Chap 6b:
IT Service Cost Model
Source: [TSO] Chap 4

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Why need IT Cost Model?

- How expenditure items will be recorded and tracked
- How each item will be classified in accounting terms
- How costs will be allocated to services and/or customers
- How costs will be reported.

IT Service Cost Model

Cost by IT organization

This model is typically only used in internal service providers with multiple IT organizations. In this model each IT organization accounts for its costs and reports them to the enterprise financial management function. These costs are analysed and then allocated to various business units and other functions based on one or more of a number of factors. These include number of users, number of PCs, percentage of overall utilization of IT services etc.

Cost by service

This type of cost model is essential for Type III service providers, especially those that position themselves using variety-based positioning, since they are in the business of selling services. However, it is also one of the most valuable types of cost model for internal service providers. In this type of cost model the costs of IT are reported according to service, which makes it possible to inform customers about the cost or price of a specific service. The customer is able to use this information to determine if the service will add value to them or whether it is too expensive for the outcomes they are trying to achieve.

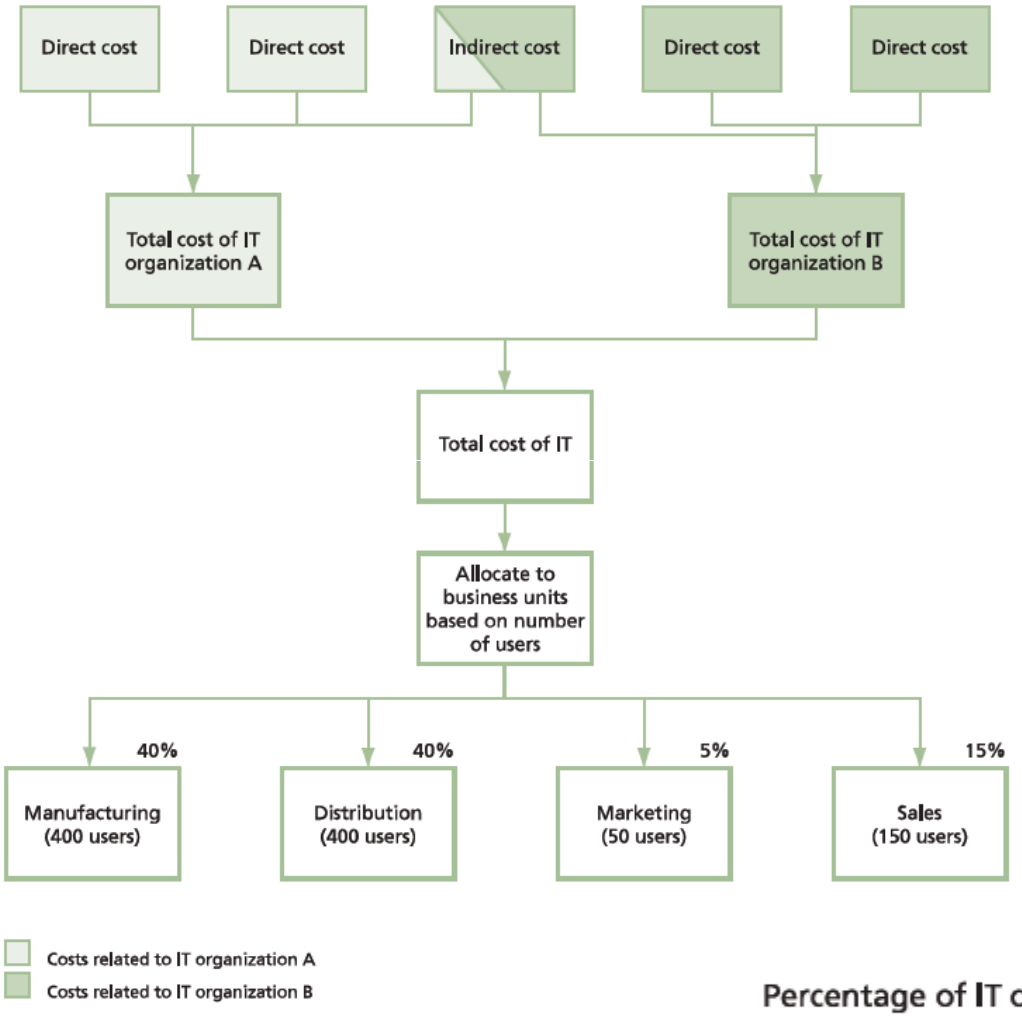
Cost by customer

This type of cost model is rarely used on its own, since it involves communicating the actual costs of components within the service provider to the customer. This is a type of 'pass through' model, where the service is paid for by the service provider and then immediately allocated to the customer.

