CHAPTER LEARNING OBJECTIVES:
MAJOR:
- Explain the three approaches to overhead allocation.
- Explain and identify unit, batch, product, customer, and organization level activities.
- Explain how to implement ABC.
- Identify benefits and limitations of ABC.
NOT IMPORTANT:
- Action analysis report using ABC will not be covered – Appendix 8A.

The proper allocation of FOH is the most difficult aspect of costing products, jobs or services. Sometimes FOH allocated on volume may not be accurate for some products. Because of this potential problem Activity Based Costing has been developed.

LEVEL 1 is when there is one plant-wide FOH rate usually using DLH, MH or Material Cost as the common activity base.

LEVEL 2 is when there is one FOH rate per department usually using DLH, MH or Material Cost as the common activity base.

LEVEL 3 is when there are multiple COST POOLS (group of related costs) that are allocated by that activity (COST DRIVER) that most closely causes the cost to occur.

(NOTE: The terms Level 1, 2 and 3 are not widely recognized in industry. Outside of this class you should use plant-wide overhead rates, departmental overhead rates, or ABC, as appropriate.)

ACTIVITY BASED COSTING:

THERE ARE 6 KEY COMPONENTS TO IMPLEMENTING ABC:
- Identify and define activities and activity pools.
- Wherever possible, directly trace costs to activities and cost objects.
- Assign costs to activity cost pools.
- Calculate activity rates.
- Assign costs to cost objects using the activity rates and activity measures.
- Prepare management report.

ACTIVITY COST POOLS:
- UNIT LEVEL ACTIVITIES occur each time an individual unit is made.
- BATCH LEVEL ACTIVITIES occur each time a batch of units are made.
- PRODUCT LEVEL ACTIVITIES support the specific products manufactured.
- CUSTOMER-LEVEL ACTIVITIES occur each time contact is made between company and customer.
- ORGANIZATION-SUSTAINING ACTIVITIES support the overall company.

BENEFITS OF ABC:
Generally, ABC leads to more accurate product costing as a result of:
- Increasing number of cost pools used to allocate FOH costs.
- Changing the base used to allocate costs to products. I.e., using a “Cause & Effect” relationship.
- Changing management’s perception of many FOH costs. Previously certain costs were thought of as indirect costs; they are now seen as “traceable” to individual products.
LIMITATION OF ABC:
- There is still a need for some “arbitrary allocations” of costs.
- Implementing and sustaining ABC is expensive.

USING ABC results in more accurate costing of products (major benefit) but there are some arbitrary allocations and a high cost of acquiring the improved information. You must weight the Costs relative to the Benefits.

COST DRIVER SELECTION:
- Data relating to the cost driver should be easy to collect.
- Cost driver should be directly related to the amount of the consumption that occurs by the product (or better than any other possible driver).

FINANCIAL RESULTS OF USING ABC: - high volume products are less costly than previously thought and low volume products are more costly than previously thought.

EXAMPLE OF ABC:
The following is an example of how to cost-out (determine the cost of) a job after the activity pools and activity rates have already been determined. Assume you operate an accounting practice preparing tax returns for anyone who drops in your office (for example, like H&R Block) and have the following activity pools and rates:

<table>
<thead>
<tr>
<th>Activity Pool</th>
<th>Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax returns</td>
<td>$ 20.00 for each jurisdiction (e.g., $20 federal + $20 per each state).</td>
</tr>
<tr>
<td>Professional staff</td>
<td>$ 5.00 per tax form completed.</td>
</tr>
<tr>
<td>Paraprofessional staff</td>
<td>$.50 per minute</td>
</tr>
<tr>
<td>Office/clerical staff</td>
<td>$ 10.00 per contact with client</td>
</tr>
<tr>
<td>Copies</td>
<td>$ .20 per page</td>
</tr>
</tbody>
</table>

A client comes to your office and tells your receptionist that they want their tax return prepared. The receptionist enters their name in a computer program then asks the client to wait until a paraprofessional can interview them. A few minutes goes by then the paraprofessional greets the client and takes them to their office for the interview, getting their name, address, etc. and then assembles the documents that were brought in by the client. Reviewing last year’s tax return and asking other questions the paraprofessional assembles the information that the CPA will need in order to prepare the tax return. Some information is input directly into the computer and some is recorded on paper. Some documents are copied. The paraprofessional spends 27 minutes with the client and has made 6 copies for the records. All this information is given to the CPA who then prepares the tax returns for Federal, California and Oregon – the client lived part of the year in Oregon then moved to California in mid-year. The following forms were completed: Federal: 1040, 1040 Schedule A, 1040 Schedule B; California: f540 and 540-CA; Oregon: 620 and 635. Each tax return is 10 pages with one set going to the federal and one to each state plus a set to the client. The preparer’s copy is kept on the hard disk in the computer – no paper copy. The paraprofessional then meets with the client one more time to discuss the tax return results and to answer any questions the client might have. This took 12 minutes. How much is the cost of preparing this tax return?

<table>
<thead>
<tr>
<th>Activity Pool</th>
<th>Rates</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client contact by office staff</td>
<td>. . . . . .</td>
<td>$10.00</td>
</tr>
<tr>
<td>Paraprofessional time 39 x $.50</td>
<td>. . . . . .</td>
<td>19.50</td>
</tr>
<tr>
<td>Tax returns: 3 x $20.00</td>
<td>. . . . . .</td>
<td>60.00</td>
</tr>
<tr>
<td>Professional’s time: 7 forms x $5.00</td>
<td>. . . . . .</td>
<td>35.00</td>
</tr>
<tr>
<td>Copies [6 + (10 x 4)] x $.20</td>
<td>. . . . . .</td>
<td>9.20</td>
</tr>
<tr>
<td>Total cost of job</td>
<td></td>
<td>$133.70</td>
</tr>
</tbody>
</table>

The amount charged the client could be $133.70 plus a profit percentage, or a set amount per form. E.g. 30% profit margin would be $173.81 ($133.70 x 1.30); or 7 forms x $25 = $175.00.