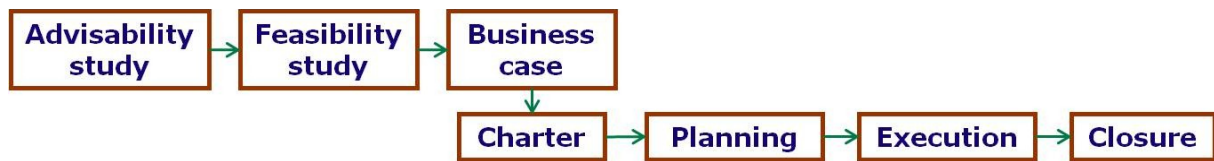


### 3) The life cycle of a project

#### General remarks

This chapter provides an overview of the various phases in a project's life cycle, as shown in the following diagram. Details are provided in subsequent chapters of this guide.



Another high-level description of the sequence of phases involved in transforming an idea into a project then into a product is the following: **evaluation, initiation, preparation (planning & organization), product creation/development, closure.**

#### From idea to project

At the root of any project, there is an idea (or a concept). An idea may be interesting or crazy, workable or completely utopian, so it must be evaluated before turning it into a project or dropping it.

If an idea is retained, it is usually the PM's responsibility to turn it into a concrete project, regardless of whether the PM is the originator of the idea or not.

In a professional context, the idea may originate within a company (or organization) or it may come from an external party.

In order to **qualify as a potential project**, the idea should at least:

- 1) **correspond to a need** identified by the company, for its customers or for itself;
- 2) **be consistent with its strategy**;
- 3) **be workable** in principle;
- 4) **be economically viable** (unless the exception to this rule can be justified!).

Note that **innovative ideas** are not necessarily derived from needs expressed by potential users. Actually, such ideas often result in creating a need and, in some cases, a huge new market!

In order to determine whether undertaking a project is of any interest and whether the objectives of the project under consideration are achievable, an **advisability study** and a **feasibility study** need to be conducted.

#### Advisability study

To establish whether it is advisable to turn an idea into a project, the PM (or whoever is in charge of the study) needs to take into account information concerning the market, the competition, the company's needs and strategy, other projects that may be under way, etc.

In some cases, the advisability study may be very straightforward, since the justification for a project may simply be the absolute necessity to satisfy a need of the company or to solve a serious problem.

If the result of the advisability study is positive, the next step towards an actual project is a feasibility study.

## Feasibility study

The feasibility study determines whether the objectives of the project are achievable, given editorial, technical, financial and timing constraints, as well as any possible risks.

In order to conduct the feasibility study, the PM (or whoever is in charge of the study) needs to imagine, at least as a broad outline, what the result of the project will be and how to achieve it, which requires a **summary project description** and a **summary project plan** including an estimate of the resources, the budget and the schedule involved.

The PM may require assistance from experts in order to conduct the feasibility study.

## Business case

If it is believed, after an advisability study, a feasibility study and careful consideration, that the matter (the "idea") deserves to be taken further, a **business case** (or **business plan** or **project proposal**) must be presented to those of the **stakeholders** who have the **authority to decide** whether to go ahead with the project or not. The main stakeholder in this respect is of course the (potential) **project sponsor**, who, all being well, will **fund the project**.

The business case usually takes the form of an "**information package**" describing the **project**, its expected **result** and the **benefits** it will provide; it should also include a **risk assessment** and a **Profit & Loss ("P&L") evaluation**.

The project's estimated P&L is usually established by the PM, possibly with the help of a financial controller, and, in the case of a commercial product, in close cooperation with "Marketing & Sales", which is in the best position to provide product pricing estimates, sales forecasts and an evaluation of launch and other promotion costs.

The **basic purpose** of the business case is to provide **decision-makers** with the information they need to understand the project and to form an opinion of it.

- The "**Go / No go**" decision is usually based on the business case.

The business case may have been prepared independently of the PM, before he was appointed, although it is advisable to involve the PM (or "potential PM" at this stage of the "potential project") as early as possible in the process.

An experienced PM should neither have much difficulty nor require too much time to develop a business case, thanks to his knowledge of previous projects. As mentioned above, the PM will however generally need to consult a few specialists, for example editors, developers, marketing and sales people, in order to validate the project's feasibility and its commercial (or other) interest.

