

Three Routes for Target Costing

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Abstract

This paper explains the three alternative routes that target costing projects can pursue to reach their goals: total cost management (TCM), cost cutting (CC) and cost shifting (CS). The basic strategies of comprehensiveness, integration, flexibility, dynamic and long-term continuity form the strength that TCM needs to reach the targets. TCM can be diverted into cost cutting and cost shifting practices.

As American corporations begin turning to the Japanese target costing systems, target costing affects how the management accounting profession develops and communicates cost analysis and reports for decision making purposes. Corporate personnel relying on this new data should recognize how the system works. Contributions of this paper include: (1) developing three possible routes that target costing can pursue to reach its objectives, (2) identifying and explaining the basic strategies shaping the critical and suggestive nature of cost improvement through TCM, and (3) demonstrating how the weaknesses in applying these strategies can divert TCM into assertive cost cutting or evasive cost shifting practices. The overall message conveyed to a target costing manager is: improve, cut or shift in order to decrease costs, but be aware of the consequences.

Three Routes For Target Costing

Target costing, a technique that many Japanese companies use to sustain a competitive advantage, has begun to invade the province of management accountants. Invented by Toyota, target costing has been used by Japanese managers for nearly 30 years (Kato, 1993). More than 80 percent of major Japanese companies in assembly industries and 60 percent in process industries use the system (Kato, 1993). Currently, many Western managers find these techniques difficult to understand. Fuchsberg (1993) reports that:

The mere names of the new notions are mind-boggling.... Many small-business owners are too busy just getting through the day's crises to study the pros and cons of all the new techniques, which are aimed at cutting costs and improving productivity. So they do what entrepreneurs have always done to solve problems: improvise.... The very complexity of all the new management strategies has created a business niche of its own.¹

Some U.S. and European corporations, perhaps assuming that target costing is a major reason for Japan's success, turn to target costing to possibly replace standard cost accounting (Financial Times, 1991, p. 12). Therefore, management accountants should understand target costing as an alternative to the product costing method, but recognize that it can dilute management accounting's role in "doing" accounting and in developing and evaluating cost management systems." For example, Inoue (1989, p. 344) argues that:

The new techniques are becoming more essential than accounting methods such as standard costing. They emphasize not only management through management accounting but also through production management, and are aimed at complete, company-wide cost management.

Several disciplines, such as industrial engineering, production management and engineering economics, have already claimed a large area of cost concepts and practices that were management accounting's primary territory. In Japan, management accounting information is not considered the key determinant of technological decisions. Accounting is accorded no privileged or separate status as the source of management information or control (Jones, et al., 1993). Williams, et al. (1991, quoted in Jones, et al., 1993, p. 115) reported that information on the profitability of particular products was demoted and marginalized:

Nissan told us cheerfully "we throw it away" and some companies like Toyota appear never to have used cost accounting for internal accounting purposes.

The purpose of this paper is to show that target costing is neither a specific tool nor a concrete technique but a general approach or philosophy that, to reach predetermined goals, can follow three routes: cost improvement, cost cutting and cost shifting. The paper first presents an overview of the Japanese approach. The second section describes the basic characteristics of the three potential routes. The strategies underlying cost improvement programs are examined in the third section. Weaknesses of applying these strategies to reduce these programs to mere cost cutting and cost shifting practices, are presented in the fourth section. The paper ends with a summary and conclusions.

