6) Profit & Loss (P&L) statement and evaluation

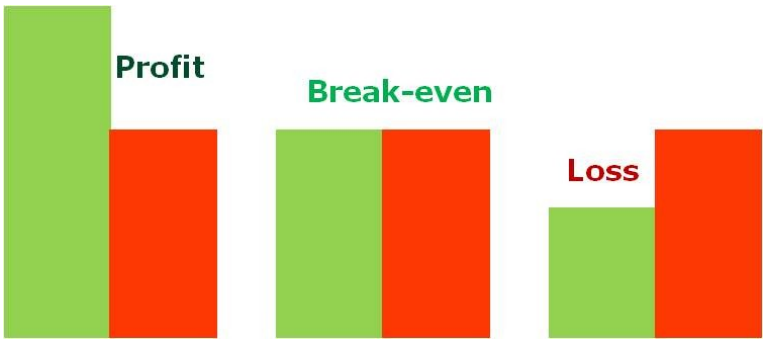
General remarks

This chapter provides an overview of the notion of "**P&L**", which is mentioned on several occasions in this guide.
A P&L evaluation makes it possible to form a judgment on a project's **profitability**.

The basic principle is very simple: the "**bottom line**" of the **P&L statement** is the **net margin**, ie the difference between total expected revenue from a product and the total cost of producing it (in the broadest sense, ie creation + manufacturing), promoting it and selling it; if the net margin is **positive**, then the project is **profitable**; a **negative** net margin corresponds to a **loss**.

The "**break-even**" point is reached when revenues cover costs. This may occur only after some time, at which point the P&L starts to show a profit instead of a loss.

In the following illustration, the left-hand bars represent revenues and the right-hand bars represent costs.



Revenues

Revenues may be generated by **selling products** or **services** or **subscriptions** and/or by **advertising** (eg websites featuring ads).

Revenues may be derived from **licence fees** or **royalties**, or from **commissions** on third-party product sales or transactions. Examples of such a model are eBay and PayPal.

Revenues may take the form of **donations** that are made by users or sponsors or benefactors in order to keep a product alive (eg Wikipedia).

Revenues may also correspond to the **cost reduction** of a business operation over a certain period of time as a result, for example, of the installation and use of a new application or system. The amount of money saved by the cost reduction may however be difficult to evaluate…

> See the following site for **an overview of business models on the web**:

>> digitalenterprise.org/models/models.html

From a contractor's viewpoint, if the project consists in a service provided to a client, the revenues correspond to the **fee paid by the client** for the provision of the service, ie the **price of the service**.
The fee may be divided into a **flat fee** and a **proportional fee** (eg a percentage of gross or net revenues generated by the product). An additional fee is often charged by the contractor for maintenance (unless maintenance is included in the flat fee).

A developer may also charge a **licence fee** for the use of its proprietary technology.

Note that a contractor's fee generally includes a **profit margin**. The price paid by the project owner (the client) is therefore the sum of the contractor's cost and its profit margin. Another way of putting this is to say that the contractor applies a "**mark-up**" to its cost in order to make a profit.
(There is often **confusion between margin and mark-up expressed as a percent value**: see the section at the end of this chapter for more details on the subject.)

Contractors may be obliged to pay **penalties** to a client, eg in the case of a late delivery. Such penalties may be considered as **revenues** by the client but they are obviously **offset by the cost of damages** caused.

Costs

The **costs** to be taken into account in the P&L are those of the **project** (people and other resources such as equipment, facilities, supplies, service providers, (sub)contractors, travel, etc.) and those of the **resulting product** (manufacturing, maintenance, distribution, marketing, customer services, etc.).

Some costs are **fixed**, for example the project costs; others are **variable**, for example manufacturing and other costs (including possible royalties) which are usually a function of the number of units of the product that are forecasted to be sold.

Project costs will be reviewed in more detail in chapter 9 ("Project planning").

Product-related costs and revenues are to be estimated by Marketing & Sales, based on the product's marketing mix as well as information about the market and competition.

