**Prince2**

1. Introduction

Prince2 is one of the most widely used **method for managing projects**.

Prince2 has been designed to be generic so that it can be applied to any project regardless of project scale, type, organization, etc. It achieves it by:

* Separating the management of project work from the specialist contributions
* Focusing on describing what needs to be done, rather than prescribing how everything is done

Prince2:

* Is based on established governance for project management
* Can be fit to specific needs of the organization and scaled to the size and complexity of the company
* Can be applied to any type of project and can easily be implemented to industry-specific models (ex. engineering models, development lifecycles)
* Provides a common vocabulary for all project participants.
* Promotes consistency of project work and ability to reuse assets.
* Facilitates staff mobility and reduces the impact of personnel changes.
* Ensures that participants focus on business case objectives rather than simply seeing the completion of the project as an end.
* Promotes learning from project experience and continual improvement in organizations.
  1. The structure of Prince2

The Prince2 method addresses project management with four integrated elements of **principles, themes, processes, and the project environment.**

* **Principles.** The principles are guiding obligations and good practices which determine if the project is being managed using Prince2. There are 7 principles and unless all of them are applied. It is not a Prince2 project**.** Prince2 is flexible and one of the principles is that it should be used to suit the type and size of project.
* **Themes.** Themes (project disciplines) are things that must be applied all throughout the project. There are 7 themes, and they explain why they need to be applied.
* **Processes.** Processes describe a progression from the pre-project activities of getting started, trough the stages of project lifecycle, to the final act of project closure. Each process has checklists of recommended activities, related products, and responsibilities.
* **Environment.** Organizations often want a consistent approach to managing projects, so they fit Prince2 to create their own project management method.
  1. What Prince2 does not provide

It is not intended for Prince2 to cover every aspect of project management. There are 3 wide topic categories which are **outside of Prince2:**

* **Specialist aspects.** Prince2 strength is in its wide applicability. It is generic and excludes industry specific or type specific activity. Agile methods can be used alongside Prince2. All specialist work is excluded, and Prince2 focuses on management products which are required to manage a project.
* **Detailed techniques.** There are many proven planning and control techniques that can be used in support of Prince2 themes, for example, critical path analysis and earned value analysis. Such techniques are well documented elsewhere. Even when Prince2 recommends a technique, it can be substituted with any other equivalent technique if they meet the requirements set out in the manual.
* **Leadership capability.** Leadership, motivational skills, and other soft skills are very important in project management, but impossible to codify in a method. Leadership styles can work in one place but fail in another. There are many successful leaders who adopted very different styles. Prince2, although, defines creation of an effective project team.
  1. What makes project a Prince2 project?

You can say that project is Prince2 project only when it meets the criteria. Here is the criteria:

* Is applying Prince2 principles
* Is meeting the minimum requirements set out in the Prince2 themes
* Has project processes that satisfy the purpose and objectives of Prince2 processes.
* Is using Prince2 recommended techniques or using alternative, equivalent techniques.

Beyond there requirements, users have freedom to tailor Prince2 to their needs.

* 1. The purpose of this manual

This manual is intender for those who will work with Prince2 project and is designed:

* For entry level project management personnel wishing to learn about project management and the Prince2 method.
* For experienced project managers who wish to learn about Prince2
* As a detailed reference source for Prince2 practitioners.
* As a source of information on Prince2 for managers considering whether to adopt the method.

The manual helps to address the questions that are frequently asked by people involved in project management and support roles. These questions include:

* What is expected of me?
* What does the project manager do?
* What do I do if things do not go to the plan?
* What decisions am I expected to make?
* What information do I need, or must I supply?
* Who should I look to for support? For direction?
* How can I tailor the use of Prince2 for my project?

1. Project management with Prince2
   1. What is a project?

A key challenge in today’s world is to succeed in balancing two things:

* Maintain current business operations (profitability, service quality, customer relationships, brand loyalty, productivity, market confidence). In other words, keep business as usual.
* Transform business operations to survive and compete in the future (looking forward and deciding how business change can be introduced so it would work for the organization).

