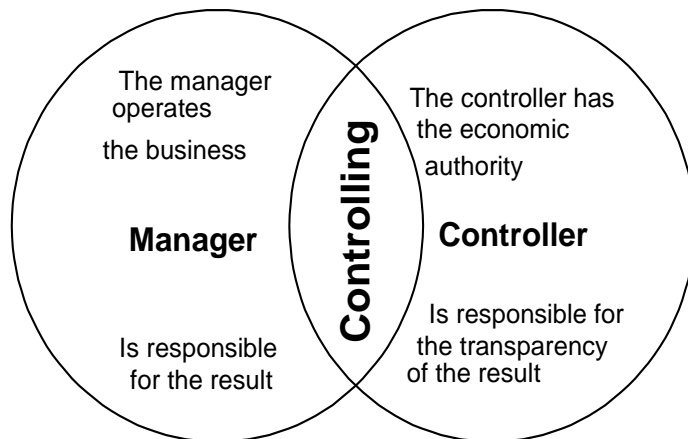


Examples from the Dictionary for Controllers, 3rd ed.

Controlling

Controlling takes place when manager and controller cooperate. Controlling is the whole process of defining objectives, of planning and controlling (in the sense of steering and regulating) and includes all relevant financial and commercial aspects. Controlling involves



such activities as taking decisions, defining actions or procedures determining alternatives, directing individuals and their activities and setting up guidelines. Consequently managers must practise controlling, since it is their responsibility to define a company's objectives and to specify the necessary targets as part of the planning process. Likewise, they are responsible for the achieved results. Controlling is therefore understood as a management activity and should

be undertaken in every business, however small. For the same reason controlling should not be thought of as being exclusively the professional controller's job.

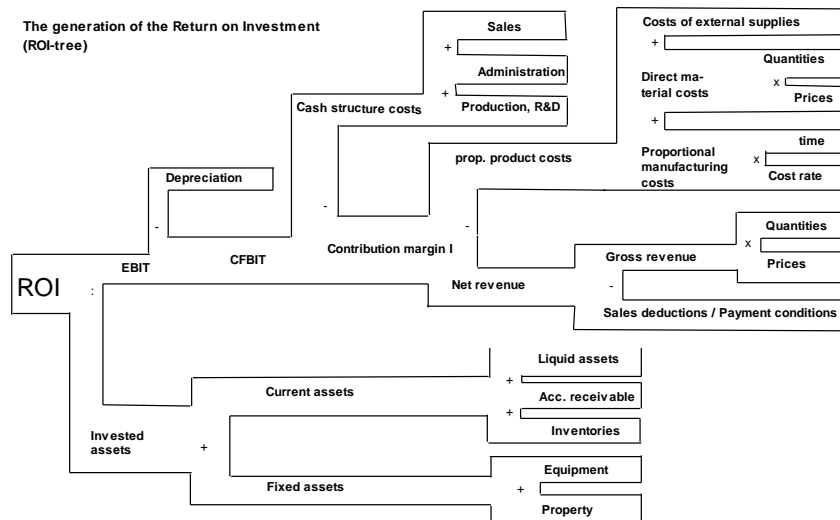
Management that practises proper controlling is focussed on *objectives* and planning, is forward-looking, adaptable and decentralised. It only makes sense to install controller services in those businesses whose managements believe in and practice controlling.

Operative controlling includes those management activities that cover setting objectives, planning and controlling in the mid-term and single year time frame. The main objectives are liquidity, profits and financial stability.

Strategic controlling includes those management activities that comprise the planning, testing, implementation and monitoring of strategies. The time span is determined by the period considered relevant for the strategy's development. Typical objectives here could be: existing and future potentials for success, market shares as well as (free) cash flow.

Ratio systems

Ratio systems are (mathematically or logically connected) combinations of ratios (absolute or relative figures with special significance). Ratios are derived from planned values or actual data and serve as a measurement to show the cause and effect of changes in operations. Under the entry "objective" we have a *ratio system structure*, which can be used to compare budgeted and actual figures. It is an extension of DuPont de Nemour's well-known ROI scheme.



The *ROI-tree* (see diagram) shows the *return on investment* (more precisely: *return on operating assets*) and the factors that influence it in an inter-linked pattern of accounting. The upper half of the diagram shows how the *EBIT* (earnings before interest and taxes) is calculated and is built up as contribution accounting, while the lower half illustrates the structure of \Rightarrow *operating assets*.