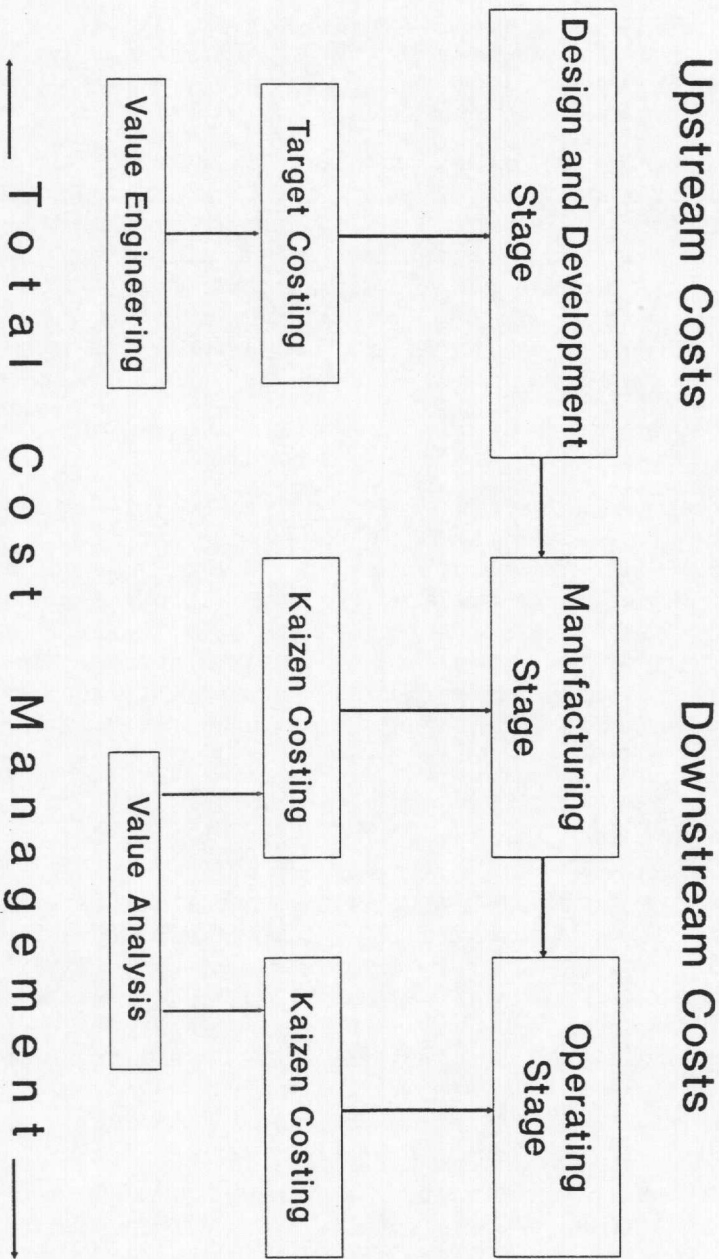
An Overview of Target Costing

Traditional standard costing systems motivate managers to operate at static, standard cost levels; target costing (TC) and Kaizen costing (KC) consider standards only as interim objectives and stress continuous, dynamic cost improvement. Makido (1989) argues that "the essence of cost reduction is to cut the present cost standards themselves." TC and KC techniques are applicable at different stages of product development and operation in a manufacturing company. Exhibit 1 diagrams these stages and the positions where these techniques assume their functions.

A company's total costs consist of upstream and downstream costs. Upstream costs are incurred at the product development stage (including design, research and development and product planning), and downstream costs consist of expenditures on manufacturing and operating activities (Kato, 1993, p. 35). The concept of total cost management (TCM) includes two components, TC and KC. Monden and Hamada (M & H) (1991, p. 17) define TC (*Genkakikaku* in Japanese) as "the system to support the cost reduction process in the development and designing phase of an entirely new model, a full model change or a minor model change." TC operates mainly at the product design and development stage. M & H next define KC (*Genkakaizen* in Japanese) as "the system to support the cost reduction process in the manufacturing phase of the existing model of product²." KC is also relevant to other downstream (i.e., non-manufacturing) costs. Kato (1993, p. 35) calls the stage of product design and development more promising for cost improvement, forming a

EXHIBIT 1

POSITIONING TOTAL COST MANAGEMENT WITHIN
A MANUFACTURING COMPANY



"treasure island of cost reduction opportunities," stressing that leading Japanese manufacturers emphasize cost reduction in the design and development stage:

This is mainly because they have learned from their JIT practices that the most fundamental cost drivers are in the earlier stages of new product development. A well-known rule-of-thumb among Japanese companies is that once a production specification has been developed, over 80 percent of the costs are fixed.

Employed along with these techniques are the concepts of value engineering (VE) and value analysis (VA). While VE can be performed before, during and after the design phases, 50 percent of VE activity hours are spent in the design phase (Tanaka, 1989). Thus, VE refers to cost improvements through basic functional changes in the new product development stage, and VA refers to cost improvements requiring design changes (Monden, 1989). In other words, VE is conducted before, and VA after, mass production of a model begins (Monden and Nagao, 1989).

In this study, we use the term "target costing" to refer to a general approach to manage costs whose ultimate goal is rational cost decrease. TCM is one avenue to reach this goal. Furthermore, we refer to the costing phase of TCM as "cost improvement." When TCM faces practical difficulties, cost cutting and cost shifting practices rather than cost improvement dominate target costing programs as explained below.

COST IMPROVEMENT VS. COST CUTTING VS. COST SHIFTING

A target costing project can be accomplished by cost improvement, cost cutting or cost shifting. The management accounting literature does not currently ascribe adequate technical terminology with distinctive definitions to these concepts. The three concepts differ significantly and have substantial relevance to the current conditions of the new manufacturing environment characterized by downsizing, reengineering and restructuring activities. The three concepts are developed below.

A target costing project entails a process of directing changes in the physical (i.e., a product and its components) and monetary dimensions of costs, toward a preset point or a range of points). This cost directing activity can take three routes to reach the targeted point(s). The first route is cost improvement, which consists of qualitative and quantitative parts. The qualitative part pertains to the basic structure of cost development, including the strategies of comprehensiveness, integration, flexibility, dynamic and long-term continuity (which are explained in detail later in this paper). That is, a target cost developed by an approach incorporating these strategies is said to follow the cost improvement route. An effect of the latter is a net cost reduction. Cost improvement becomes the cause and cost reduction is the effect. The relation of cost reduction to cost improvement is not one of interaction but one of dependence. Cost reduction always results from a cost improvement program. However, cost improvement does not always mean cost reduction.

On the contrary, cost improvement may increase cost. For example, at the design stage in an automobile plant, a cost improvement program may suggest an upgrading of the driver airbag when its relative cost is significantly less than its relative value that the customers perceived. Upgrading this "valuable" item translates into higher airbag costs for the manufacturer. In effect, a cost improvement program may suggest higher costs for some product components, lower costs for others and the total cost

of all of these components constituting the product may be reduced. In brief, cost improvement refers to cost development through employing a structure that connects costing, pricing, market share, normal profit margin and long-term investment into a unified whole. This structure is called TCM which encompasses cost and non-cost elements. Again, we use the term "cost improvement" to refer to the costing phase of TCM for close examination. Cost reduction then is the result of employing TCM. More specifically, we use the term cost reduction only when it results from cost improvement; otherwise we call it cost cutting or cost shifting.

