Relevant Costing

Decision-making has been a key concept in the class to this point. . The managerial accountant is responsible for designing and maintaining the accounting system that will deliver relevant information to decision-makers. Relevant costs are those expected future costs that differ among alternative courses of action – that is the cost is pertinent to the decision being made. This idea of relevance focuses on two factors: the cost must be a future cost (not sunk) and the cost must differ among alternative courses of action. Notice that this decision does not exclude qualitative factors from being relevant to the decision. However, the difficulty involved in quantifying these qualitative factors often leads to their exclusion from a strictly numerical analysis.

Why is it important to identify relevant information? First, information generation is a costly process. If the accountant can provide only relevant information, significant cost savings may be realized (e.g., reduced collection, processing times). Second, the cognitive processing ability of decision makers is limited. Beyond some limited amount of information, individuals face information overload.

Relevant costing (sometimes referred to as differential analysis) is used in a wide variety of contexts – several of which we have previously discussed. Decisions in which this type of analysis may be useful include:

- sell or process further (joint costs)
- special order
- make or buy (outsourcing)
- closing a department or segment
- sale of obsolete inventory
- disposition of equipment
- scarce resources

Whatever the situation, 3 key concepts emerge:

1. The only relevant costs are those that differ among alternatives.
2. All sunk costs are irrelevant.
3. Opportunity cost must be considered.

Several potential pitfalls occur when attempting to perform a relevant costing analysis. First, do not consider sunk costs. This concept is quite simple but people often attempt to justify past decisions by considering sunk costs – DON'T DO IT. Second, beware of unitized fixed costs – misleading decisions often result. Third, beware of allocated fixed costs. Fourth, all variable costs are not relevant – they must differ among alternatives to be relevant. Finally, all fixed costs are not irrelevant – sometimes these do change with the alternative being considered. Following are several problems that apply the concepts of relevant costing.

Replacement of Equipment

Tiger Stripes is a locally owned business producing various Auburn paraphernalia. Tiger Stripes has a T-shirt press that was acquired eight years ago at a cost of $100,000. The press was expected to have a ten year useful life with no salvage value if sold at the end of the tenth year. The current market value of the equipment is $5,000. Straight-line depreciation is used. In addition to the annual depreciation of $10,000, Tiger Stripes incurs $45,000 of annual operating costs to operate the press. A salesperson has approached Tiger Stripes' manager, D.B. Walters (an MBA graduate of another Alabama institution), with an opportunity to purchase a new T-shirt press. The new press is much cheaper than the old press (acquisition cost of $30,000), costs less to operate ($25,000 per year), but is operable for only 2 years before it needs to be replaced (salvage value is 0 at the end of the second year).

After hearing the offer, D.B. responds angrily to the salesperson that it would be dumb to get rid of the old T-shirt press because of the loss that would be incurred ($20,000 book value less salvage value of $5,000). D.B. exclaims he is very insulted and is about to throw the salesperson out when you intervene. Critically evaluate D.B.'s analysis.

Special Order

One of Tiger Stripes products is a "spirit pin". All true Auburn University fans are expected to buy the pins to show loyalty to the University's athletic teams. The spirit pin is manufactured on a special-purpose machine that has a capacity of 15,000 pins a month. Currently, however, Tiger Stripes is only producing 5,000 pins per month. Expected results for the next month are:

Sales (5,000 pins * $10/pin)	$50,000
CGS:	
Variable (5,000 pins * $8/pin)	<40,000>
Fixed	<5,000>
Marketing costs ($800 of which is variable)	<1,000>
Profit	$ 4,000

Due to Auburn's increasing popularity in the athletic world and the numerous Auburn alumni around the world, Far Eastern Novelties has approached D.B. Walters with regard to a special order. Far Eastern wishes to purchase 5,000 pins at a price of $8.50 per pin. D.B. performs a quick analysis for this special order as follows:

Sales (5,000 pins * $8.5/pin)	$42,500
CGS:	
Variable (5,000 * $8/pin)	<40,000>
Fixed	<5,000>
Marketing costs	<1,000>
Loss	<$2,500>

As D.B. is in the process of declining the offer and attempting to persuade the Far Eastern representative that he cannot cover his costs at that price, you enter the office. D.B., knowing your expertise in managerial accounting, asks for your help in explaining the situation to the Far Eastern representative. What is your recommendation?

Outsourcing - Make or Buy Decisions

D.B. currently serves as the janitorial supervisor in addition to his other responsibilities. Because D.B. dislikes cleaning, he is considering outsourcing the janitorial services. A current breakdown of janitorial costs for a typical month is as follows:

Variable Costs	
Direct material (cleaning supplies, etc.)	$600
Direct labor	960
Overhead	500
Fixed Costs (allocated to janitorial services)	
Supervisory salary (for D.B.)	$3,000
Depreciation on janitorial equipment	500
Total monthly cost	$5,560

Plainsman Janitorial Services has offered to provide janitorial services to Tiger Stripes for $4,000 a month. If Tiger Stripes signs the contract, the janitorial equipment will still be retained for miscellaneous cleanups, and it is anticipated that about $20 worth of material will be used for these miscellaneous cleanups. There will be no janitorial labor as the manufacturing employees would clean up after themselves. D.B. obtains the janitorial contract from Plainsman but needs your approval. Do you sign the contract?

Cost of Inventory

Tiger Stripes had created special Auburn shakers for football games. However, the colors faded and more closely resembled University of Florida colors rather than Auburn University colors. The original costs of the material for the shakers was $50,000. The shakers can be sold to Gator Chomp (a Florida-based firm) for $47,000. If the shakers are sold to Gator Chomp, it will cost approximately $56,000 to purchase new material for the shakers. D.B. does not like this alternative since it would produce a $3,000 loss ($50,000 cost less $47,000 revenue) and would entail spending and additional $56,000. However, the material could be reworked at a cost of $12,000 and the shakers can be used by Auburn fans. Due to D.B.'s previous errors, he asks for your help. What do you suggest?