

#6

MARKET ANALYSIS

what's new?



CPA... Imagine the possibilities!

Learning Activity

Market Analysis: *Students identify and assess the “value added benefits” of three types of cars—the standard gas-powered car, a “gas and electric” car, and a diesel-powered car—in determining a selling price for each car.*

Learning Objectives

1. Understand the concept of “value added benefits.”
2. Assess the “value added benefits” of a new product.
3. Calculate the financial value of “value added benefits” as part of the pricing process.

Assessment

Students will: (1) rate the benefits provided by a gasoline-powered car, a gas and electric car, and a diesel-powered car, (2) calculate the financial value of those benefits using a model, (3) determine the selling price of each car using cost, profit margin and the financial value of value added benefits as the components.

Academic Standard

“Students identify and explain how external factors influence and dictate marketing decisions.” (NBEA)

Business Skill

Management Consulting: CPAs provide advice and insight into the value of new technologies by performing cost analysis and market analysis.

Procedure

Distribute a copy of the Topic Overview to your students and explain any terms or concepts they are unfamiliar with.

Use examples such as the VCR, cell or car phones, and calculators to illustrate that consumers are willing to pay more for “new” products when these products are first introduced because of the added features and benefits they provide.

Distribute copies of Activity #6 and ask students to rate the benefits provided by three cars—the traditional gas-powered car, the new “GEA” or gas and electric car, and a diesel car—in determining the selling price of each.

Compare the selling prices determined by your students and explain that CPAs are engaged by companies to perform market analysis of new and existing products, and that this process involves assessing consumers’ preferences for different features in products.

TEACHING-TIPS

For a complete lesson and activity on the services provided by CPAs, see Activity #12, *A Day in the Life*.

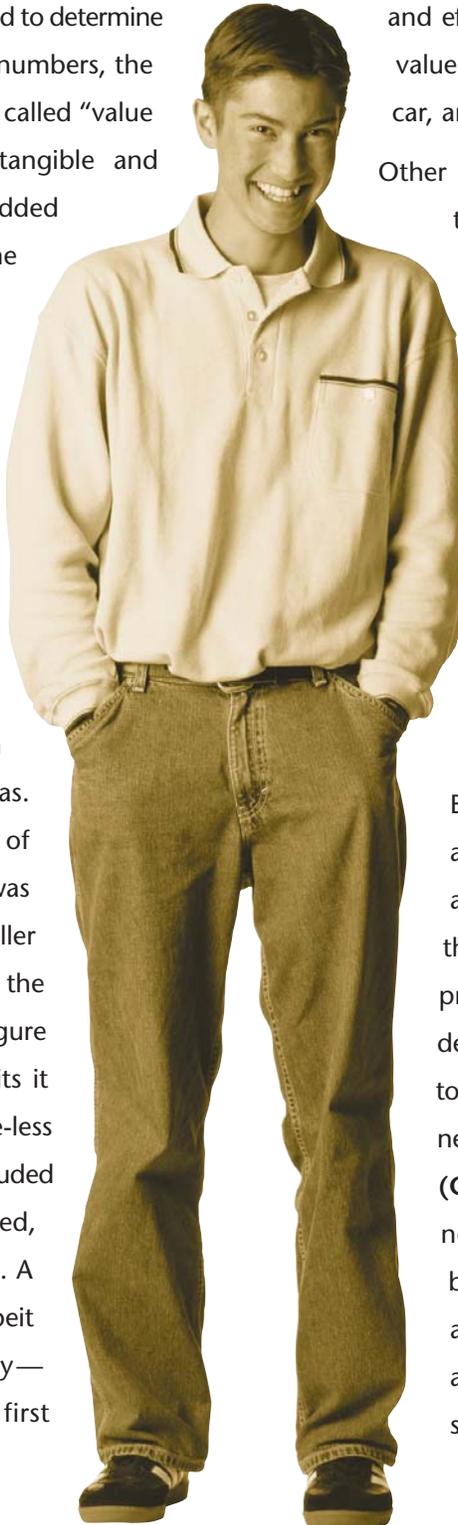
Overview

When companies manufacture a product, a selling price must be established. The selling price of any product is first and foremost based on the cost to the company to manufacture the product. In addition, companies then add a profit margin to the manufacturing cost. With new technologies, however, there is a third component of the selling price that causes “new and modern” technologies to initially be priced at levels unaffordable to most. Whereas the cost and profit margin used to determine a selling price are objective, “hard” numbers, the third component of the selling price, called “value added benefits,” is subjective, intangible and somewhat arbitrary. The “value added benefits” of a new technology are the driving force behind the initially expensive price of the technology. For example, when the “horse-less buggy” was introduced by Henry Ford in the early part of the 20th century, the selling price was based on the manufacturing cost, a profit margin, and “value added benefits.” Ford’s horse-less buggy was a means of transportation just as the horse and buggy was. However, whereas the price of purchasing a horse and buggy was mainly based on the cost to the seller plus a profit margin, the price of the horse-less buggy included a dollar figure attached to the value added benefits it provided. The benefits of a horse-less buggy versus a horse and buggy included comfort, convenience, status, speed, reliability, longevity, and ease of use. A price attached to these benefits—albeit subjective, intangible, and arbitrary—made the horse-less buggy at first