As the pace of change accelerates (technology, business, social, regulatory), the penalties for failing to adapt to change become more evident, so the focus of management attention is moving to achieve a balance between business as usual and business change.

Projects are how we introduce change and although many of the skills required are the same, there are differences between managing business as usual and managing project work.

Project definition:

* **Temporary activity which aims to get to a specific goal and has its beginning and the end and has limited resources.**

There are characteristics of project work that distinguish it from business as usual:

* **Change**. Project are how we introduce change.
* **Temporary**. Projects are temporary in nature. When the desired change has been implemented, business as usual resumes (in its new form) and the need for the project is removed. Projects should have a defined start and a defined end.
* **Cross-functional.** A project involves a team of people with different skills working together to introduce a change that will impact others outside the team. Projects often cross the normal functional divisions within an organization and sometimes span entirely different organizations. Each has different perspective and motivation for getting involved in the change.
* **Unique.** Every project is unique. An organization may undertake many similar projects, but each one will be unique in some way: different team, different customer, different location, different time. All these factors combine to make every project unique.

The environment within the project is being managed may influence how it is started up, delivered, assured, and closed. There are factors external to the project itself, such as embedded corporate standards, the maturity of the organization, factors specific to the project like project risks, etc.

* 1. What is project management

Project management is the planning, delegating, monitoring and control of all aspects of the project, and motivation of those involved, to achieve the project objectives within the expected performance targets for time, cost, quality, scope, benefits, and risk.

Taking an example of building a house, it is completed by creating drawings, foundations, floors, walls, windows, a roof, plumbing, wiring and connected services. None of this is project management, why do we need project management at all? The purpose is to keep control over the specialist work required to create the project’s products or, to continue with the house analogy – to make sure roofing contractor does not arrive before the walls are built.

Additionally, given that projects are how we introduce change, and that project work is a high degree of risk, it follows that implementing a secure, consistent, well-proven approach to project management is a valuable business investment.

* 1. What is it we wish to control?

There are six variables involved in any project, therefore six aspects of project performance to be managed. These are:

* **Costs.** The project must be affordable, and even though we may start with budget in mind, there will be many factors which can lead to overspending, and, perhaps, some opportunities to cut costs.
* **Timescales.** Closely linked to costs, one of the questions project managers are most frequently asked is: When will it be finished?
* **Quality.** Finishing on time and within budget is not much wanted result if the project does not work. In Prince2 terms, the project’s products must be fit for purpose.
* **Scope.** Exactly what will the project deliver? Without knowing it, various parties involved in a project can very often be talking about cross-purposes about this. Ex – customer may assume that finished kitchen and bathroom are included in the price of the house, while supplier views them as extras. On large scale projects scope definition is much more subtle and complex. There must be agreement on the project’s scope and the project manager needs to have a good understanding of what is and what is not within the scope. Project manager should take care not to deliver beyond the scope as this is common source of delays, overspends and uncontrolled change (scope creep).
* **Benefits.** Perhaps most often overlooked is the question – Why are we doing this? It is not enough to build the house successfully on time, within budget and quality specifications if, in the end, we cannot sell or rent it at a profit or live in tit happily. Project manager must have a clear understanding of the purpose of the project as an investment and make sure that what the project delivers is consistent with achieving the desired return.
* **Risk.** All projects entail risks but exactly how much risk are we prepared to accept? Should we build a house in very populated area or near some factory? If we decide to go ahead, is there something we can do about the risk? Maybe we can insure against some smells from the factory, and simply monitor with ongoing process?

Prince2 is an integrated method of principles, themes, and processes that addresses the planning, delegation, monitoring and control of all these six aspects of project performance.

* 1. What does a project manager do?

