

## 15.501/516

### Problem Set 8

#### Seligram case write-up

This problem set may be done in groups of at most three students. Please keep a copy of your group's answers for use during the class discussion.

1. What business decisions at Seligram does the cost system support? In this context, what caused the existing cost system at Seligram (ETO) to fail?
2. Calculate the reported costs of the five components described in Exhibit 6 under:
  - (a) the existing system,
  - (b) the system proposed by the accounting manager, and
  - (c) the system provided by the consultant.
3. Explain conceptually (and briefly) the dynamics that cause the movements you see in the costs calculated above. For example, why do costs for certain components increase when moving from alternative (a) to (b) but decrease from (b) to (c), while other costs increase from (a) to (b) to (c)?
4. Which of the three cost systems do you think is most appropriate? Why? What are some potential disadvantages of the system that you recommend?
5. Would you treat the new machine as a separate cost center or as part of the main room? Why? If you were to treat it separately, how would you allocate its costs?

Note: To answer this question, you may need to be familiar with the Double-Declining Balance (DDB) approach to determining annual depreciation charges. Here is all you need to know: The new machine has a purchase price of \$2MM, an 8-year life, and no salvage value. DDB will result in depreciation of \$500K, \$375K, \$281.25K, and \$210.9K in years 1 through 4, respectively. For each of years 5 through 8, depreciation will be \$158.2K.

***(These questions are not part of PS8):*** Use the course framework (from Lecture 1) to further analyze the case.

- What is the accounting decision?
- Describe the related economic activity.
- What users are affected by the accounting decision?
- What factors influence the decision?
- What decisions are users making that depend on the accounting decision?
- What are the consequences of user's decisions on Seligram?
- What real-life computation challenge is related to the accounting decision?