

# Suitability of Oracle Applications for Standard and Activity Based Costing

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Costing classification, costing methods, costing systems, standard costing, activity based costing, process costing, inventory valuation

## Summary

From the perspective of a trading and service company a critical look is taken at the suitability of Oracle Applications, Release 10, for implementation of various methods for effective cost control.

Standard cost systems have developed to a point where there is general agreement on the underlying concepts and their application. The key drawbacks of traditional costing systems arise when allocating various overheads caused by service and control activities. The root of this matter is explained.

A now well-published approach - Activity Based Costing (ABC) - attempts to find out what key factors drive cost in the first place. Therefore, how can you measure and trace the Cost Drivers in the Oracle system? Some guidance is given in this paper.

Finally all major costing features of Oracle General Ledger are summarised and corresponding professional terms are briefly explained for easier and quicker understanding

## 1 Cost squeeze

Globalisation trends are causing cost pressure. Cost control is becoming more and more important. Efficiency must be improved and overhead costs must be brought in line with sales. Consequently, the following questions need to be answered:

- Which costing methods are supported by Oracle Applications?
- Are the costing requirements of different industries covered satisfactorily?
- What is delivered? What is missing?
- What are the pros and cons?
- Where are the pitfalls?

There are five topical essays<sup>1</sup> in the Oracle Inventory Reference Manual which should be studied in order to get at least some answers to above questions:

- Overview of Costing
- Standard Cost Set-up and Control
- Inventory Standard Costing
- Inventory Average Costing
- Activity Based Costing

Although these topical essays are well-structured and clearly written, some issues might remain after reading. This paper is intended to narrow the gap, starting with an general view on costing methods.

The author has not much practical experience with the build-in costing methods mentioned above, except Average and Standard Costing for inventory items. But he was heavily involved in designing and implementing Bull's company-specific costing approach applying nearly all standard functionalities available within the General Ledger module. But before getting started it always advantageous

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<sup>1</sup> See [ORACLE-IC94], page 9-134

- to recall the basics of cost accounting
- to study what is delivered by Oracle.

## 2 Costing Classification

A costing classification<sup>2</sup> is shown in figure 1. Only *Process*, *Standard*, and *Activity Based Costing* will be discussed in greater detail.

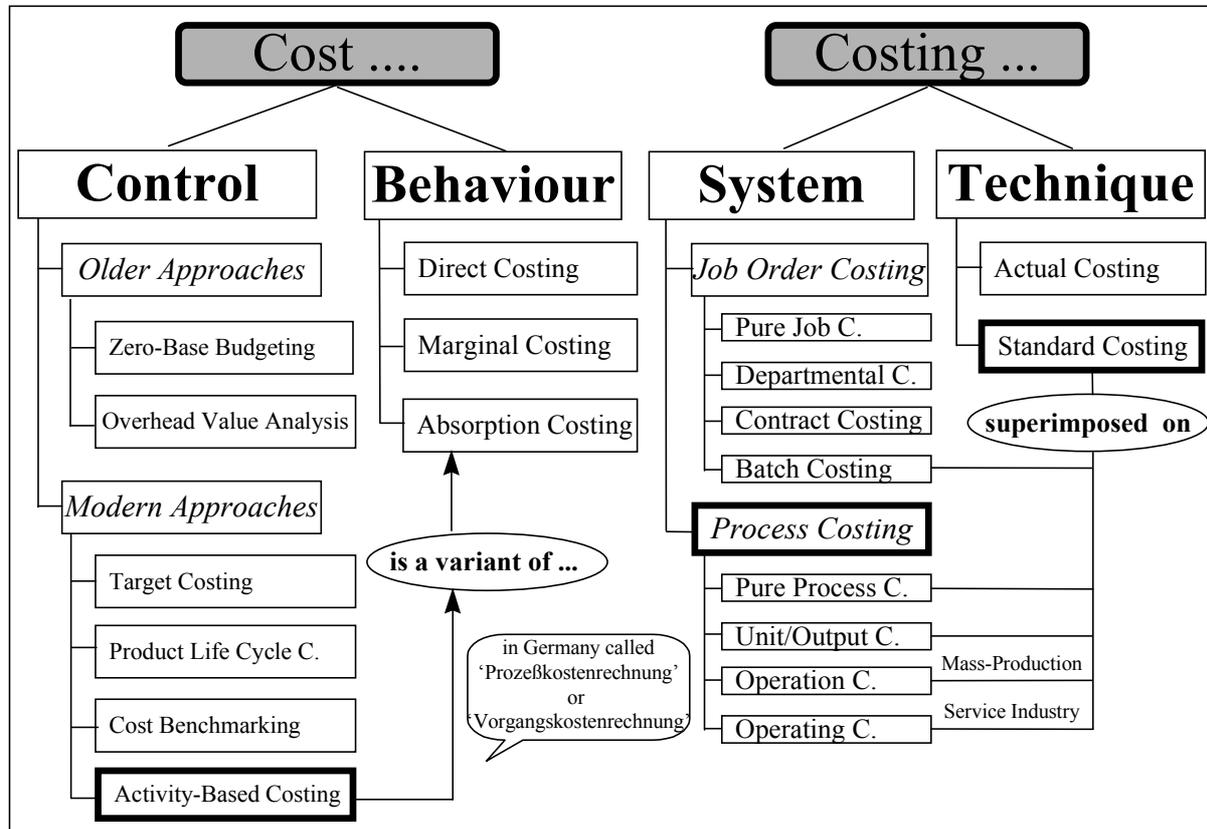


Figure 1: Costing Classification

Cost systems may be broadly classified either as job order or process costing systems. The type of operation generally determines the system used. For example, a machine shop would normally use a job order cost system, whereas a flour mill would use a process cost system.

There is no fundamental difference between the two costing system with respect to overhead allocation procedures (see figure 2).

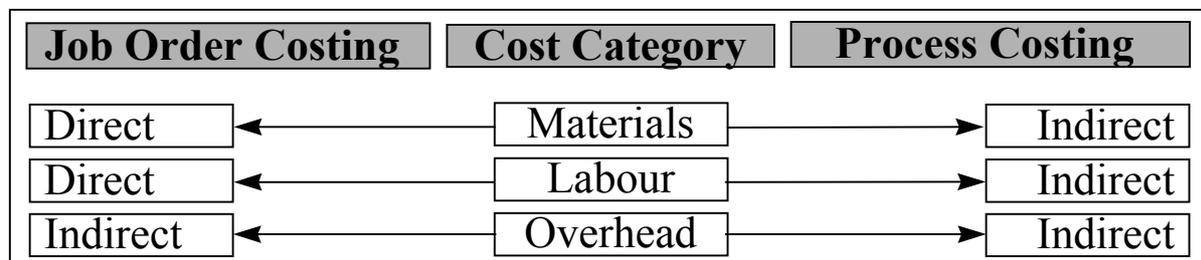


Figure 2: Cost Allocation to Units of Output by Costing System

Under traditional cost accounting systems the share of overhead is usually related to volume of output. But an ideal costing method should model both, the factory and the office, tracing the time, efforts and skills needed to produce and sell each individual product.

