

with the manager of PDAs, reports to the manager for all sales of handheld devices, Mary Burton. Burton received the following data for September 2011 operations:

	Cell Phones		PDAs
	Digital	Video	
Revenues, budget	\$ 202,000	\$ 800,000	\$ 400,000
Expenses, budget	143,000	420,000	275,000
Revenues, actual	213,000	890,000	350,000
Expenses, actual	130,000	440,000	260,000

Requirement

1. Arrange the data in a performance report similar to Exhibit 21-20. Show September results, in thousands of dollars, for digital cell phones, for the total cell phone product line, and for all devices. Should Burton investigate the performance of digital cell phone operations?

■ Problems (Group A)

P21-20A (L.OBJ. 1, 2, 6) Why managers use budgets, understanding the components of the master budget, and preparing performance reports for responsibility centers [50–60 min]

Doggy World operates a chain of pet stores in the Midwest. The manager of each store reports to the regional manager, who, in turn, reports to the headquarters in Milwaukee, Wisconsin. The *actual* income statements for the Dayton store, the Ohio region (including the Dayton store), and the company as a whole (including the Ohio region) for July 2011 are as follows:

DOGGY WORLD Income Statement For the month ended July 31, 2011			
	Dayton	Ohio	Companywide
Revenue	\$ 158,400	\$ 1,760,000	\$ 4,400,000
Expenses:			
Regional manager/headquarters office	\$ —	\$ 58,000	\$ 122,000
Cost of materials	85,536	880,000	1,760,000
Salary expense	41,184	440,000	1,100,000
Depreciation expense	7,800	91,000	439,000
Utilities expense	4,000	46,600	264,000
Rent expense	2,500	34,500	178,000
Total expenses	141,020	1,550,100	3,863,000
Operating income	\$ 17,380	\$ 209,900	\$ 537,000

Budgeted amounts for July were as follows:

DOGGY WORLD Budgeted Income Statement For the month ended July 31, 2011			
	Dayton	Ohio	Companywide
Revenue	\$ 173,400	\$ 1,883,000	\$ 4,650,000
Expenses:			
Regional manager/headquarters office	\$ —	\$ 64,600	\$ 124,000
Cost of materials	91,902	1,035,650	2,092,500
Salary expense	41,616	470,750	1,162,500
Depreciation expense	7,800	87,500	446,000
Utilities expense	4,900	54,600	274,000
Rent expense	3,400	32,700	169,000
Total expenses	149,618	1,745,800	4,268,000
Operating income	\$ 23,782	\$ 137,200	\$ 382,000

Requirements

1. Prepare a report for July 2011 that shows the performance of the Dayton store, the Ohio region, and the company as a whole. Follow the format of Exhibit 21-20.
2. As the Ohio regional manager, would you investigate the Dayton store on the basis of this report? Why or why not?
3. Should Doggy World prepare the master budget? Briefly discuss the benefits of budgeting. Base your discussion on Doggy World's performance report.

P21-21A (L.OBJ. 2) Preparing an operating budget [30 min]

The budget committee of Clipboard Office Supply has assembled the following data. As the business manager, you must prepare the budgeted income statements for May and June 2011.

Requirement

- a. Sales in April were \$50,000. You forecast that monthly sales will increase 2.0% in May and 2.4% in June.
- b. Clipboard maintains inventory of \$9,000 plus 25% of the sales revenue budgeted for the following month. Monthly purchases average 50% of sales revenue in that same month. Actual inventory on April 30 is \$13,000. Sales budgeted for July are \$65,000.
- c. Monthly salaries amount to \$3,000. Sales commissions equal 4% of sales for that month. Combine salaries and commissions into a single figure.
- d. Other monthly expenses are as follows:

Rent expense	\$2,600, paid as incurred
Depreciation expense	\$300
Insurance expense	\$200, expiration of prepaid amount
Income tax	20% of operating income

1. Prepare Clipboard Office Supply's budgeted income statements for May and June. Show cost of goods sold computations. Round *all* amounts to the nearest \$100. (Round amounts ending in \$.50 or more upward, and amounts ending in less than \$.50 downward.) For example, budgeted May sales are \$51,000 (\$50,000 $\times$ 1.02), and June sales are \$52,200 (\$51,000 $\times$ 1.024).

Note: Problem 21-21A must be completed before attempting Problem 21-22A.

P21-22A (L.OBJ. 4) Preparing a financial budget [30 min]

Refer to P21-21A. Clipboard Office Supply's sales are 75% cash and 25% credit. (Use the rounded sales values.) Credit sales are collected in the month after sale. Inventory purchases are paid 25% in the month of purchase and 75% the following month. Salaries and sales commissions are also paid half in the month earned and half the next month. Income tax is paid at the end of the year.

The April 30, 2011, balance sheet showed the following balances:

Cash	\$ 25,000
Accounts payable	53,000
Salaries and commissions payable	2,500

Requirements

1. Prepare schedules of (a) budgeted cash collections, (b) budgeted cash payments for purchases, and (c) budgeted cash payments for operating expenses. Show amounts for each month and totals for May and June. Round your computations to the nearest dollar.
2. Prepare a cash budget similar to Exhibit 21-14. If no financing activity took place, what is the budgeted cash balance on June 30, 2011?

P21-23A (L.OBJ. 4) Preparing a financial budget [50–60 min]

Box Printing of Baltimore has applied for a loan. Bank of America has requested a budgeted balance sheet at April 30, 2011, and a budgeted statement of cash flows for April. As Box Printing's controller, you have assembled the following information:

- a. March 31 equipment balance, \$80,900; accumulated depreciation, \$12,900
- b. April capital expenditures of \$16,900 budgeted for cash purchase of equipment
- c. April depreciation expense, \$600
- d. Cost of goods sold, 45% of sales
- e. Other April operating expenses, including income tax, total \$33,000, 40% of which will be paid in cash and the remainder accrued at the end of April
- f. March 31 stockholders' equity, \$136,700
- g. March 31 cash balance, \$50,200
- h. April budgeted sales, \$84,000, 60% of which is for cash; of the remaining 40%, half will be collected in April and half in May
- i. April cash collections on March sales, \$15,300
- j. April cash payments of March 31 liabilities incurred for March purchases of inventory, \$8,600
- k. March 31 inventory balance, \$11,800
- l. April purchases of inventory, \$10,800 for cash and \$37,200 on credit. Half the credit purchases will be paid in April and half in May.

Requirements

1. Prepare the budgeted balance sheet for Box Printing at April 30, 2011. Show separate computations for cash, inventory, and stockholders' equity balances.
2. Prepare the budgeted statement of cash flows for April.
3. Suppose that Box Printing has become aware of more efficient (and more expensive) equipment than it budgeted for purchase in April. What is the total amount of cash available for equipment purchases in April, before financing, if the minimum desired ending cash balance is \$21,000? (For this requirement, disregard the \$16,900 initially budgeted for equipment purchases.)

Note: Problem 21-23A must be completed before attempting Problem 21-24A.

P21-24A (L.OBJ. 4, 5) Preparing a financial budget, and using sensitivity analysis in budgeting [30–40 min]

Refer to P21-23A. Before granting a loan to Box Printing, Bank of America asks for a sensitivity analysis assuming April sales are only \$56,000 rather than the \$84,000 originally budgeted. (While the cost of goods sold will change, assume that purchases, depreciation, and the other operating expenses will remain the same as in P21-23A.)