

BHAGS, HEDGEHOGS, AND FLYING PIGS may sound like characters from the latest Hollywood fantasy epic or perhaps a hot new video game. In reality, they can help an organization reach for and achieve excellence.

In the book *Built to Last*, Jim Collins and Jerry Porras studied 18 “visionary companies” to determine factors leading to their endurance and success. They found a core ideology linked to what they call “Big Hairy Audacious Goals” or BHAGs. The goal captivated the imagination and motivated members of the organization to strive toward excellence for its own sake.

In his follow-up study, *Good to Great*, Collins analyzed good companies that had breakthroughs. He and his team again tried to determine what triggered triumphs in organizations. Once more, the BHAGs were pivotal.

In *Good to Great*, the BHAGs were linked to the “Hedgehog Concept”: focusing on the single thing a company does well,

# Reaching Big Hairy Audacious Goals



## CREATING A MANAGEMENT CONTROL SYSTEM THROUGH TARGET MAPPING

BY AUDREY TAYLOR

then doing it over and over again. Collins points out that a hedgehog is neither the fastest nor the smartest animal, but it's a survivor. When attacked, it knows to wrap up into a protective ball surrounded by sharp spines. Similarly, companies using the Hedgehog Concept successfully find the one thing they are best at and then use that core competency to respond to, and plan for, changes in the business environment. This one thing lies in the overlap between what they are passionate about—what they are best at doing—and what their economic resources will allow them to do. According to Collins, this common ground is the launch pad to breakthrough success.

**Table 1: The Target Map Format**

**TARGET (Step 1)**

Higher profit for the entire golf course via the course restaurant.

**OBSTACLES (Step 2)**

**INTERMEDIATE OBJECTIVES (Step 3)**

The restaurant clientele are limited to resort golfers.	The restaurant draws nonresort golfers.
Many resort golfers don't use the restaurant.	The service and food meet the expectations of the resort golfers.
Staff aren't willing to work the long hours required.	Staff enjoy their time working in the restaurant.
Staff training isn't adequate.	The right people are hired and trained well.
Weather directly impacts volume.	Rain as well as sunshine draws clientele.
Food needs are hard to predict.	Needed supplies are always on site.
Storage space is very small.	Needed supplies are always on site.
Backup storage is a long walk from the restaurant.	Needed supplies are always on site.
Service isn't fast enough or courteous.	Service is fast, accurate, and friendly.
Wages are low.	Compensation is sufficient to draw and keep the best.

Missing from Collins's analysis are the metrics that help companies achieve their goals. Though the BHAG triggers the passion to achieve success, it's the accounting system that provides the measurements to monitor results.

**STEPS TO ACHIEVING A BHAG**

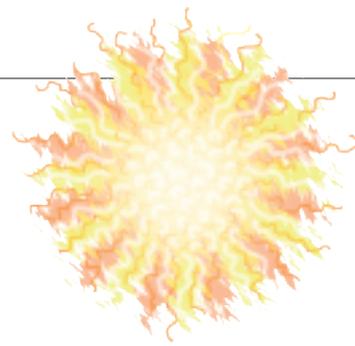
By adhering to the following process, a company or organizational unit can simply determine the method of achieving its overall goal and the metrics needed to monitor progress. The process was originally developed by Eliyahu Goldratt and then modified and simplified by Kathy Suerken and Rami Goldratt and by Larry Till.

Till, assistant principal of Joy Middle School in Detroit, Mich., attended the Education Thinking and Communication Tools (TACTs) training in Detroit. Afterwards, he started to use the Ambitious Target tool, the precursor to the Target Map, with troubled students, who automatical-

ly developed actions to overcome obstacles. Till modified the original Ambitious Target tool process, and his changes were later officially incorporated into TACTs training. The final step is my modification, which focuses all of a company's metrics on its overall goal.

The six steps to transformation are:

1. List the Ambitious Target—or the BHAG.
2. List the obstacles that block the company from reaching the target.
3. Determine what would have to be true to make each obstacle disappear. That item is named an intermediate objective (IO).
4. & 5. Order the IOs chronologically until the Ambitious Target is reached. Determine which specific actions are needed.
6. Determine the metrics needed to monitor whether each IO has been achieved.