unaffordable to the average person. By virtue of new companies entering the car market and the competition they provided, the price to purchase a car has become affordable to most people. Although today’s cars are affordable to most individuals, the horse-less buggy was, and still is, considered invaluable and—to a degree—priceless. Imagine going to school or work in a horse and buggy. Imagine the discomfort, embarrassment, time, and effort that would be involved. As such, the value added benefits of the horse-less buggy, a car, are indeed invaluable.

Other “new” technologies that, at the time of their introduction to the market place were considerably more expensive than they currently are now include the calculator, cell phone, VCR, and microwave oven. The calculator, for instance, was introduced in 1972 at a price of \$120, but only performed basic functions. The cell phone was introduced in 1984 at a price of \$4,200 and the VCR in 1972 at \$1,400. The price tag on the first microwave, introduced in 1947, was \$3,000.

Businesses that produce new technologies and new products must perform a market analysis to determine the financial value of the value added benefits provided by their product. In other words, businesses try to determine the amount consumers are willing to pay for added features and benefits of a new product. **Certified Public Accountants (CPAs)** in particular are engaged by businesses to determine the value added benefits provided by a product or service, and the dollar figure that could be attached to those benefits in establishing a selling price.



Activities

As a Certified Public Accountant, you have been asked to determine the dollar value of the value added benefits provided by a new, state of the art automobile that combines the use of gas power and electric power, a diesel-powered car, and the standard gas-powered car. To do so, you must assess the benefits provided by the “GEA”— Gas & Electric Auto—and then compare them to the benefits provided by the standard, gasoline-powered car and the diesel-powered car. This calculation will provide a dollar value for the benefits, or features, of each car and will be incorporated into the selling price of each car.

As you assess the features of each car, note that the gasoline-powered car has greater acceleration than the GEA due to its larger engine, but is less fuel-efficient than the GEA. As such, the GEA is considered to be environmentally safer. In addition, note that the diesel-powered car is less expensive to run than the gasoline-powered car because diesel fuel is cheaper than unleaded fuel. The downside, however, is that diesel fuel is more polluting to the environment than gasoline.

PHASE – 1 : Assessing Value Added Benefits

In order to determine the dollar value of the added benefits provided by the GEA, the gas-only car, and the diesel car, you must assess the features—“sales appeal” and “environmental impact”—of each car.

Rate the sales appeal of each automobile on a scale of 0 to 10, with **10** indicating the **most favorable sales appeal** and **0** the **least favorable appeal**.

Rate the environmental impact of each automobile on a scale of 0 to 10, with **10** indicating the **least negative impact** on the environment and **0** indicating the **most negative impact** on the environment.

Feature	Gas Car	Sales Appeal	Environmental Impact
Acceleration 0-60 (sec)	10 sec		
Gasoline engine power	120 horsepower		
Electric motor power	None		
Fuel economy: Miles per gallon	32 mpg		
Subtotal			
Total Points			
\$1,000 per point	\$		
Dollar Value of Features	\$		

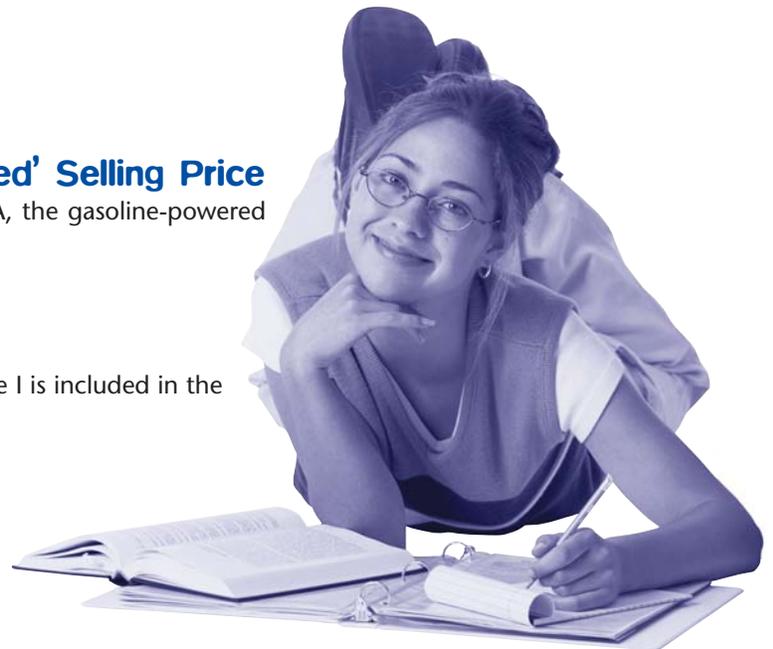
Feature	“GEA”	Sales Appeal	Environmental Impact
Acceleration 0-60 (sec)	16 sec		
Gasoline engine power	60 horsepower		
Electric motor power	40 horsepower		
Fuel economy: Miles per gallon	58 mpg		
Subtotal			
Total Points			
\$1,000 per point	\$		
Dollar Value of Features	\$		