<sup>2</sup> See [BATTY74], page 31-43

Cost Category	Cost Behaviour		
	Direct C.	Marginal C.	Absortion C.
Variable manufacturing costs	Product cost	Product cost	Product cost
Fixed manufacturing costs	Period costs	Period cost	Product cost
Variable general & admin. costs	Period cost	Product cost	Period cost
Fixed general & admin. costs	Period cost	Period cost	Period cost

Figure 3: Cost Allocation Scheme by Cost Behaviour

With respect to the responsiveness of costs figure 3 illustrates the ‘Cost Behaviour’ dimension of costing classification shown in figure 1. The illustration is self-explaining if linked up with figure 4.

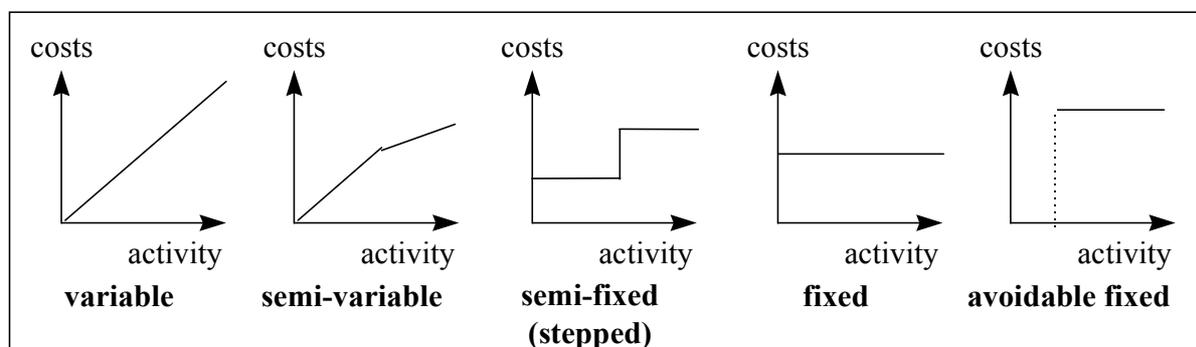


Figure 4: Costs mapped against Activity

Standard cost systems are usually Process cost systems in which accountants use set standards instead of attempting to compute an actual cost per unit for each period. The major advantage of a standard cost system are that it highlights and allows management to manage by exception, that is, it allows management to concentrate on the areas where there are inefficiencies.

Activity accounting, Transaction accounting, and Cost-Driver accounting are all synonyms for Activity Based Costing (ABC). An essay ‘The Hidden Factory’ published in 1985 by Miller & Vollmann is considered to be the beginning of an evolution which has attracted attention on manufacturing support functions (scheduling, planning, purchasing, and quality control) as well as general operation and marketing support activities.

In Germany ABC is called ‘*Vorgangskostenrechnung*’ and (most frequently) ‘*Prozeßkosten-rechnung*’. A word-by-word translation of the last designation would result in ‘*process costing*’. Obviously this can lead to confusion of fundamental costing ideas.

Thus, what is the hard core of process costing?

Unlike Job Order cost systems, which associate a company’s costs with specific jobs, Process cost systems shift the emphasis to an evaluation of a process or department in terms of the total number of units produced by the process during an accounting period.

Process costing deals mainly with products that are regular in specification and made continuously. Such products would be found in the *process industries*, for example, in the basic steel, aluminium, plastic, lumber, cement, flour, and petroleum industry. The

fundamental idea, as with job order costing, is to allocate costs of material, labour, and overhead inputs to the output designations of the system. Unlike job order costing, however, process costing uses units lost not jobs as output objects, units in ending inventory (still being worked on), and units transferred (completed as far as the present department is concerned) to the next department in the series.

The key assumption in the design of process cost systems is that all units of output passing through a particular process during a specified time period are alike in all economic respects. When all products are not homogeneous, the accountant must allocate the costs of the process among two or more products. This gives rise to what is referred to as joint processing costs.

A typical series of processes (or departments) could look like this (see figure 5 ):

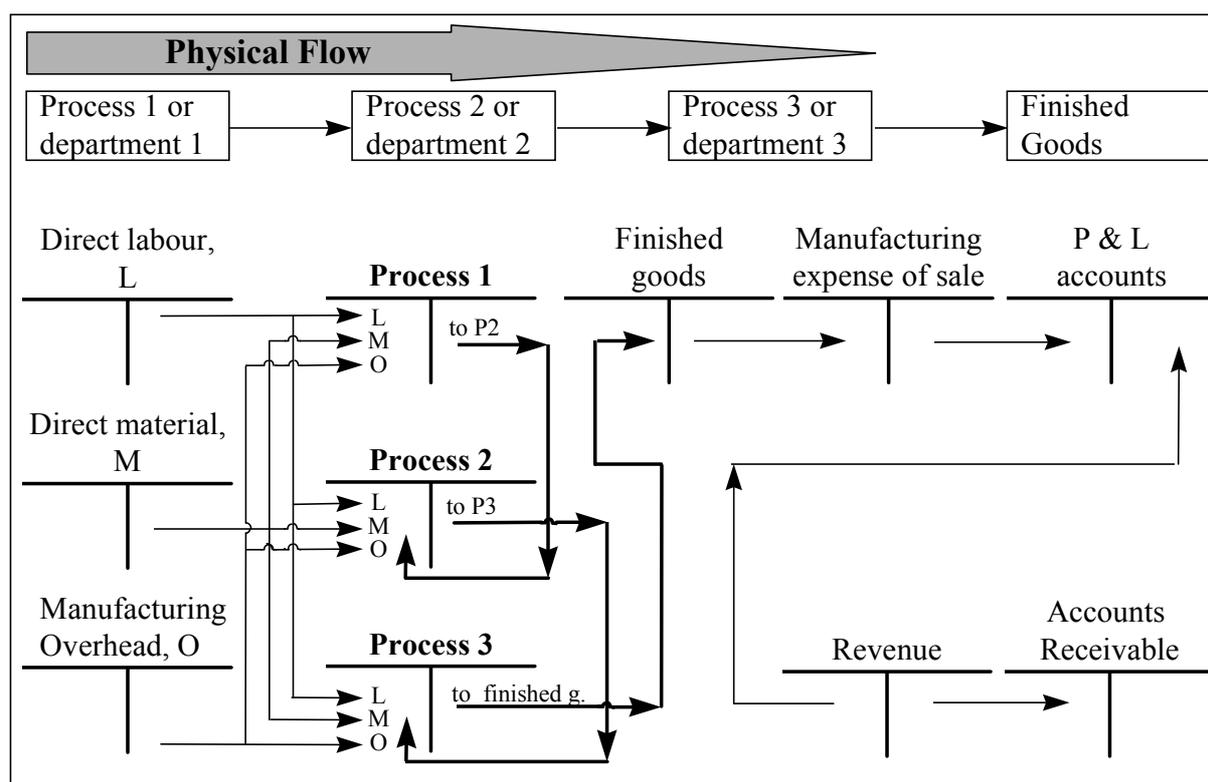


Figure 5: Physical and Cost Flow through a Process Costing System

In the lower part of figure 5 the cost flow is shown in T-account form. In the series of processes, process 2 has an additional input in the costs transferred to it by process 1. Similarly, process 3 has the costs transferred to it by process 2.

