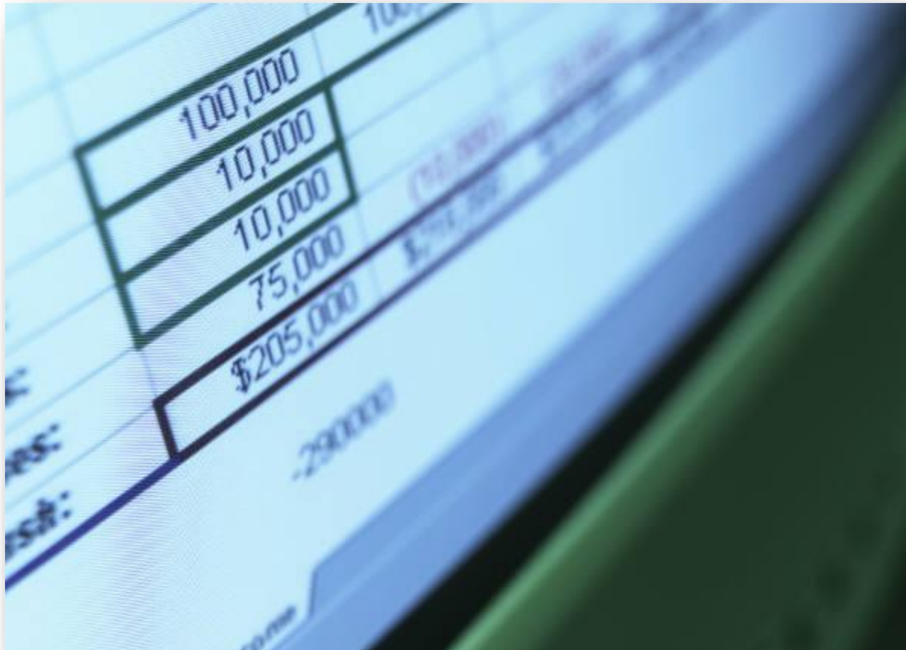


Differential Analysis for Decision Making

ACMP

Session 09: Relevant Cost in Decision Making

- ***Consents Required:***
  -Relevant Cost vs. Irrelevant Cost
  -Traceable Fixed Cost vs. Common Fixed Cost
  -Net Income vs. Segment Margin

- ***Types of Decisions to be discussed:***
  -Make or Buy Decision
  -Drop or Retain Decision
  -Special Pricing Decision

Income Statement

- Sales-VC=CM-FC=NOI
- FC=TFC+CFC
- Sales-VC=CM-TFC=<u>Segment Margin</u>-CFC-NOI
- Segment report should end at segment margin and segment performance should be evaluated on the basis of segment margin.

Cost Concepts for Decision Making

A **relevant cost** is a cost that differs between alternatives.

Identifying Relevant Costs

An avoidable cost is a cost that can be eliminated, in whole or in part, by choosing one alternative over another. Avoidable costs are relevant costs. Unavoidable costs are irrelevant costs.

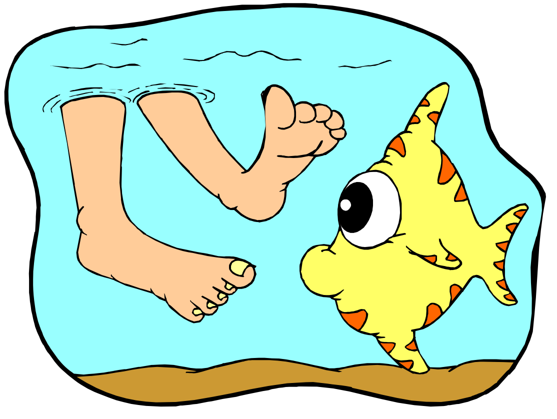
Two broad categories of costs are never relevant in any decision. They include:

1. **Sunk costs.**
2. **Future costs that do not differ between the alternatives.**

Relevant Cost Analysis: A Two-Step Process

Step 1 **Eliminate costs and benefits that do not differ between alternatives.**

Step 2 **Use the remaining costs and benefits that differ between alternatives in making the decision. The costs that remain are the differential, or avoidable, costs.**



Adding/Dropping Segments

One of the most important decisions managers make is whether to add or drop a business segment. Ultimately, a decision to drop an old segment or add a new one is going to hinge primarily on the impact the decision will have on net operating income.

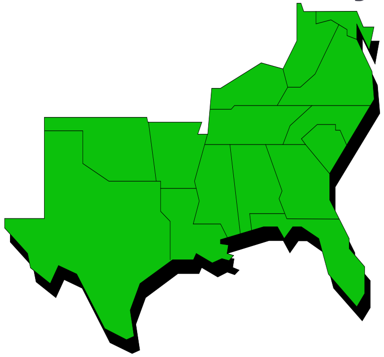
To assess this impact, it is necessary to carefully analyze the costs.

