

Seligram and Managerial Accounting Wrap-Up

- 15.501/516 **Accounting**
- Spring 2004

- **Professor S. Roychowdhury**
- **Sloan School of Management**
- **Massachusetts Institute of Technology**

- **May 10, 2004**



Seligram ETO

- ETO: A support department / cost center

- Who are ETO's customers? – the departments producing ICA, ICB, Capacitor, Amplifiers and Diodes

- Customers have to bear the cost of maintaining and operating ETO.

- Any signs of problems?



12

Main Questions

- Is the current costing system – using direct labor dollar as the single allocation base - adequate?
 - Are there signs in the case that it is not?
- Why does the current system exist?
- As time has passed, which kind of testing within ETO is actually causing overheads for other departments? What are overheads being allocated by?
- Therefore, getting which kind of testing (basic or advanced) done internally has a cost advantage over outside markets?
 - Departments that use basic testing are "overcosted"
 - Departments that use advanced costing are "undercosted"
- What happens if departments that are mainly getting basic testing done leave? Excess capacity – our old enemy, the death spiral



13

The Two Alternate Allocation Systems

- Each takes total overheads of \$4,714k and splits it into two parts:
 - 685k, to be allocated based on direct labor dollars
 - 4,029k, to be allocated based on machine hours
- The second further splits the 4,029k into Main Test Room hours and Mechanical Test Room hours



Seligram: Overhead Burden Rates Under Three Allocation System

1. $\frac{OH}{SDL} = \frac{\$4,714k}{\$3,260k} = 1.45$

Engineering & Admin	Testing Rooms
2. $\frac{OH}{SDL} = \frac{\$684k}{\$3,260k} = 0.21$	$\frac{OH}{Mach Hrs} = \frac{\$4,029k}{50,304hrs} = \$80/hr$

Engineering & Admin	Main Room
3. $\frac{OH}{SDL} = \frac{\$684k}{\$3,260k} = 0.21$	$\frac{OH}{Mach Hrs} = \frac{\$2,103k}{33,201hrs} = \$63/hr$
	Mechanical Room
	$\frac{OH}{Mach Hrs} = \frac{\$1,926k}{17,103hrs} = \$113/hr$



Seligram: Exhibit 6

- Capacitors
 - Percentage direct labor dollars = $1,094/5,106 = 21\%$
 - Percentage total machine hours = $7.5/83 = 9\%$
- Suggests capacitors are “overcosted” using an allocation base of direct labor dollars.



Seligram Main Points

- This case shows that overtime, costs systems can become obsolete. The current system penalizes lots that require more direct labor -- (i.e., labor intensive tests) and subsidized lots that require more equipment time.
- This case shows that costs systems can affect managers actions. The current cost system encourage division managers to produce components that require mechanical testing since these products appear to be cheaper to test.
- This case gives an example of the methods one might use to solve the common problem, i.e., allocating the costs of a cost center used by many divisions.



17

Wrap-up

- The focus of the Managerial Accounting Section has been on Cost Accounting for decision-making
- Allocation of costs is an important factor that affects product profitability and pricing decisions
- Two major allocation systems have been covered in class: Traditional Costing System and Activity-Based Costing (ABC) Systems
- The major issue in traditional costing systems is their continuous evolution as business realities change.
- The major issue in ABC is the identification of objective cost drivers.



18

Pitfalls To Watch Out For In Costing Systems

- With traditional costing
 - Death spirals – a direct result of using an allocation system that is “incorrect” either because it is outdated or excessively simple.
- With ABC
 - The sensitivity of cost allocations to choice of cost drivers.
 - The lack of acceptance by internal managers, especially if ABC shows them in a poor light
 - The tendency to accept easier solutions than the ones demanded as a result of ABC analysis.



19