It improves understanding to realise that the output designations are all-inclusive. Output of a process must show up in one of the lost, ending, or transferred categories. *Nothing else is possible*. The lost category is the catchall category. It might be used to isolate the costs of such things as by-products, or to segregate the cost of damaged or obsolete quantities.

Five aspects of costing have been made clear so far:

- Standard Costing and ABC are build-in functionalities of Oracle Application. Both are tailored for the manufacturing environment.
- ABC is a variant of Absorption Costing. Major emphasis is on Cost Drivers for causal allotment of overhead costs to products or services.
- The German term 'Prozeßkostenrechnung' is easily mixed up with Process Costing. But Process Costing belongs to a different dimension of costing classification (see figure 1). In Germany the term

'Vorgangskostenrechnung' is certainly a better translation of Activity Based Costing.

- Absorption Costing can be combined with both, Job Order and Process Costing.
- Standard costing can be superimposed on Batch costing and all variants of Process costing. Target costs used with Standard Costing are 'engineered' costs, whereas Target costing means something completely different.

### 3 Standard Costs

#### 3.1 Basic Purposes

Standard costs fill three basic purposes:

- they add in budgeting
- their use in flexible budgets forms the basis of manufacturing and distribution performance evaluation
- when they are used in standard costing 'systems', they assist in record keeping

Standard costs are necessary for effective control in situations with these characteristics:

- highly complex production process with many operations and material inflows and outflows
- repetitive high-volume production
- relative stable technical specifications

#### 3.2 Budgeting

Remember that budget figures are *not* incorporated in the accounts. You can use the standard budgeting functionality of Oracle's General Ledger module to record budget figures.

In a standard cost system, the standard costs are recorded directly in the accounts; separate accounts are established for recording the *variances* between actual costs and standard costs. Thus, both the standard costs and the standard cost variances are an integral part of the recorded accounting values.

How do standard costs relate to profit planning and control?

Fundamentally, in a standard cost accounting system, the costs *recorded* are predetermined or target costs. (By the way, *target costing* means something different.) The *variances* between target and the actual amounts are recorded in separate *variance accounts*. The latter amounts are described as '*losses due to inefficiencies*'. Thus, a standard cost system, at the time a transaction is recorded, compares actual with targets, similar to the process used in budgetary control.

#### 3.3 Standard Cost System

Standard costs can be utilised in a wide variety of industries; however, they are applied more often in the manufacturing industry.

Standard costing is exceedingly popular in the United States, far more popular in medium-sized and larger companies than ordinary job order and process costing. The main appeal of standard costing lies in the fact that it has a built-in cost control system. The cost control feature relies on the following:

- the principle of management-by-exception, and
- the calculation of cost variances.

According to this scheme, management only investigates those cost variances that are significant.

Standard costs include material, labour, and overhead costs that are loaded on a product as it gradually takes shape and these costs are predetermined. Standard costs are spoken of as 'should be' costs and there are at least a dozen synonyms.

To be theoretically sound, standard costs must reflect "should be" costs and this favours regular updating. This also poses something of a paradox, for if costs change often, the instability suggests that no standard exists. People who are bothered by this paradox have a static conception of a standard. The dynamic conception seems better to fit the theory that standard costs represent a measure of what should be done under the circumstances that prevail. On the other hand, in the extreme case, cost changes could be so frequent that the standard costs in effect become actual costs.

Under a standard cost system the values in the work-in-process account and the finished goods account are used to determining *inventory values*. These values are needed in the determination of the company's financial position and its periodic profit. But these figures, particularly on a unit basis, are also important to pricing, bidding, and other managerial decisions. Such decisions must often be made before production is complete, the value of the predetermined or standard costs is substantial.

The flow of data through a standard cost system is graphically shown in the following illustrations (figure 6). Note the recording of *standards and variances*.

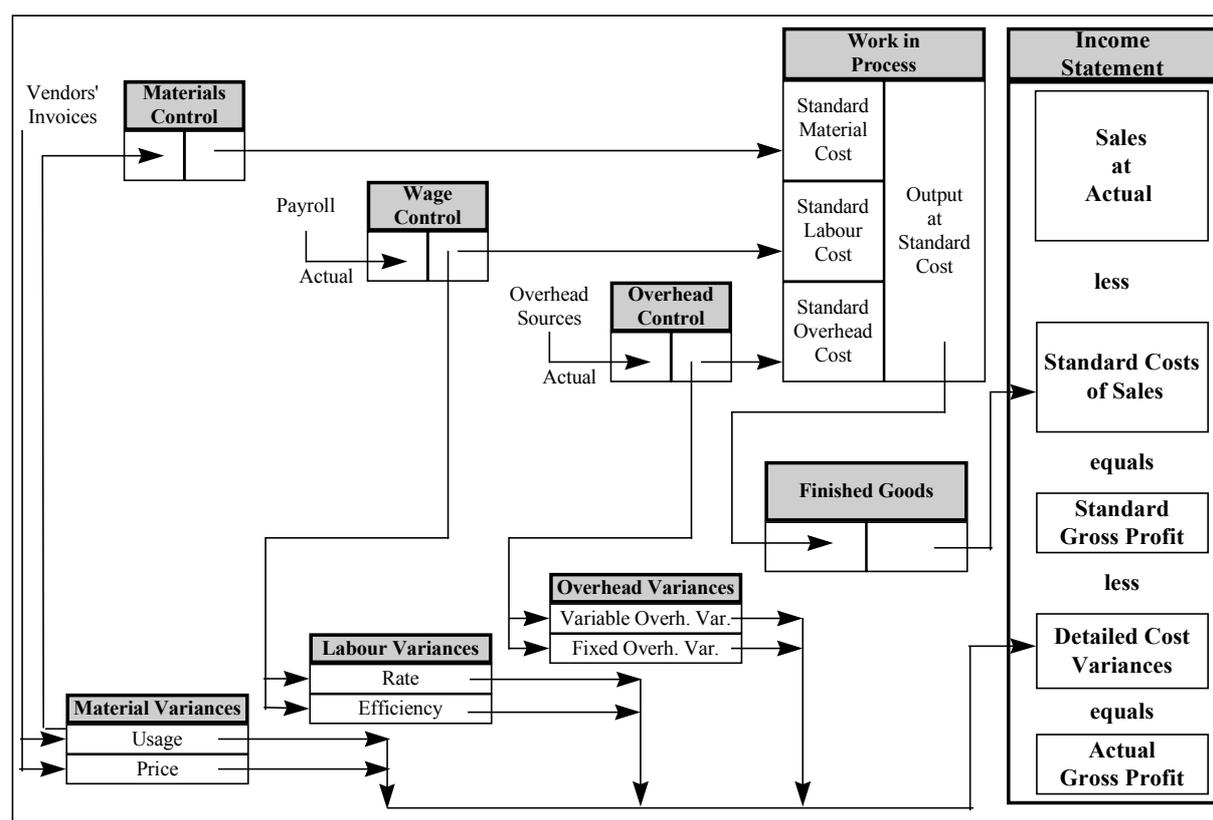


Figure 6: Transfers in a Typical Standard Cost System

The actual labour and actual material incurred are debited to the work-in-process accounts. The *standard labour* and *standard material* are transferred to the finished goods account. What happens to any difference between the actual costs incurred and the standard costs of work completed and in process? These differences are called *variances*. They are identified according to their causes and are transferred to variance accounts. For material and labour, there are two variance accounts called *price* and *efficiency* variances.