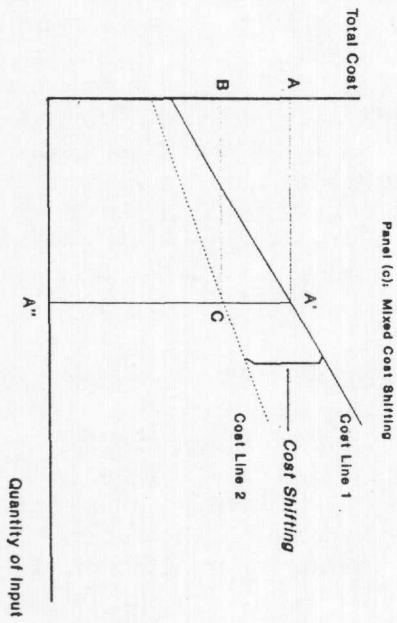
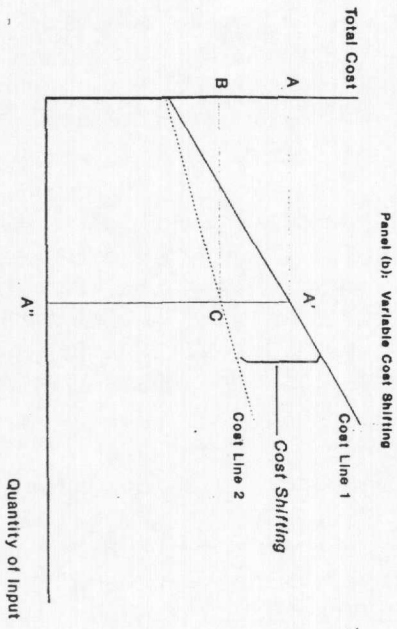
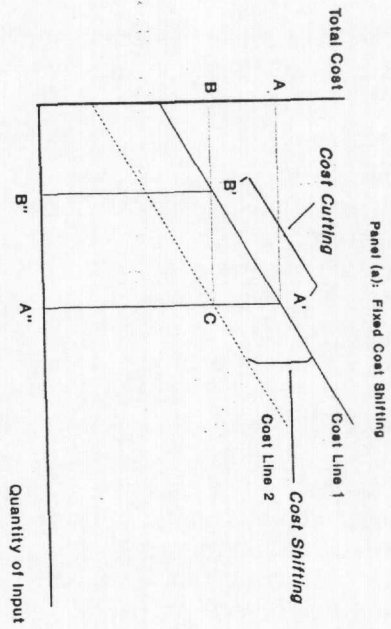
Cost cutting entails slashing costs without going through TCM. Thus, the decision to reduce last year's actual total cost, say by 20%, is a cost cutting judgment which may still be called target costing. The decrease in actual total cost usually takes one of three forms:

1. Decreasing avoidable inefficiencies,³
2. Decreasing unavoidable inefficiencies,⁴ or
3. Decreasing both avoidable and unavoidable inefficiencies.

Cost cutting refers only to the first form, decreasing avoidable inefficiencies. To reduce unavoidable inefficiencies, redesigning the product or the restructuring the production process may be necessary. But this redesign or restructuring usually requires changes in the basic strategies, e.g., by changing the form of the product so that it can be shipped or marketed differently or by increasing flexibility in a flexible manufacturing system (FMS) factory. Cost cutting practices are not based on these strategic changes. If they are so based, then they would be considered cost improvement. What if a manufacturer who has no intention to employ a TCM faces difficulties in cutting more avoidable inefficiencies? Unless the manufacturer decides to maintain the status quo, the only route left to cost change is through cost shifting.

Cost shifting switches to different types or qualities of resources in the manufacturing process. Cost shifting differs from cost improvement in that former is not implemented on the basis of TCM. It differs from cost cutting in that cost cutting is a movement down the same cost line. Cost shifting is a leap from one cost line to another. Exhibit 2 compares cost cutting to cost shifting practices. A manufacturer decides to decrease costs, say by 20%; how can it accomplish this objective without adopting a TCM? Through cost cutting, cost is reduced from point A to point B on the Y-axis (Panel a). Accordingly, the quantity of input, e.g., raw materials, labor and manufacturing overhead items, are reduced from point A' to point B' on the X-axis (Panel a). This cost cutting behavior represents a movement along the same cost line (Cost Line 1 in Panel a), from point A' to point B'. The manufacturer can accomplish a similar 20% cost decrease by cost shifting. This cost shifting can occur to fixed costs (Panel a), variable costs (Panel b) or mixed costs (Panel c). In each of the three panels, the cost decrease is accomplished by a leap from point A' on Cost Line 1 to point C on Cost Line 2. In all of these three cost shifting behavior patterns, the *quantity* of input does not change. It is the *quality* (e.g., type, grade, and supply sources) of the input that must change to reach the target 20% cost decrease. For example, in the case of fixed cost shifting, the manufacturer replaces the current supervisors, leased or

EXHIBIT 2
A COMPARISON BETWEEN COST CUTTING AND
COST SHIFTING



owned equipment and facilities, insurance policies or insurers with ones requiring less fixed expenditures. Variable cost items are decreased in quality also, for example, by switching to cheaper raw materials, less skilled hourly labor and less expensive maintenance and repair supplies. The mixed cost is a combination of fixed and variable cost switching.

