and 11. The project management team must make sure that any tailored process still achieves these purposes and objectives.

When the project management team is considering how much tailoring is required, they should balance the cost of training the project teams in the new approach against the benefits that the adapted method will bring.

Why Tailor PRINCE2?

PRINCE2 says that it is mandatory to tailor the method. There are many reasons why a project management team would want to tailor PRINCE2. You've already seen that if you are faced with a small project, you would want to cut back your application of PRINCE2. The opposite is also true: If you are faced with a very large initiative, you might want to increase your project management approach (and also use a programme management approach, as described in more detail later).

Applying PRINCE2 helps reduce the project risk, so anything that makes the project more complicated and more risky might mean you want to apply PRINCE2 in a more rigorous way. For example, projects running across multiple organizations or countries have much more scope for miscommunication, so you would want to be more careful in your project management approach.

Tailoring isn't just a matter of increasing or decreasing PRINCE2—there are many other ways of adapting the method. For example, the project might be operating in an industry that uses differing delivery methods or lifecycle models. A common approach in the IT industry is the Waterfall method, where the project follows a number of prescribed phases: First, the client's requirements are established and recorded; then the IT system is designed; then it is built and tested; and finally, it is deployed. The project management team would want to adapt PRINCE2 so that there is a decision point at the end of each phase where the project board decides whether to proceed.

The project might be operating in a legal or regulatory environment. For example, I did a web project in the pharmaceutical industry where every web page had to be reviewed by the legal team to ensure it met regulatory standards. I adapted the quality management approach to ensure that all quality reviews included a legal compliance review. The project management approach might need to include certain mandatory

processes or frameworks. For example, public sector projects often have to follow a mandatory procurement process.

An organization might have a range of pre-existing project management terms. For example, many companies create something similar to PRINCE2's PID at the beginning of a project. (You learn more about this important management product in the "An End-to-End Walk-Through of PRINCE2" section later in this chapter.) I've seen these documents called many things: project charters, project terms of reference, project definition documents, and so on. Rather than change the document's name, the project manager could use the existing term that everyone is used to and just check that the document fulfills all the criteria of the PID.

Other factors that might influence how PRINCE2 is tailored include the capability of the project management team, the maturity of the organization, and any legal contracts that apply to the project's work.

What Can Be Tailored?

What specific parts of the model can be tailored? The simple answer is: everything, as long as you follow the rules I gave you in the preceding "What Cannot be Tailored?" section. However, you must ensure that the tailoring of PRINCE2 does not increase the risk of the project failing.

I provide you with a lot of tailoring guidance throughout this book. For example, all the themes can be tailored, and I explain how this can be done in each theme's chapter. Some themes can be tailored more than others. For example, the organization theme can be adapted in all sorts of ways to suit all sorts of situations, which you learn about in the "Tailoring the Organization Theme" section of Chapter 3. And in Chapters 2, 10, and 11, I explain how other processes can be tailored.

Generally, a tailored process shouldn't be too complicated—a simple process is more likely to be used. You will learn many different ways to tailor the processes: Sometimes processes might be combined; sometimes activities might be split; sometimes the role responsible for an activity might be amended; or, on simple projects, the processes might be followed in a more informal way.

The management products can also be tailored. As I explained earlier in this chapter, management products are things such as the project plan, the risk register, and the lessons log. Throughout this book, you will see that the management products can take many formats, such as a slide deck, an email, or something called an information radiator. (An *information radiator* is a display with a lot of easy-to-read graphs and diagrams describing the status of the project. You learn more about information radiators in Chapter 10.)

Management products might not even be documented; they might be a simple verbal agreement. Or they might be combined, or some of the parts of the documents that are not relevant could be omitted. The opposite is also true: For more complicated projects, some of these management products might be split up to create more documents.

It is very important that everyone involved with the project clearly understands how PRINCE2 will be amended for the upcoming project. The project manager must record the approach to tailoring in the PID.

In the following sections, I describe some of the common situations for which PRINCE2 can be tailored.

Simple Projects

A simple project is one that is perceived as straightforward and low risk. PRINCE2 prefers the term *simple* rather than *small* because size is a relative term. A small project for a large corporation might be perceived as very large for a small company.

As I said earlier, if you were to apply all aspects of PRINCE2 to a simple project, you would overburden the project management team with a great deal of unnecessary project management processes, documents, and procedures. Throughout this book, I discuss how each aspect of PRINCE2 can be cut back to suit a simple project. You will see, for example, that certain processes can be combined, one person can do more than one PRINCE2 role, and some of the management products can be combined or omitted.

Programme Environments

What is a programme? Simply put, it is like a big project. Earlier in this chapter, I used the example of the Crossrail initiative in London to explain the six aspects of project performance. Crossrail is a good example of a programme. It is made up of a set of interrelated projects. One project might focus on digging the tunnels under London, another on creating the trains, another on building one of the new stations, and so on.

Because of the size and complexity of a programme, a different set of skills than PRINCE2 is needed to carry out programme management. However, PRINCE2 can be used to manage any individual project within the programme. What generally happens is that in an individual project, the project board will report directly to a higher-level programme board or steering committee.

As you will see throughout the book, there are many ways that PRINCE2 can be adapted to a programme situation. For example, a number of PRINCE2 documents might be fully or partially created at the programme level, such as the business case and the differing approaches to risk, quality, change, and communication management. So the project manager might not need to re-create these documents at the project level. A more pragmatic concern is that it would be easy to confuse programme-specific documents with project-specific documents, so it would be important to create a naming convention to distinguish the two.

PRINCE2 sometimes refers to a specific programme-management approach called *Managing Successful Programmes* (MSP®).[1] This is another best-practice approach from AXELOS, the company that owns PRINCE2. You learn more about MSP in the "Tailoring the Organization Theme" section of Chapter 3 and elsewhere in this book.

[1]

However, it is not a mandatory requirement to use MSP if you find yourself in a programme situation.

Commercial Customer and Supplier Environments

PRINCE2 often refers to the fact that projects operate within what it calls a customer and supplier environment. This just means there is always a customer, who specifies what is required and usually pays for the work, as well as a supplier (or a number of suppliers), who provides the skills and resources to deliver the result. The suppliers might be internal suppliers (people who work within the customer's organization) or they might be external organizations (if the customer has outsourced the work).