- > See the following article for **more information on the notion of "business case"**:

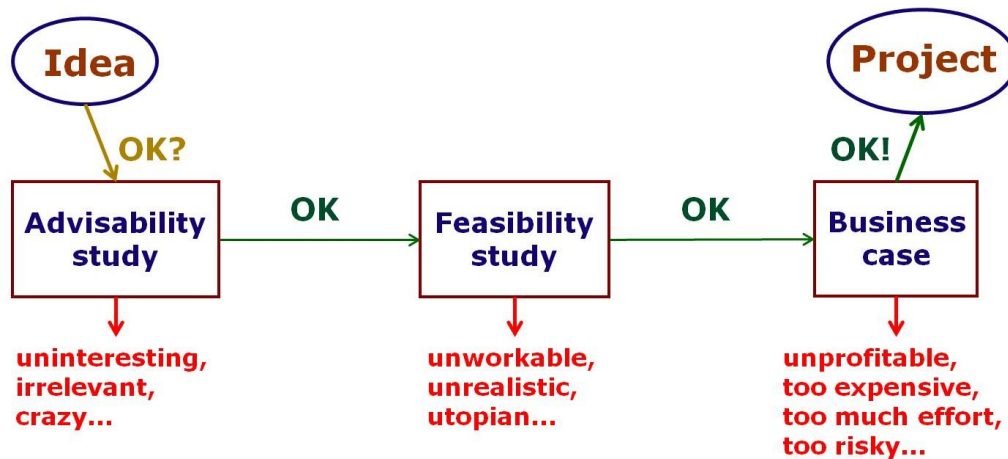
>> [en.wikipedia.org/wiki/Business\\_case](https://en.wikipedia.org/wiki/Business_case)

I strongly recommend creating a short version of the business case, a so-called "**elevator pitch**" version that is liable to pass an "**elevator test**", ie which can be used **to "sell" the project in a matter of minutes**. An elevator pitch is particularly useful if lobbying is required to get the project accepted (with appropriate funding...).

- > See the following article about **elevator pitches**:

>> [elevatorpitchessentials.com/essays/ElevatorPitch.html](https://elevatorpitchessentials.com/essays/ElevatorPitch.html)

The following diagram provides a summary of the initial **steps leading from an idea to a project**.



A project that has been rejected may be given a **second chance**. In this case, the above process (advisability study, feasibility study, business case) should be repeated, at least partially, for a revised or alternative project.

Note that **alternatives**, each documented with their “pros and cons”, may be featured in the initial business case in order to give decision-makers a broader choice.

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Here are a few **examples of evaluation of ideas**:

*In the early 1990s, at a time when CD-ROM technology was still very recent, Hachette decided to explore the possibilities of the technology for its line of business, namely content publishing. Hachette digitized one of its dictionaries and structured it in SGML (the ancestor of XML) in order to exploit it in “electronic” form on a CD-ROM, named Zyzomys, which was sold directly to schools and via retail outlets to the general public.*

*Following this successful experience, other dictionaries were digitized and structured, and were used by companies such as Franklin and Sony, under licence from Hachette, on a variety of portable devices (Bookman, Data Discman). Concurrently with experimenting “electronic publishing”, Hachette undertook the creation of an eighteen-volume encyclopedia in print form. Named Axis, it was put on the market in 1993 and sold directly to schools and families by a dedicated door-to-door sales force.*

*A CD-ROM was added as an optional item to the Axis offering. The CD-ROM contained the text of the Axis encyclopedic dictionary along with thousands of multimedia assets (photos, drawings, animations, videos, sound...). It featured a very powerful advanced search tool which was especially appreciated in schools, in particular for its pedagogical virtues.*

*In the same timeframe, the Hachette Multimedia Dictionary on CD-i (interactive CD), coproduced by Hachette and Philips, was released for the general public and “bundled” with Philips CD-i players, and the Hachette Multimedia Dictionary CD-ROM project was launched, based on the assumption that there would be greater demand for CD-ROMs than for CD-i products (which turned out to be true: the CD-i was discontinued in 1996).*

*Over that period of five years or so, Hachette had acquired a solid experience in electronic publishing. It had also created a major encyclopedia, part of which was available on a multimedia CD-ROM.*

*At that stage, Hachette was convinced it should become a major player in the emerging "multimedia publishing" market, in particular for "Reference" products, ie dictionaries and encyclopedias.*

*Furthermore, Hachette's American subsidiary, Grolier Publishing, was very successful with its "Grolier Multimedia Encyclopedia" CD-ROM, the first of its kind, which was available in English-speaking markets long before the arrival of Microsoft Encarta.*

