# **ACCT 102 - Lecture Notes - Johnson Chapter 23 - Relevant costing for Managerial Decisions**

#### **Goals:**

- To be able to determine which costs (and revenues) are relevant and exclude those that are not
- To be able to apply decision making tools to short term managerial decisions
- To be able to determine a product's selling price using a variety of methods

## **The Importance of Relevant Costs**

Managers have access to all types of data, especially in this information age. The key is deciding what data is useful and relevant to the decisions to be made. There are lots of key terms and definitions in this chapter, and you should spend some time becoming familiar with them. Some of these are as follows:

- *Sunk Costs* These are costs that have already been expended and cannot be reversed or changed. Sunk costs are irrelevant to future decisions. They should be excluded from your analyses.
- Out of Pocket Costs require future cash outlays and are very relevant to future decisions
- *Opportunity Costs* a potential benefit that may be lost if one alternative choice is made. Many times, such costs should be considered.
- *Relevant benefits* additional or incremental revenue by choosing an alternative course of action. This is relevant to managerial decisions.
- Avoidable costs These are also called escapable costs and are usually used in conjunction with decisions to eliminate a product or segment. These are amounts that the company would not incur if it eliminated the segment. These are relevant to decisions regarding elimination.
- *Unavoidable costs or inescapable expenses* amounts that would continue even if the segment is eliminated. These are not relevant because the amounts will be incurred whether or not the segment is discontinued

## **Some Managerial Decision Scenarios**

### <u>To Accept a Special Order or Additional Business at a Reduced Price</u> –

**Strategy**: Ignore historical costs and focus on the incremental costs and revenues – those items that change if the business is accepted. Things such as capacity restrictions or pricing laws must be considered.

#### Make or Buy a Part

**Strategy:** Compare the cost to buy from a supplier to the incremental costs to make the part in house. Usually only a portion of the overhead is variable or incremental. (Things like additional electrical power, or additional supervisory hours, etc.) The fixed part of the overhead will continue to be incurred anyways, and is thus not relevant to the decision.

## Scrap or Rework

**Strategy**: Focus on the incremental costs as opposed to the revenue you could generate from selling the scrap. The costs already incurred in manufacturing the goods up until this point are irrelevant. They are sunk and cannot be changed. Example on page 956.

### Sell As Is or Process Further:

**Strategy:** Focus on the Revenues that you could generate by selling the goods in their current state, in comparison to what the incremental costs are for processing them further

Sales Mix Considerations Strategy: Allocate the resources that the company has to the most profitable units first, and then any leftover capacity can be devoted to the less profitable items. As we know from previous chapters, most companies sell a variety of products and all companies want to maximize their profits. If resources and production capabilities are limited, then a company should use their capacity to first produce the higher contribution margin items, and then allocate out the remaining resources to items that may not be as profitable.

#### **Eliminating a Segment**

**Strategy:** Decide which costs are avoidable, eliminate the sunk costs, and analyze profitability. When a company has different segments, there is a tendency to look at GAAP financial statements to determine profitability. The problem with this approach is that much of the overhead is fixed and just allocated out to the various segments. Just because one segment goes away doesn't necessarily mean the overhead will go away.

#### **Qualitative Expenses**

We need to be concerned with other non-financial issues. Things such as the quality of the product, the morale of a decision on employees, whether a machine will pollute the environment, whether workers who are valued for their services will need to be let go because their technological skills are not recent, customer reaction, etc. You can never ONLY rely on financial data.

## More on Sales Mix (Day 2)

Companies usually sell a variety of products – each with different gross profit margins and contribution margins. If resources are limited, sometimes management is left to decide what is the optimal mix of product that will meet the needs of their customers, yet at the same time return the highest profitability. In general, here are the steps to should follow to determine that optimal mix:

- 1. Calculate the Contribution Margin per unit. (We have done this many times in previous chapters.)
- 2. Turn that into a Contribution Margin per Machine hour or other scarce resource (CM per unit/MH per unit)

- 3. Take the highest CM per machine hour (or other scarce resource) and focus the next step on it.
- 4. Make as many as possible of the highest per unit (of scarce resource) CM product, considering any internal constraints (machine availability) and external constraints (customer orders)
- 5. One you have maxed out on the most profitable unit, apply any remaining machine time to the other units in order of profitability.
- 6. As always, consider any other non-financial issues.