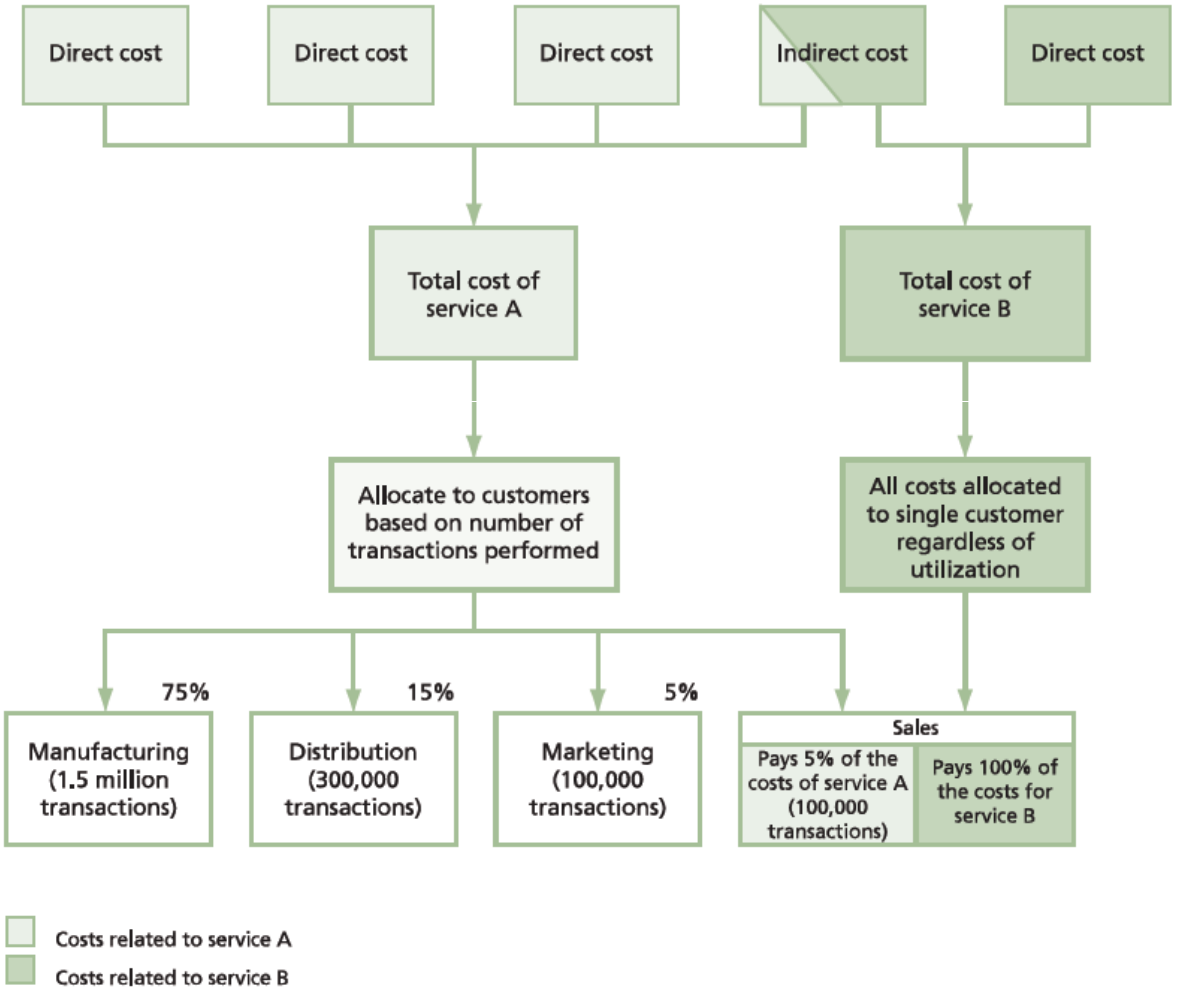
Cost by location

As with the 'cost by customer' this type of cost model is rarely used on its own, since it involves communicating the actual costs of components within the service provider to a group of customers at a particular location. This is also a type of 'pass through' model, where the service is paid for by the service provider and then immediately allocated to a location. The location will then decide how to allocate the costs across the local business units.

