Cases

Bo Vonderweidt, the production manager for Sportway Corporation, had requested to have lunch with the company president. Vonderweidt wanted to put forward his suggestion to add a new product line. As they finished lunch, Meg Thomas, the company president, said, "I'll give your proposal some serious thought, Bo. I think you're right about the increasing demand for skateboards. What I'm not sure about is whether the skateboard line will be better for us than our tackle boxes. Those have been our bread and butter the past few years."

Vonderweidt responded with, "Let me get together with one of the controller's people. We'll run a few numbers on this skateboard idea that I think will demonstrate the line's potential."

Sportway is a wholesale distributor supplying a wide range of moderately priced sports equipment to large chain stores. About 60 percent of Sportway's products are purchased from other companies while the remainder of the products are manufactured by Sportway. The company has a Plastics Department that is currently manufacturing molded fishing tackle boxes. Sportway is able to manufacture and sell 8,000 tackle boxes annually, making full use of its direct-labor capacity at available work stations. The selling price and costs associated with Sportway's tackle boxes are as follows:

Selling price per box		$86.00
Costs per box:		
Molded plastic	$ 8.00	
Hinges, latches, handle	9.00	
Direct labor ($15.00 per hour)	18.75	
Manufacturing overhead	12.50	
Selling and administrative cost	17.00	65.25
Profit per box		$20.75

Because Sportway's sales manager believes the firm could sell 12,000 tackle boxes if it had sufficient manufacturing capacity, the company has looked into the possibility of purchasing the tackle boxes for distribution. Maple Products, a steady supplier of quality products, would be able to provide up to 9,000 tackle boxes per year at a price of $68.00 per box delivered to Sportway's facility.

Bo Vonderweidt, Sportway's production manager, has come to the conclusion that the company could make better use of its Plastics Department by manufacturing skateboards. Vonderweidt has a market study that indicates an expanding market for skateboards and a need for additional suppliers. Vonderweidt believes that Sportway could expect to sell 17,500 skateboards annually at a price of $45.00 per skateboard.

After his lunch with the company president, Vonderweidt worked out the following estimates with the assistant controller.

Selling price per skateboard		$45.00
Costs per skateboard:		
Molded plastic	$5.50	
Wheels, hardware	7.00	
Direct labor ($15.00 per hour)	7.50	
Manufacturing overhead	5.00	
Selling and administrative cost	9.00	34.00
Profit per skateboard		$11.00

In the Plastics Department, Sportway uses direct-labor hours as the application base for manufacturing overhead. Included in the manufacturing overhead for the current year is $50,000 of factorywide, fixed manufacturing overhead that has been allocated to the Plastics Department. For each unit of product that Sportway sells, regardless of whether the product has been purchased or is manufactured by Sportway, there is an allocated $6.00 fixed overhead cost per unit for distribution that is included in the selling and administrative cost for all products. Total selling and administrative costs for the purchased tackle boxes would be $10.00 per unit.

Required: In order to maximize the company's profitability, prepare an analysis that will show which product or products Sportway Corporation should manufacture or purchase.

1. First determine which of Sportway's options makes the best use of its scarce resources. How many skateboards and tackle boxes should be manufactured? How many tackle boxes should be purchased?
2. Calculate the improvement in Sportway's total contribution margin if it adopts the optimal strategy rather than continuing with the status quo.