A characteristic peculiar to cost cutting and cost shifting decisions is their primary focus on the monetary dimension that drives the change in the nonmonetary dimension of cost. These decisions are often made without considering fully the effect on output or service quality. This behavior occurs as if the cost on the Y-axis is the independent rather than the dependent variable in Exhibit 2. In contrast, cost improvement decisions are strategy-based where cost reduction is the effect (dependent variable), as explained above.

Normally cost improvement, cost cutting and cost shifting are relative constructs locating on a continuum rather than forming discrete and exclusive ones. Some cost improvement programs are so superficial that they are closer to being cost cutting or shifting of cost improvement endeavors. Furthermore, these three cost concepts have general tendencies: cost improvement is *suggestive*, cost cutting is *assertive* and cost shifting is *evasive*. The first is suggestive because a large scale cost improvement through TCM involves many experts in product design engineering, manufacturing, marketing, accounting and economics among others. The final results are recommended (suggested to top management) for implementing decisions. Cost cutting decisions are imposed from top-down in order to reduce losses or increase profits. They are assertive since they usually move in one direction without sufficient justification or employee participation (because they lack consideration of improvement strategies). Cost shifting decisions are generally evasive because of the switching (evading) from the current cost line to a completely different line without going through a program of strategic improvement.

Before they are suggestive, cost improvement tasks of TCM are *critical*. They tend instead to question all aspects of manufacturing, reconsidering the profound beliefs regarding the product design, manufacturing, service and marketing activities. Just-in-time (JIT) inventory and activity-based costing (ABC) systems are two examples of these suggestive cost improvement systems. Not only critical of the parameters constituting the traditional economic order quantity model of determining optimal amounts of inventory to order, JIT questions the wisdom of carrying inventory at all. Thus, zero inventory is the ultimate goal of this Japanese philosophy. Similarly, ABC not only identifies those activities responsible for driving the cost of a department, but sheds light on those unnecessary activities and waste and may suggest eliminating the whole department. However, the criticality of cost improvement programs necessitates suggestive modes of introducing the programs and communicating their results. Often the early news of implementing a cost improvement program in a plant is enough to send a wave of fear of drastic change and job insecurity among some personnel. To minimize antagonism and encourage cooperation with the program specialists, the communication of instructions and results not only from these specialists to managers, workers and top management but also from top management to personnel at the lower level must be carefully planned and implemented.

Cost cutting programs are usually accompanied by an air of skepticism. As the decisions to cut costs moves down the management ladder, some managers may doubt the real intentions behind them, especially when these decisions are made in an effort to deal with a deteriorating situation. To overcome this skepticism and gain quick acceptance, top management may provide incentives or resort to penalty (e.g., not getting expected rewards) or punishment (e.g., demotion) schemes. However, if the problems facing the entity are profound, these cost cutting schemes have the effect of only postponing confrontation with the real issues.

Evasive cost shifting decisions cause confusion among some personnel and customers. Switching to different ways of doing business may convey an attitude of "modernization," "taking advantage of new technologies" or "stepping into the 21st Century," which often become merely empty slogans. Indeed, some evasive schemes need illusions for their justification and acceptance. Nevertheless, like any illusion, they may soon be revealed as only ways of escaping the real problems ailing the entity. Cost shifting may also reflect a management style. Some managers have inadequate patience to solve pressing problems by allowing the costs to slide to the bottom of the cost curve. Instead, they constantly look for the opportunity to escape the status quo. For example, they may prefer to scrap a currently failing project and switch to a new one instead of fixing and escalating the current project.