## PLAN (Steps 4 and 5)

## METRICS (Step 6)

Promotions are designed to draw local residents to the restaurant.

Sales from nonresort clientele.

Resort golfers are surveyed after each round to determine if they used the restaurant. Reasons for use or nonuse of the restaurant are solicited.

Percentage of golfers using the restaurant.

HR is very particular about who is hired. Current staff meet each candidate prior to final hiring and have input into the hiring decision.

Staff turnover. Restaurant sales trends.

Wages are benchmarked against the competition, and tips are monitored. Staff aren't released to the floor until they are trained and pass a "server test." HR is very particular about who is hired.

Time needed to pass the server test.  
Staff turnover. Sales trends. Tips.

Promote rainy day menus with lower prices and customer giveaways on any rainy day.

Restaurant sales trends.

Buffers of each supply are monitored and maintained by a dedicated person.

# of times the buffer lacks a needed item.

Buffers of each supply are monitored and maintained by a dedicated person.

# of times the buffer lacks a needed item.

Buffers of each supply are monitored and maintained by a dedicated person.

# of times the buffer lacks a needed item.

Wages are benchmarked against the competition, and tips are monitored. Staff are well trained.

Tips. # of times the buffer lacks a needed item. Restaurant sales trends.

Wages are benchmarked against the competition, and tips are monitored. Staff are well trained.

Tips. Staff turnover and absenteeism.  
Restaurant sales trends.

### Step 1: Determining the BHAG, or Making Pigs Fly

In the classroom and in several companies, I have used the BHAG to trigger planning in managers and analysis in students.

To evaluate the weaknesses of any system, you first have to ask, "What is the goal?" In the best instances I have witnessed managers "kick around" goals via e-mail or meetings until they reach consensus. The rule for the goal is that it must "curl your toes." In other words, the goal must excite the members of the organization and capture their imagination. If the goal is too easy, it won't motivate anyone.

Collins warns that the BHAG can't be picked based on "bravado." Instead, it must be based on the intersection of the company's passion, economic resources, and core competency, and it must be "audacious." Goldratt and Suerken refer to this goal as a "Flying Pig," or something

that will happen when pigs fly.

In a senior project, my student Chelsey Hageman used the example of a golf course restaurant attached to a hotel. The restaurant wasn't heavily utilized by the resort golfers. The restaurant managers decided that their Ambitious Target should be to generate a higher profit for the entire golf course (see Step 1 in Table 1). In other words, an operating loss would be acceptable if the restaurant increased the use of the course because it meant an overall increase in the combined profit.

### Step 2: List the Goal Blockers/Obstacles

So now that these obstacles are obvious, what should be done? List them.

Ask each manager to state the obstacles he or she believes will keep the company from reaching the goal. Keep adding to the list until everyone is satisfied that the

majority of their “hot ticket” objections are listed for the group to see. This is done best in a meeting with all of the department heads in attendance. The people responsible for achieving the target must be allowed to state why that target will be difficult, if not impossible, to reach.

The list is part of the process included in the tool Goldratt developed called a Prerequisite Tree, which was used to find a method of overcoming obstacles. Suerken modified the tool and renamed it the Ambitious Target Tool in her training materials used in the Theory of Constraints (TOC) Education TACTs course.

The simplified process, refined by Suerken and Rami Goldratt, has only four steps:

1. List the Ambitious Target.
2. List the obstacles that block the company from reaching the target.
3. Determine what would have to be true to make each obstacle disappear (the IO).
4. Order the IOs chronologically until the Ambitious Target is reached.

The golf course restaurant managers were asked what blocked them from running the restaurant in a way that increased overall course profit. Here’s their list, shown in Step 2 of Table 1:

1. The clientele are limited to resort golfers.
2. Many resort golfers don’t use the restaurant.
3. Staff aren’t willing to work the long hours required.
4. Staff training isn’t adequate.
5. Weather directly impacts volume.
6. Food needs are hard to predict.
7. Storage space is very small.
8. Backup storage is a long walk from the restaurant.
9. Service isn’t fast enough or courteous.
10. Wages are low.

