

IN PRACTICE

Target Costing and the Mercedes-Benz M-Class

In the early 1990s, Mercedes-Benz wanted to develop a new line of SUVs, the Mercedes-Benz M-Class. Production began in 1997 at the Tuscaloosa plant in Alabama. Mercedes decided to use target costing to help them define costs before they were committed. Mercedes relied on a number of customer, design, product, and marketing clinics before manufacturing the product and determined that safety, comfort, economy, and styling were the four key characteristics that customers were concerned about. Engineers determined that the key components for the automobile

were the chassis, transmission, air conditioner, electrical system, and other systems.

Using an approach very similar to the one used for design and development of the Kitchenhelp coffee-maker, Mercedes determined the relationships among customer requirements and engineering components. What follows is an illustration of how the final value index for the Mercedes-Benz M-Class might look. The value index shows that both the chassis and the air conditioner could be enhanced, while the transmission, electrical system, and other systems' costs could be reduced.

COMPONENT OR FUNCTION	COMPONENT COST (% OF TOTAL)	RELATIVE IMPORTANCE (%)	VALUE INDEX	ACTION IMPLIED
Chassis	20	33	1.65	Enhance
Transmission	25	20	0.80	Reduce cost
Air conditioner	5	7	1.40	Enhance
Electrical systems	7	6	0.86	Reduce cost
Other systems	43	35	0.81	Reduce cost

Source: Professor Thomas L. Albright, "Use of Target Costing in Developing the Mercedes-Benz M Class," class presentation, University of Alabama.

costs, ultimately leading to the product coming late to market. For some types of products, being six months late may be far more costly than having small cost overruns.

Companies may find it possible to manage many of these factors, but organizations interested in using the target costing process should be aware of them before immediately attempting to adopt this cost reduction method. The behavioral issues associated with motivating employees to meet ambitious targets are particularly important to consider. We will discuss these issues more fully in Chapter 9. Despite these concerns, target costing does provide engineers and managers with a great tool at the time of greatest leverage, the RD&E stage, to reduce total-life-cycle product costs.

A survey conducted by Kobe University of Japanese companies showed that of those responding, 100% of transportation equipment manufacturers, 75% of precision equipment manufacturers, 88% of electrical manufacturers, and 83% of machinery manufacturers stated that they used target costing.⁵ These companies had been experiencing diminishing returns from their kaizen costing and just-in-time production systems and were looking for new opportunities to reduce manufacturing and service costs by focusing on cost reduction activities that could be accomplished during the RD&E stage.⁶

In the United States, target costing has gained momentum as a management method; however, it is not only a method of cost control but also a comprehensive

⁵ See Kato et al., "Target Costing."

⁶ See R. Cooper and R. Slagmulder, *Target Costing and Value Engineering* (Portland, OR: Productivity Press, 1997).