The cost variances provide one of the more important inputs to cost-control procedures. The nature and disposition of variances is illustrated in figure 7.

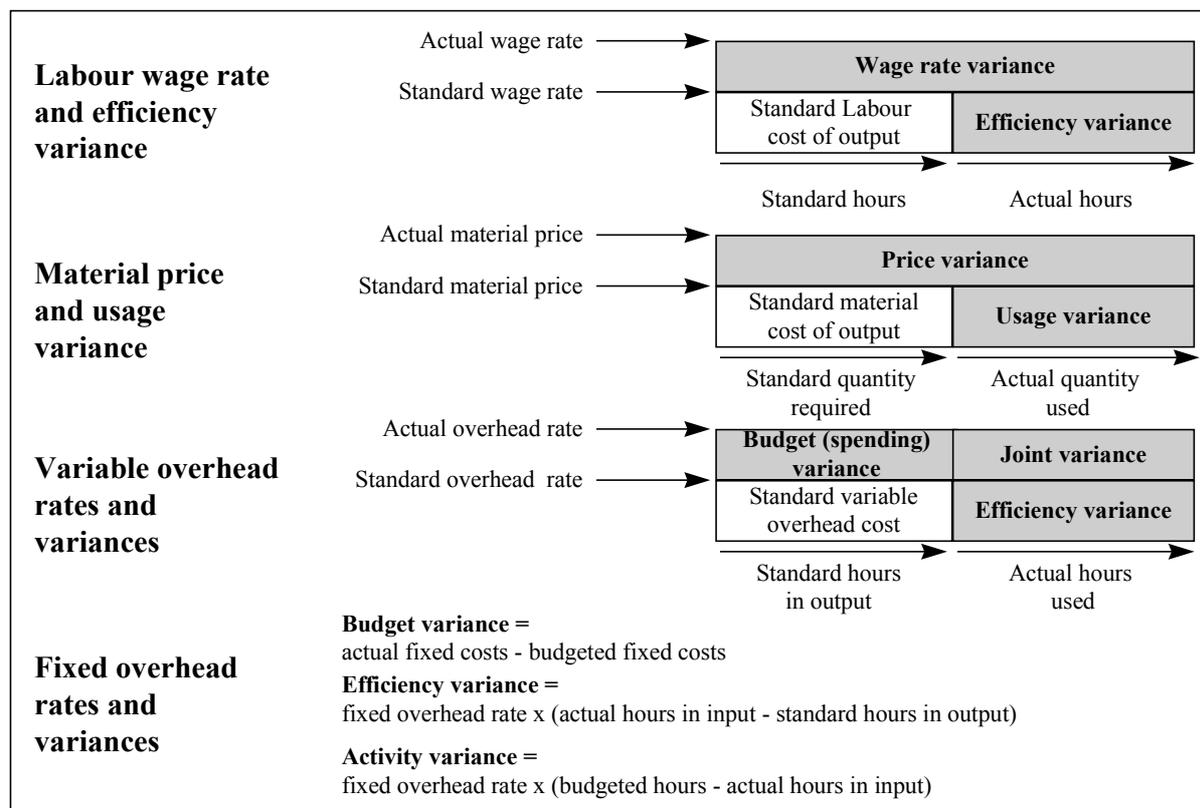


Figure 7: Variances in a Typical Standard Cost System

To focus on the complementary relationships between standard costs and profit planning and control, the distinctive features of standard costs as applied in an accounting system are reviewed. Standard costs are predetermined costs that, presumably, represent what costs should have been as opposed to historical costs that represent what costs *were*. Proponents of standard cost systems view the standard cost as the *true* costs of activity or production, whereas actual costs generally represent the true cost *plus* losses due to inefficiency, faulty operations, and inadequate control.

### 3.4 Standard cost specification

The standard cost specification represents a basic component of a standard cost system. Basically, it specifies the standard costs of material, labour, and overhead for each product or job. The standard cost specification generally emerges from a series of cost analyses and engineering studies to develop reliable standards:

- In the case of standardised products there would be a standard cost specification for each product.
- In job order situations a standard cost specification is developed for each job. The procedure for each job involves predetermination of the requirements for raw material, labour, and overhead, taking into account the various departments through which the work must flow from start to completion.

Many companies find it more practicable to develop a separate standard specification for each major component, operation, or assembly so that the total standard cost may be determined by summing the various standard costs for the components. Obviously, the standard cost specification should be designed to fit each particular situation.

### 3.5 Inventory Valuation at Standard Cost

Standard costs play an important part in placing a value on inventories, particularly in the case of work -in- progress and finished goods. In both these situations it is not only the raw material content to which a price is assigned, but also the added value created by the consumption of resources during the manufacturing process. At every step in the production process value is added (or should be) to the product. So with the use of standard costs it is possible to put a figure on that value, depending on the point reached. This is depicted in figure8.

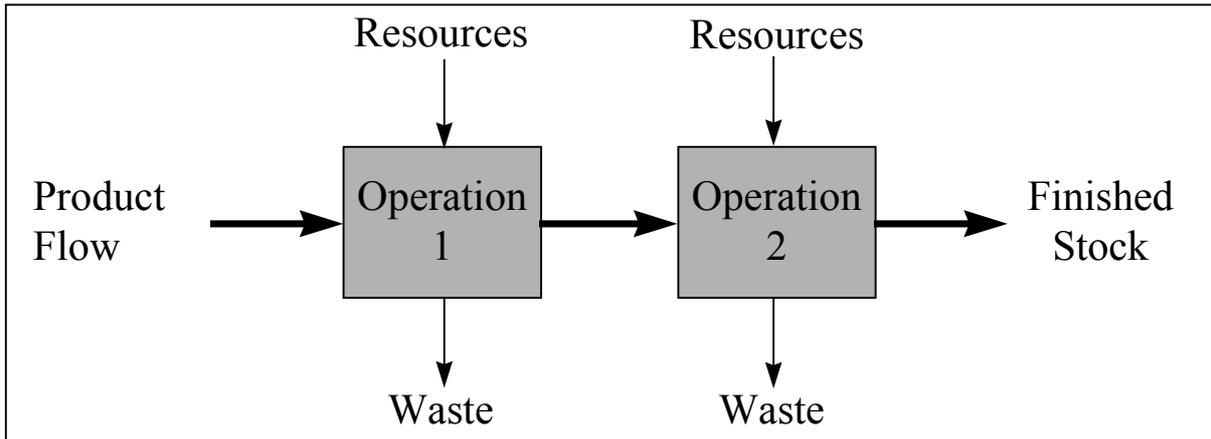


Figure 8: Simple Manufacturing Process

Inventory valuation is perhaps the most beneficial use of standard costs in the manufacturing industry. It not only simplifies corresponding tasks, but it provides a readily auditable system.