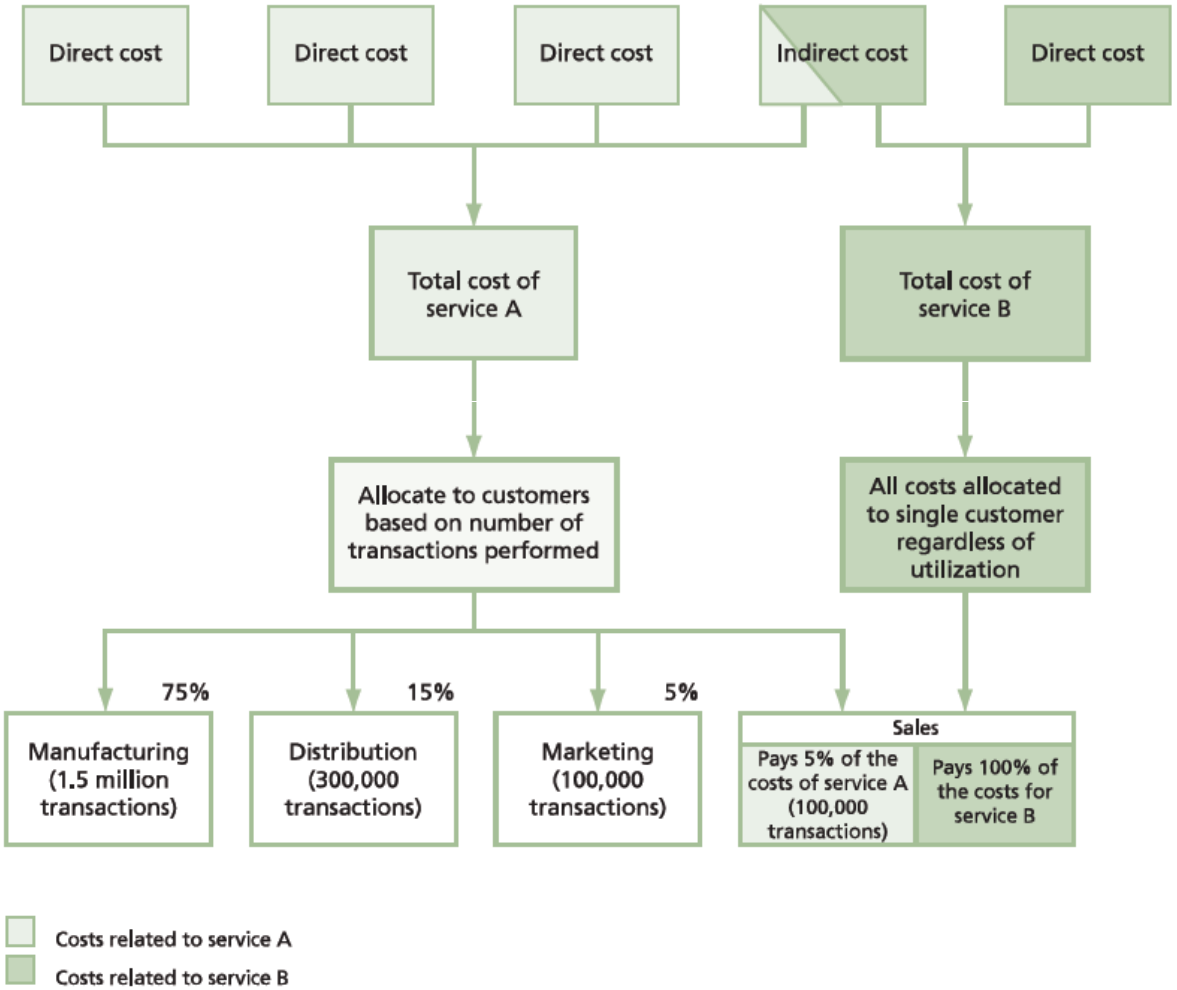
Cost by IT Organization



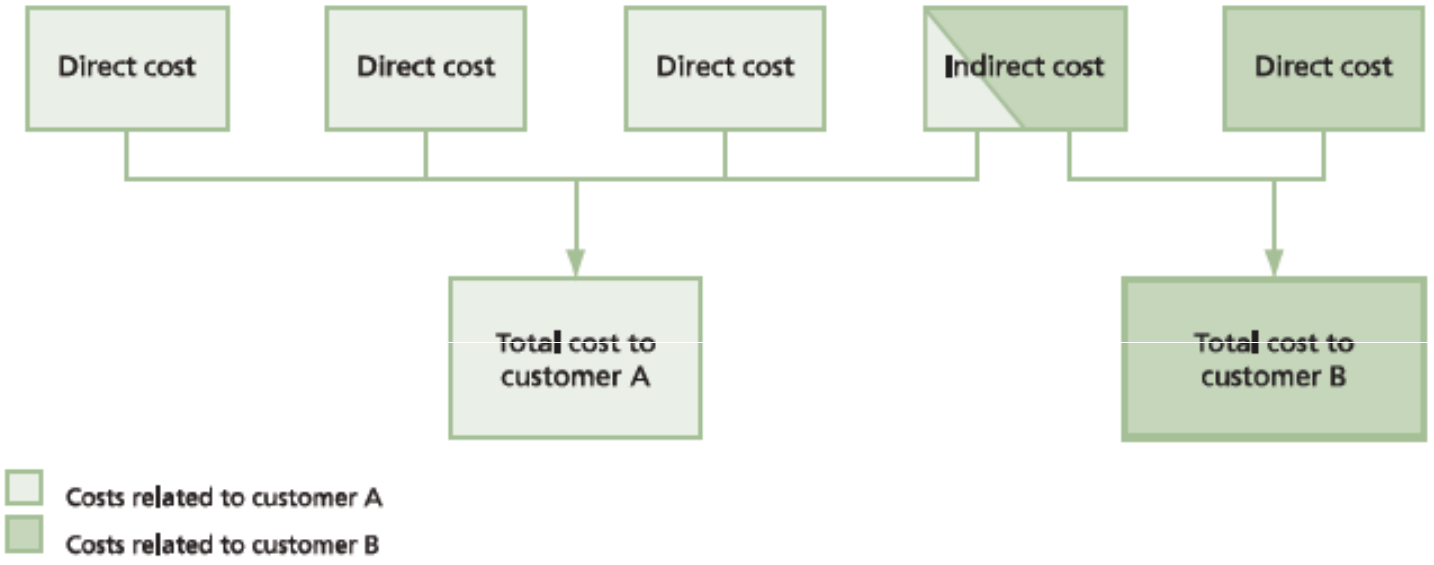
Percentage of IT costs allocated to business unit = Number of users in business unit / Total number of users ×100