The P&L is often established for a period of several years, even if profitability is required within a shorter time frame.

Some of the project costs (software development, servers…) may be treated for accounting purposes as an investment to be amortized over a number of years.

Project funding

Project funding is not to be considered as actual revenue but as the "**fuel**" required to get a project started and successfully completed.

Funds may come from the **project owner's/sponsor's organization**, from a **bank** in the form of a loan (to be reimbursed of course!) or from **venture-capital** firms or "**business angels**", who generally expect a **return on investment** ("ROI").

In some cases, the project may be subsidized by an external organization (government, etc.): the **subsidy** may offset all or part of the cost of the project.
Note that some subsidies may be granted on the condition that they should be reimbursed, at least partially, at some stage after the product resulting from the project has been launched and starts to generate revenue.

> *My team at Hachette Multimedia designed and developed two series of "Learning Objects" for schools. 50% of the cost of the first series was funded by the European Commission. 30% of the cost of the second series was funded by the French Ministry of Education. The first project was profitable, while the second project was not, due to a premature interruption of sales of the resulting products (as a consequence of the closing down of Hachette Multimedia).*

As mentioned above for products, a project may also be funded, at least partially, by **donations** from benefactors of some kind, or by **crowdfunding**.

P&L example

As an example, the following two tables show the forecasted project costs and 3-year P&L statement which were established for the EHM project (code-named "Dante") back in 1996 (they are actually revised versions of the mid-1995 costs and P&L which were featured in the initial "business case").
(Monetary amounts originally in FRF have been converted into EUR.)

Project DANTE: forecasted project costs (established on 24/06/1996 - values converted into €)	
Writing/restructuring texts	600,000
Writing captions and titles	33,000
Writing scenarios, scripts and commentaries	76,000
Creation of font and acquisition of rights	30,000
Design and creation of quiz	23,000
Digitization of texts	20,000
Typing manuscripts	7,500
Proofreading and typing corrections	168,000
Tagging, creating metadata and links	225,000
Sourcing of media assets	53,000
TOTAL CONTENT CREATION	**1,235,500**
MEDIA ASSETS REPRODUCTION RIGHTS	**275,000**
Creation and digitization of media assets	290,000
Recording and synchronization of vocal commentaries	65,000
Software development	330,000
External testing	23,000
TOTAL PRODUCTION	**708,000**
Hardware & software	60,000
Documentation, travel, etc.	15,000
TOTAL EQUIPMENT,TRAVEL, etc.	**75,000**
STAFF (incl overhead)	**915,000**
GRAND TOTAL	**3,208,500**

Project DANTE: forecasted 3-year P&L statement (established on 24/06/1996 - monetary values in €)					
	Average per unit	**1997**	**1998**	**1999**	**TOTAL 3 years**
Number of units sold		**32,000**	**80,000**	**130,000**	**242,000**
Recommended retail price (incl VAT)	77.0	90	75	75	
Recommended retail price (excl VAT)	**64.9**	**76**	**63**	**63**	
Retailers' revenue	64.9	2,428,331	5,059,022	8,220,911	15,708,263
Retailer discount (40% of revenue)	26.0	971,332	2,023,609	3,288,364	6,283,305
Publisher's net revenue	**38.9**	**1,456,998**	**3,035,413**	**4,932,546**	**9,424,958**
Product manufacturing & packaging cost	3.0	96,000	240,000	390,000	726,000
Distribution cost (7% of retailers' revenue)	4.5	145,399	363,497	590,683	1,099,578
Customer Services cost	1.1	35,200	88,000	143,000	266,200
Other costs	1.5	48,000	120,000	195,000	363,000
TOTAL variable costs	**10.1**	**324,599**	**811,497**	**1,318,683**	**2,454,778**
Margin on variable costs	28.8	1,132,400	2,223,916	3,613,864	6,970,179
as a % of publisher's net revenue	74%	78%	73%	73%	74%
Advertising/promotion costs		915,000	762,000	762,000	2,439,000
Amortization of product creation cost		1,375,000	916,750	916,750	3,208,500
Product update costs			230,000	230,000	460,000
TOTAL fixed costs	**25.2**	**2,290,000**	**1,908,750**	**1,908,750**	**6,107,500**
NET MARGIN	**3.6**	**-1,157,600**	**315,166**	**1,705,114**	**862,679**
as a % of publisher's net revenue	9%	-79%	10%	35%	9%