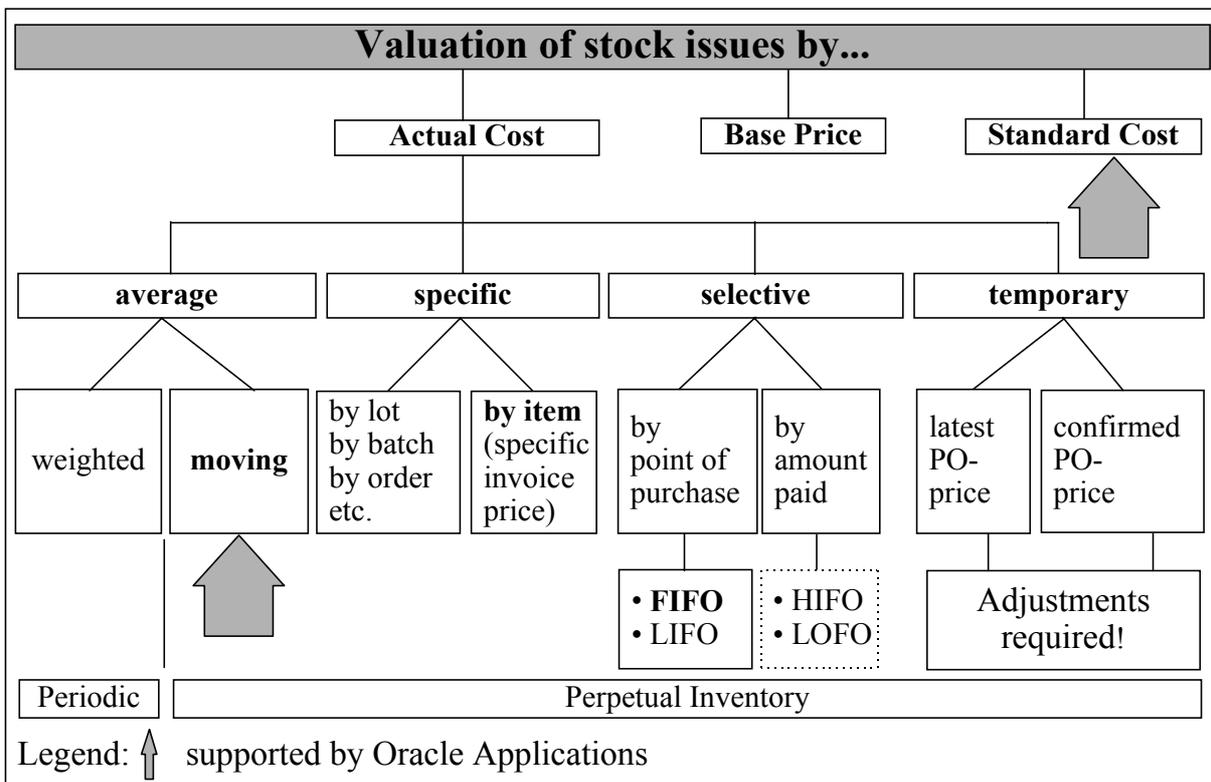


Figure 9: Inventory Valuation Methods

In figure 9 a general view<sup>3</sup> of contemporary inventory valuation methods is shown. Only Standard and Average costing is supported by Oracle Inventory.

A topical essay in the *Oracle Inventory Reference Manual* defines Inventory Standard Costing<sup>4</sup> as follows:

‘Under standard costing, Oracle Inventory determines the value of inventory using the material and material overhead standard costs of each inventory item. If you use Oracle Bills of Material, Oracle Inventory maintains the standard cost by cost element (material, material overhead, resource, outside processing, and overhead).’

By the way, trading companies usually prefer inventory valuation at **actual** cost, that is, moving average cost, first-in-first-out cost , or specific invoice price (⇒ individual valuation).

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<sup>3</sup> See [THORMÄHLEN95]

<sup>4</sup> See [ORACLE-IC94], page 9-213

## 4 Activity Based Costing

### 4.1 Definition

In the *Oracle Inventory Reference Manual* a definition of ABC published by *Computer Aided Manufacturing International (CAM-I)* is quoted as follows<sup>5</sup>:

‘Activity based costing is a methodology that measures the cost and performance of activities, resources, and cost objects. Resources are assigned to activities, then activities are assigned to cost objects based on their use. Activity based costing recognizes the causal relationships of Cost Drivers to activities.

Instead of measuring the cost of what goes into your items, you measure how you make and deliver your items. By understanding the activities and processes, cost drivers that influence the cost of activity, and whether the activity is needed at all, you can analyze the cost of how you make your items and how you may eliminate unnecessary steps.’

For clarity of the above definition and explanation they are illustrated less abstractly in the following diagram (see figure 10):

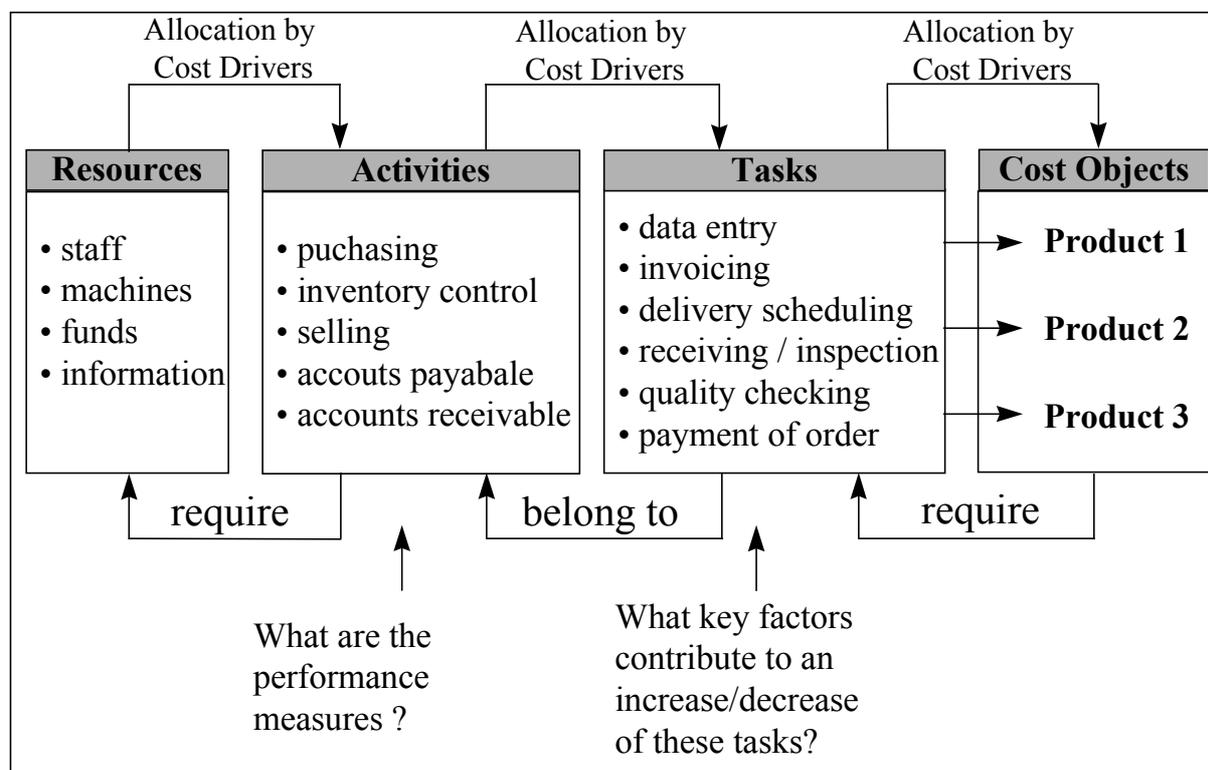


Figure 10: Illustration of ABC definition

(adapted from Dohle, David: *Cost Control, A Strategic Guide*, London 1994, page 77)