Obviously, projects will be more difficult to manage if a number of organizations are involved. Throughout this book, I explain how to tailor PRINCE2 to cope with this situation. For example, key PRINCE2 documents, such as the PID, and work packages might form the basis of a legal contract, so the project management team needs to decide whether the management product becomes part of the legal contract or is a separate document referred to in the contract. The latter is usually better; otherwise, changing the document might involve expensive legal work.

Throughout an initiative, the project manager needs to review and monitor a delivery team's work. This will be more difficult if the delivery team is a separate organization, especially if that organization uses certain confidential processes to create their work. The project manager needs to ensure that he has the right to review what the team is doing, at least to a certain level.

The situation might be more complicated than a customer outsourcing work to a number of suppliers. The commissioning organization might do part of the work in-house and outsource the rest to separate commercial suppliers, or the suppliers themselves might outsource some of their work or operate in partnership with one another. As you learn in this book, PRINCE2 can be tailored to suit all these situations.

There might be more than one commissioning organization. For example, this might happen in a collaborative research project or an intergovernmental project. In this case, there might be multiple reasons for doing the project, multiple business cases, and multiple organizational cultures. It will not be easy to set up a project board that can make quick decisions, because it will probably be difficult to identify one key person to perform the main decision-making role of the executive. Decisions might take a long time and require a period of consensus building. It would probably be better to use some of the programme governance concepts to direct this sort of project.

Agile Environments

Agile is another common environment that PRINCE2 can work effectively within. Agile refers to a collection of approaches that originated in the software industry, many of which were first developed in the 1990s, such as rapid application development, the dynamic systems development method (DSDM), and Scrum. In 2001, a collection of experts in agile

approaches published the Agile Manifesto, which outlined the following four principles of the agile approach:

1. Individuals and interactions are valued more than processes and tools.
2. Working products are valued more than comprehensive documentation.
3. Customer collaboration is valued more than contract negotiation.
4. Responding to change is valued more than following a plan.

Over the last decade, agile approaches have started to be used successfully in all sorts of industries, and if you haven't come across them yet, I'm sure you soon will. The purpose of this book isn't to teach you agile—many good books and other information sources are available—but it is helpful to know some of the common ideas and terms of agile in order to understand how PRINCE2 can be tailored for it.

Agile approaches tend to deliver their products over a series of iterations rather than all at the end of the project. These iterations are often referred to as *sprints* and are often quite short, maybe three or four weeks. This has a number of benefits. First, although the client will not get everything they want in the earlier releases, at least they do not have to wait too long until they get some useful products. Second, releasing in short bursts avoids the situation where, if a deadline is a long way away, the natural human tendency is to prevaricate and work more slowly. In an agile world, the deadline for release is always only a few weeks away, which motivates the team to get down to their work. And third, there is always the risk that what the teams are creating isn't really what the clients want. Clients can do their best to put across their requirements, and suppliers can do their best to understand them, but often the only time when a client can really see if the supplier understood them is when they are handed the final product. Agile approaches find out if there's been a miscommunication about requirements much quicker and so save more time and money than if everything is delivered at the end. Agile calls this *failing fast* since it's obviously better to know you're doing the wrong thing as quickly as possible. Finally, the client can give feedback to the teams when they start using products from earlier releases, which can help the team create better products in later releases.

PRINCE2 is entirely compatible with this iterative way of delivering. As you have learned, one of the PRINCE2 principles is managing the project by stages, and the project team could release products at the end of each stage if required. You can also see that this focus on delivering regularly is aligned to the PRINCE2 principle of focus on products.

Timeboxing is another agile concept. This is when a sprint of work is fixed to a certain amount of time (for example, three weeks), and if the delivery team falls behind in their work, rather than slip the deadline, they must deliver less. In order for timeboxing to work, the team must be given some flexibility on the scope of work that they need to create. In the "Tailoring the Progress Theme" section of Chapter 9, you see how you can use scope tolerances and the PRINCE2 principle of managing by exception to implement this agile idea.

A *backlog* is another common agile term. A backlog is a list of requirements that the customers want in the finished product. However, agile approaches steer away from the word *requirements* because it sounds like a mandatory feature. As I have just said, agile works

best when there is some flexibility around what the customer wants. So rather than use the term *requirements*, agile approaches often use the term *user stories* because they describe a particular journey that a user would take with the product. For example, if the end product is going to be a website, a story might describe how the user wants to be able to log into the website, select a certain report, and send it to their printer. I talk more about using user stories within a PRINCE2 project in Chapter 6.

A backlog is a list of user stories that the customer wants to see in the finished product, (called a *product backlog*) or a list of user stories that the delivery team will create in a particular sprint (called a *sprint backlog*). Sometimes, if a user story is particularly big, it is referred to as an *epic*. The items in a backlog should be ordered by the value that they will provide to the client. This helps agile teams to prioritize which user stories to address in earlier releases and which to eliminate if they are running out of time. Focusing on what to deliver and prioritizing by value is very much aligned to the PRINCE2 principles of focus on products and continued business justification.

One of the principles of PRINCE2 is defined roles and responsibilities, and as you will see in Chapter 3, there are PRINCE2 roles that help to manage a successful project. Many of the agile approaches also have certain defined roles. In Chapter 3, I show you how these agile roles and PRINCE2 roles can work together. Two roles from the Scrum agile approach that are regularly used are the *scrum master* and the *product owner*. The scrum master leads a Scrum delivery team, and a product owner represents the customer and collates the user stories that are required for the product.

You will learn a lot more about tailoring PRINCE2 to an agile environment throughout this book. In fact, in every chapter that describes the themes and the processes, I will explain how to adapt that area to suit an agile approach.