To achieve control over anything, there must be a plan. It is the project manager who is responsible for planning the sequence of activities to build the house, working out how many bricklayers will be required and so on.

It may be possible to build the house yourself, but being a manager implies that you will delegate some or all the work to others. The ability to delegate is important in any form of management but particularly so in project management, because of the cross-functionality and risks.

Plan -> Delegate -> Monitor -> Control -> Plan …

With the delegated work under way, the aim is that it should go according to plan, but we cannot rely on this.

It is the project manager’s responsibility to monitor how well the work in progress matches the plan.

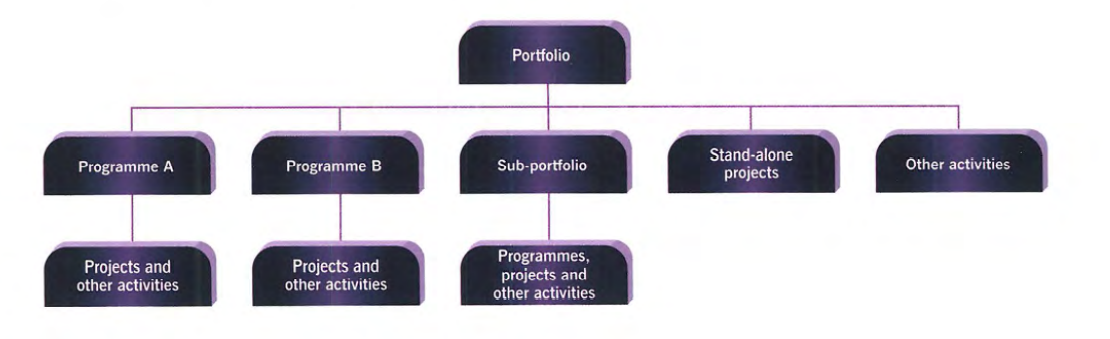
One aim of Prince2 is to make the right information available at the right time for the right people to make the right decisions about the project. Those decisions include whether to take **corrective action** or **implement measures** to improve performance.

* 1. Projects in context

Prince2 assumes that there will be a customer who will specify the desired result and a supplier who will provide the resources and skills to deliver that result.

Prince2 assumes that there will be an organization that commissions a project. That organization is responsible for providing the project’s mandate (official order), governing (having the authority to conduct the policy) the project, and for realizing any benefits/risks that the project might deliver or enable.

Prince2 refers to a supplier as the person, group, or groups responsible for the supply of the project’s specialist products.

Projects can exist within many contexts. They may be stand-alone, or they may be part of a program or wider portfolio.

* + 1. Stand-alone projects

Projects can exist as stand-alone entities within an organization and outside the governance structures, where organization has been set up solely for the purpose of undertaking the project.

* + 1. Projects within programmes

What is a programme? A temporary, flexible organization structure created to coordinate, direct and oversee the implementation of a set of related projects and activities in order to deliver outcomes related to organization’s strategic objectives. A programme is likely to have a life that spans several years.

A project may be part of a programme. The project will be impacted by the programme’s approach to governance.

Prince2 defines the term sponsor as the role that is the main driving force behind a programme or project. The guidance uses the term commission for the activity or authority to request the project. The organization commissioning the project will usually provide the project sponsor.

* + 1. Project within a portfolio

What is a portfolio? The totality of an organization’s investment in the changes required to achieve its strategic objectives.

Corporate organizational structures can vary from traditional functional structures (organized by type of work, ex. Marketing, finance, sales etc.) and project-focused organizations (practice is to work with project teams). Goal is the same, contribute to achieving the strategic objectives.

* + 1. Projects in commercial environment

If project is run to deliver specific set of customer requirements, the customer may have entered a commercial relationship with a supplier. The organization delivering the project (the supplier) will do so to satisfy a particular need identified by the customer. The contract between the parties sets out how the customer and supplier will work together to deliver the project. But the rights and duties covered by the agreement may constrain how a project manager manages the project.

