Decisions and Relevant Costs

1. Basic Concepts

Thus far, we have focused on the mechanics of cost accounting systems. We have seen how costing systems calculate product costs. We now ask how the numbers generated by the accounting system should be used for decision making.

- **Relevant Cost**: Every cost is either relevant or not with respect to a particular decision. A cost is relevant to a particular decision if it varies over the alternatives under consideration.

- Problems created by accrual accounting for determining relevant costs:
  - Assigning costs “arbitrarily” to time periods (e.g., depreciation).
  - Assigning costs “arbitrarily” to business units or functions (e.g., allocating facility-sustaining costs to individual departments).
  - Assigning costs “arbitrarily” to products (e.g., applying fixed costs to units of output using a per unit burden rate).
  - Physical constraints (e.g., capacity) are not always evident in the management accounting system.

- **Sunk Cost**: A cost that has been incurred in the past. Since such costs do not affect decisions, they are always irrelevant.

- **Opportunity Cost**: The net return of a resource in its best alternative use.
Special Order Schema

<table>
<thead>
<tr>
<th>Incremental Revenue</th>
<th>$R$</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Incremental Cost)</td>
<td>$C$</td>
</tr>
<tr>
<td>(Opportunity Cost)</td>
<td>$O$</td>
</tr>
<tr>
<td>Net Benefit/(Cost)</td>
<td>$R - C - O$</td>
</tr>
</tbody>
</table>

Accept the special order if there is a net benefit.

Remember that opportunity costs often arise because of a binding constraint. In cases where there is only one bottleneck, the opportunity cost is apparent from the contribution margin per unit of the constraining factor. In more complex situations a linear program can often capture the effects of production constraints that are not evident in the accounting cost model.

Pitfalls to Avoid

None of these statements are always true:

- All variable costs are relevant.
- All fixed costs are irrelevant.
- All costs should be unitized over the anticipated volume.
- The correct time horizon is one year.

Typical Relevant Costing Problems

Common types of relevant costing problems deal with:

- make-or-buy decisions,
- whether to accept a special order, and
- deciding on product emphasis.