An End-to-End Walk-Through of PRINCE2

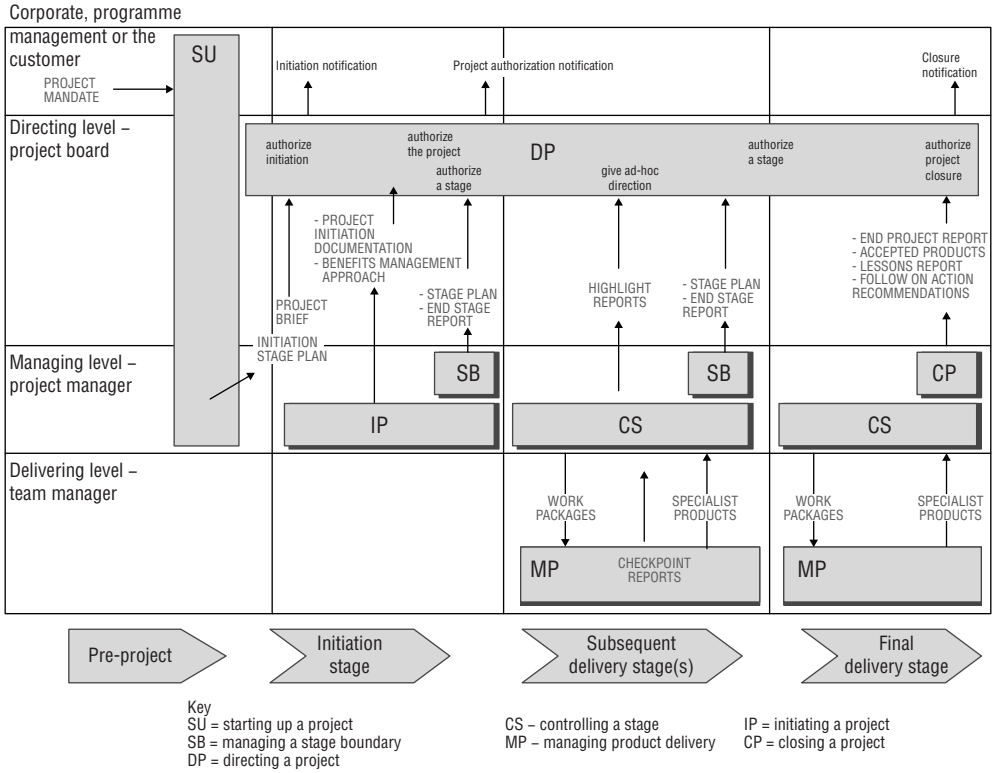
Thus far in this chapter, you've learned about some of the major parts of PRINCE2, including its underlying principles, processes, themes, roles, and management products. Now it's time to see how these parts fit together in a project.

In this section, I use a sample project—constructing a new hotel for a leisure company—to show you how the processes are used both before and during the project. I also discuss where each role becomes involved in the model and how some of the main management products are used.

At this point, I am going to discuss the various areas at a high level. To use an analogy, I want you to see how the major pieces of the jigsaw puzzle fit together before I discuss each piece on its own. It will then be easier, when I discuss a particular part of PRINCE2 in the later chapters, to show you how that part fits into the whole model.

For this section, I will use the process overview diagram shown in Figure 1.5.

FIGURE 1.5 PRINCE2 process model



Take a look at the composition of Figure 1.5. First, there are four horizontal rows that correspond to the four levels of the project management structure.

The various rectangles and squares on the diagram represent the seven processes. The processes are positioned to show which level of management is involved with that process. For example, all the activities in the directing a project process occur at the project board level, and all the activities of the managing product delivery level occur at the team level. Some processes are carried out by a number of the management levels. For example, the starting up a project process involves corporate, programme management, or the customer; the project board; and the project manager.

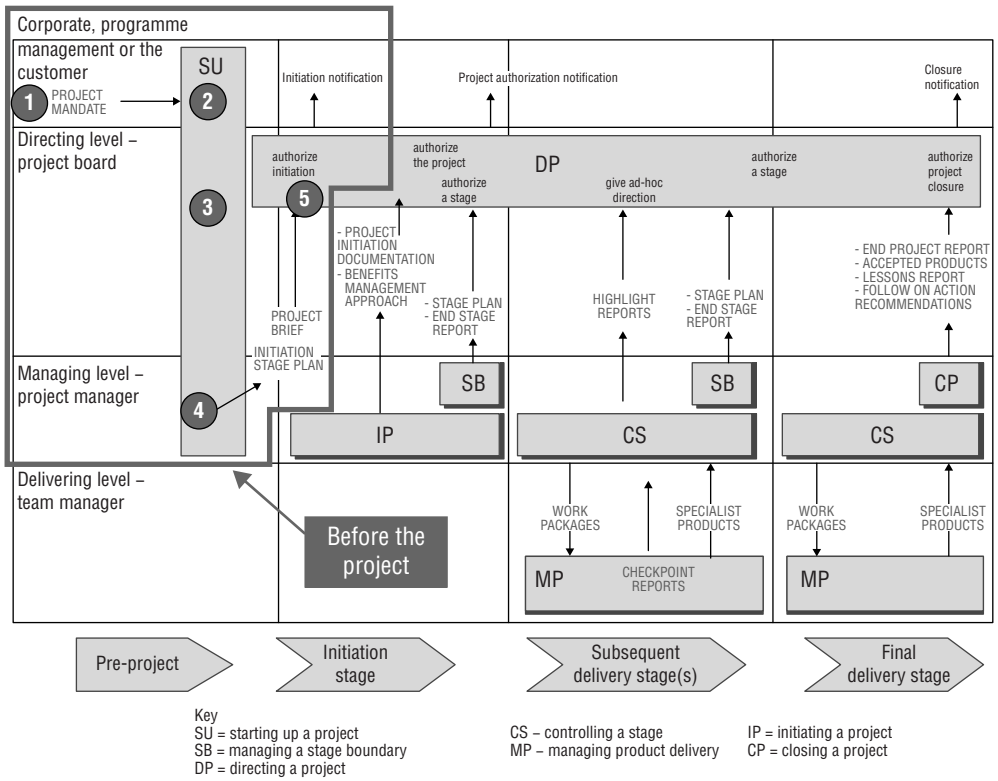
The four columns in Figure 1.5 show the work that is done during four different times in the project, as follows:

- Work that happens before the project (pre-project)
- Work that happens at the beginning of the project (initiation stage)
- Work that happens in the middle of the project (subsequent delivery stages)
- Work that happens at the end of the project (final delivery stage)

Pre-Project Activities

Figure 1.6 highlights the work that takes place before a PRINCE2 project. The numbered circles on the diagram correspond to the five steps described in this section.

FIGURE 1.6 Activities before the project



Step One: Corporate, Programme Management, or the Customer Creates a Project Mandate

In PRINCE2, before a project can start, a number of activities and authorizations must occur. First, someone (or a group of people) with an appropriate level of authority to authorize this project must create a project mandate. The project mandate will begin to answer basic questions about the project, such as the following:

- What is the project all about? What is it creating?
- Who will be involved in the project? Who will be using the project's products after the project?

- Where will the project happen? Where will the products be built?
- When will the project start and finish? When will there be any return from this project?
- How will the project be done? How will the products be built?
- Why do this project? What is the justification for it?