### Step 3: Finding the Obstacle Annihilators or the Intermediate Objectives

Next, the manager who listed each obstacle is asked to determine what’s needed to eliminate it. This becomes the intermediate objective for that obstacle. The manager has veto authority over any objections to or suggestions about his/her IO. This process continues until all of the obstacles have IOs. Some IOs can be used for more than one obstacle, and some obstacles will need more than one IO.

The benefits are threefold:

- ◆ All the obstacles are highlighted by those responsible for overcoming them.
- ◆ The plan to achieve the target is developed by the very managers originally objecting to it.

◆ The third, powerful result is that the process focuses the team on a common goal, injecting them with energy and enthusiasm.

At one company, for example, the team members were at an impasse until the Target Map helped them focus on only what was needed to overcome obstacles to their clearly defined and very ambitious goal. The options included using existing space modified for a new production process, building a new factory, or outsourcing the entire project. The team became energized and quickly solidified behind a series of refined steps that were ultimately implemented by upper management.

The golf course restaurant managers listing each obstacle were asked to determine what would need to be true for their obstacle to disappear. (See Step 3 in Table 1.)

It’s important to simply dream at this step. Don’t edit your IO by practicality. You must list what *has to be achieved* for the target to be hit rather than listing what you think *can be achieved*.

### Steps 4 and 5: Developing the Implementation Plan and Chronology

The next steps are to find specific actions to achieve the intermediate objective for each obstacle and to determine the chronology of those specific steps. For each IO, a specific action must be taken by a particular person or group. Due dates are inserted, and then actions are prioritized in chronological order.

In the process of specifying the actions needed to achieve the IO, the chronology of the action steps can change from the original hypothesized order given in the original IO list. This iterative characteristic makes the process particularly robust in the sense that it’s self-correcting.

For the golf course restaurant, specific actions were proposed to achieve each IO. In some instances, the same action could achieve several IOs, and, in other instances, several actions are needed to achieve one IO. (See Steps 4 and 5 in Table 1.)

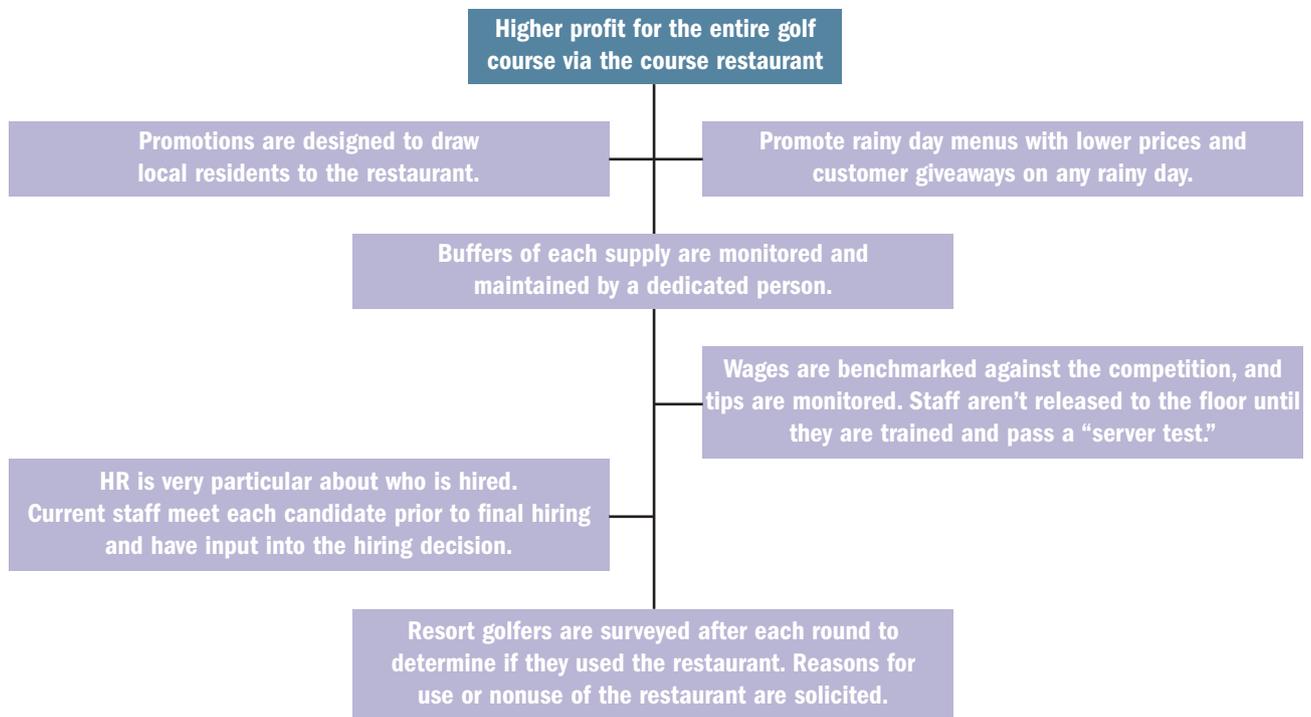
The IO/Action Steps Map lists them in chronological order, clearly stating which actions must take place before the next can be addressed. (See Figure 1.)