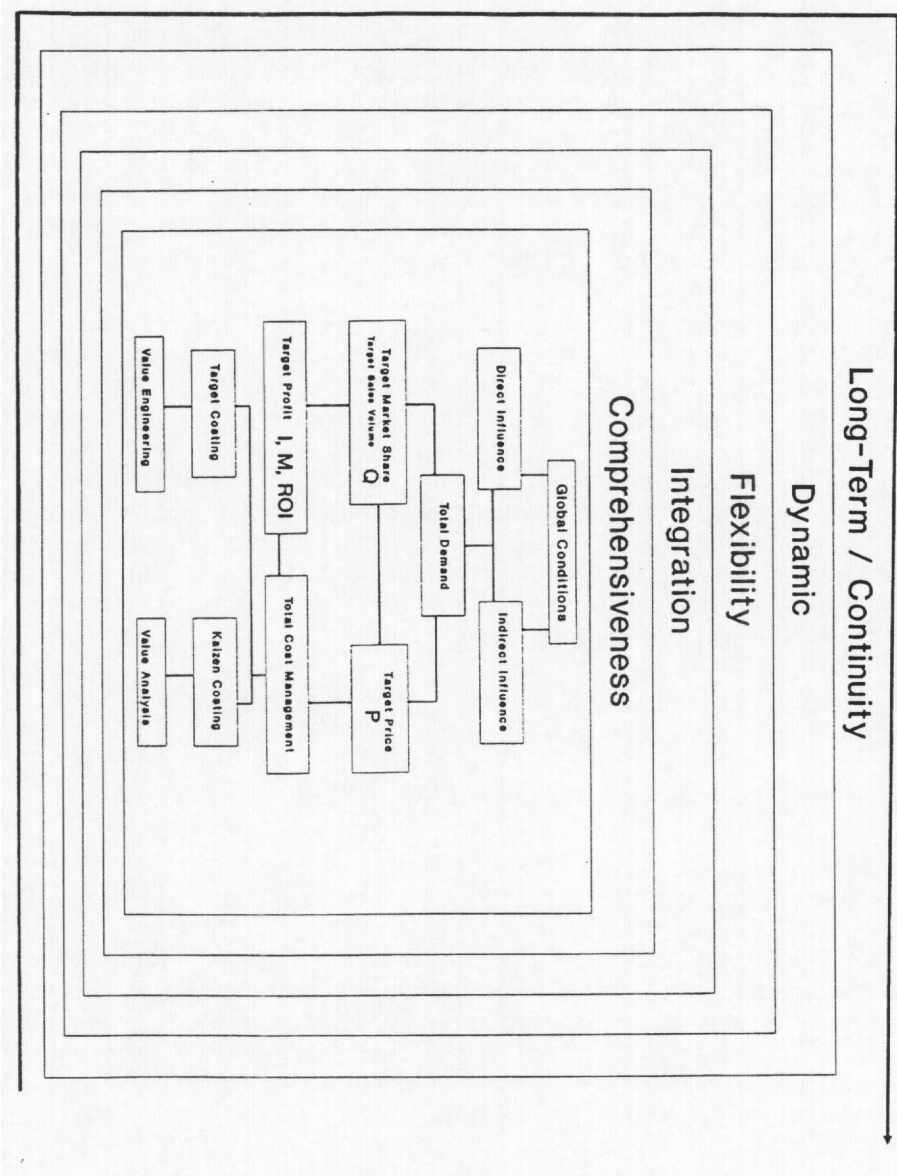
A target costing project may follow any of these three routes. The following section begins with the cost improvement route.

TARGET COSTING THROUGH COST IMPROVEMENT PROGRAMS

Cost improvement of TCM entails several strategies including comprehensiveness, integration, flexibility, dynamics and long-term/continuity as shown in Exhibit 3. *Comprehensiveness* covers all phases of business from the embryo stage of new product design to quality assessment after the product reaches the customer. Kato (1993, p. 36) argues that TC is not an actual costing system; rather, it is a "comprehensive programme to reduce costs, which begins even before there are any plans for new products." Thus, to develop a realistic estimate of the total demand for a product, a manufacturer should examine, measure and integrate both the variables familiar in standard cost accounting and other variables embedded in competition, technology, geography and economics. For example, an extensive forecasting of the demand for a compact car model over the next four years (the model's life cycle) should consider not only similar automobiles produced by the manufacturer and other competitors, but also all other means of transportation, e.g., vans, trucks, motorcycles,⁵ public transportation systems and airline services.

Comprehensiveness differs from perfection, thereby contrasting Japanese techniques and traditional standard costing systems. The cost system using ideal standards that emphasize performance perfection is applicable to such engineering costs as direct materials and direct labor, but not to discretionary costs (e.g., R&D, personnel development and marketing promotions) since the *optimal* amounts (hence the ideal standards) of these costs are deemed indeterminable. On the other hand, a comprehensive cost improvement system may include these discretionary costs. Thus, an ideal standard cost system pursues complete control (via budgetary control and cost

EXHIBIT 3
THE JAPANESE COST REDUCTION TECHNIQUES
AND THEIR STRATEGIES



variance analysis) over *selected* cost elements, while a comprehensive technique seeks to contain *all* significant costs and their drivers regardless of their budgetary control and variance feedback.

Integration is another basic strategy underlying TCM. As a comprehensive strategy draws various variables into the system of TCM, integration connects these variables into a unified, coherent structure. For example, the target cost developed at the product design stage is connected to the target sale price and the target volume of sales expected at this price, combining the price, volume and cost targets into a model that produces the target profit preset by top management strategies (Exhibit 3). These relationships are explained briefly by the following system of equations:

$$\begin{array}{l} \text{Target cost} \\ C \end{array} = \begin{array}{l} \text{Target Revenues} \\ R \end{array} - \begin{array}{l} \text{Target Profit} \\ I \end{array} \quad (1)$$

$$\begin{array}{l} \text{Target Revenues} \\ R \end{array} = \begin{array}{l} \text{Target Sales Volume} \\ Q \end{array} \times \begin{array}{l} \text{Target Price} \\ P \end{array} \quad (2)$$

$$\begin{array}{l} \text{Target Profit} \\ I \end{array} = \begin{array}{l} \text{Target Revenues} \\ R \end{array} \times \begin{array}{l} \text{Profit Margin} \\ M \end{array} \quad (3)$$

$$\begin{array}{l} \text{Profit Margin} \\ M \end{array} = (\text{Target Price} - \text{Target Variable Cost} - \text{Target Non-Variable Cost}) / \text{Target Price} \quad (4)$$

$$M = (P - VC - NVC) / P$$

$$\begin{array}{l} \text{Target Variable Cost} \\ VC \end{array} + \begin{array}{l} \text{Target Non-Variable Cost} \\ NVC \end{array} = \begin{array}{l} \text{Target Cost} \\ C \end{array} \quad (5)$$

$$\begin{array}{l} \text{Target Unit Cost} \\ C_u \end{array} = \begin{array}{l} \text{Target Cost} \\ C \end{array} / \begin{array}{l} \text{Target Sales Volume} \\ Q \end{array} \quad (6)$$