The project mandate will answer these basic what, why, when, who, where, and how questions. At one extreme, the information might be high-level, in which case, as you will see, the first set of activities in PRINCE2 is partly about refining and expanding these details. At the other extreme, the information in the project mandate might be in great detail, in which case the first set of activities in PRINCE2 will be more about checking that it is correct. The latter is more likely in a programme situation, where the project is part of a group of projects. In this case, the specific definitions of each project will probably be agreed to at the beginning of the programme.

For our hotel project example, let's say someone in the leisure company has an idea for a new hotel. They may have many hotels across the world, but they decide they would like to create one in Shanghai because they see China as a growing market. Someone who has the authority to start a project of this size will create a project mandate. In this example, the head of business development in the Asia Pacific region is assigned this task.

Step Two: Corporate, Programme Management, or the Customer Appoints the Executive

Once the project mandate is created, the PRINCE2 process model starts. The first process is starting up a project. (I describe the starting up a project process in much more detail in Chapter 2.)

The first step in the starting up a project process is for corporate, programme management, or the customer to appoint a senior-level person to the executive role. This person should see the initiative from a business perspective and will act as the key decision-maker for the project. (The executive role is described in more detail in Chapter 3.)

Let's say in the example project, the head of business development in the Asia Pacific region is appointed as executive. He is now straddling two of the PRINCE2 management levels: He created the project mandate while sitting in the corporate, programme management, or the customer level, and now he takes on the executive role that sits in the project board level.

Step Three: The Executive Appoints the Project Manager

The next step in the starting up a project process is for the executive to appoint the project manager. The executive can then focus on directing, decision-making, and business-related activities, and the project manager can focus on the day-to-day management of the pre-project work.

Step Four: The Executive and the Project Manager Create the Project Brief and Recruit the Project Management Team

The remaining activities in the starting up a project process focus on answering the following question: Is the project idea set out in the project mandate worthwhile and viable? With regard to the hotel project example, is it worth committing major resources to start a project to build a new hotel in Shanghai? As such, a PRINCE2 project doesn't actually start during the starting up a project process. Instead, the starting up a project process is a set of activities that are performed *before* the project to decide whether or not to do that project.

To begin, the project mandate needs to be reviewed, and if necessary, the information needs to be expanded so as to provide enough details to form the basis of the decision of whether to commission the project. The output of this work goes into a new management product called the *project brief*. The project brief will answer exactly the same set of what, why, when, who, where, and how questions about the project that the project mandate did.

The "why" question is answered by creating an outline business case, which forms part of the project brief. This will start to show, at a high level at least, the justification for undertaking the project. It is the executive's responsibility to create this section of the project brief.

The rest of the project management team members are now appointed. So people are assigned to the other two project board roles of senior user and senior supplier. (These roles are described in more detail in Chapter 3.) Some of the project board members might appoint separate project assurance roles, which will monitor the project to find out if it is being run in the correct way for their perspective on the project. A project support person or people might also be appointed.

This initial project management team might get updated and added to as the initiative proceeds. At this point, however, the team needs to reflect the range of stakeholder perspectives of business, user, and supplier at the right level of authority. That way, a thorough analysis of the project idea can be done and a meaningful authorization can occur if the project idea looks to be worthwhile and viable.

For the hotel project example, let's say the leisure company's marketing director for Asia is appointed a senior user and will use the hotel to increase his sales figures. A travel market research consultant is also appointed as a senior user to represent the needs of the tourists and business travelers who might stay in the hotel. To represent the interests of the supplier side of the project, the head of procurement for Asia Pacific is appointed as senior supplier. (Later, people from the suppliers contracted to do work on the hotel might also take on the senior supplier role.)

Once the project brief has been finished, the project board will review it and decide whether to authorize things to go any further. If they decide to allow the initiative to proceed, the project will officially start with what PRINCE2 calls the *initiation stage*. In this stage, the project will be planned out, at least at a high level. (Remember that the manage by stages principle means that more detailed planning is done before each stage.) Before committing resources to the initiation stage, the project board will want to see a plan for the work that will be involved. So the final activity in the starting up a project process is for the project manager to create a stage plan for the initiation stage, detailing the time, effort, and costs needed to plan the project.

Step Five: The Project Board Authorizes Initiation

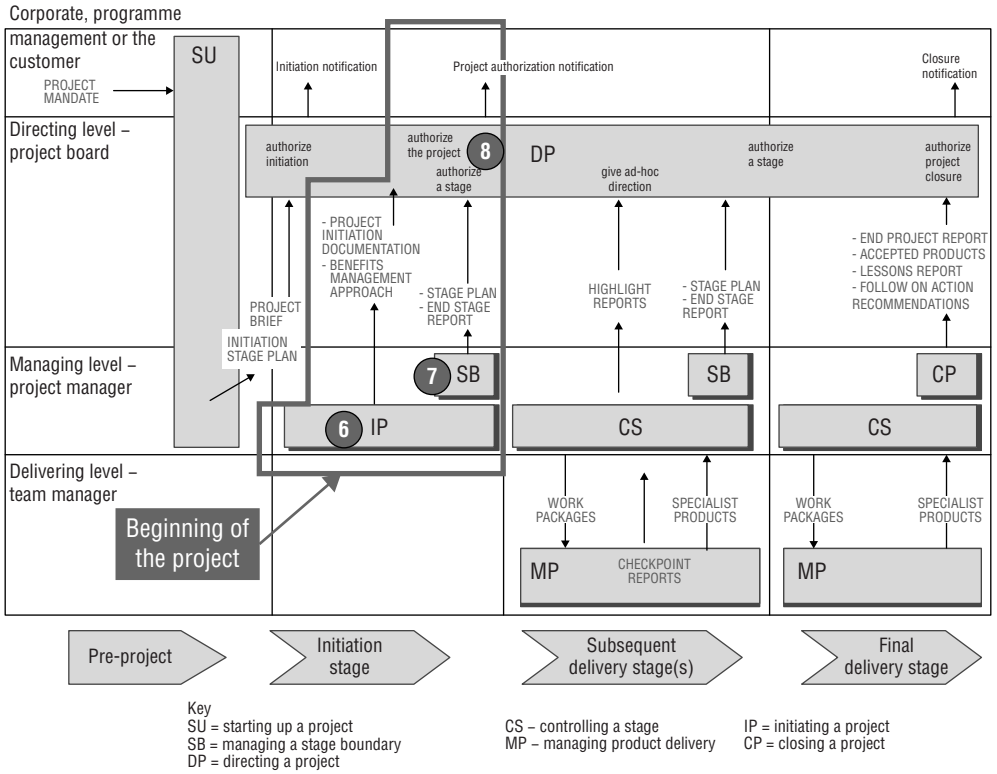
Now that the starting up a project process is complete, the PRINCE2 model moves on to the directing a project process. This process covers the work of the project board, which mainly involves making decisions.