### Step 6: Developing the Metrics

The final step is for the team to decide what the signals should be to determine whether the plan is on track. At this point, accounting metrics should be added that are congruent with the overall goals of the firm. (Step 6 of Table 1 shows those related to the golf course restaurant.)

There has been a great deal of criticism about the way

**Figure 1: Placing the Actions in Chronological Order**



accountants measure performance. In *Relevance Lost*, H. Thomas Johnson and Robert S. Kaplan show the negative impact accounting metrics have had on the post-1950 industrialized manufacturing decision making of most Western companies. They document that, in the 1980s, direct labor was predominantly used as the basis for overhead allocation even though it represented only 11% of the total manufacturing cost and even though labor and overhead weren't heavily correlated. As a result, time was wasted monitoring and controlling a fraction of the overall manufacturing cost, and many costly choices were made.

In addition, short-term profit was the driver of performance. According to Johnson and Kaplan, managers discovered that profit could be increased by manipulating some expenses and deferring others. Return on investment (ROI) was widely used to evaluate divisions and firms. The drive to increase ROI year after year put pressure on managers to increase profit in any way possible, even if that increase was simply an accounting manipulation. The drive to increase profit coupled with an inaccurate overhead allocation method gave managers faulty information on which to base their profit-maximizing choices.

Johnson faulted American companies for decoupling processes and running them at capacity to mass produce at each station, building unnecessary work-in-process inventories and increasing lead time and storage costs.