There are circumstances where products are not (or no longer) profitable but nevertheless have a positive impact on a company's business. Such impact is generally "**intangible**" but it is sometimes possible to assign a monetary value to it (though this is not something that financial controllers like!).

> *The EHM, Hachette Multimedia's "flagship of the fleet", was profitable for many years before it started to show a loss. Despite this negative factor, top management at Hachette decided to prolong the product's life for several years, because of its quality and positive contribution to the company's image.*

Extent of a PM's P&L responsibility

The question of whether the **PM** should have "**full P&L responsibility**" (ie should be responsible for the bottom line of the P&L) is a subject of controversy. There are several schools of thought on the matter.
There is no single answer to that question, since the scope of the PM's responsibilities depends on the context and organization of the project. If the PM works for a project execution contractor, eg a software development company, it is likely that he will be given full responsibility for the contractor's P&L, whereas the PM working for a project owner usually shares P&L responsibility with other stakeholders, eg Marketing & Sales. However that may be, the **PM** should at least be **accountable** for a major part of the P&L, namely **project-related costs**.

Margin vs Mark-up

The (profit) **margin** is often expressed as a **percent** value applied to the **price** of a product or service, calculated as follows.

- If P is the price, C the cost, and **Margin%** the percent value of the margin, then…
  - **Margin% = (P - C) / P**
- Price (P) can therefore be determined from cost (C) and Margin% as follows.
  - **P = C / (1 - Margin%)**

For example, if the cost is 75,000 and a margin of 25% is required (Margin% = 25% = 0.25), then the resulting price is 100,000 (= 75,000 / (1 - 0.25) = 75,000 / 0.75).

Another approach for calculating a price consists in applying a **mark-up** to the cost of a product or service. The mark-up is often expressed as a **percent** value applied to the **cost**, calculated as follows.

- If P is the price, C the cost and **Mark-up%** the percent value of the mark-up, then…
  - **Mark-up% = (P - C) / C**
- Price (P) can therefore be determined from cost (C) and Mark-up% as follows.
  - **P = C x (1 + Mark-up%)**

For example, if the cost is 75,000 and a mark-up of 33.3333…% is required (Mark-up% = 33.33…% = 0.3333…), then the resulting price is 100,000 (= 75,000 x 1.3333…).

Whatever the approach, the **profit margin's absolute value** is P – C.

In the above example, P – C = 25,000, ie 1 /4 of the price (Margin% = 0.25 = 25%) and 1/3 of the cost (Mark-up% = 0.3333… = 33.33…%).

The **relationship between the mark-up and the margin**, both expressed in **percent values**, is given by the following formula.

- **Mark-up% = 1 / (1 – Margin%) – 1**

For example, if the required margin percentage is 25% (Margin% = 25% = 0.25), then the mark-up percentage to apply to cost is 33.33…%.
(1 / (1 - 0.25) – 1 = 1 / 0.75 – 1 = 4/3 – 1 = 1/3 = 0.3333…).

Likewise, if the required margin percentage is 20% (Margin% = 20% = 0.20), then the mark-up percentage to apply to cost is 25%.
(1 / (1 - 0.2) – 1 = 1 / 0.8 – 1 = 5/4 – 1 = 1/4 = 0.25).

The two examples given above are illustrated in the following diagram.

> See the following sites for **more information on the subject**:

>> en.wikipedia.org/wiki/Gross_margin

>> www.accountingtools.com/questions-and-answers/what-is-the-difference-between-margin-and-markup.html