The project board's first decision is called *authorize initiation*. The project board reviews the project brief to see whether the project is a worthwhile and viable initiative. If they think it is, they then review the stage plan for the initiation stage to see what would be involved in planning this project. If they decide that the resources requested for the initiation (planning) stage are reasonable, they authorize the project manager to proceed. In effect, they are giving the project manager the authority to manage just the initiation stage, after which the project manager must ask the project board, once again, for authority to continue any further.

Activities at the Beginning of the Project

Figure 1.7 shows the process diagram again, with the initiation stage highlighted and its steps numbered.

FIGURE 1.7 Activities at the beginning of the project



Step Six: The Project Manager Creates the Project Initiation Documentation

The initiating a project process describes a set of activities to create the project initiation documentation (PID). The project manager does most of the work to create the PID. The information in the PID answers the same what, why, when, where, who, and how questions that the project mandate and then the project brief answered. This time, the document has greater detail because now that the project has been authorized, the project team will have more time and resources to consider these questions.

The PID is actually a collection of documents and contains the following information:

- The project plan, which describes the major products and the activities and resources required to create them, as well as how the project will be divided into stages. This plan can be high-level, because the manage by stages principle of PRINCE2 allows for more detailed planning to be left until just before a particular stage.
- A set of approach documents that set out how the project will be managed with regard to such areas as risk, change, quality, and communication
- A detailed business case
- Information on the project management team
- Information on how the project will be delivered (project approach)
- A project definition, giving information on areas such as the background to the project, the project's objectives, and the project's scope
- Information on how the project will be controlled, such as how to monitor the progress of the project and what reports are required
- Information on how PRINCE2 will be tailored for the project

With regard to the hotel project, the project plan section might set out the individual delivery stages as follows:

Delivery Stage One Create architectural plans for the hotel. Obtain planning permission for construction. Create tender documents for outsourced contractors and send to potential suppliers. Select suppliers.

Delivery Stage Two Construct hotel exteriors.

Delivery Stage Three Decorate interior of the hotel; fit with electricity, plumbing, furniture, and so on.

In addition to creating the PID, the project manager will create the benefits management approach during the initiating a project process. The benefits management approach specifies how and when the project will be reviewed with regard to whether it's achieving the stated benefits. Many of these reviews might be planned for some time after the project. In the hotel project example, a review might be scheduled for a year after the hotel opens, to see if the hotel is meeting its targets for room sales, restaurant sales, and so on—but the planning for that review would start at this point in the project.

Step Seven: The Project Manager Creates a Plan for the First Delivery Stage

Once the project manager has almost finished the PID, he can start planning the next stage of the project. In the hotel example, he will plan in detail the work for the first delivery stage, which is when architectural plans for the hotel are created and the tender process takes place. This work is done in the managing a stage boundary process.

At this point, the project manager might have two focuses: finishing the PID (using the initiating a project process) and creating the plan for the first delivery stage (using the managing a stage boundary process). Chapter 10 describes the managing a stage boundary process in detail.

Step Eight: The Project Board Authorizes the Project and the First Delivery Stage

The project manager sends the PID and the stage plan for the first delivery stage to the project board. The project board reviews both of these management products in their directing a project process.

The project board has two directing a project activities to carry out at this point. First, they review the information in the PID and decide whether to authorize the project. Second, they review the information in the stage plan and decide whether to authorize the first delivery stage of the project.

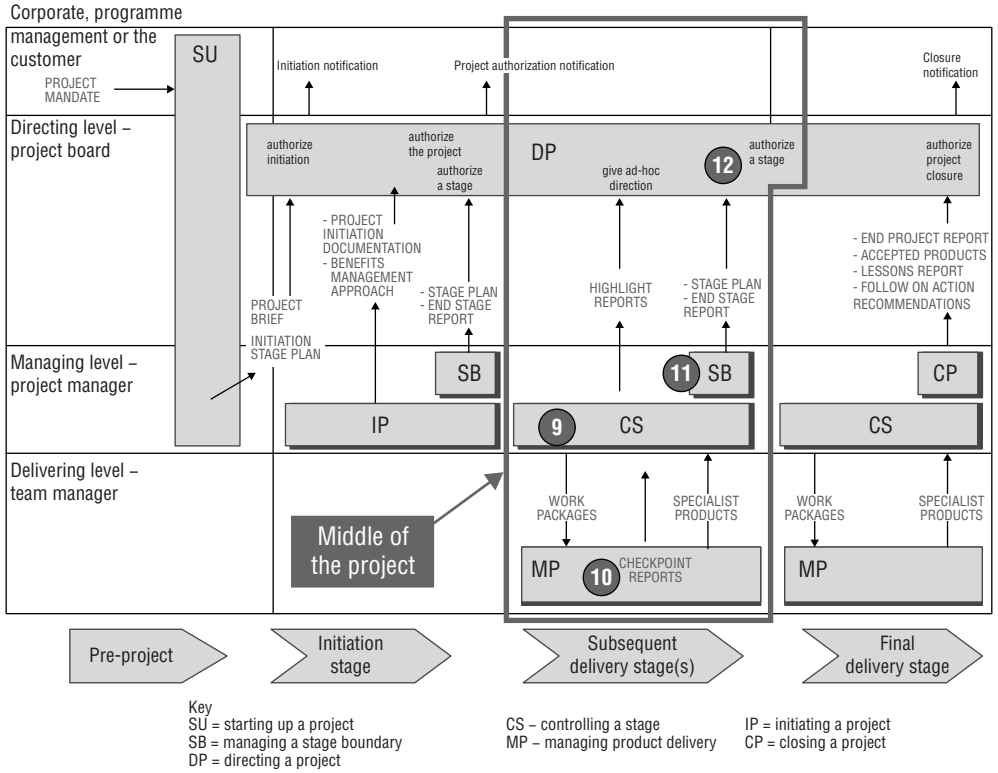
The way that PRINCE2 has set out the directing a project activities at this point can be confusing for two reasons. First, it says the project board authorizes the project here. However, the project has already started at this point. (It has just finished the initiation stage.) What PRINCE2 means is that the project board needs to decide whether to authorize the delivery part of the project, where specialist products are created.