Segment Reporting

A **segment** is any part or activity of an organization about which a manager seeks cost, revenue, or profit data.

An Individual Store

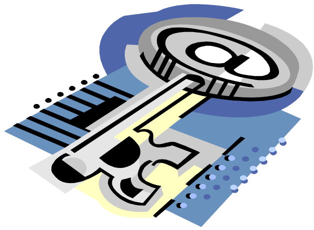
A Sales Territory



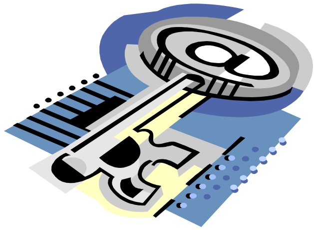
A Service Center

Keys to Segmented Income Statements

There are two keys to building segmented income statements:



A contribution format should be used because it separates fixed from variable costs and it enables the calculation of a contribution margin.

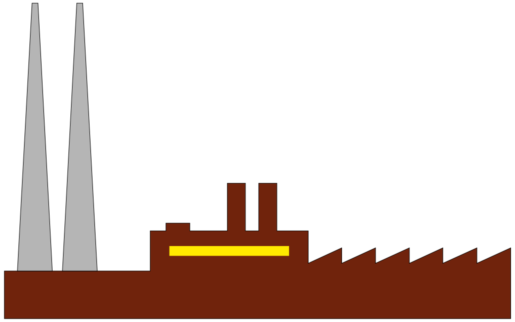


Traceable fixed costs should be separated from common fixed costs to enable the calculation of a segment margin.

Identifying Traceable Fixed Costs

Traceable costs arise because of the existence of a particular segment and would disappear over time if the segment itself disappeared.

No computer division means . . .

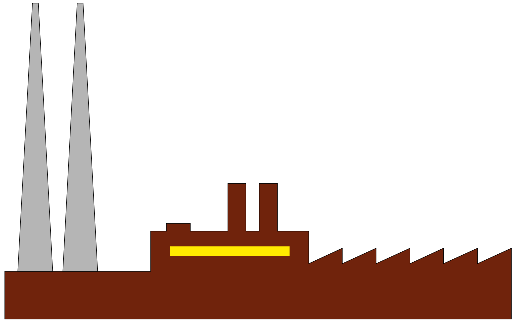


No computer division manager.

Identifying Common Fixed Costs

Common costs arise because of the overall operation of the company and would not disappear if any particular segment were eliminated.

No computer division but . . .



We still have a company president.

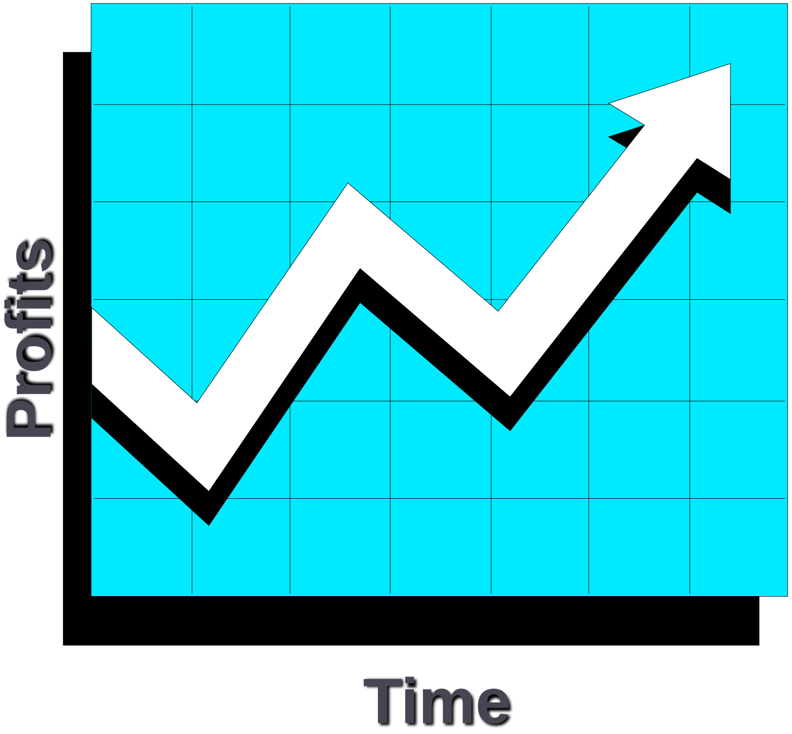
Traceable Costs Can Become Common Costs

It is important to realize that the traceable fixed costs of one segment may be a common fixed cost of another segment.

