



Short Term Decision Making

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Businesses face decision making situations in relation to their operations on an ongoing basis. These decision making situations may be short term in nature, relating to periods of less than one year, or longer term, pertaining to periods of one year or more. While decision making terminology applies to all situations the application of management accounting principles differs depending on whether the issue is short term or long term in nature. This article will discuss the main aspects of short term decision making. Firstly, explanation and examples of short term decisions will be provided. Next, important terminology used and principles to apply in short term decision making will be outlined. Discussion of the role of qualitative factors in decision making will be then be provided. Finally, a worked example will be presented to illustrate how to approach decision making questions.

Different types of decisions

There are a number of decisions that a business may face in the short term such as:

- (a) Special pricing decisions: these usually involve 'one off' orders from customers that are not expected to recur and where a lower selling price may be offered. This type of decision arises where the business has spare production capacity and by fulfilling the special one off order it may boost its existing revenue and profits. For example, a t-shirt manufacturer may receive a one off order to produce 1,000 t-shirts for a specific conference or other event.
- (b) Product mix decisions where there is a capacity constraint: these decisions arise where a business has, in the short term, limited or restricted capacity in some aspect of its production (e.g. machine hours). A decision must be made regarding which mix of products will utilise the limited capacity factor most effectively to maximise profits. For example, a company may manufacture 3 products which require 25,000 labour hours in production to satisfy demand. However, the company may only have 22,000 labour hours available for production. Hence, given the capacity constraint, a decision must be made regarding the best product mix to maximise profits.
- (c) Make or buy decisions: this requires a company to consider the possibility of outsourcing some or all of its production. Outsourcing may enable the business to increase its profits by reducing its operating costs or by gaining access to greater production capacity. For example, a company manufacturing an existing product at a cost of €0.46 per unit might receive an offer from another supplier to produce and supply the product for €0.40 per unit. The company must then consider whether to continue to make the product in-house or outsource production to the supplier.
- (d) Whether to replace equipment: the business must consider the costs and benefits involved in replacing existing equipment with new equipment. For example, a business may be considering whether to try to improve efficiency by purchasing new production machinery and getting rid of the existing, old machinery.

- (e) **Discontinuance decisions:** the business must consider its current product/service/customer/location mix and the impact on its costs and revenues if a decision is taken to discontinue one or more of the existing products/services/customers/locations. For example, a company may be manufacturing four products but there may be very little profit arising from one particular product after all costs have been assigned and allocated. In this case the company must consider the implications on both total costs and total revenues of discontinuing the product.

Terminology and principles of short term decision making

In decision making it is important to understand the meaning of key terms used such as relevant costs and revenues, sunk costs and opportunity costs. In decision making these terms are used to classify costs and revenues and enable the business to select the most appropriate course of action.

Relevant costs and revenues are costs and revenues that are specific to a particular decision. They are future costs and revenues that change depending on the decision taken. If there are a number of alternative courses of action relevant costs and revenues will differ between alternatives.

Relevant costs and revenues are also called avoidable costs and revenues.

Sunk costs are past costs arising from a decision that has already been made. Sunk costs do not differ between alternatives; they remain the same and as such are not relevant to a future decision.

Opportunity costs represent the costs of the opportunity that is lost, foregone or sacrificed by selecting one course of action instead of another. Opportunity costs only apply to the use of scarce resources. Where resources are not scarce there is no sacrifice in using these resources.

Irrelevant costs and revenues are thus not specific to a particular decision; they do not differ between alternatives; and they may relate to the past.

Particular phrases or terms used to describe costs and revenues may indicate which are relevant to a decision or irrelevant to a decision. The table below shows the most commonly used terms and classifies them as relevant or irrelevant in decision making.

Costs RELEVANT to a decision are often described as:	Costs IRRELEVANT to a decision are often described as:
<ul style="list-style-type: none"> • Incremental • Additional • Escapable • Avoidable • Opportunity costs 	<ul style="list-style-type: none"> • Costs paid in the past • Costs committed to in the past • Unescapable • Unavoidable • Non-cash costs (e.g. depreciation) • Allocated

When faced with a short term decision only relevant costs and revenues should be considered. Sunk costs should be identified and excluded from the analysis. Care should be taken to highlight and calculate any opportunity costs and these should be included in the analysis.

Qualitative factors

The previous sections have focused on costs and revenues i.e. quantitative factors that may influence a decision making situation. While it is important to assess these factors it is also necessary to evaluate the importance of any non-quantitative or qualitative factors before making a final decision. Qualitative factors may include issues such as the effect that a decision may have on product or service quality; on the morale of the workforce; the reliability of the supplier to deliver goods/services on time; the effect on any existing customers; and the effect of the decision on the reputation of the business. Full consideration should be given to both quantitative and qualitative factors in any decision making situation.

