

CASE 8-31 Contrasting Activity-Based Costing and Traditional Costing [LO3, LO4, LO5]

This chapter emphasizes the use of activity-based costing in internal decisions. However, a modified form of activity-based costing can also be used to develop product costs for external financial reports. For this purpose, product costs include all manufacturing overhead costs and exclude all nonmanufacturing costs. This problem illustrates such a costing system.

"Wow! Is that X-20 model ever a loser! It's time to cut back its production and shift our resources toward the new Y-30 model," said Darrel Karter, executive vice president of Cutler Products, Inc. "Just look at this income statement I've received from accounting. The Y-30 is generating four times as much profit as the X-20, and it has only about one-sixth as much in sales. I'm convinced that our future depends on the Y-30." The year-end statement to which Darrel was referring follows:



	Total	Model	
		X-20	Y-30
Sales	\$7,250,000	\$6,000,000	\$1,250,000
Cost of goods sold	<u>4,600,000</u>	<u>3,660,000</u>	<u>940,000</u>
Gross margin	2,650,000	2,340,000	310,000
Less selling and administrative expenses	<u>2,450,000</u>	<u>2,300,000</u>	<u>150,000</u>
Net operating income	<u>\$ 200,000</u>	<u>\$ 40,000</u>	<u>\$ 160,000</u>
Number of units produced and sold		30,000	5,000

"The numbers sure look that way," replied Karen Carpenter, the company's sales manager. "But why isn't the competition more excited about the Y-30? I know we've only been producing the model for three years, but I'm surprised that more of our competitors haven't recognized what a cash cow it is."

"I think it's our new automated plant," replied Darrel. "Now it takes only two direct labor-hours to produce a unit of the X-20 and three direct labor-hours to produce a unit of the Y-30. That's considerably less than it used to take us."

"I agree that automation is wonderful," replied Karen. "I suppose that's how we're able to hold down the price of the Y-30. Branson Company in Germany tried to bring out a Y-30 but discovered they couldn't touch our price. But Branson is killing us on the X-20 by undercutting our price with some of our best customers. I suppose they'll pick up all of our X-20 business if we move out of that market. But who cares? We don't even have to advertise the Y-30; it just seems to sell itself."

"My only concern about automation is how our manufacturing overhead rate has shot up," said Darrel. "Our total manufacturing overhead cost is \$1,800,000. That comes out to be a hefty amount per direct labor-hour, but Darlene down in accounting has been using direct labor-hours as the base for computing overhead rates for years and doesn't want to change. I don't suppose it matters so long as costs get assigned to products."

"I've never understood that debit and credit stuff," replied Karen. "But I think you've got a problem in production. I had lunch with Joanne yesterday and she complained about how complex the Y-30 is to produce. Apparently they have to do a lot of setups, special soldering, and other work on the Y-30 just to keep production moving. And they have to inspect every single unit."

"It'll have to wait," said Darrel. "I'm writing a proposal to the board of directors to phase out the X-20. We've got to increase our bottom line or we'll all be looking for jobs."