

Chapter 18

Information for tactical decisions

The management accountant's role in decision making

- ◆ To provide relevant information to managers and team who make the decisions
- ◆ Types of decisions
 - ▲ Accept or reject a special offer
 - ▲ Make or buy (or outsource) a product or service
 - ▲ Add or delete a product, service or department
 - ▲ Joint products: sell or process further

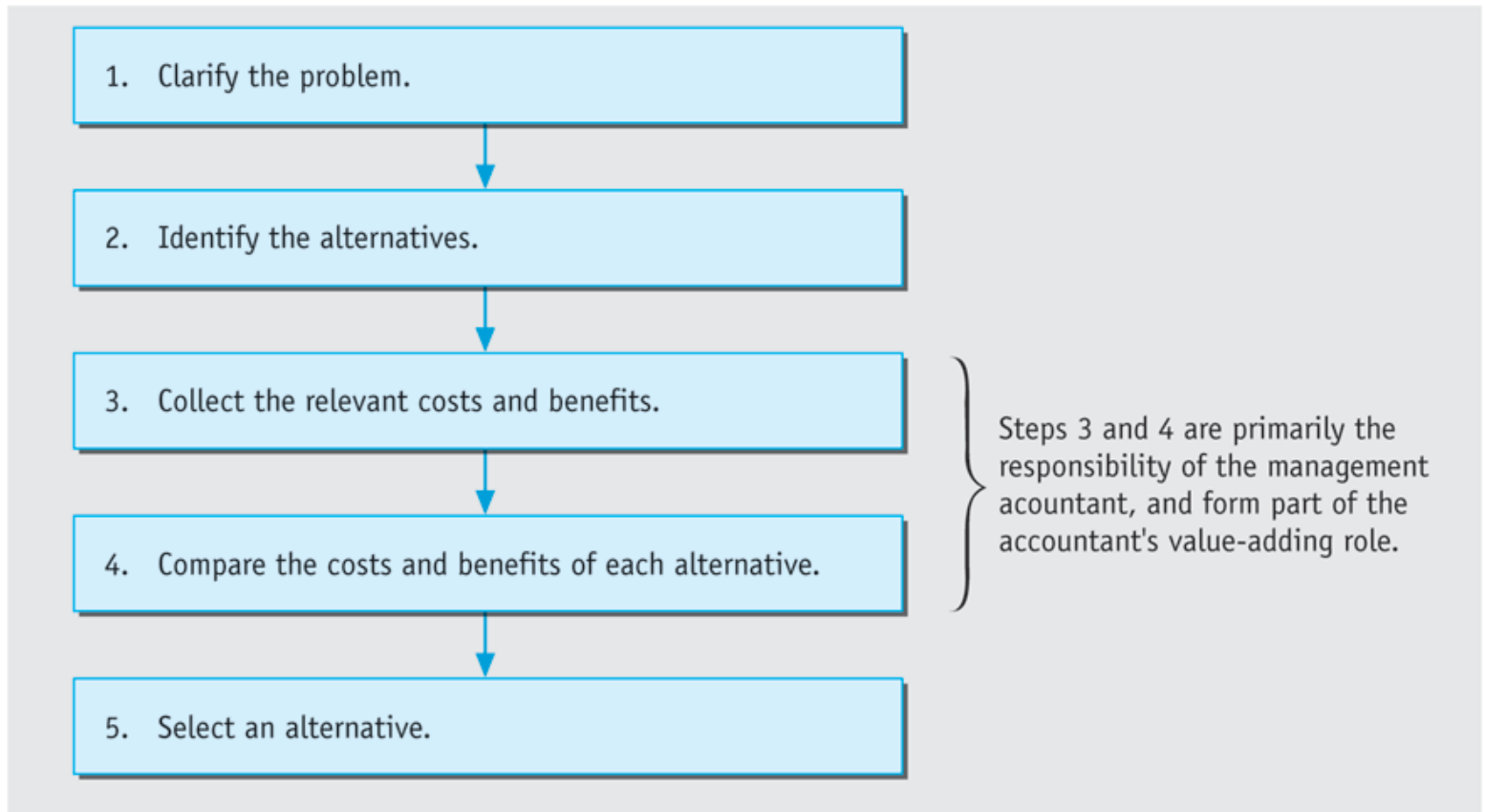
Tactical versus long-term decisions

- ◆ Tactical decisions
 - ▲ Do not require significant or permanent resource commitments
 - ▲ Can be reversed if better opportunities arise
- ◆ Long-term decisions
 - ▲ Tend to be more strategic in nature
 - ▲ May involve changes in capacity
 - ▲ More difficult to reverse and effects may extend over longer time periods

A model of the decision-making process

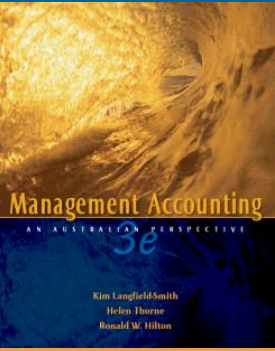
- ◆ Clarify the problem
- ◆ Identify alternative courses of action
- ◆ Collect relevant cost and benefits
- ◆ Compare the cost and benefits of each possible course of action
- ◆ Select a course of action