Worked example

This section presents a worked example to demonstrate how to apply decision making principles. The example provided is a special pricing decision as noted at (a) above.

Question

Pluie Limited manufactures a unique high quality umbrella and supplies two well-known department stores in Dublin. The cost of producing one umbrella is calculated as €9 and the selling price charged to the department stores is €15. The company currently has spare production capacity and has been approached by a local golf club to supply 1,000 umbrellas for a special promotion event. The golf club has specified that it would like the umbrella to be manufactured using red waterproof fabric which is the club colour and has offered to pay €12 per umbrella. The following information is available:

(i) Pluie Limited recently employed Creative Product Consultants to alter the design of the umbrella. The cost of developing the revised design was €5,000. The company had received the invoice from the consultants but had not yet paid it.

(ii) The umbrella comprises a steel frame, waterproof fabric and a varnished wooden handle. The steel frame costs €2.50 per umbrella and the handle costs €1 per umbrella. Each umbrella uses 2 metres of waterproof fabric which costs €1 per metre. The company does not currently use any red fabric in its production and would have to purchase the fabric from a different supplier. The supplier will only sell the red fabric in batches of 5,000 metres for a total cost of €5,100. Pluie Limited does not envisage using the red fabric after the golf club order has been filled. Any red fabric not used could be sold for €0.90 per metre.

(iii) The golf club has requested that the club logo (crest) is applied to each umbrella. To do this the company would have to purchase one embossed label for each umbrella at a cost of €0.45 per label. If not used on the umbrellas these labels would be scrapped.

(iv) Each umbrella takes 15 minutes to cut fabric, assemble and pack. The company pays its workers €12 per hour. Currently, the company wage records show total idle time of 300 hours per month. It envisaged that the umbrellas for the golf club would be produced during the month of February 2015.

(v) To produce the umbrellas for the golf club the company will have to use one particular machine which is being depreciated at €3,000 per month. This machine is currently being leased for €4,200 per month to a company located in the building beside Pluie Limited.

(vi) The company uses traditional overhead absorption costing to allocate production overheads to products. A budgeted overhead absorption rate of €2 per labour hour has been calculated for the year.

Should Pluie Limited manufacture the umbrellas for the local Golf Club?

Solution

<u>Item</u>	<u>€</u>	<u>Comment</u>
(i) Revised design costs	-	Not relevant. Sunk cost as the decision to alter the design has already been made.
(ii) Steel frame 1,000x €2.50	2,500	Relevant. Cost is specific to the umbrellas, only incurred if they are produced.
(ii) Handle 1,000x €1	1,000	Relevant. Cost is specific to the golf club umbrellas, only incurred if they are produced.
(iii) Red waterproof fabric	5,100	Relevant. Cost is specific to the golf club umbrellas, only incurred if they are produced.
(ii) Red waterproof fabric 3,000 mtrs x €0.90	(2,700)	Relevant. Income from sale of left over fabric only arises if project goes ahead.
(iii) Labels 1,000 x €0.45	450	Relevant. Cost is specific to the golf club umbrellas, only incurred if they are produced.
(iv) Labour cost	-	Not relevant. The company currently employs workers and there is spare capacity. [(1,000 x 15 mins)/60] 250 hours are required during the month to produce the golf club umbrellas and the company currently has 300 hours of spare capacity per month.
(v) Depreciation	-	Not relevant. This is a non- cash, past cost that is being spread over future years. Cost occurs whether the golf club umbrellas are manufactured or not.
(v) Loss of machine lease income	4,200	Relevant. This is an opportunity cost. If the golf club umbrellas are produced the company will not be able to earn income from leasing out the machine. This cost is the lease income foregone by producing the umbrellas.
(vi) Production overheads	-	Not relevant. The production overheads are not specific to the golf club umbrellas. They occur regardless of whether the golf club umbrellas are produced or not.
Total costs	10,550	
Total revenue 1,000x €12	12,000	
Net income	1,450	

The calculation shows that, on a financial or quantitative basis Pluie Limited (as it has spare capacity) should produce the umbrellas for the local golf club as it would generate additional income. However, the decision should not be finalised before considering qualitative factors such as: Is there any possibility that the existing customers may be affected by the decision? Will there be any effect on staff – would morale be reduced if there was less idle time? Is it possible that acceptance of this job may lead to more work for the company? Would producing the umbrellas for the local golf club enhance the reputation of Pluie Limited?