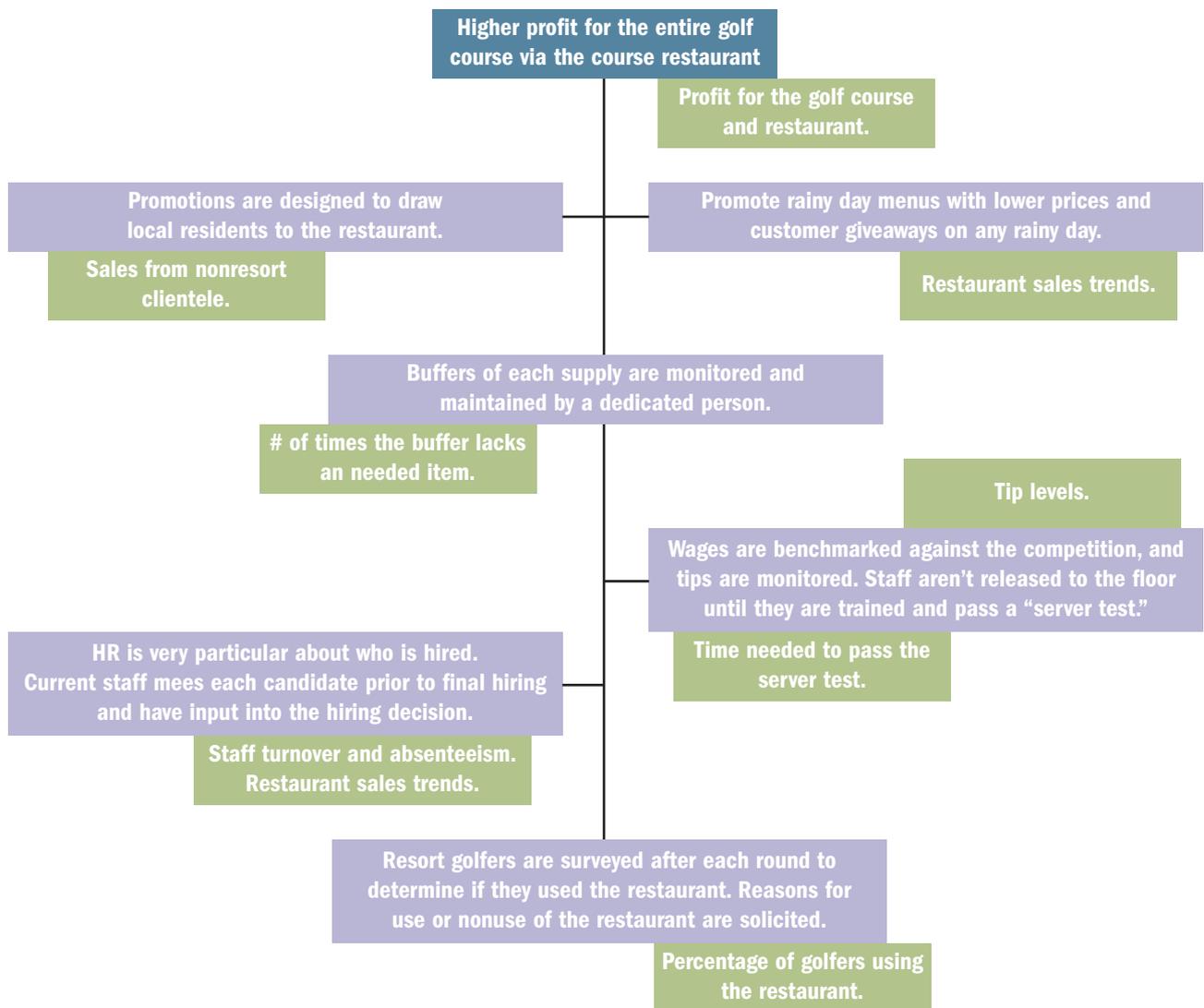
The primary metric was efficiency. Efficiency metrics were also the focus of Goldratt's criticism of accountants in his novel, *The Goal*. Goldratt demonstrated how the highly utilized efficiency metric caused production and shipping delays and caused customer dissatisfaction to the point that some sales were lost. Simultaneously, products not immediately required by the market were produced and stored, using precious resources.

How can managers and accountants determine the measurements that will encourage managers to focus on the overall goal of the company? As the plan is developed in the Target Map to achieve the BHAG, actions are planned. These actions are theorized to have certain effects on the overall results of the firm. (See Figure 2 for those related to the golf course restaurant.)

Sometimes the projections aren't correct or the plan hasn't been well executed. It's incumbent upon managers to state clearly what the intended results of each action step should be and when those results should be evident. Then it's the obligation of the group to develop the measurements to track these results to ensure that they are taking place in a timely fashion and in the quantities anticipated.

If the results don't follow the hypothesis, corrections must be made. But managers should be careful not to jump in too soon and overcorrect. In *Relevance Regained*,

**Figure 2: Chronology of the Actions and the Related Metrics**



Johnson points out that W. Edwards Deming and William Scherkenbach, both statisticians, remind us that processes normally vary within statistically normal limits. “If someone tweaks the process to compensate every time there is a variation, the process is changed and the limits of normal variation grow wider and wider.” On the other hand, measurements should eventually lead to overall improvements in profitability. If such positive change isn’t occurring, assumptions have to be challenged, and metrics may have to be changed.

One metric can monitor several outcomes (see Step 6 in Table 1). For example, *the number of times the buffer lacks a needed item* and *tip size* can monitor the achievement of several intermediate objectives and their resulting actions.