The second reason it can be confusing is that although the project board authorizes the delivery part of the project, the project manager cannot move ahead and manage the whole project. The project manager has authority to manage only the next delivery stage, after which he must again ask the project board for authority to continue further. In the hotel example, the project manager will have authority only to manage the work to create the architectural plans, obtain planning permission, and carry out the tender process.

Activities in the Middle of the Project

In Figure 1.8, I have highlighted the section of the process model we are now focusing on: delivering specialist products in the middle of the project. In the hotel example, this will involve creating deliverables such as tender documents, architectural plans, parts of the hotel building, computer software to run the booking system, and so on. The delivery of these specialist products will be managed on a stage-by-stage basis.

FIGURE 1.8 Activities in the middle of the project



Step Nine: The Project Manager Manages a Delivery Stage

The project manager will manage each delivery stage using the activities in the controlling a stage process. This process sets out management activities such as how the project manager delegates work to various teams, reports on progress, and deals with problems and issues.

In the hotel example, the project manager will use the controlling a stage process to manage the first delivery stage (and all the other stages, too, once they've been authorized). The project manager might delegate work to an architectural firm to create the hotel designs. He might also delegate work to the leisure company's procurement department to create and issue the tenders as well as delegate work to the people who are dealing with the planning authorities in Shanghai. In PRINCE2, the project manager assigns work to teams using a work package. A work package gives team members all the information they need to know in order to do some work, such as what to create, how much time and money they have, how often to report back to the project manager, and so on. Teams are not authorized to do any work until they have received a work package.

The project manager reports progress to the project board throughout the stage by creating highlight reports. The project board decides how regularly they would like to receive these reports, but let's say, in our example, they are sent every week.

The controlling a stage process is described in a lot more detail in Chapter 10.

Step Ten: The Teams Create the Stage's Specialist Products

The team managers and their teams carry out their work in the managing product delivery process. The teams carry out three PRINCE2 activities during this process:

- Accept the work from the project manager via the work packages.
- Create the specialist products as instructed in the work packages.
- Deliver the specialist products back to the project manager.

During the first delivery stage in the hotel project example, the architects creating the hotel's plans, the procurement team creating tenders for the construction work, and the team dealing with the Chinese planning authorities will all use the managing product delivery process.

The teams must also regularly report on the progress of their work to the project manager. They do this by creating checkpoint reports.

Step Eleven: The Project Manager Plans the Next Stage

This step is similar to step seven. Once the project manager sees that the work of the current delivery stage is nearly finished, he will start planning the next delivery stage. In the hotel example, the project manager will plan in detail the work to construct the hotel's exteriors. Just as in step seven, this work is done in the managing a stage boundary process.

Also just as in step seven, at this point, the project manager might have two focuses: finishing managing the work in the current delivery stage (using the controlling a stage process) and creating the stage plan for the next delivery stage (using the managing a stage boundary process).

The project manager also creates an end stage report for the delivery stage just ending and, if necessary, updates some of the major management products within the PID, such as the project plan and the business case.

Step Twelve: The Project Board Authorizes Another Delivery Stage

Once all the specialist products of the stage have been delivered, the project manager will send the end stage report, the next stage plan, and the updated PID to the project board. In the hotel example, this will take place when the architectural designs for the hotel are finished, contractors have been sourced for the construction work, and planning permission for the hotel has been obtained.

The project board will review the next stage plan, the updated business case, and the updated project plan in their directing a project process and decide whether to authorize the next delivery stage. In our hotel example, they will decide whether the project can move on to building the hotel's exteriors.

Steps Nine, Ten, Eleven, and Twelve Again and Again and . . .

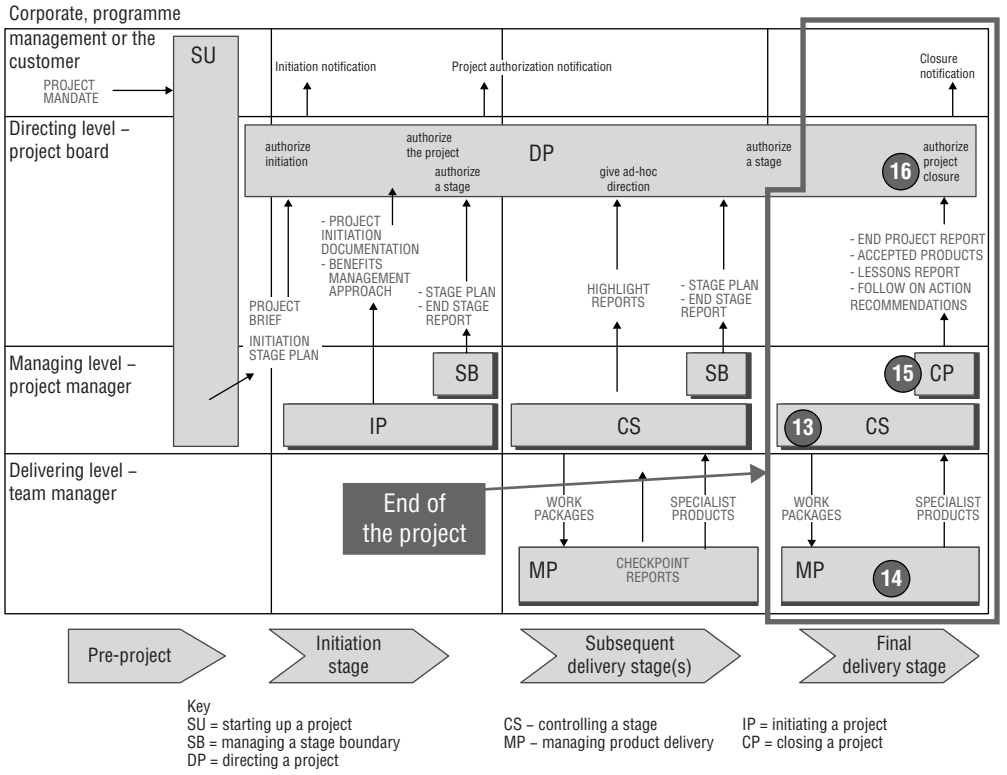
Steps nine, ten, eleven, and twelve are repeated again and again, managing the delivery of each stage of the project, until the project team reaches the last stage. The final stage is handled a little differently, as you will see in the next section.

In our hotel example, which has an initiation stage and then three delivery stages, steps nine, ten, eleven, and twelve will be carried out twice: first to manage delivery stage one, and then again to manage delivery stage two.