This TC system is called "deductive method" because the target costs are derived by deducting the target profit from the target revenue (Equation 1). Kato (1993, p. 38) notes that the deductive method enables managers to link TC to their mid- and long-term profit plans and their strategic business plans, which normally cover three to five years. The "adding-up method" provides an alternative method to determine TC, where the target cost of each part, component or activity is estimated, starting from the current cost level and considering all possible cost reductions. These costs are summed over the product's functions and the final target cost of the product is computed. Kato (1993) states that both the deductive and adding-up methods are popular in Japan, but the adding-up method is less sophisticated than the deductive method. Actually, it is the former's less integrative features that make the latter

preferable. He (p. 38) explains: "Though the adding-up method is based on feasibility tests of the approved VE improvements, it is difficult to provide a logical connection with the profit and business plans."

A TCM system integrates all of these variables (C_u , C, R, I, Q, P, M, VC and NVC) to help satisfy corporate strategies. Success at this time hinges on developing a product that can: (1) be sold at a target sales price (P), (2) generate a sufficient demand (Q), and (3) be produced and distributed at a cost (C_u) that enables the manufacturer to reach the target profit (I). (I) can further be expressed as a function of the target return on investment (ROI), as well as return on sales (ROS). By sensitivity analysis and VE activities, a multitude of product designs and several estimates of P, Q, I, M, C and C_u are developed in order to reach the optimal combination that produces the target profit (I).

Flexibility is another basic strategy of the Japanese techniques. TC and KC systems require flexibility to accomplish their goals. As flexibility improves towards its optimal level, opportunities for cost reduction increase. Gustavsson (1984, p. 805) proposes three ways to calculate this "optimal flexibility:"

- (1) All starting-up costs and all other costs are grouped under 'life-cycle cost' to facilitate optimization.
- (2) Only model-restricted machinery is optimized in the 'life-cycle' sense.
- (3) Expensive process machinery is made to be used irrespective of model and has been standardized to the extent that it can be used generally.

If total demand for a product is subject to wide fluctuations and uncertainty, capital investments should be made in small parallel steps that can easily be added to or stopped short (Gustavsson, 1984, p. 806). Conventional capital budgeting and costing models do not explicitly account for flexibility, a significant omission in light of increasing adoption of automation and flexible manufacturing systems (FMS) in manufacturing industries. In the FMS area, flexibility has been studied qualitatively and quantitatively.

Flexibility as a strategy empowering cost improvement programs consists of two types: (1) derived flexibility, and (2) built-in flexibility. The first type is derived from the flexibility of the manufacturing system (e.g., flexibility found in a FMS environment) which influences the quantity and quality of output. This flexibility also influences the costing system. The latter's flexibility is derived from the manufacturing systems' flexibility. For example, the flexibility emanating from reengineering and the consequent reduction in set-up costs allows a manufacturer to produce a variety of products in different sizes, colors and styles. Meanwhile, the set-up cost change enables the controller to replace an expensive job-order costing system with a less expensive process (or a hybrid, i.e., operation) costing system. (Setup costs are usually a major factor separating these costing systems from each other). Furthermore, the cost improvement program may incorporate a degree of flexibility of its own independently of that underlying the FMS. Examples include flexible costing systems

that can produce not only undiscounted value, constant-dollar reports but also reports incorporating different assumptions regarding rates of inflation, cost of capital, probabilities to produce alternative expected values based on different optimistic, pessimistic and most likely demand predictions. These two types, of built-in and derived flexibility, are important strategies for designing a comprehensive cost improvement program.

A TCM system is a *dynamic* model in a specific technical meaning of the term. The specific technical use involves the concept of "force" (Yalom, 1980, p. 6). A dynamic model posits several conflicting forces operating within an organization, and both controllable and uncontrollable gains/losses, cash excess/shortage, efficiency/inefficiency, and effectiveness/ineffectiveness result from these conflicting forces. These forces also are distributed at various levels of the organization and its environment. For example, the forces of corporate culture, competition, labor relations, customers' tastes and preferences and the corporate financial position (regarding liquidity and earning power) constantly drive the firm's performance. The dynamic strategy of TCM is based upon these forces and their interactions. As these forces operate continuously, a TCM model projects the forces' actions and interactions and accordingly directs the product design and mass production. This is the essence of the continuous improvement theme underlying kaizen and target costing philosophy. Unlike the total cost system, the traditional standard costing system is based on a static mechanism: Once cost standards are developed, they may remain in effect (without updating) for a long time. The cost standards that are once considered "currently attainable" or "perfect" standards may turn into "loose" standards over time.

TARGET COSTING THROUGH COST CUTTING AND SHIFTING ROUTES

Internal and external forces can "move" TCM and its cost improvement program into non-optimal directions, often causing dysfunctional routes of cost cutting and shifting. The derailing may also occur due to weaknesses arising from the practical application of the aforementioned strategies as explained below.

Weaknesses of Cost Improvement Programs

TCM has its limits. Designed as a long-range technique, its continued use creates several problems. Tanaka (1993) explains that with a good control system, "*kaizen* efforts throughout a company inevitably lead to fewer opportunities to cut costs." Success is hardly a failing, but Kato (1993) argues that TC has its dysfunctional aspects, including undue pressure on the labor force. He (p. 44) argues that "[h]itting target costs within the reducing time schedule is becoming quite impossible." Cost targets derived from the profit plan are extremely demanding." Furthermore, unless TC and KC functions are integrated sufficiently at different stages in a manufacturing company, the results of one can cancel out the other's.