*Finally, Hachette knew through competitive intelligence that Microsoft was preparing the French version of Encarta for release in 1996, that the development of a CD-ROM version of the Encyclopaedia Universalis (the French equivalent of Encyclopaedia Britannica) was about to be undertaken, and that one of its main competitors, Havas Interactive, was setting up a multimedia publishing organization.*

*So, in 1995, Hachette decided to create a division dedicated to multimedia reference products publishing (which I was hired to lead). Among other assignments, that division was given the responsibility of transforming the idea of a full-blown multimedia encyclopedia into a project, then of course into a commercial product (the "Encyclopédie Hachette Multimédia (EHM)").*

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*Many ideas for products submitted to Marketing & Sales by the editorial teams at Hachette were rejected because the answer to the simple question "how many units could we sell?" was something like "probably no more than ten!".*

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*One interesting idea that my team at Hachette came up with (before the team was dismantled...) was a website where the general public could subscribe to online reference and educational resources developed by several of the company's editorial departments. Although the project would have been feasible, it was rejected by management for three main reasons:*

- 1) the implementation cost was considered to be too high;*
  - 2) there was an indisputable risk attached to the projected revenues (the issue being: "will the general public accept to pay for such resources?");*
  - 3) my team's charter did not include implementing and operating an online product distribution platform.*
- 

## **Project charter**

Once the business case has been accepted, the project is **initiated** and moves on to its **preparation** phase. One of the first tasks in this phase consists in establishing the **project charter**, which is a reference document that provides a **detailed description of the project**, as well as of its outcome (in a **summary requirements specification**).

The following terms may be considered as **synonyms of "project charter"**: "project mandate", "project definition", "project initiation document (PID)", "project overview statement (POS)" and "terms of reference (TOR) of the project".

The project charter should clearly document the **project's scope, schedule and budget** (however imprecise they may be at this stage of the project). It should also define the **scope of the PM's responsibilities** and his **level of authority**.

This subject is covered in more detail in chapter 7.

### ***Requirements specification and project planning***

Expanding on the project charter, the PM must describe and plan the project very precisely, with a **thorough requirements specification** and a **detailed and exhaustive project plan**, which may be considered as a "**roadmap**", covering all areas of project management (as described in chapter 1).

These subjects are covered in more detail in chapters 8 and 9.

### ***Forming the project team, choosing contractors***

Before going ahead with the actual execution of the project, the PM usually needs to form a project team and to establish an **adequate organization**. In some cases, the PM will need to **recruit staff** and to **select contractors** as well as suppliers and service providers.

The choice of contractors generally involves evaluating proposals and estimates made by candidates on the basis of specific "**Statements of Work (SOWs)**" adapted to each type of work. SOWs, which are usually derived from the overall requirements specification, must be **precise and exhaustive**. Ideally, the PM should have specialists at his disposal to help write the SOW documents.

These subjects are covered in more detail in chapters 10 and 11.

### ***Project execution***

The implementation phase of a project involves execution of the tasks documented in the project plan.

### ***Software development life cycle models and methodologies***

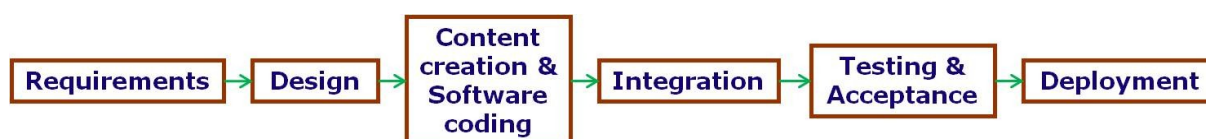
There are many models that describe the sequence of phases specific to a software development project: requirements, design, implementation (or coding), integration, testing, deployment (or delivery or entry into operation or launch).

Each particular model emphasizes certain features of a project's organization and dynamics. The choice of a model has an influence on the detailed definition of a project's execution phases, so, ideally, **the model should be chosen before planning the project**.

The following models are addressed in chapter 12 of this guide: Waterfall model, Incremental model, V-shaped model, Spiral model, as well as the Agile Software Development methodology and one of its applications, eXtreme Programming.

### ***Major phases of product creation***

The following diagram provides a summary view of the **major "work packages"** (sets of tasks) involved in the execution phase of a project that results in a product featuring content. They can be considered as **phases of product creation**.