EXHIBIT 18.1 Steps in the decision-making process



Determining relevant information

- ◆ Relevant information
 - ▲ Differs under competing courses of action
 - ▲ Relate to the future
 - ▲ Is timely
 - ▲ Can be qualitative or quantitative



Characteristics of relevant information

- ◆ Different under competing courses of action
 - ▲ Opportunity costs may be relevant
 - ❖ The potential benefit given up when one alternative is chosen over another
- ◆ Relates to the future
 - ▲ Sunk costs are ignored
 - ❖ Costs that have already been incurred and are irrelevant to any future decisions
 - ▲ Prediction of future costs may be based on past data

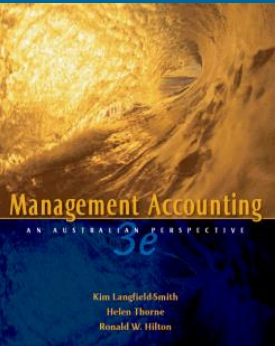
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Characteristics of relevant information

- ◆ Timeliness versus accuracy
 - ▲ Timeliness *I* information available in time to be used in the decision-making process
 - ▲ As accuracy increases timeliness may decrease
- ◆ Quantitative or qualitative
 - ▲ Quantitative information can be expressed in numeric terms, such as dollars
 - ▲ Qualitative information cannot be expressed easily in numerical terms

Providing only relevant information

- ◆ Generating information is a costly process
- ◆ Supplying irrelevant data can result in a waste of managerial resources
- ◆ Information overload decreases the effectiveness of decision-making



Information for unique versus repetitive decisions

- ◆ Unique decisions
 - ▲ Arise infrequently or only once
 - ▲ Relevant information will often be found both inside and outside the organisation
 - ▲ Relevant information is harder to generate
- ◆ Repetitive decisions
 - ▲ Made at regular or irregular intervals
 - ▲ May draw on a large amount of historical data
 - ▲ Relevant information is readily available

Information for decisions: terminology

- ◆ Incremental revenue
 - ▲ The additional revenue that will be gained as a result of choosing one alternative over another
- ◆ Incremental costs
 - ▲ The additional costs that arise from choosing an alternative

continued

Information for decisions: terminology

- ◆ Avoidable costs
 - ▲ Costs that will not be incurred in the future if a particular decision is made
- ◆ Unavoidable costs
 - ▲ Costs that will continue to be incurred no matter which decision alternative is chosen
 - ▲ Irrelevant to the decision

Accept or reject a special order

- ◆ Whether or not to supply a customer with a single, one-off order for goods or services, at a special price
- ◆ Excess capacity
 - ▲ Where equipment, labour or other inputs to production that are not being utilised and hence are available for other purposes

continued

Accept or reject a special order

- ◆ Excess capacity
 - ▲ If incremental revenues $>$ incremental costs, acceptable on financial grounds
 - ▲ Allocated fixed costs should not be included
 - ▲ No alternative uses for resources needed to fill the order

continued

EXHIBIT 18.2 Incremental revenues and costs of special flight with excess capacity, Wallaby Airlines

Incremental revenue:		
Price of the special flight		\$150 000
Incremental costs:		
Variable cost of a routine flight	\$90 000	
Less Savings on reservations and ticketing	<u>5 000</u>	
Direct cost of special flight		<u>85 000</u>
Contribution from special flight		<u>\$65 000</u>

continued

Accept or reject a special order

- ◆ No excess capacity
 - ▲ Include opportunity costs associated with use of the capacity
- ◆ Qualitative factors
 - ▲ Whether the decision to accept the special order will impact on regular business
 - ▲ If the decision is not a one-off decision wider consideration need to be taken into account

EXHIBIT 18.3 Incremental revenues and costs of special flight with no excess capacity, Wallaby Airlines

Incremental revenue:		
Price of the special flight		\$150 000
Incremental cost:		
Variable cost of a routine flight	\$90 000	
Less Savings on reservations and ticketing	<u>5 000</u>	
Direct cost of special flight		<u>85 000</u>
Contribution from special flight:		\$65 000
Less Opportunity cost—forgone contribution from cancelling Japan–Hong Kong flight		<u>80 000</u>
Loss if special flight accepted		<u><u>\$(15 000)</u></u>

Make or buy a product

- ◆ Whether to produce particular goods or services, or purchase them from an external supplier
- ◆ Consider
 - ▲ Avoidable costs versus unavoidable costs
 - ▲ Incremental costs and opportunity costs

EXHIBIT 18.5 Total costs of the make-or-buy decision, Wallaby Airlines

	Alternatives	
	Make desserts	Buy desserts
Cost of purchasing desserts		\$210 000
Variable costs:		
Direct material (avoidable)	\$60 000	
Direct labour (avoidable)	40 000	
Electricity (avoidable)	40 000	
Fixed costs:		
Supervisory salaries (avoidable)	10 000	
Supervisory salaries (unavoidable)	30 000	30 000
Depreciation (unavoidable)	70 000	70 000
Total costs	<u>\$250 000</u>	<u>\$310 000</u>
Additional cost per month of purchasing desserts		