Beyond a certain point, comprehensiveness begins correlating positively with complexity and negatively with measurement precision. A system becomes more difficult to understand as its structure incorporates more variables and measurements. The long-term continuity of the cost reduction techniques suffers from the usual

difficulties of predictability beyond one year. Waiting for more reliable predictions can cause such problems as acting too late to respond to market demands. As the uncertainty of future demand increases, TC and KC become less effective. In an uncertain environment, the targets of costs, prices, sales volume and profits appear as fuzzy notions of future objectives rather than concrete figures until more reliable economic forecasts become available.

Connecting TC and KC to normal profits is logical when the company operates profitably near normal levels. However, when operating below normal profits, especially in streaks of losses, basing TC and KC on normal profit as a target can lead to unrealistic goals. During these times, top management often welcomes any rational cost reduction, kaizen or otherwise. However, as comprehensiveness increases or this involvement intensifies, managerial autonomy promoted by decentralization diminishes.

Finally, in a comprehensive, integrated, and dynamic system concerned with long-term cost reduction targets, secrecy often becomes an essential constraint. Some competitors would pay dearly to acquire a manufacturer's target cost developed for the next four years for a major product. Kato (1993, p. 36) explains that, "target costing activities relate directly to the development of new products; something which is regarded with very great secrecy in most [Japanese] companies. This secrecy may have hidden the real impact of target costing." Focusing on secrecy also may impair the controller's participation in developing the TC and KC schemes. Secrecy and its corollary, the reduced role or absence of the controller, give different meaning to Jones, et al.'s (1993, p. 120) conclusion that "Japan's manufacturing success has been neither helped nor hindered by its accounting or, alternatively, ... it has succeeded in spite of its accounting." Thus, the strengths of the TCM system reside in implementing the foregoing strategies (comprehensiveness, integration, flexibility, dynamics and long-term/continuity). On the other hand, practical difficulties and side effects of this implementation constitute weaknesses of the TCM system. Exhibit 4 summarizes the strengths and weaknesses of the Japanese costing techniques.

Weaknesses intensifying to a certain point (e.g., points C or D in Exhibit 5) could divert cost improvement into cost cutting or cost shifting practices. Conversely, cost cutting and cost shifting practices, with normal short-term objectives (e.g., several points labeled T_c and T_s , respectively) may be redirected to follow a cost improvement program as shown by points A and B (Exhibit 5) in order to reach longer term goals, T_i .

Summary and Conclusions

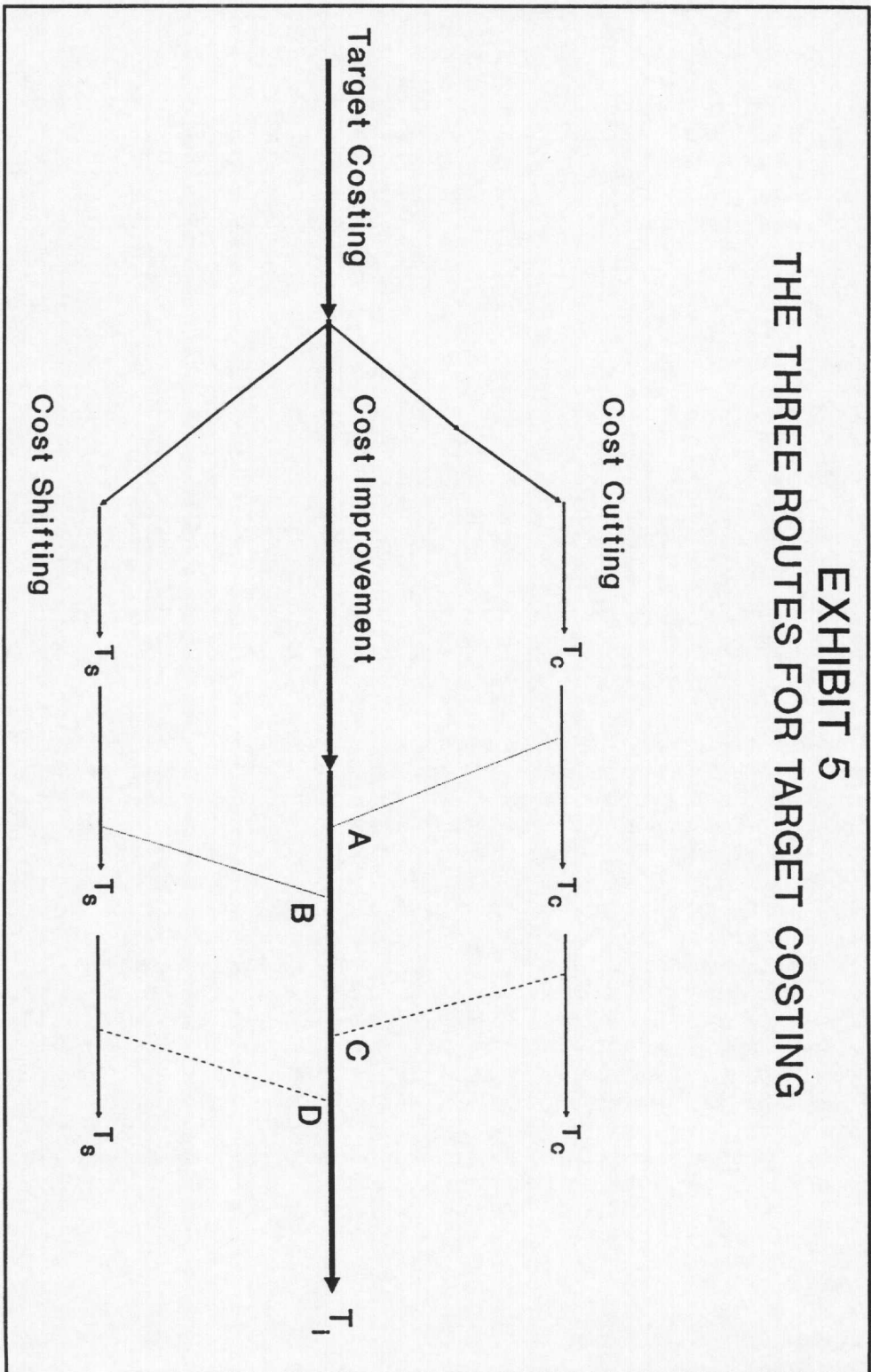
Total cost management and its main branches, target and kaizen costing, provide opportunities to reduce costs. Although Japanese companies have practiced these techniques for more than 30 years, they remained largely unknown in the West until recently. The currently published research on these methods suggest that adopting these methods eventually diminishes management accounting's role in developing advanced manufacturing technologies. Corporate executives and other individual users should be familiar with the techniques and their underlying conditions so that they are able to: (1) understand the nature of these techniques, (2) assess their strengths