Direct cost
Direct cost
Direct cost
Indirect cost
Direct cost
Total cost of service A
Total cost of service B
Allocate to customers based on number of transactions performed
All costs allocated to single customer regardless of utilization
75%
15%
5%
Manufacturing (1.5 million transactions)
Distribution (300,000 transactions)
Marketing (100,000 transactions)
Sales
Pays 5% of the costs of service A (100,000 transactions)
Pays 100% of the costs for service B
Costs related to service A
Costs related to service B

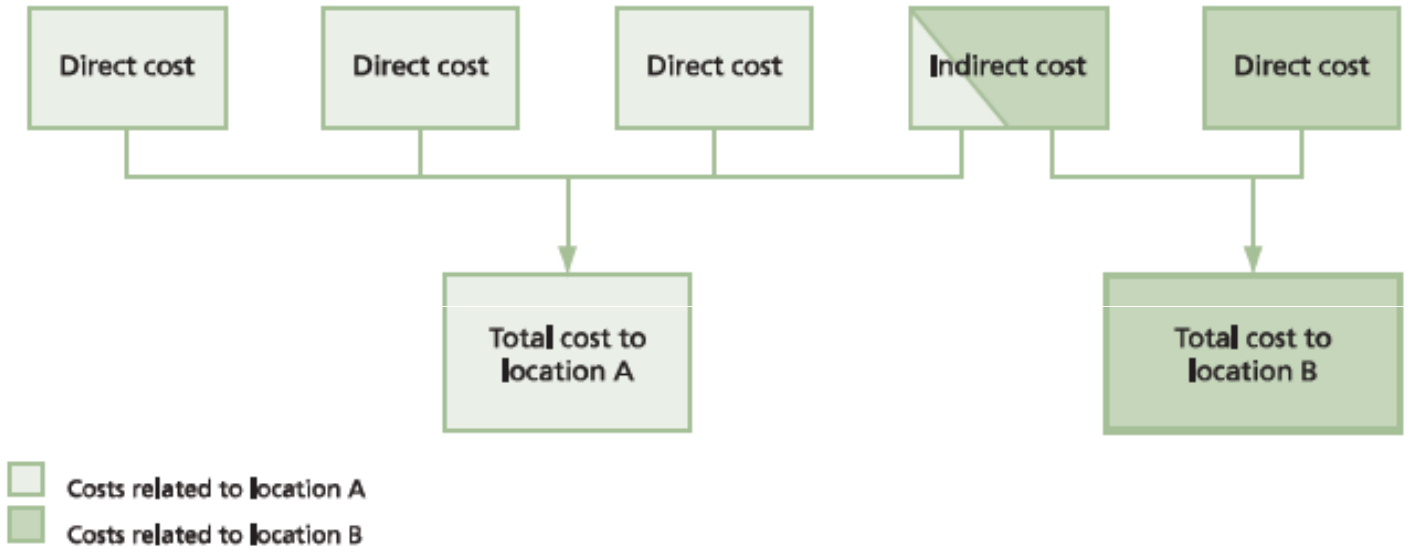
Cost by service



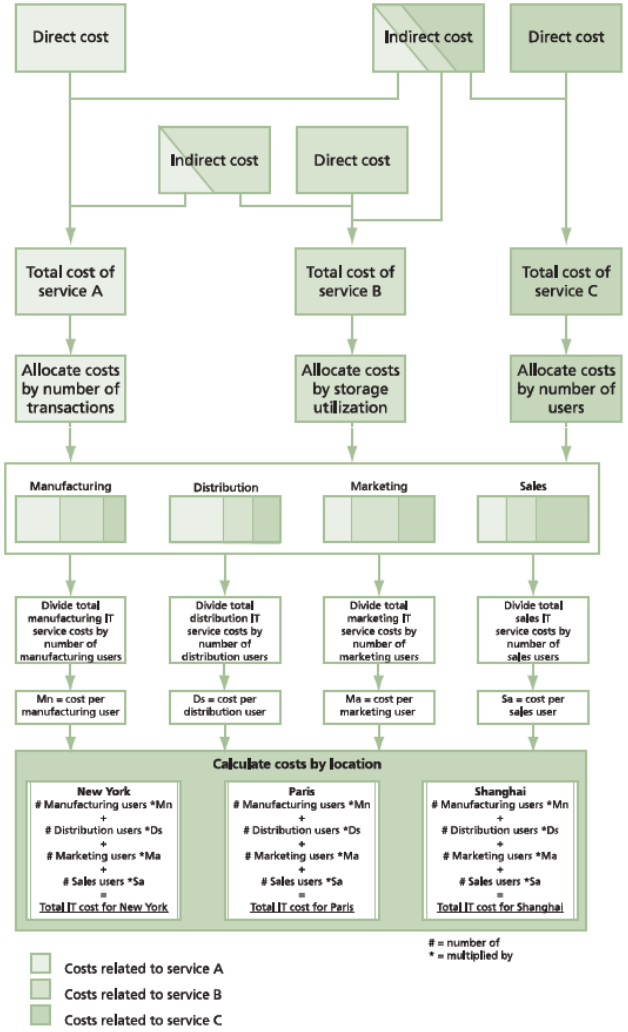
Cost by customer



Cost by Location



Hybrid Cost (Service, Customer, Location)