\Rightarrow ROI \Rightarrow ROCE

Costs/Cost accounting

Costs are the value-based consumption of goods and services for the production of output. The valuation standards depend on the requirements of the management (*decision accounting* and \Rightarrow *responsibility accounting*).

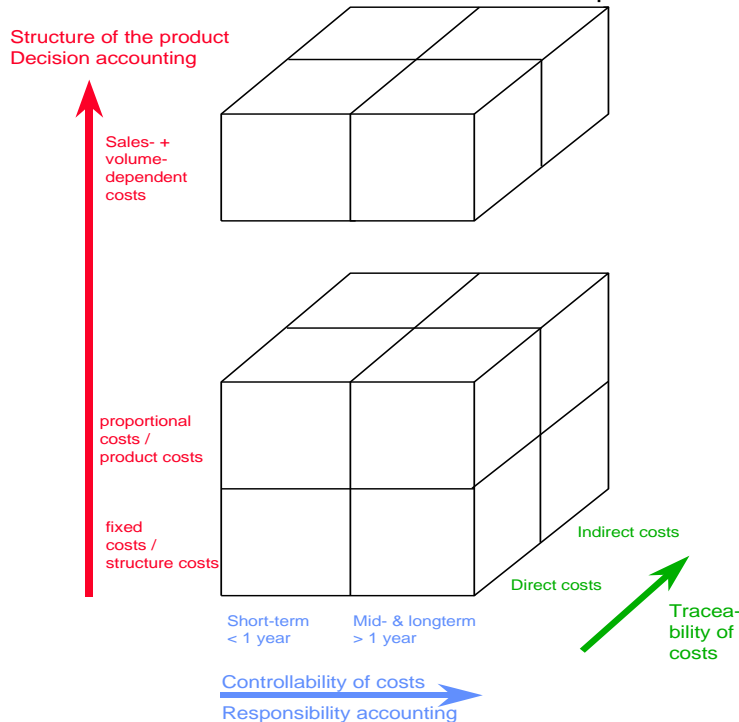
If we want to analyse the management's responsibility for costs and revenues and prepare the necessary information for taking cost-related decisions, we first must present the different *cost aspects* in the clearest possible way, showing how they are inter-linked, and second make consistent use of clearly defined concepts. The *cost cube* is not a new theory but rather a model for explaining cost behaviour, which has proven itself very useful in practice. It presents the *cost aspects* in three dimensions:

- \Rightarrow *Product costs / structure costs* (vertical axis of the cube).
For the purposes of decision accounting it is important to differentiate between costs caused by the *nature of the products* on one hand - and costs caused by the *structure of the business* on the other hand. *Product costs* (proportional costs) are the direct and causal consequence of producing a product-item or a service.
In contrast *structure costs* are defined by a business's capacity and organisational structure. These are costs, in other words, that are not directly dependent on output but are determined by decisions over the business's capability to produce goods and services. These \Rightarrow structure costs express the necessary effort to ensure that goods and services can be produced at all.
- \Rightarrow *Controllability* in the short or middle term (horizontal axis of the cube)
"Who has the competence to influence costs as they arise and in what time-frame can the costs be changed?" These are the questions asked by *Responsibility Accounting*. This dimension shows, which cost amounts can be altered in what time-frame. There are product costs, which can change within the time span of a month, when, for example, another materials supplier or another employee have to be sought. But there are also

product costs, which are only alterable in the middle or long term, because e.g. they are determined by the production process, or by periods of notice for the personnel employed. On the other hand, one also finds immediately controllable structure costs like, for instance, advertising costs for product promotion, which can be reduced at short notice.

- ⇒ *Direct* and ⇒ *indirect* costs (third dimension in the cube):

Whether it is a matter of direct or indirect costs depends on the object in question. The



The salary of the employee in the accounts receivable department (structure costs, controllable in the middle term) belongs to the direct costs of the accounting cost center, but to the indirect overhead costs of products. Material costs for highly refined parts (product costs, controllable in the long term, because only one supplier is available) are direct costs of the manufactured product. Tool costs for a specific customer order are direct costs of that order.

The same three-dimensional way of thinking applies to the costs dependent on *revenue*. Commissions, deductions from revenue, freight charges, those parts of the distribution costs dependent on orders etc. – All these costs are no longer depend on the volume produced but on sales-mix, sales volume and revenue, which means they need to be represented by a detached cube (see diagram above).