EXHIBIT 4 STRENGTHS AND WEAKNESSES OF THE JAPANESE TOTAL COST MANAGEMENT	
Strengths	Weaknesses
Comprehensive	Complex/difficult to understand
Integrative Concerned with Flexibility	Secrecy Different cost reduction programs may cancel each others' effects on target profit
Dynamic	Expressing the targets optimally: Point estimates Interval estimates Non-concrete targets
Long range	Predictability problems may lead to a waiting game
Continuous	Limits to improvements Undue pressure/dysfunctional
Involve top & middle management	Less decentralization; thus creating problems for motivating and measuring divisional managers' performance

and weaknesses by exposing and analyzing their basic conditions, and (3) judge whether these cost reduction philosophies deserve their acclaimed popularity.

This study suggests that target costing managers should improve, cut or shift costs, but that they must consider the potential pitfalls in doing so. Cost improvement, which refers to the costing elements of TCM, has a critical nature which necessitates a suggestive mode for its conduct and communication. This criticality stems from the strategies of comprehensiveness, integration, flexibility, dynamic functioning and long-term continuity. Those strategies face many practical problems, including forecasting in the face of ever changing global conditions (e.g., value of the yen and dumping charges pressed especially by Ford Corporation against Toyota and other Japanese auto makers (Miller, 1993)), model complexity, limits to continuous cost improvement, conflicts with decentralization and the emergence of secrecy as a fundamental constraint. When these problems intensify to a certain degree, TCM declines into cost cutting or cost shifting practices, often seeking short-term objectives. Because they are not based on TCM strategies, these practices are regarded as a "quick fix" to a deteriorating situation. To gain acceptance from managers and subordinates, these practices may resort to various schemes: empty slogans, pecuniary rewards, punishment and penalty threats. In many cases, these practices show management avoiding the real issues that face the firm.

EXHIBIT 5 THE THREE ROUTES FOR TARGET COSTING



Notes

¹ Most of Kato's (1993, pp. 45-47) references for target and kaizen costing are in Japanese. He (p. 36) stresses that the published literature on these methods is scarce in the West and Japan: "we [in Japan] have more than 100 articles on target costing, but over 90% were published within the last five years." He argues that the popularity of JIT, especially in the 1980s, and Japanese companies' handling of target costing information with "very great secrecy" account for the earlier scarcity of this method (Kato, 1993, p. 36).

² According to Monden and Hamada (1991, p. 17), the Japanese word "kaizen" in kaizen costing and the English word "improvement" refer to two distinct concepts. "Kaizen" refers to continuous accumulations of small betterment activities rather than innovative improvement. Therefore, 'kaizen costing' includes cost reduction in the manufacturing stage of existing products. Innovative improvement based on new technological innovations is usually introduced in the developing and designing stage."

³ Avoidable inefficiencies usually result from poor performance. If they are controllable, and especially when budgeted costs are currently attainable, they represent losses that should be written off against the period's income rather than capitalized. (A loss can be avoidable yet uncontrollable. For example, losses from fire are uncontrollable, yet avoidable by carrying fire insurance).

⁴ Unavoidable inefficiencies are difficult, or impossible to eliminate without drastic changes in the manufacturing setting or in the form and content of the product. For example, the legal environment can be so threatening to a manufacturer that the best ways to reduce legal risks and losses are either to replace labor by robotics or by locating the plants completely outside this environment.

⁵ Ono (1993) notes that during the period April-June 1993, Honda's car sales in North America dropped 12% to 178,000 units, while sales in Japan fell 11% to 149,000 units. Thus, overall sales declined 11% to 414,000 units. However, Honda's motorcycle sales rose 12% to 999,000 units during the same period.

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