EXHIBIT 18.6 Total costs of the make-or-buy decision with opportunity costs, Wallaby Airlines

	Alternatives	
	Make desserts	Buy desserts
Cost of purchasing desserts		\$210 000
Variable costs:		
Direct material (avoidable)	\$60 000	
Direct labour (avoidable)	40 000	
Electricity (avoidable)	40 000	
Fixed costs:		
Supervisory salaries (avoidable)	10 000	
Supervisory salaries (unavoidable)	30 000	30 000
Depreciation (unavoidable)	70 000	70 000
Plus Opportunity costs of using spare capacity to produce additional meals	<u>65 000</u>	
Total costs	<u>\$315 000</u>	<u>\$310 000</u>
Net cost savings per month by purchasing desserts and using facilities to produce extra meals		\$5000

Make or buy a product

- ◆ Qualitative and strategic issues
 - ▲ Quality of the product
 - ▲ Delivery responsiveness of supplier
 - ▲ Technical capabilities of the supplier
 - ▲ Labour relations at the supplier
 - ▲ Financial stability of the supplier
 - ▲ Ability of the supplier to respect confidential information

Outsourcing decisions

- ◆ Part of a manufacturing process, or another function normally undertaken within an organisation, is contracted to an outside business
- ◆ More long-term than make or buy decision
- ◆ Difficult to reverse

Add or delete a product or department

- ◆ Involves considering which costs and benefits will change if the decision is taken
- ◆ Entails long-term implications
- ◆ Conventional accounting data should be treated with care
- ◆ Qualitative and strategic issues
 - ▲ Deleting a department raises morale concerns
 - ▲ Strategic implications

EXHIBIT 18.8 Total revenues and costs of decision to drop the World Hoppers Club, Wallaby Airlines

	Alternatives	
	Retain club	Eliminate club
Sales revenue	\$200 000	
Less Costs:		
Food and beverages (avoidable)	\$70 000	
Personnel wages (avoidable)	20 000	
Personnel wages (unavoidable)	20 000	\$20 000
Electricity and telephone (avoidable)	25 000	
Depreciation (avoidable)	30 000	
Supervisory salaries (avoidable)	20 000	
Insurance (avoidable)	5 000	
Rent (unavoidable)	10 000	10 000
General administrative costs (allocated)	10 000	10 000
Net loss	<u>\$(10 000)</u>	<u>\$(40 000)</u>
Additional loss per month by eliminating the club		\$30 000

Joint products: sell or process further

- ◆ Joint products
 - ▲ Two or more products produced simultaneously from the one production process
 - ▲ Cannot be separated prior to split-off
- ◆ Split-off point
 - ▲ The stage in the production process where the joint products are identifiable as separate products

continued

Joint products: sell or process further

- ◆ Joint cost
 - ▲ All manufacturing costs incurred in the production of joint products
- ◆ Relative sales method
 - ▲ Allocates joint cost to joint products in proportion to their sales value at the split-off point

Implications of ABC analysis for decisions

- ◆ Identification of relevant costs, incremental costs, opportunity costs, sunk costs and avoidable costs do not change
- ◆ Costs more accurately assigned to products or departments
- ◆ Leads to identification of precise cost implications of various decision alternatives

EXHIBIT 18.13 Make-or-buy decision using activity-based costing data, International Chocolate Company

Bill of Activities: gift boxes			
Activities	Cost per unit of activity driver	Annual quantity of activity driver consumed	Annual activity cost of gift boxes
Product level costs:			
Product development	\$100 per product spec.	2	\$200
Supervision of product line	\$40 per supervisory hour	15	<u>600</u>
			<u>\$800</u>
Batch level costs:			
Material handling	\$18 per move	1 000	18 000
Inspection	\$32 per inspection	1 000	32 000
Setting up box machine	\$200 per setup	1 000	<u>200 000</u>
			<u>\$250 000</u>
Unit level costs:			
Material cutting	\$0.10 per unit	1 000 000	100 000
Box assembly	\$0.05 per unit	1 000 000	<u>50 000</u>
			<u>150 000</u>
Total activity cost (annual and per unit)			<u>\$400 800</u>
Direct material cost per unit			<u>0.1000</u>
Total product cost per unit			<u>\$0.5008</u>

Incentives for decision makers

- ◆ Managers typically make decisions that will maximise their reported performance and rewards
- ◆ Cost systems may be explicitly designed to encourage certain biases in decisions making
- ◆ To encourage managers and employees to make certain decisions, systems must be designed with incentives

Pitfalls to avoid

- ◆ Ignore sunk costs
- ◆ Beware of unitised fixed costs in decision making
- ◆ Beware of allocated fixed costs; identify the avoidable costs
- ◆ Pay special attention to identifying and including opportunity costs in a decision analysis