## Requirements

Although a requirements specification needs to be provided before a project can be planned, one of the first work packages involved in product creation is "Requirements" (as featured in the above diagram), because the requirements specification provided by the project owner is the **foundation for product design** and **may need to be reviewed and modified** before actually doing the design and/or as progress is made on designing the product.

## Design specifications

Most projects involve work that requires very **detailed design specifications**. This is particularly true for software and website development, as well as for complex editorial projects.

Product **design specifications need to be written before the product is actually built**. The specifications are the "**blueprint**" for building the product.

Such specifications are usually devised and written in close cooperation with specialists in each area of interest, for example the editorial manager for editorial specifications, the technical manager or software developer(s) for functional and technical specifications. Detailed technical specifications are generally written by the developer(s) and/or a development PM. Functional design specifications need to be **reviewed and validated by the overall PM** (possibly with the help of appropriate specialists in the project team).

This subject is covered in more detail in chapter 13.

## Content creation, software coding, integration

**Content creation, coding (implementation) of the software** (which is the "container" part of the product) **and integration** (of content with the container) are the work packages corresponding to the actual building of the product.

**Content creation and software coding** can generally be performed **in parallel** (or at least with a certain degree of parallelism).

These subjects are covered in more detail in chapters 14 and 15.

## Testing and acceptance

The implementation of a project materializes in the form of "**deliverables**", which are generally successive, more and more complete versions of a product, corresponding to various stages of content and software integration, as well as documentation, etc.

It is the PM's responsibility or that of a subproject manager to organize **testing** of deliverables beyond the basic technical tests that are usually carried out by the developers themselves under the supervision of a development subproject manager.

The PM should take an active part in **quality control**, which involves testing, since he is ultimately responsible for the quality of the finished product and **accepting** it before deployment/launch.

This subject is covered in more detail in chapter 16.

## Product deployment/launch

The deployment/launch of the resulting product must be prepared in **close cooperation with Marketing & Sales** (particularly in the case of a commercial product) or with any other entity that will be in charge of the product's operation.

The **PM**, as the primary interface between the project team and the "outside world", is the **official source of project and product information** for Marketing & Sales (which usually includes Customer Services / Technical Support).

The PM provides the product description and often helps Marketing & Sales **translate product features into user benefits**, devise a sales pitch, brief a communications agency and advertising people, write a press release, etc. Marketing may also ask the PM to take part in press conferences, in product demonstrations, in interviews with journalists, etc.

This subject is covered in more detail in chapter 18.

### Project direction/supervision, monitoring and control

The PM **directs** project execution, which involves **coordinating** and **supervising** all of the tasks (activities) that are involved in the **execution of the project** and the **creation of the resulting product**. For that purpose, the PM must keep himself **informed** about the progress of the tasks; he needs to **identify any deviation** from the requirements, the schedule, the budget, etc., and, whenever necessary, he must **take corrective action** as soon as possible.

The PM needs to closely **monitor** and **control** the work of all contributors to the project, which generally involves using a “**project dashboard**” consisting of various tables, charts, diagrams and other documents that represent “**performance indicators**”, with up-to-date information on the project’s **progress** (this information may also be used for reporting purposes). Regular progress and coordination meetings enable the PM to take stock of the status of the project, to draw conclusions and to make appropriate decisions.

This subject is covered in more detail in chapter 17.

### Project closure

The end of a project usually coincides with the launch of the product which has been gestating since the initiation of the project.

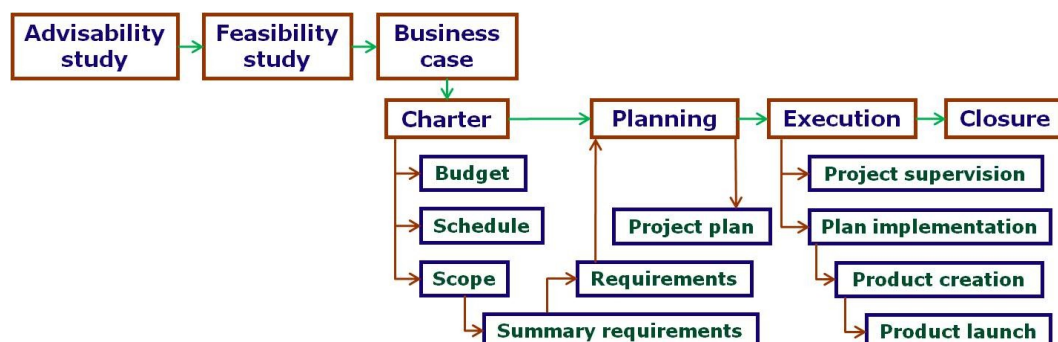
Project closure involves **releasing resources** that are no longer needed, **terminating contracts** and making sure **adequate project documentation** is available for follow-up purposes and future reference.