<sup>5</sup> See [ORACLE-IC94], page 9-255

## 4.2 Forerunners and Rivals

Traditional *absorption costing* and *direct costing* are the forerunners of ABC. Other approaches such as *Overhead Value Analysis* are considered to be either complementary or competitive to ABC (see figure 11).

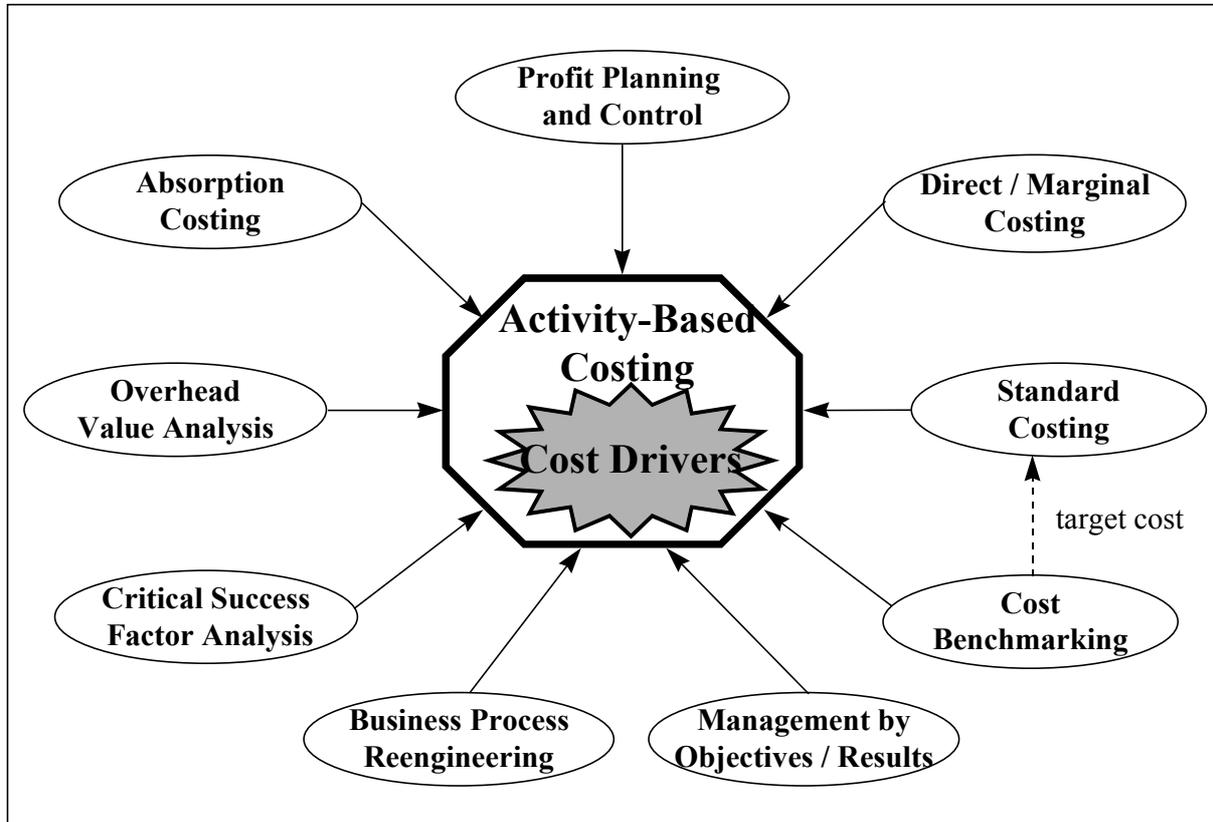


Figure 11: Forerunners of ABC and complementary / competitive approaches

For example, *Business Process Reengineering* is requiring more or less the same information as ABC and related approaches<sup>6</sup>:

- process hierarchy (⇒ ABC ⇒ Task Analysis)
- process flowcharts (⇒ Business Process Reengineering)
- process attributes (⇒ ABC ⇒ Cost Drivers)
- process triggers (⇒ Information Requirement Analysis)
- process targets and measurement methods (⇒ Management by Objectives / Results)
- intermediate and final output of processes (⇒ Input / Output Analysis)
- critical success factors of processes (⇒ Critical Success Factor Analysis)
- cost behaviour of processes (⇒ Absorption Costing ⇒ Direct Costing)
- process-supporting activity centres (⇒ Departmental Costing)

Supporter of ABC allege,

- that conventional overhead allocation methods are not adequately considering the different usage of the various overhead domains (for example, in-house service units) by cost objects.

<sup>6</sup> See [AL-ANI94], page 6

## Suitability of Oracle Applications for Standard and Activity Based Costing

- that traditional *absorption costing* as well as *direct costing* are not able to manage cost budgeting and cost controlling for the overhead domains.

### 4.3 Objectives

The objectives of ABC may be summarised as follows<sup>7</sup>:

- Causal allocation of overheads to cost objects ( $\Rightarrow$  *improved estimation of cost*).
- Improved planning and controlling of overheads by increasing the cost and performance transparency in the indirect costs domains ( $\Rightarrow$  hidden factory).

Therefore, the key questions are

- What are the unit costs of a task and which are the cost drivers?
- What is the outcome of a task?

The ABC approach is especially applicable for tracing costs in companies

- making a selling a mixture of high- and low-volume products,
- selling in multiple markets where the cost structures for each market are different
- targeting different market segments with differentiated products.

### 4.4 ABC in the manufacturing environment

Oracle's ABC approach is clearly addressed to the manufacturing industry. In a manufacturing environment the first step in setting up an ABC system requires the analysis of a large number of activities to a reasonable depth. A manufacturing company could start by itemising and costing basic tasks such as<sup>8</sup>:

- issuing purchase orders and their follow-up;
- inspecting deliveries;
- transferring deliveries of parts to a stock-holding area;
- moving parts to the production floor;
- inserting parts.

The ABC analyst then has to visit each unit in the organisation responsible for these tasks and pose questions about what actually happens<sup>9</sup>:

- How do the staff in each centre really spend their time, e.g. filling in forms, keying-in data, telephone calls, interaction with other units, etc.?
- What sort of events or factors (Cost Drivers) initiate these activities?
- What is the tangible outcome of the centre's work and how can it be measured?