The intermediate goals are:

1. Service is fast, accurate, and friendly.
2. Needed supplies are always on site.

The resulting actions are:

3. Buffers of each supply are monitored and maintained by a dedicated person.
4. Tips are monitored.
5. Staff are well trained.

As buffers are available closer to the restaurant, service time will drop. By tracking the number of times a needed item isn’t in the buffer, the buffer will be maintained so that items are quickly replenished. If tips increase, it must mean customers are more satisfied (since happy customers leave larger tips). As tips increase as a percentage of sales, customers are reflecting greater levels of satisfac-

tion, which could be linked to food quality, speed and accuracy of service, and attitude. The speed could be linked to either the food and supply buffers or to the increased training. When the metrics can be used to monitor several action outputs, time is saved, and managers and employees are more focused on the items that they hope will increase overall performance.

Finally, overall profit for the restaurant and the golf course are measured and tracked. If the overall profit increases, then we can presume that the restaurant is increasing golfer satisfaction and, therefore, course use. By merging the two incomes, it's possible for the restaurant to increase the cost of food and servers to draw in and satisfy clients as long as total profit increases.

### IMPACT ON THE BALANCED SCORECARD

Robert Kaplan and David P. Norton developed the balanced scorecard (BSC) with four perspectives on the company: financial, customer, internal processes, and learning/growth. The theory is that companies need metrics that monitor actions leading to future benefits in addition to those linked to current short-term profit. The assumption is that by increasing employee skills, internal processes and customer satisfaction will improve, resulting in increased profit. There is a predicted time lag between lower-level actions resulting in financial improvements. For example, employee training takes time, and the benefit of having better employees may not be financially evident in the short term.

Kaplan and Norton advocate using cause-and-effect logic to hypothesize the results of the actions and their associated metrics on the behavior of managers. The four perspectives are to lead to overall long-term financial growth and well-being. Goals are listed for each perspective, and related metrics are chosen to monitor progress toward them.

Many companies have found the implementation of the BSC to be time-consuming and to result in a plethora of metrics. The Hackett Group's *2004 Finance Book of Numbers* reported that, on average, companies using the balanced scorecard use 132 measurements. By employing too many metrics, the BSC mutes its effectiveness. Kaplan and Norton advocate starting with a few and adding new ones only as needed. The trick is to use as few as possible while monitoring key indicators of progress toward the overall goal.

In contrast, the Target Map functions as an editor to

test metrics against the overall goal. Only metrics needed to monitor actions used to eliminate obstacles are added to the model.

### A CAUTIONARY NOTE

As you choose metrics, another consideration is the ease with which you can collect the data. For example, to track tips, you would either have to ask each server to self-report tip levels or pool all the tips to be divided up later. The second option will make tracking tips much easier, but servers may not find it motivating and may not trust management to divide the money equitably. In addition, there may be a motivation for either the server or management to falsify the tips. If you can't find a satisfactory way to track tips easily, then choose another metric.

Consider the metric: *number of times the buffer lacks a needed item*. This should result in buffer maintenance and faster customer service times, which should result in higher levels of customer satisfaction. Instead, the restaurant management could track *customer service time*. But that would be far more difficult and would add unneeded pressure on servers. The chosen metric is simple to track and can be done easily by servers or by managers. It can also be said that monitoring the buffer is something in the best interests of both servers and managers and therefore will most likely take place.

All in all, using the Target Map is quick and easy. The benefits are wide ranging, from management buy-in to the generation of new and previously unconsidered methods of achieving the goal. It also provides a means of projecting intermediate results and developing metrics to monitor the existence and size of those results. By developing the metrics after the plan has been established, management is protected from using traditional measurements that are either redundant or harmful to the overall goal.

The proposed metrics should be sparse. Include only enough to track the primary outputs anticipated. The benefit of developing them late in the planning process is that only needed metrics will be used and will have firmwide impact. If the hypothesized relationships hold true, the overall profitability of the firm will improve as the measurements improve. ■

*Audrey Taylor, Ph.D., is an assistant professor of accounting at Western Washington University in Bellingham, Wash. You can reach her at (360) 650-2204 or [Audrey.Taylor@wwu.edu](mailto:Audrey.Taylor@wwu.edu).*