Customer may break the work down into one or more elements. Some of the elements may be delegated to the supplier, while others may be handled by the customer himself.

In commercial environment, there may be hierarchies of commercial relationships between suppliers. Projects often involve multiple organizations constrained by multiple contracts. There may be primary commissioning organization, but there may others. Possible project undertaking examples:

* Joint ventures
* Collaborative research
* Intergovernmental projects
* Interagency projects
* Partnerships

When managing projects in commercial environment, consider that there may be multiple sets of:

* Reasons for taking the project
* Management systems (including project management methods)
* Governance
* Organization structures
* Delivery approaches
* Corporate cultures
  1. Applying Prince2
     1. Prince2, international standards and bodies of knowledge

A standard provides rules, guidelines, or characteristics that can be used consistently to ensure that materials, products, processes, and services are fit for their purpose. It does not state how activities should be carried out to achieve this.

A method such as Prince2 provides not only a set of activities to be done, but also techniques for taking these activities. Prince2 method exists within the context of a number of such standards and bodies of knowledge including:

* ISO21500
* BS 6079 Project management, Principles and Guidelines for the management of projects
* A guide to the project management body of knowledge (PMBOK)
* APM Body of knowledge
* The IPMA individual competence

When embedding a project management based on PRINCE2, organization needs to be aware of these standards and bodies of knowledge, and should apply them in a manner appropriate to its business.

* + 1. Prince2 and commissioning organization standards

Organization will typically develop values, principles, policies, standards, and processes that are fit for purpose, including those required to govern, manage and support programmes and projects.

A programme defines its strategies in a plan which must ensure that the progamme’s vision and goals align with those of the organization. Projects commissioned by programme will typically inherit programme strategies which may be used to replace project’s approach to quality management, risk management, tailoring them as appropriate.

If project is commissioned by a customer outside the project organization, then the mandate may require the use of some or all the customer’s standards or methods. Examples may include the use of the customer’s issue management process and specific to reporting requirements.

The project manager may need to tailor the project to meet standards and process the requirements, but within the guidelines of the organization’s method. This will be recorded in **project initiation documentation.**

Terminology might get confusing when multiple best-practice methods are used in same organization.

* + 1. Prince2 and delivery approaches

The project approach is the way in which the work of the project will be delivered. It may rely on one or more delivery approaches. Typical approaches are:

* **Waterfall**. Where each of the delivery steps to create the products happens in sequence (requirements gathering and design take place before programming). The product is made at the end of the project.
* **Agile**.Requirements gathering, design, coding and testing take place iteratively trough the project.

There are number of delivery steps in each approach (sprints within an agile approach, or steps like study, design, build, test, etc. within a waterfall approach).

The application of Prince2 can be very different depending on which delivery approach is used.

Prince2 agile regards agile as family of behaviors, concepts, frameworks, and techniques.

* + 1. Measures of success.

Traditional approach of measuring time, cost and quality may take its place, but it doesn’t tell the whole story. The best way to summarize the project status at a point in time is to identify **key performance indicators (KPIs).**

When designing KPIs, we need to find a balance between qualitative and quantitative measures, leading and lagging indicators, project inputs and outputs. The number of KPIs should be balanced to create only information that is necessary and sufficient.

**Objectives** are what the project needs to achieve, whereas KPIs are the measures that indicate whether progress is being made towards achieving the objectives.

What are lagging indicators?

* Track down how well actual performance matches that which was expected. An example could be the number of unexpected errors reported after a particular software release. It is what happened already.

What are leading indicators?

* Track down whether it is on course to achieve the expected performance. An example would be the persistent failure of a supplier to meet quality requirements early in the project. It is what’s going to happen.