When is ABC appropriate? Oracle is answering this question as follows<sup>10</sup>:

'Activity based costing is especially useful to allocate indirect costs to your items that are difficult to track and assign. The main benefit is more accurate product overhead costing. However, the main drawback is the time involved to analyze and define activities and resources, restructure the chart of accounts, and set up activity based costing. All industries can benefit from activity based costing. This becomes even more critical as the direct labor portion of your product decreases, while overhead and administration cost increase.'

### 4.5 ABC in non-manufacturing environment

In a service environment an ABC analysis requires analysts to take a rigorous look at those activities, such as the handling of paperwork, the number of reservations or requests for the service made and so on. which determine overhead costs. By recognising the real Cost Driver

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<sup>7</sup> see [KREMIN98], page 30

<sup>8</sup> See [Dohle94], page 77

<sup>9</sup> See [Dohle94], page 77-78

<sup>10</sup> See [ORACLE-IC94], page 9-257

of the business, management can make decisions about what services to offer and how much to charge for them. In the process, more rational and streamlined internal procedures should result, thereby accelerating and improving customer service.

Although the *customer order cycle* will vary from industry to industry and have different steps when applied to products or services, practically all business companies have the same activities<sup>11</sup>:

- sales analysis generating forecasts for production levels
- order taking
- cost calculation and pricing policy
- processing and recording of customers' orders
- planning and scheduling
- order implementation (purchase components, production, assembly, quality control, storage, delivery and installation)
- issuing invoices and accounts receivable effort
- after-sales service and repair

The following non-monetary Cost Drivers might be detected in the customer order cycle as being most closely related to the levels of costs incurred during a given accounting period:

- number of offers handled
- number of customer orders entered
- number of purchase orders placed
- number of vendor invoices matched
- number of deliveries received or dispatched
- number of customer invoices mailed
- number of new customers gained
- number of new products introduced
- number of skeleton agreements with customers or vendors
- etc.

The investigation of the 'driving' factors which determine the activities' costs enables the cost accountant to reallocate those costs to other activities (tasks, events) according to how much a cost object actually spends getting processed by each operation.

It should be observed, that the term '*order cycle*' in Oracle Order Entry is narrower, just indicating a sequence of actions being performed on an order to complete it.

Each step in the overall customer order cycle is characterised by<sup>12</sup>:

- a decision and/or action;
- staff involvement within the operational units;
- the participation of practically all support units of the organisation,

In turn, each activity or task is characterised by:

- a measurable output
- a defined quality level
- consumption of resources expressed in monetary units
- factors (Cost Drivers) which significantly influence costs (and indicating simultaneously the number of repetitions of an activity or task)

Every individual department recognises its role in relative isolation and no doubt conducts its work in a very efficient manner in accordance with its own performance standards. However, when the process is conceptually mapped out as a *customer order cycle* of events, flowing from the time the order is forecast to its final delivery, a chain of shared and overlapping responsibility emerges.

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<sup>11</sup> See [Dohle94], page 78

<sup>12</sup> See [Dohle94], page 78

#### 4.6 Cost Flow

When combined with traditional absorption costing or direct costing the cost flow caused by ABC can be illustrated as follows (see figure 12):

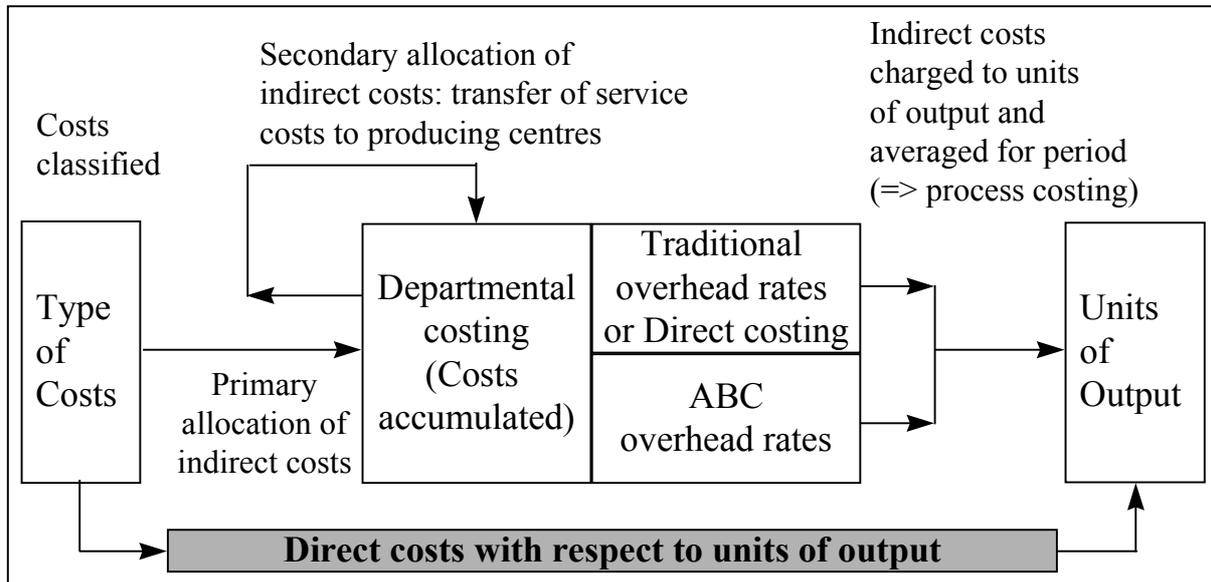


Figure 12: Treatment of Costs: ABC combined with other costing approaches

(adapted from Kremin-Buch, Beate: Strategisches Kostenmanagement, Wiesbaden 1998, page 33)

Classical overhead procedures usually comprise three steps:

- classification and collection
- direct allocation to cost centres and transfer of service and control costs to producing cost centres
- Dividing overhead costs between cost centres and cost objects.

This is also true for ABC, except that former allotment bases are now called Cost Drivers.

Wherever possible, ABC is using a *non-monetary* instead of *monetary* apportionment basis for the distribution of overheads to products or services. ABC is tracing simultaneously the full and the 'real' cost of a cost object as measured by its consumption of resources, especially with respect to service and control centres.

#### 4.7 Cost Price

Displaying the calculation scheme for cost price (see figure 13) is disclosing the possible difference between traditional absorption costing (left scheme) and ABC (right scheme).

Direct materials	Direct materials
+ Direct labour	+ Direct labour
<b>= Prime costs</b>	<b>= Prime costs</b>
+ total overhead costs distributed to products by usual apportionment bases	+ production overhead costs distributed to products by usual apportionment bases
<b>= traditional cost price</b>	+ non-production overhead costs distributed to products by non-monetary usage factors
	<b>= activity-based cost price</b>

Figure 13: Comparison of Calculation Schemes for Cost Price

(adapted from Kremin-Buch, Beate: *Strategisches Kostenmanagement*, Wiesbaden 1998, page 31)

Obviously the possible difference is centred around the non-production overhead costs, in other words, the white-collar overhead costs.

Traditional absorption costing is prorating all overhead costs to products or jobs. On the other hand ABC is only prorating (a) all production overheads costs and (b) non-production overhead costs if attributable to products or jobs on an acceptable basis. Thus, a causal relationship has to be present for non-production overhead absorption based on Cost Drivers.