Feature	Diesel Car	Sales Appeal	Environmental Impact
Acceleration 0-60 (sec)	13 sec		
Gasoline engine power	90 horsepower		
Electric motor power	None		
Fuel economy: Miles per gallon	38 mpg		
Subtotal			
Total Points			
\$1,000 per point	\$		
Dollar Value of Features	\$		

PHASE - 2 : Determining the 'Suggested' Selling Price

Determine the selling price of each automobile—the GEA, the gasoline-powered car, and the diesel car—given the following information:

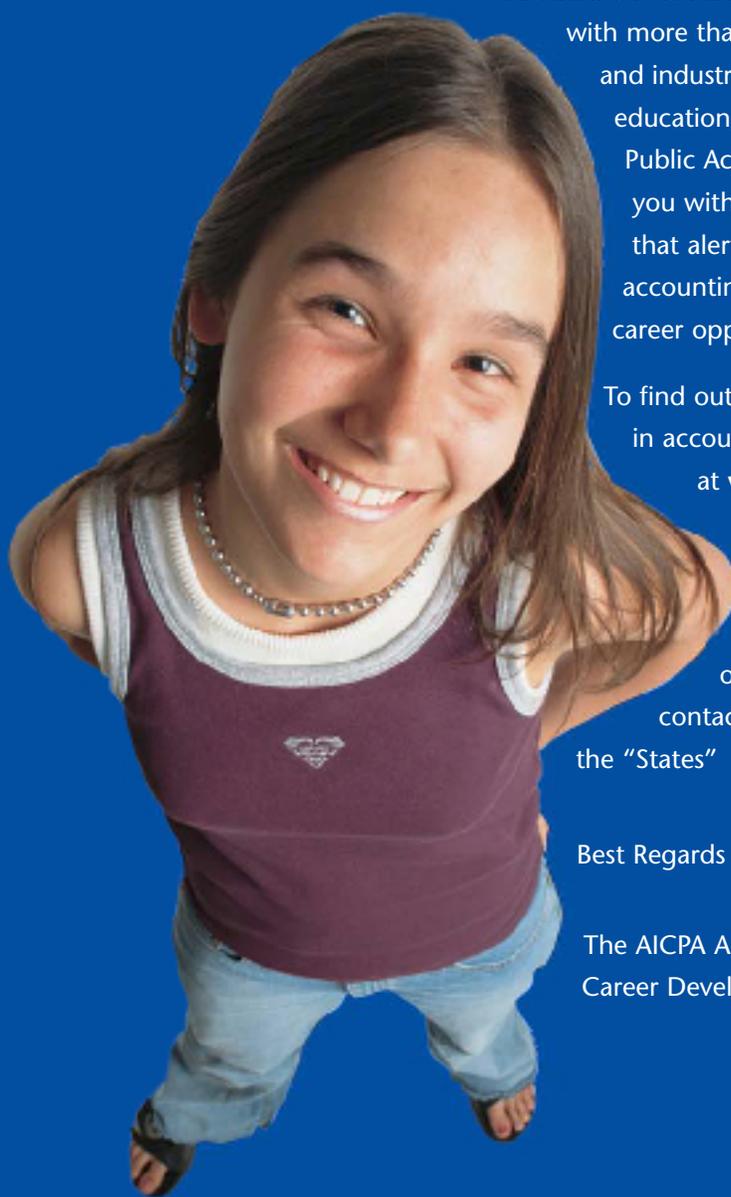
- Each car costs \$15,000 to manufacture
- The profit margin on manufacturing costs is 10%
- The dollar value of added benefits calculated from Phase I is included in the purchase price of the car



Car	Cost	Profit Margin	Value Added Benefits	Selling Price
Gas	\$	\$	\$	\$
"GEA"	\$	\$	\$	\$
Diesel	\$	\$	\$	\$



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Best Regards

The AICPA Academic and
Career Development Team