Activities at the End of the Project

The final delivery stage is managed slightly differently. In our hotel example, this would correspond to the management of delivery stage three, when the hotel is decorated and the electricity, plumbing, furniture, IT systems, and so on are installed. Figure 1.9 highlights the section of the process model discussed in this section.

FIGURE 1.9 Activities at the end of the project



Step Thirteen: The Project Manager Manages the Final Delivery Stage

This step is exactly the same as step nine from the previous delivery stages. The project manager uses the controlling a stage process to create work packages, which delegate the final stage's delivery work to the appropriate teams. In the hotel project example, the project manager might give out work to the electrical fitters, the plumbers, the furniture moving companies, and so on. The project manager also reports to the project board using highlight reports and deals with problems and issues.

Step Fourteen: The Teams Create the Specialist Products of the Final Stage

This step is exactly the same as step ten from the previous delivery stages. The teams involved with creating this delivery stage's specialist products use the managing product delivery process to accept work via work packages, create the specialist products, and give them back to the project manager. They also report on progress to the project manager using checkpoint reports.

In the hotel example, the teams involved with creating the last delivery stage's specialist products will now be involved. These could be decorators painting the hotel, electricians wiring the lighting, IT specialists installing software, and so on.

Step Fifteen: The Project Manager Prepares for the End of the Project

The first difference between the final delivery stage and the previous delivery stages is that at the end of this last stage, instead of using the managing stage boundary process to prepare for the next stage, the project manager uses the closing a project process to prepare for the end of the project.

During the closing a project process, the project manager will do the following:

- Ensure that the project's products are signed off and accepted by the ultimate clients. In the hotel example, the ultimate clients might be the head of the Asia Pacific region that ultimately will need to accept the new hotel.
- Create an end project report. This report will review the project's performance against the original objectives that were set out in the first version of the PID.
- Update the benefits management approach to check that all the post-project benefit reviews are included.
- If any products have been delivered to the clients in earlier stages of the project, measure any benefits that have been made so far .In the hotel example, maybe the hotel's gym was built first and opened before the rest of the hotel was finished. If so, the project manager should measure the revenue gained so far from selling gym memberships. Give a list of follow-on action recommendations to the people who will operate the project's products.
- Create a lessons report that can be passed on to subsequent projects.
- Archive the project documentation.

Step Sixteen: The Project Board Authorizes the Project to Close

The second difference between the final delivery stage and the previous delivery stages is that at the end of it, the project board will authorize the closure of the project rather than another stage. Board members will review all the management products prepared by the project manager in the closing a project process, and if they are satisfied that everything is complete, they will authorize the end of the project. The project board will carry out this authorization in the directing a project process.

Summary

This chapter presented a broad summary of all the features of PRINCE2 and showed you how they fit together. I described the main sections of PRINCE2: principles, themes, processes, roles, and management products.

Projects have five key characteristics that distinguish them from business as usual: They change the organization; they are temporary, with a start and an end; they involve different functions and divisions within an organization; they involve unique work that has not been done before; and they involve a lot of uncertainty.

Given all the challenges that projects introduce, project management attempts to lower the risks and increase the likelihood of a successful outcome. As you saw, there are four main areas of project management: planning work, delegating work, monitoring the progress, and controlling the project. These four main areas of project management attempt to deliver the project to its objectives. In PRINCE2, there are six ways of describing a project objective: in terms of cost, time, scope, quality, risks, and benefits. PRINCE2 describes these as the six aspects of project performance.

After discussing what constitutes a project, I introduced a tool that you can use to manage them: PRINCE2. The PRINCE2 method consists of four integrated elements: principles, processes, themes, and the project environment. There are seven principles of PRINCE2: continued business justification, learn from experience, defined roles and responsibilities, manage by stages, manage by exception, focus on products, and tailor to suit the project environment. These are core concepts that the rest of the PRINCE2 model adheres to. Next, you learned about the PRINCE2 processes, which describe the activities to be performed by the various project roles both before and during a project. The chapter then covered the seven themes—business case, organization, quality, plans, risk, change, and progress—which explain how certain aspects of project management should be approached throughout a PRINCE2 project.

In addition to the four integrated elements of PRINCE2, you learned that there are a number of other important parts. Certain roles need to be carried out on each project, such as a project manager, who manages the project on a day-to-day basis. There are also 26 PRINCE2 management products, including plans, registers, logs, approaches (showing how the project will be managed), and a variety of reports. This chapter covered the whole range of benefits that PRINCE2 can bring to a project. These range from providing a common

vocabulary for project management to providing a tested best-practice approach to managing projects.

In this chapter, you learned how PRINCE2 can be tailored to suit the type of project and the environment that the project will operate within. You saw that PRINCE2 is a very flexible approach. Common situations that PRINCE2 is tailored for include simple projects, projects operating within a programme, projects that involve outsourcing work to separate commercial suppliers, and projects that use an agile delivery method.

Finally, you saw how the major parts of PRINCE2 are used throughout the life of a project. I suggest that you review this section a number of times—it will give you a good idea how all the parts of PRINCE2 fit together.

Foundation Exam Essentials

Recall the definition and characteristics of a project. Be able to define a project as a temporary organization created for the purpose of delivering one or more business products according to an agreed business case. Be able to name the five characteristics of a project: change, temporary, cross-functional, unique, and uncertainty. These characteristics distinguish project work from business as usual.

Recall the six aspects of project performance to be managed. Recall that the six objectives of a project can be written in terms of cost, timescales, risk, benefits, quality, and scope.

Recall the four integrated elements of PRINCE2. Recall that the four integrated elements of PRINCE2 are the principles, the processes, the themes, and tailoring to suit the project environment. Recall that the principles are the guiding obligations and good practices that determine whether a project is genuinely being managed using PRINCE2. Recall that the processes describe a progression from the pre-project through the stages of the project lifecycle to project closure. Recall that the themes show how to do various aspects of project management. Recall that tailoring is about amending the PRINCE2 approach to suit the project type and the environment.

Recall what makes a project a PRINCE2 project. For a project to be following PRINCE2, it must at a minimum be applying the PRINCE2 principles, meeting the minimum requirements of each theme, meeting each process's purpose and objectives, and either using PRINCE2's recommended techniques or using alternative equivalent techniques.