Cost Centre and cost unit

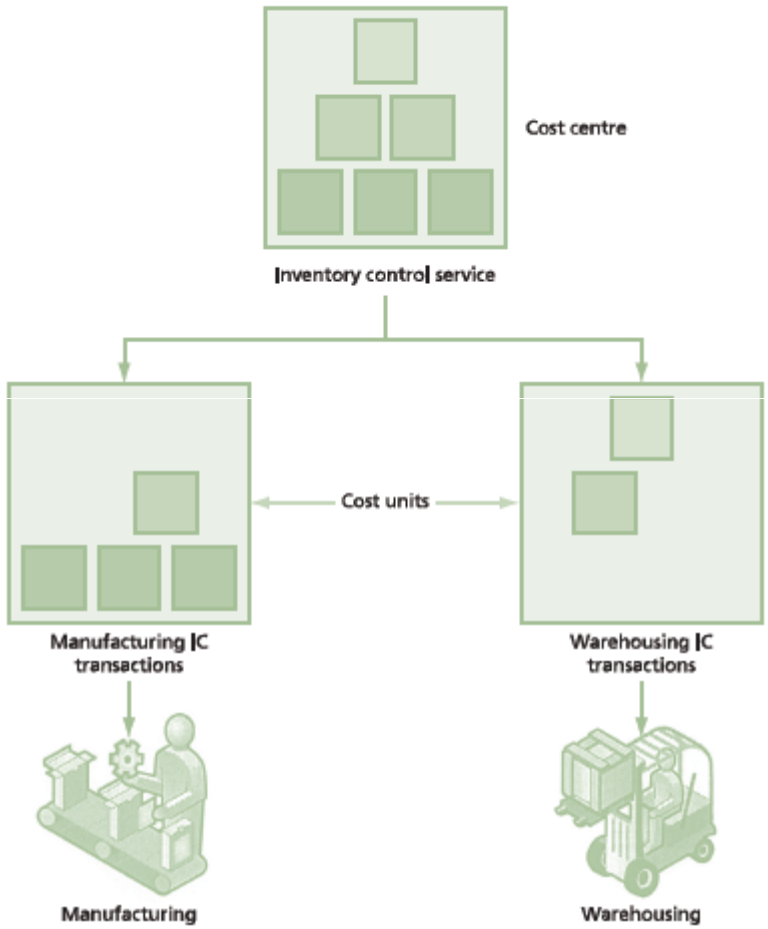


Figure 4.31 Example of cost centres and cost units

Cost Type and Component

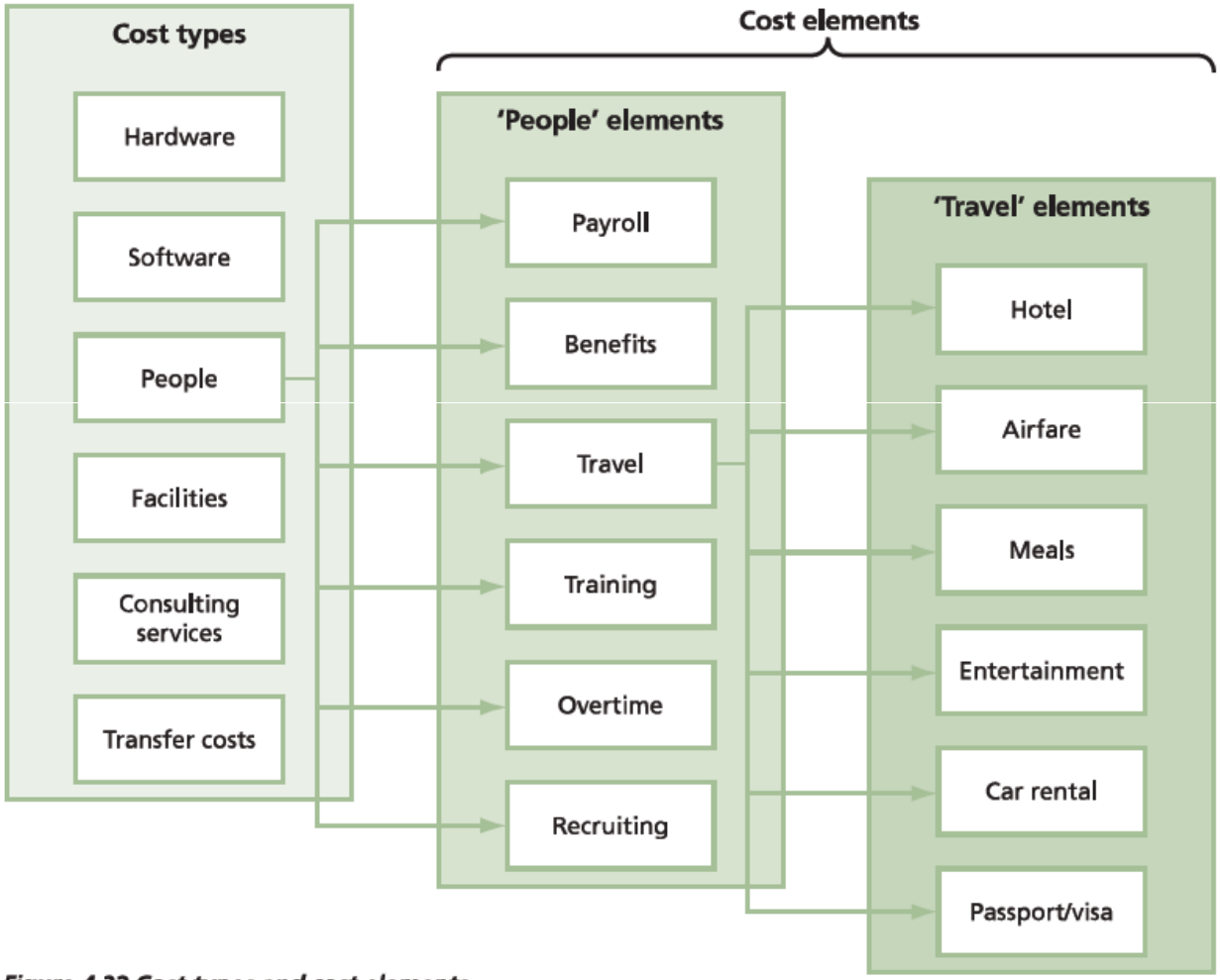


Figure 4.32 Cost types and cost elements

Why IT need cost classification

Simply put, if a cost is classified as operational, the entire cost of that item has to be accounted for and funded in the current financial year. If this is a large investment that is not going to show any returns in the current year, it will be very difficult to show value and it is very likely that IT will be viewed as too expensive, or that an alternative service needs to be found. Additionally, the organization's tax liabilities are different for operational and capital expenses.

Cost Classification

- **Capital costs** or capital expenditure (Capex) is the cost of purchasing something that will become a financial asset – for example, computer equipment and buildings. Capital costs are used to purchase fixed assets, information about which is stored in the organization's asset register, and which are subject to the asset management process.

- **Operational costs** or operational expenditure (Opex) is the cost resulting from running the IT services, which often involves repeating payments – for example, staff costs, hardware maintenance and electricity. Operational expenses are also known as current expenditure or revenue expenditure.

- **Direct costs** refer to any cost in providing an IT service which can be allocated in full to a specific customer, service, cost centre, project etc. (for example, the cost of providing dedicated servers or personal computers).
- **Indirect costs** refer to any cost of providing an IT service which cannot be allocated in full to a specific cost centre, such as customer, service,

Fixed or variable

The third cost classification is whether the cost is fixed or variable:

- **Fixed costs** are costs that do not vary with IT service usage – for example, the cost of server hardware.
- **Variable costs** are costs that depend on how much an IT service is used, how many products are produced, the number and type of users, electricity or something else that cannot be fixed in advance.