Consequently, traditional absorption costing is equivalent to ABC, if total overhead costs can be distributed to output units on the basis of benefits received.

Of course, if there are non-variable, idle, and similar cost categories ABC will result in a lower cost price for products or jobs. Any balance of overhead costs remaining will be charged against period revenue.

#### 4.8 Possible Pitfalls

One of the most frequent problems encountered with the implementation of ABC is the amount of time and effort needed to interview staff and to collect facts and figures.

An effective search for the Cost Drivers with limited means is not helped by investigating every possible activity. Experts recommend limiting the ABC analysis to a maximum of eight

key activities in each department. Otherwise you are getting bogged down in excessive detail and costing.

If the portion of non-repetitive work (primarily in the indirect domains) is high the identification of significant Cost Drivers may be very difficult.

If significant Cost Drivers cannot be derived from information sources which are already available costing will become more expensive as in the past.

Poorly structured cost accounting practice is not an ideal starting point for the ABC analysis. Modifying the costing approach can have a great impact on organisational culture, and the company may simply not be ready for such a major cultural change.

Fixed overheads are simply not divisible like variable costs. Related procedural overkill is likely to create complexity costs instead of reducing the complexity of flows , processes, and procedures.

Departmentalised overhead costs nearly always represent a mixture of original expense headings, being variable, semi-variable, semi-fixed, fixed, or avoidable fixed in nature with respect to activity levels in service and control centres (see figure 4). Declaring a proportional relationship between such compound costs and Cost Drivers seems to be either risky or ignorant.

With respect to overhead costs a true causal relationship between Cost Drivers and appropriate cost objects may not be detected easily, if there is any chance. Especially semi-fixed, fixed, and avoidable fixed costs can be misleading, when allocated to cost objects under the ABC approach.

A final point to be stressed is that recording and direct comparison of actual and planned performance figures can be advantageous in situations where a sophisticated costing system is not really paying-off. In such situations Management by Objects could be the better choice.

## 5 User-definable costing features

Manufacturing modules and the Inventory module comprise costing methods which are conceptually predefined to a large extent. For example, Oracle Inventory restricts the choices to Average and Standard costing.

Neglecting the Manufacturing modules and the Inventory module, all features for primarily user-defined costing methods<sup>13</sup> are available within the General Ledger module. No specific costing approach is prescribed or predefined. Consequently, you can set up virtually any costing system<sup>14</sup>, provided the following features of the GL module are sufficient for its implementation:

- User-defined segments of the Accounting Flexfield
  - Statistical accounts within the account segment
  - Expense categories and multiple hierarchies over the account segment
  - Departments and multiple horizontal department structures over the cost centre segment
  - Any other segment required for modelling the desired costing approach, for example, product, project, customer, etc.
- Mass allocation formula supporting the following allocation types:
  - step-down allocations
  - rate-based allocations

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<sup>13</sup> see [ORACLE-GL94], Creating Allocation Entries, page 1-12

<sup>14</sup> For example, see [ BERGMANN96]

- usage-based allocations
- net allocations
- Recurring journal entry formulas
  - a formula can include constant amounts (factors) as well as Accounting Flexfield balances
  - each formula can contain as many calculation steps as required

Especially the mass allocation functionality is very flexible and powerful. It is based on the following general formula:

$$\text{Allocation Amount} = \text{Cost Pool} * (\text{Usage Factor} / \text{Total Usage})$$

Two well-known cost allocation methods are *not* supported:

- iterative allocations (based on a service distribution matrix)
- normal equation allocation, that is, simultaneous cost allotment through a system of normal equations

All professional terms used in this section for describing the costing functionality of the GL module are briefly defined in the following table:

Keyword	Explanation
<b>A right arrow (⇒) refers to a keyword defined elsewhere in the table of definitions.</b>	
Account combination	It is one full ⇒accounting flexfield completely populated with valid segment values at posting level.
Accounting flexfield	It is usually comprised by multiple ⇒segments which together are making up the full account number structure.
Allocation amount	It corresponds to the target (allocate-to) ⇒account combinations
Allocation formula	⇒ MassAllocation uses the following formula in its allocations: ⇒ Allocation amount = Cost Pool * (Usage Factor / Total Usage)
Child	A valid segment value assigned to a ⇒parent value.
Constant	It is a ⇒segment type. If used with a ⇒child value, its detail account balance is used. If used with a ⇒parent value, its ⇒summary account balance is used.
Cost pool	It is an accumulated total to be prorated to specific ⇒account combinations.
Dependent segment	It has no meaning on its own. Only the independent/dependent combination has meaning.
Direct costs	Those costs, that are obviously traceable to a unit of output or a cost centre.
Independent segment	It has a description and meaning on its own.
Indirect costs	All costs, that are not ⇒direct costs.
Looping	It is a ⇒segment type used to create a separate ⇒allocation formula for each ⇒child value assigned to a ⇒parent value entered.

MassAllocations	A single journal entry formula that allocates revenues and expenses across a group of ⇒account combinations. For example, you may want to allocate indirect labour costs to each of your departments bases on the direct labour costs in each of them.
Net allocation	A cost distribution posting the net of all apportionments to an allocated-out account.

*Table 1: Alphabetical list of professional terms used in the GL module*

Keyword	Explanation
<b>A right arrow (<math>\Rightarrow</math>) refers to a keyword defined elsewhere in the table of definitions.</b>	
Parent	It is a $\Rightarrow$ segment value that represents a number of subordinate segment values, called $\Rightarrow$ child segment values
Rate-based allocation	To perform this type of apportionment, an $\Rightarrow$ allocation formula has to be defined using the balance of the appropriate $\Rightarrow$ account combinations to compute the variable ratio.
Recurring formula	A journal entry you set up once. When requested, recurring journals are created based on the previously defined formula.
Segment	It typically represents a specific dimension of the business, such as Company, Account, or Department.
Segment Type	You can choose the following segment types: $\Rightarrow$ Looping, $\Rightarrow$ Summing, $\Rightarrow$ Constant
Segment value	It is a unique number or code within a $\Rightarrow$ value set
Step-down allocation	Allocation of a $\Rightarrow$ cost pool that is based on already prorated costs. The order in which the steps are performed is important.
Summary account	It is an $\Rightarrow$ account combination whose balance is physically stored and updated with each journal entry or budget posting.
Summing	It is a $\Rightarrow$ segment type used to sum the balances of all $\Rightarrow$ child values assigned to a $\Rightarrow$ parent value.
Usage-based allocation	Statistical account balances such as headcount, square footage or time consumed are used to compute the allocation amounts.
Value set	It is a list of values and related attributes for one $\Rightarrow$ segment.

Table 1: Continuation

## 6 Concluding remarks

Full understanding of the above has as a prerequisite in an understanding of the following concepts:

- the fundamentals of contemporary costing methods
- the built-in and user-definable costing functionalities of the Oracle system
- the jargonistic terminology used by Oracle (see table 1)

The author hopes that the contents of this essay serves as a useful guide for the concepts just mentioned.

No claim concerning the completeness and correctness of the statements in this study can be made. They represent purely the author's understanding of the matter.

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