Describe the features and benefits of PRINCE2. Describe the features of PRINCE2, such as: It is a generic project management method; it separates the management of a project from the specialist work; and it focuses on describing on what needs to be done rather than prescribing how everything is done. Describe the benefits of PRINCE2, such as: It is an established, proven approach to managing projects; it can be tailored to meet the needs of the organization; and it provides a common project vocabulary that aids communication about project management matters.

Describe the customer/supplier context on which PRINCE2 is based, including considerations when undertaking projects in a commercial environment. PRINCE2 assumes that there will be a customer who will specify the desired result and at least one supplier who will provide the resources and skills to deliver the result. Sometimes the suppliers are external organizations.

Explain the PRINCE2 principles. Be able to explain the seven principles of PRINCE2: continued business justification, learn from experience, defined roles and responsibilities, manage by stages, manage by exception, focus on products, and tailor to suit the project environment. Explain how adhering to these principles helps increase the likelihood of project success.

Explain which aspects of a project can be tailored, who is responsible, and how tailoring decisions are documented. Know that a range of PRINCE2 aspects can be tailored: Processes can be combined or adapted; themes can be used with techniques that are appropriate for the project; roles can be combined or split; management products may be combined or split into any number of data sources; and terminology may be changed. The project manager is responsible for identifying and documenting the levels of tailoring needed for the project in the PID. The project board will make the final decision on what tailoring to apply to the project.

Practitioner Exam Essentials

Analyze the application of PRINCE2 principles in context: continued business justification, learn from experience, defined roles and responsibilities, manage by stages, manage by exception, focus on products, and tailor to suit the project environment. Assess and critique an approach to applying the seven PRINCE2 principles, including how the principles might be adapted to different project contexts—for example, a small project, an agile project, a project with external third-party organizations, or a project operating within a programme environment.

Review Questions

The remainder of this chapter contains mock exam questions, first for the Foundation exam and then for the Practitioner exam. Answers to the exam questions can be found in Appendix A.

Foundation Exam Questions

1. Which two statements about tailoring are correct?
   1. PRINCE2 projects should use the recommended PRINCE2 techniques.
   2. Management products might be split into many data sources.
   3. PRINCE2 projects can comprise as many management stages as are necessary.
   4. Principles that are not relevant to the project can be excluded.

   A. 1 and 2
   B. 2 and 3
   C. 3 and 4
   D. 1 and 4

2. Which of the following describes an advantage of applying the focus on products principle?
   A. The project management method used is appropriate to the project.
   B. Projects that can no longer be justified are stopped.
   C. Senior management's time is not wasted managing the project on a day-to-day basis.
   D. The project does no more work than necessary to deliver its products.

3. Which aspect of project performance that needs to be managed helps set the objectives for the expected return on the project?
   A. Costs
   B. Risks
   C. Benefits
   D. Scope

4. Which option represents a characteristic of projects?
   A. Involves work with no defined end point
   B. Involves work across multiple functional divisions
   C. Involves predictable, recurring work
   D. Involves work that brings little change to an organization

5. Which principle ensures that the range of stakeholder perspectives is represented within the project management team?
   - **A.** Defined roles and responsibilities
   - **B.** Continued business justification
   - **C.** Learn from experience
   - **D.** Tailor to suit the project environment

6. Delegating authority from one management level to the next supports which principle?
   - **A.** Continued business justification
   - **B.** Learn from experience
   - **C.** Manage by stages
   - **D.** Manage by exception

7. Which principle addresses the problem that planning beyond a certain planning horizon is difficult?
   - **A.** Continued business justification
   - **B.** Manage by stages
   - **C.** Manage by exception
   - **D.** Tailor to suit the project environment

8. How is the principle of continued business justification applied?
   - **A.** By re-evaluating the reason for the project throughout the life of the project
   - **B.** By seeking opportunities to implement improvements throughout the life of the project
   - **C.** By using product description to provide clarity around user's requirements
   - **D.** By ensuring that a project has at least two management stages.

9. Which of the integrated elements of PRINCE2 provides a stepwise progression through the project life cycle?
   - **A.** Principles
   - **B.** Themes
   - **C.** Processes
   - **D.** Tailoring to the project environment

10. What is one of the benefits provided by PRINCE2?
    - **A.** Sets out how to manage projects in particular industries
    - **B.** Provides motivational techniques
    - **C.** Provides a common project vocabulary
    - **D.** Shows how to manage business as usual

Practitioner Exam Questions

The following Practitioner questions are based on the Practitioner exam scenario in Appendix B.

1. The project is approaching the end of stage two and the project manager has heard that a competitor is launching a similar website. The chief executive has called a meeting to discuss the viability of carrying on with the project. Which principle is being applied, and why?
   - **A.** Continued business justification, because the justification for the project should remain valid throughout the life of the project
   - **B.** Learn from experience, because as the project progresses, the project should continually review and learn from outside events
   - **C.** Defined roles and responsibilities, because the project manager is responsible for collating all the information regarding threats to the business case
   - **D.** Manage by exception, because a threat to project tolerances should be escalated to the chief executive

2. The project is in stage two. The project manager has just met with the team creating the requirements document, which tells him their work is delayed. The project manager realizes this delay will cause a breach in stage tolerances. He is meeting with the team that is dealing with the website supplier procurement next week, who also might report a delay. To ensure he understands the full situation, he has decided to wait until after this meeting to escalate the tolerance breach to the project board. Is this an appropriate application of the manage by exception principle, and why or why not?
   - **A.** Yes, because avoiding having to escalate two problems to the project board does not waste senior management's time.
   - **B.** Yes, because it is the project manager's responsibility to escalate forecast breaches of stage tolerances to the project board.
   - **C.** No, because if tolerances are forecast to be exceeded, the situation should be escalated immediately.
   - **D.** No, because the team creating the requirements document should escalate the issue straight to the project board.

3. The project is in stage two. The requirements for the website are being collated. The marketing manager has created a long list of features he would like to see in the product. The IT manager has pointed out that in order to deliver all of these features, the project will not be completed within a reasonable time. The project manager has asked the marketing manager to categorize the features into mandatory requirements and features that are desirable but not essential. Which principle is being applied, and why?
   - **A.** Defined roles and responsibilities, because it is the responsibility of the project manager to create product descriptions
   - **B.** Manage by exception, because categorizing features as either mandatory or desirable will allow the project management team to define a scope tolerance
   - **C.** Manage by stages, because categorizing features as either mandatory or desirable will allow the project manager to plan effective control and decision points
   - **D.** Tailor to suit the project, because the project will be adapted so as not to deliver all the original requirements