Table 4.5 Examples of capital and operational costs

Typical capital costs	Typical operational costs	Costs that could be either capital or operational, depending on level of investment, tax laws and enterprise policy
Hardware above a specific financial value Buildings (e.g. data centre facilities)	Maintenance costs Software licensing fees Consulting Salaries Office rental Hardware below a defined cost Utilities (power and water)	Software Remodelling of existing facilities PCs (some organizations or countries allow calculation of the total investment in PCs rather than the individual cost of each PC)

Table 4.6 Example of indirect cost rate calculation

	Direct and allocated indirect costs			Allocating unallocated indirect costs			
Symbol	*d*	*i*	*a*	*p*	*u*	*r*	
Description	Total direct costs	Total allocated indirect costs	Total direct and allocated costs	Allocation percentage	Unallocated indirect costs	Allocation of *u*	Total cost
Calculation			*d* + *i*	*a*/*t*		*u* × *p*	*a* + *r*
					80,000		
Cost centre 1	250,000	150,000	400,000	25%		20,000	420,000
Cost centre 2	150,000	75,000	225,000	14%		11,250	236,250
Cost centre 3	80,000	25,000	105,000	7%		5,250	110,250
Cost centre 4	500,000	20,000	520,000	33%		26,000	546,000
Cost centre 5	300,000	50,000	350,000	22%		17,500	367,500
Sub-total(s) (*t*)			1,600,000			80,000	1,680,000

Table 4.7 Examples of fixed and variable costs

Fixed costs	Variable costs
Salaries (salaries stay the same regardless of how many hours the employee works)	Cost of hourly or daily contractors (the more they are utilized the more money is spent on them)
Benefits (health insurance, retirement, company car etc.)	Overtime (the more an employee works overtime, the more money they are paid)
Printers	Paper and toner/ink
Building loan repayments	Electricity and water
Insurance premiums	Travel costs