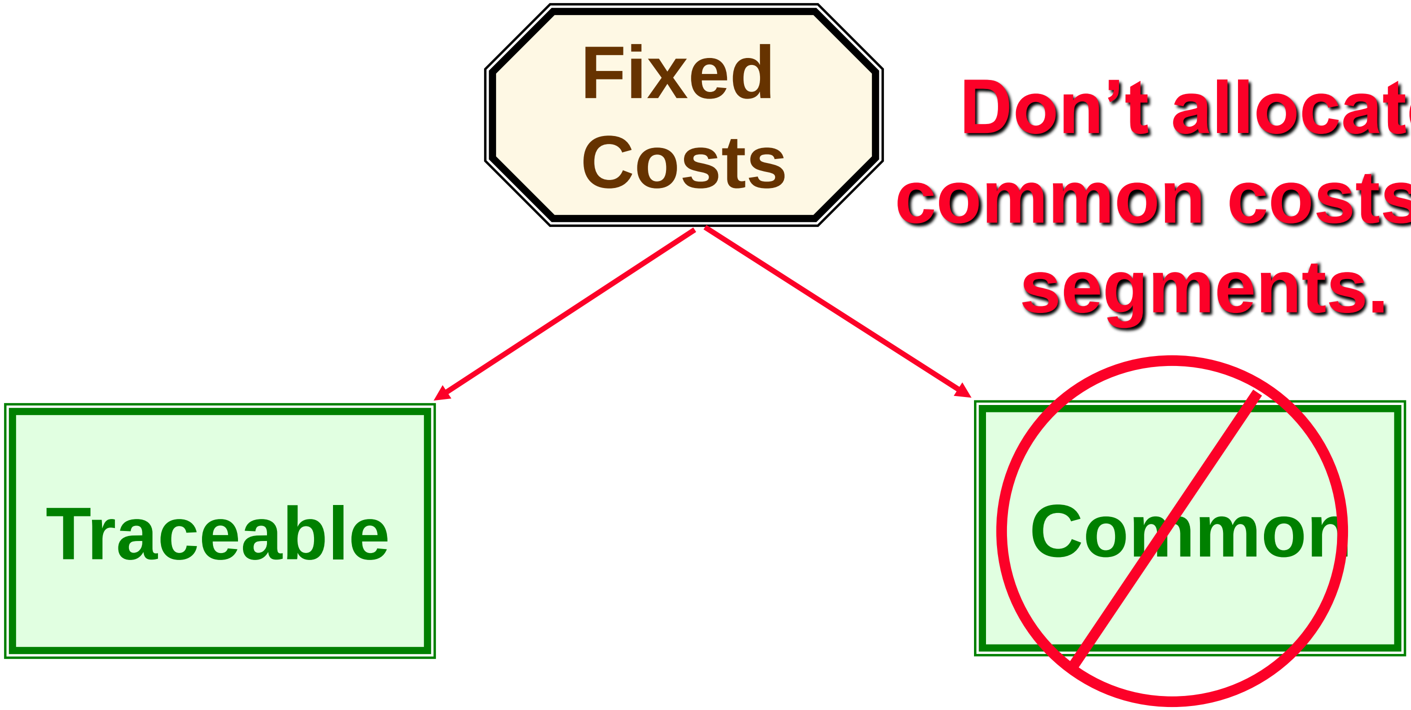
For example, the landing fee paid to land an airplane at an airport is traceable to the particular flight, but it is not traceable to first-class, business-class, and economy-class passengers.

Segment Margin

The segment margin, which is computed by subtracting the traceable fixed costs of a segment from its contribution margin, is the best measure of the long-run profitability of a segment.



Traceable and Common Costs



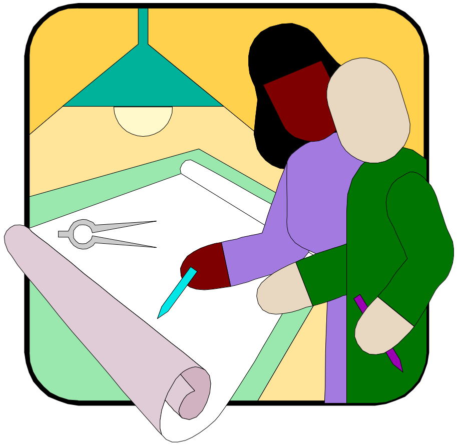
Dropping a Product/Line/Segment

- Don’t Allocate Common Fixed cost to segments as no individual segment is responsible for it. Even if you decide any segment, you can’t eliminate any of common fixed cost unless you shut down the organization!

- Therefore, if Positive Segment Margin-Don’t Drop!!!

The Make or Buy Decision

When a company is involved in more than one activity in the entire value chain, it is vertically integrated. A decision to carry out one of the activities in the value chain internally, rather than to buy externally from a supplier is called a "make or buy" decision.



Special Order

A **special order** is a one-time order that is not considered part of the company's normal ongoing business.

When analyzing a special order, only the **incremental costs and benefits** are relevant.

Since the existing fixed manufacturing overhead costs would not be affected by the order, they are not relevant.