

BUSI 2710

Class 4 Handout

Solution

Q: How many staff should each department head make available to handle this process?

For this question, the dominant perspective (point of view) is on the departments, and we analyze each department:

Accounting is required 45 min for each AP process, 75 min for each AR process

$$10 \times 45 \text{ min} + 15 \times 75 \text{ min} = 1575 \text{ minutes} = 26.25 \text{ hours} \Rightarrow 4 \text{ staff per 8 hour work day}$$

Finance is required 15 min for each AP process, 33 min (average of $30 \times 0.9 + 60 \times 0.1$) for each AR process

$$10 \times 15 \text{ min} + 15 \times 33 \text{ min} = 645 \text{ minutes} = 10.75 \text{ hours} \Rightarrow 2 \text{ staff per 8 hour work day}$$

Purchasing is required 30 min for 20% of the AP processes

$$10 \times 0.2 \times 30 \text{ min} = 60 \text{ minutes} = 1 \text{ hour} \Rightarrow 1 \text{ staff}$$

Mailroom is required 30 min for each AP process

$$10 \times 30 \text{ min} = 300 \text{ minutes} = 5 \text{ hours} \Rightarrow 1 \text{ staff}$$

Sales is required 9 min (average of $30 \times 0.2 + 15 \times 0.2$) for each AR process

$$15 \times 9 \text{ min} = 135 \text{ minutes} = 2.25 \text{ hours} \Rightarrow 1 \text{ staff}$$

FD is required 3 minutes for each AP process $\Rightarrow 1$ staff

Q: Do the process owners have sufficient budget to execute the expected process volume?

For this question, the dominant perspective (point of view) is on the processes, and we analyze each process:

Cost for the AP process:

$$60 \text{ minutes (1 hour) @ \$30 per hour} + 39 \text{ minutes (0.65 hours) @ \$40 per hour} \\ = \$56 \text{ per process instance} \times 10 \text{ instances per day} \Rightarrow \$560 \text{ per day (insufficient)}$$

Cost for the AR process:

$$108 \text{ minutes (1.8 hours) @ \$30 per hour} + 9 \text{ minutes (0.15 hours) @ \$40 per hour} \\ = \$60 \text{ per process instance} \times 15 \text{ instances per day} \Rightarrow \$900 \text{ per day (sufficient)}$$

The key point is to show that this is one issue that requires negotiation either between the AP process owner and the department over their charge-back rates, and/or negotiation among the AP and AR process owners about budget transfer.

**Q: How much should the accounting department manager charge to each process owner?
Assume that the accounting staff is only involved in these two processes?**

For this question, the dominant perspective (point of view) is again on the department, specifically on the accounting department:

The accounting department has to provide 4 staff per day for a total of 32 hours ==> \$960 per day
For this money, they have to provide a combined 1575 minutes (26.25 hours) minutes to AP and AR, per day. Thus, to break even, they should charge $960/26.25 = \$36.58$. Assuming they charge the same rates, they have to charge approx \$36.60 per hour to both AP and AR. Thus, each AP process (45 minutes) should be charged at \$27.45, and each AR process (75 minutes) should be charged at \$45.75.

However, with these new charge-back rates, the AP process owner is in even more trouble than with the original rate of \$30, and the AR process owner is now also in trouble.

The key point is to illustrate yet another negotiation requirement. Clearly, the company has to pay employees. One solution may be to redesign the processes so that less accounting time is required and accounting needs only 3 staff. Another solution might be to use different types of accountants at different rates for the different tasks in each process.