Example: printing services

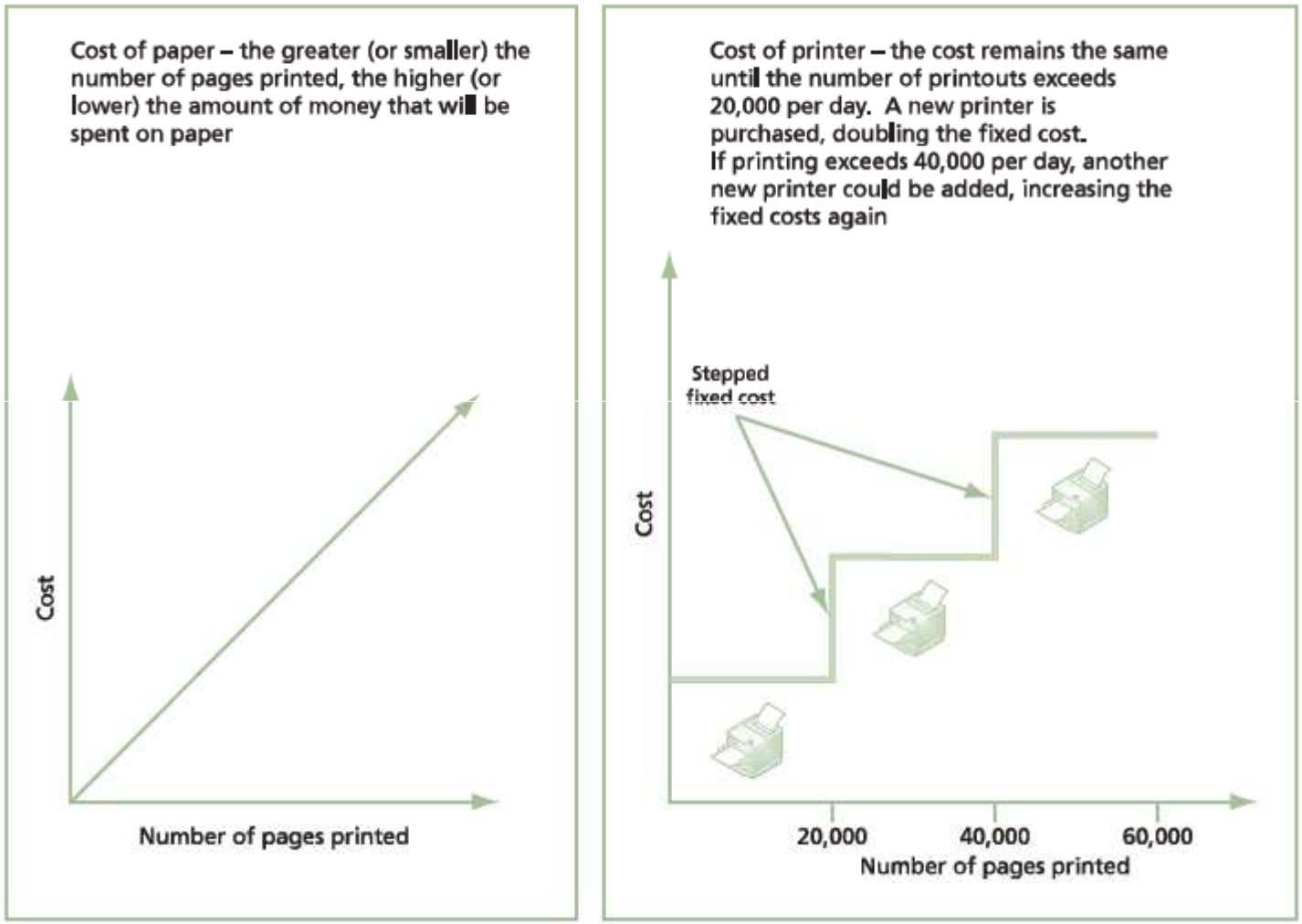


Figure 4.34 Example – fixed and variable costs in a printing service

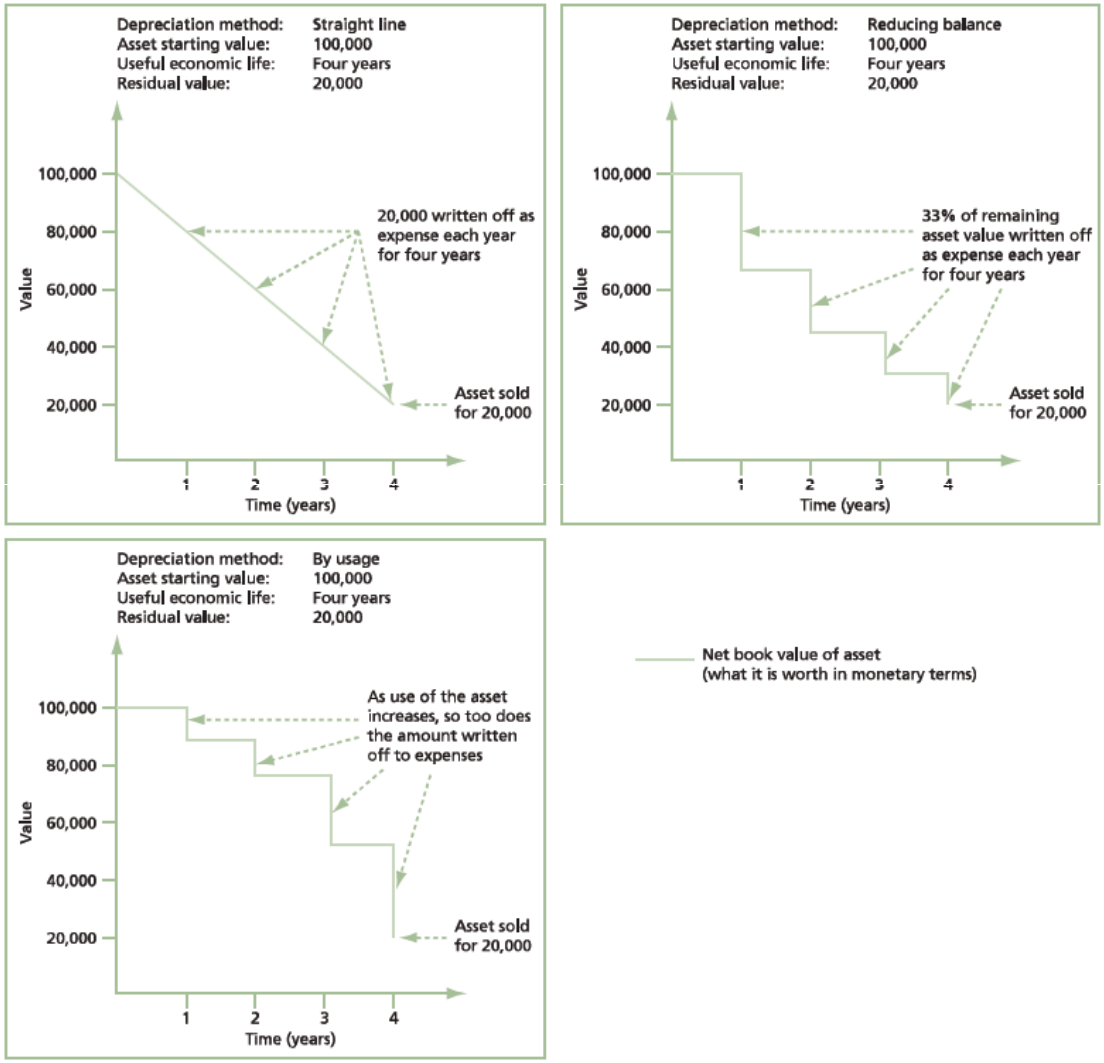


Figure 4.35 Common depreciation methods