The KPIs should be aligned with the **quality expectations** and **acceptance criteria** defined in the **project product description** and the project **tolerances** (time, cost, quality, scope, benefits, risk) defined in **project initiation documentation.**

* + 1. Prince2 and organizational capability

It is recognized that organizations which demonstrate high levels of project management capability can also demonstrate increases in business performance. Maturity models such as AXELIOS, P3M3 provide a way of comparing organizational capability against a maturity scale, diagnosing weaknesses and planning for improvements.

P3M3 characterizes an organization’s maturity using the following 5-point scale:

* Level 1: awareness of process
* Level 2: repeatable process
* Level 3: defined process
* Level 4: managed process
* Level 5: optimized process

Organization assessed at level 3 would typically ensure that a project management method such as Prince2 is consistently deployed and used by all projects.

1. Principles

Principles are designed so that it can be applied to any type of project, taking into accounts it’s scale, organization, geography, and culture. It is designed to contribute to the success of the project without burdening it with bureaucracy. The themes, processes and product descriptions describe what should be done but in general, not how it should be done.

Prince2 is principle-based.

These principles are:

* Universal in that they apply to every project.
* Self-validating in that they have been proven in practice over many years.
* They give practitioners of the method added confidence and ability to influence and shape how the project is managed.

The Prince2 principles provide a framework of good practice for people involved in project. These were made from lessons taken from both successful and failed projects.

**The seven principles are**:

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

To be following Prince2, these principles must be adopted when managing a project. Minimum requirements set out for themes and processes must also be satisfied. Minimum requirements describe what must be done, rather than how it is done.

Lets go trough the principles more in detail.

* 1. Continued business justification

Prince2 requires that for all projects:

* There is a justifiable reason for starting the project
* That justification is recorded and approved
* That justification remains valid, and is revalidated, throughout the life of the project.

The business justification is usually documented in in some form of business case. Some organizations may use business plans or similar as the business justification during the early stages of the project, but these plans may not satisfy the requirements of a business case. The format and formality of documentation might vary, depending on organizational standards.

The business justification drives decision-making to ensure that the project remains aligned with the benefits. Organizations that lack business justification may find that projects proceed even when there are few real benefits. Poor alignment with corporate, programme management can result in organizations having a portfolio of projects that have mutually inconsistent or duplicated objectives.

Projects driven by regulation, which are compulsory, should be supported by a business justification to demonstrate that chosen option represents the best value for money.

Although the justification should remain valid, it may change. It is important that the project and evolving justification remain consistent. If a project can no longer be justified, then it should be stopped. Stopping unjustified project is a positive contribution to an organization as its funds and resources can be reinvested in other more worthwhile projects.

* 1. Learn from the experience

Lessons must be recognized, recorded, and acted upon throughout the life of the project.

All projects are unique and have uniqueness that makes projects challenging as the temporary team may not have experience of a project like the currently running project.

Learning from the experience takes place throughout Prince2:

* **When starting a project.** Previous or similar projects should be reviewed to see if lessons could be applied. If the project is first for the people within the organization, then its even more important to learn from others and the project should consider seeking external experience.
* **As the project progresses.** The projectshouldcontinue to learn. Lessons should be included in relevant reports and reviews. The goal is to seek opportunities to implement improvements.
* **As the project closes.** The project should output the lessons. Unless lessons provoke change, they are only lessons identified (not learned).

**It is the responsibility of everyone involved to look for lessons rather than wait for someone else to provide them.**

* 1. Defined roles and responsibilities

A Prince2 project has defined and agreed roles and responsibilities within an organization structure that engages the business, user, and supplier stakeholder interests.

Projects involve people. No amount of scheduling or control will help if the wrong people are involved, if the right people are not involved, or if people involved do not know what is expected of them or what to expect of others.

A project is typically cross-functional, may involve more than one organization, may involve mix of full-time and part-time resources. Management structures may be different with different priorities, objectives, and interests to protect. The day-to-day line management structures may not be designed for project work.

To be successful, projects must have an explicit project management team structure consisting of defined and agreed roles and responsibilities for the people involved in projects. It should have means for effective communication between them.