Before a project is definitively closed, the PM should submit it to a **post-mortem analysis**, in order to learn lessons for future projects. Ideally, the results of this analysis should be fed into a “**knowledge base**”.

That exercise should take into account any available **user feedback** on the product. **Users** are indeed a **very valuable source of information** for future projects such as the development of new versions of the product and/or its maintenance.

### Summary diagrams

Here is a diagram showing the key phases in a project’s life cycle, including more details than those provided by the diagram featured at the beginning of this chapter:

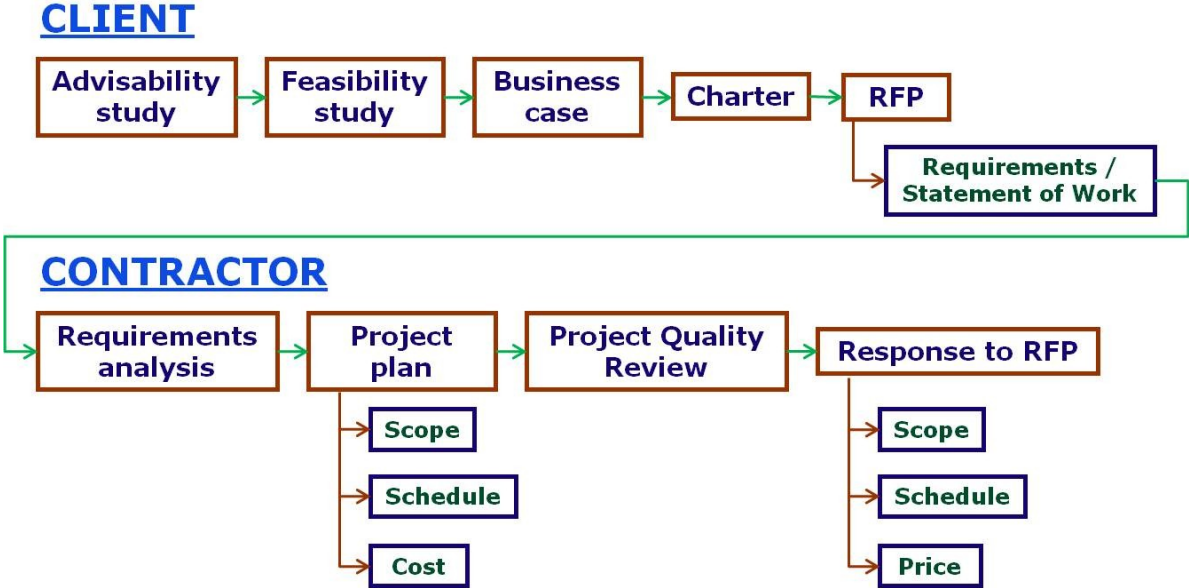


From a **contractor’s viewpoint**, a project is generally **a service to be provided to a client** (which may be internal or external), and, as far as the contractor is concerned, the client’s “business case” is generally a given. The project nevertheless has to make sense and be economically viable for the contractor, so there is a need for a **business case on the contractor’s side**, which involves preparing a project plan that meets the potential client’s requirements while being acceptable to the contractor, in particular from a financial standpoint.

The presentation of the business case to the contractor’s management may be done on the occasion of a so-called “**Project Quality Review**”, following which the “go ahead” for the project may or may not be given.

Such a review is generally conducted by a contractor before responding to a “**Request for Proposal (RFP)**”, and it may very well result in a “no go” decision, ie the contractor may decide to not respond to the RFP.

The following summary diagram shows the steps leading from an idea to an **RFP** on a client’s side, as well as the steps taken by a potential contractor towards **responding to the RFP**, ie submitting a proposal to the (potential) client.



Note in the above diagram that the contractor’s response to the RFP features a “**price**”, as opposed to a “cost”. Indeed, not only should the price paid by the client **cover the cost** of the work that has been estimated by the contractor as part of the planning process but it should also **include a profit margin** in order for the project to be **economically viable** from the contractor’s standpoint.

This subject (cost vs price) is covered in more detail in chapters 6 and 9.