Responsibility Accounting:

Responsibility accounting recognizes each person in an organization who has any control over cost or revenue to be a separate responsibility center whose stewardship must be defined, measured and reported upward in the organization.

Decentralized organizations are where decision makers are spread throughout the organization and make decisions relating to their area of responsibility.

Responsibility center is an organizational point where there is control over cost, revenue and/or invested funds.

Cost center is where there is control over cost only.

Profit center is where there is control over cost and revenue.

Investment center is where there is control over cost, revenue and invested funds.

Evaluation of:
- Cost center - by performance reports on costs.
- Profit center - by contribution margin I/S.
- Investment center - by CM I/S, but in relation to rate of return on invested funds.

Segment Reporting:

Segment reporting is having an income statement for each part of the organization. Such as: company, division, department, product line, or location. I.e., any part of the company, which has both costs and revenues.

Segmented income statements are prepared on both the traditional (full cost GAAP approach for external purposes) and on the contribution approach for internal purposes. Note: GAAP now requires, since issuance of FASB 131, internal segmented divisions, etc. to be presented on external financial statements. Our study does not conform to this GAAP requirement.

Fixed costs are divided into two types:
- Traceable fixed costs (TFC) are fixed costs that have been created because of the existence of a particular segment. They would disappear (be eliminated) if that segment were eliminated. Because of this "cause and effect" relationship, TFC are charged to the segment that created them.

- Common fixed costs (CFC) are fixed costs that are related to two or more segments, or exist because of overall operating activities of the business. They would not be reduced or eliminated if any particular segment were eliminated. As a result, they are not charged to any of the segments. Sometimes common fixed costs are called indirect costs.
Basic guidelines to follow in assigning fixed costs when presenting segmented statements:
- assign costs according to variable or fixed.
- assign fixed costs according to traceability or common.

**SEGMENT MARGIN INCOME STATEMENT**

<table>
<thead>
<tr>
<th></th>
<th>Company</th>
<th>Segment A</th>
<th>Segment B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>200</td>
<td>150</td>
<td>50</td>
</tr>
<tr>
<td>Variable Cost</td>
<td>140</td>
<td>120</td>
<td>20</td>
</tr>
<tr>
<td>Contribution Margin</td>
<td>60</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Traceable Fixed Cost</td>
<td>30</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Segment Margin</td>
<td>30</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Common Fixed Cost</td>
<td>5</td>
<td>===</td>
<td>==</td>
</tr>
<tr>
<td>NET INCOME</td>
<td>25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When segmented reports are prepared on successively smaller segments, traceable fixed costs become common. An example using Chevy cars and trucks will be given during lecture to explain this phenomenon.

Segment Margin is considered the best gauge of long-run profitability, whereas Contribution Margin is used for short-run decision-making.

Possible separation of TFC into Discretionary and Committed could also be used to allow for further distinction of performance of segment manager and performance of segment as a long-term investment.

There are three business practices that hinder SM Statements:
- Omission of some costs
- Allocation of traceable costs on some arbitrary basis
- Allocation of common costs

**RETURN ON INVESTMENT (ROI) formula:**

\[
\text{Margin times Turnover} \quad \text{(a.k.a. Profit Margin, Asset Turnover)} \quad \text{sales} \quad \text{average operating assets}
\]

\[
\text{net operating income} \times \frac{\text{sales}}{\text{sales}}\quad \text{average operating assets}
\]

EBIT is used because interest is a financing decision apart from the purchase of the assets. Taxes are a function of overall corporate profits and differing local tax rates.

Operating assets exclude assets that are not held for productive use.

ADVANTAGE of ROI is that it is comparable to all other segments or companies. DISADVANTAGES are (1) it emphasizes the short-run, (2) doesn’t equal cash, and (3) all items in the formula may not be controllable by the manager.

Increase ROI by (1) increasing sales, (2) decreasing expenses, and (3) reducing operating assets.

**RESIDUAL INCOME (RI) formula:**

\[
\text{Net Operating Income minus Minimum Return on Operating Assets} \quad \text{I.e., EBIT minus (minimum ROR \% x Average Operating Assets)}
\]

ADVANTAGE of RI is that it will encourage investment in any/all alternatives that exceed the minimum required rate of return. DISADVANTAGE of RI is it can’t be compared to other divisions, or companies, that are of different size.
TRANSFER PRICING:

Transfer Price is the amount charged by a Provider of goods or services to a related party User. The provider could be referred to as the provider, producer, maker, seller, or transferor. The user could be referred to as the user, buyer, or transferee. Transfer prices commonly used include variable cost, full cost, market-based price, and negotiated price.

Using variable or full cost eliminates the possibility of evaluating the provider by the use of ROI or RI. It also eliminates the incentive for cost control by passing on waste and inefficiencies to the final user. If cost is used it would be best to use Standard Cost.

Using market based or negotiated pricing is considered the best approach, as each party will do what is in their own best interest. This will also result in what is best for the company. In order to negotiate a transfer price the provider must know what their minimum price is. Their minimum price would be that per-unit price where they neither suffer a loss nor make a profit.

MINIMUM TRANSFER PRICE (MTP):

When calculating the MTP it is assumed the total number of units needed by the user, will be transferred by the provider. It is also assumed the MTP will be quoted on a per-unit basis. It is also possible that transferring products or services between related parties could save some variable costs. For example, a reduction of shipping costs, and/or a reduction of commissions to sales people, etc. could occur. Any savings in variable costs would reduce the usual UVC to an amount referred to as the net UVC. There are three different situations that could exist when calculating the per-unit MTP.

Minimum Transfer Price formulas:

1. The provider has enough idle capacity to meet the needs of the user. In this situation there wouldn’t be any lost contribution margin on the part of the provider as a result of redirecting sales away from current customers. The MTP would be equal to: net UVC.

2. The provider is at full production capacity and has no idle capacity. I.e., the provider is producing at its maximum level and selling everything to outside customers. Meeting the needs of the related party user would require redirecting all the needed units away from the outside customer and to the related party user. In this case there would be lost contribution margin for every unit sold to the related party. The MTP would be equal to: net UVC + lost UCM.

3. The provider is at less than full capacity but there isn’t enough idle capacity to meet all the needs of the buyer. This would require increasing production to full capacity and redirecting some sales away from outside party customers. The formula below would be used to calculate the per-unit MTP:

\[
\frac{(Idle \ units \times \ net \ UVC) + [(\text{total units needed} - \text{idle units}) \times (net \ UVC + \text{lost UCM})]}{\text{Total units needed}}
\]

If you prefer to use only one formula, instead of the three above, to calculate the Minimum Transfer Price, then the following formula should be used:

\[
\frac{[(\text{Lesser of idle or needed units}) \times \text{net UVC}] + [\text{remaining units needed, if any} \times (\text{net UVC} + \text{lost UCM})]}{\text{Total units needed}}
\]