Multidimensional contribution accounting

Since the market is usually approached through different channels and, additionally not only the products dimension is essential for strategic planning, there is now an increasing need for a multidimensional presentation of a company's ⇒ contribution margins. It is therefore necessary to be able to create multiple contribution accounts based on a business's work practices, procedures and philosophies. These accounts should be structured according to the relevant business dimensions such as *sales areas*, regions, distribution channels, fields of application, customers' needs or *strategic business units* (SBU's).

Such multidimensional contribution accounts are devised according to the principle that only those structure costs are deducted in steps from the CM I, which are unequivocally assignable (by voucher) to the object in question. So we have clear contribution targets, for which managers are responsible, per sales area, ⇒ profit center, distribution channel, ⇒ strategic *business unit*, etc. Below is an example of a multidimensional contribution account based on distribution channels

Distribution channel Retailers				
product group	4-ring-binders	2-ring-Binders	trading goods	total
sales volume planned	2'000 5.--	10'000 4.--		
prices				
Discounts	-20%	-20%	50%	
net revenues	8'000	32'000	7'500	47'500
prop. Costs	3'914	13'980	5'666	23'540
CM I	4'086	18'040	1'834	23'960
structure costs of the channel retailers				1'500
CM of the sales channel				22'460
Distribution channel Wholesalers				
net revenues	17'000	36'267	---	53'267
prop. Costs	7'828	14'891	---	22'719
CM I	9'172	21'376	---	30'548
structure costs of the channel wholesalers				1'200
CM of the sales channel				29'348
Distribution channel Direct sales				
net revenues	20'000	61'333	7'500	88'833
prop. Costs	7'828	21'405	2'834	32'067
CM I	12'172	39'928	4'666	56'766
structure costs of the channel direct sales				1'900
CM of the channel				54'866
Distribution channel Export				
net revenues	9'000	14'400	---	23'400
prop. costs	3'914	5'584	---	9'498
CM I	5'086	8'816	---	13'902
structure costs of the channel Export				800
CM of the channel				13'102
Total all channels				
sales volume planned	12'000 5.--	40'000 4.--		
prices				
discounts	10%	10%	40%	
Net revenues	54'000	144'000	15'000	213'000
prop. costs	23'484	55'840	8'500	87'824
CM I	30'516	88'160	6'500	125'176
structure costs of all sales channels				5'400
CM of all sales channels				119'776

Planning and planning framework

Planning is the intellectual anticipation of possible future situations, the selection of desirable situations to be achieved (objectives) and the determination of relevant actions that need to be taken to reach those objectives. So the business has constantly to adjust to internal and external changes, requiring decisions to be taken with an eye to future effects.

As a \Rightarrow controller, one has to rely on an inter-linked and in itself consistent planning framework. And here the following *planning levels* have proved their worth in practice:

Planning level	Main question	Decision contents	Plan elements
Corporate policy	Who do we want to be?	Set up main objectives and constraints	Vision, mission statement, corporate concepts
Strategic Planning	Where do we want to go?	Find and select potentials for success	Strategic Plans
Operative Planning	How do we reach our objectives?	Exploit existing potentials for success or build up the new ones	Mid-term planning Annual planning
Disposition	How do we react to turbulences?	Take corrective actions to stay on course	Forecasting
Implementation			

The planning framework

Operative planning consists of *mid-term planning*, acting as a hinge, which links long-term strategy and *annual planning*. Operative planning arises from strategic planning and should demonstrate in budgeted values how the objectives have been apportioned and how they are to be achieved. *Annual planning* also serves as a basis for the comparison of budgeted and actual figures.

Operative planning should ensure that ideas are transformed into reality. It facilitates the effective and well-targeted use of existing \Rightarrow *potentials for success* and the development of the new potentials selected in the strategy.

Strategic planning gives meaning to the operative planning and motivation to the people working with it.

Good planning quality is obtained, when the procedure is twofold: top down and bottom up. Top management develops the cornerstones of the plan and explains them to the lower levels (*top down-planning*). The detailed values are then fixed at the bottom and aggregated to the top (*bottom up-planning*).

Rolling budgets are the combination of annual planning and mid-term planning. Both plans are built with the same structures and with the same procedures, but mid-term planning should go less into details.

\Rightarrow corporate policy \Rightarrow mission statement \Rightarrow strategy \Rightarrow objectives