

# The Swing of Things

## Keys to Learning Golf and Management



Golf is a difficult game to learn, and once golfers reach a certain level they tend to either stay there or give up altogether. The same can be said of management and managers. What's the problem? A lack of feedback that is timely, specific, and visceral.

**W**hat's the fastest lesson you ever learned? If you ask people this question, you're likely to hear some variation of a story about the childhood experience of touching a hot baking sheet of cookies on the stove. "My mother told me not to touch it," they may say. "I did so anyway, but I never did it again." Sometimes they may wince at the memory and point to the scar that is a constant reminder of the painful event.

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*Editor's note: This article is based on David Hurst's book Learning from the Links: Mastering Management Using Lessons from Golf, published this year by The Free Press.*

The hand-on-the-baking-sheet story illustrates three of the most important criteria for feedback that leads to rapid learning: it must be timely (immediate), specific (cause and effect must be directly linked), and ideally it should be not just cerebral but also visceral—that is, it should involve not just the brain but also the body. If you don't agree with this, think about situations in which learning is not spontaneous but difficult. Think about golf. Think about management.

### HITTING A WALL

Let's look first at golf. Golf is a notoriously difficult game to learn, let

**by David Hurst**

alone get better at. Golfers typically improve for about three years after they start playing, but after that their performance stabilizes and their scores stay about the same, varying by a few strokes up or down—but mostly up. This is a source of great frustration for golfers and promoters of the game alike. Every year a large number of people take up golf, but a similar number quit, usually because they don't see steady progress in the quality of their play.

The problem is that golf is a demanding sport that doesn't generate the timely, specific, visceral, hand-on-the-baking-sheet feedback that allows a learner to immediately connect cause with effect. You'd likely find little argument from golfers about the lack of specific feedback. Every golfer knows there are a million reasons why balls go into the rough. But surely, it could be argued, the feedback is *timely*: golfers get immediate results from their actions. That's true, but they gain merely knowledge of their results rather than feedback. Effective feedback must refer to the processes of cause and effect that lead to a given result. Knowledge of a bad result tells golfers that they must change, but only timely, specific feedback can tell them *how* to change. And people need both kinds of knowledge to accomplish change successfully.

## SLICE OF LIFE

Here's where things start to get complicated, because in complex systems the processes of cause and effect are extremely difficult to figure out. Take the slice, for example, that well-known golf shot that curves with varying degrees of severity to the right of a right-handed golfer. It's estimated that 80 percent of golfers slice. It's an intensely annoying shot to play, usually ballooning up into the wind and robbing the player of distance as well as direction.

There are a number of generic explanations for the slice; professionals will often say, for example, that slicing is caused by cutting across the ball with an outside-in swing. But this so-called cause is just one link removed from the final outcome, and so it simply raises another question: Why do so many golfers have outside-in swings? It's because they grip the club incorrectly, professionals may say, or it's because they take the club back above the plane of the swing. But *why* do they do that? And each purported answer raises another *why*.

According to the philosophy of the Toyota Motor Corporation, whose Eiji Toyoda and Taiichi Ohno originated the innovative and much-imitated Toyota Production System, one has to ask the question *why* at least five times to get to the root causes of a systemic symptom. And as the *whys* are tracked back along what looks like a chain of cause and effect, the chain morphs into a complicated web of many causes and many effects on several different levels. Often what seems to be a cause is really an effect produced by another cause that itself is an effect, and so on and on in a complex tangle of what systems theorists call *mutual causality*.

As effects are traced back to their causes, the level or scale of the inquiry changes. The explanations that golf pros give for slicing are high-level and generic; they apply to many golfers. But focusing more closely on the roots of the problem requires moving from the generic to the specific; from golfers in general to *this* golfer in particular and his or her problems—right here, right now. This scaling effect, the need to zoom in from generic descriptions to specific diagnosis, is a persistent problem with all advice given to golfers, as well as to managers. There are continual mismatches between the scale of the advice and the scale of the problem: the advice is usually too coarse to apply to a complex, fine-

grained problem. It can be compared to giving a map of the interstate highway system to someone who needs instructions about how to get around an unfamiliar neighborhood. The person can see roughly where he or she is on the map, but the scale of the interstate map is far too coarse to be useful as a guide to action in the fine-grained environment at the neighborhood level.

## CONVERSION PROCESS

Once the various problems have been diagnosed, how can they be fixed? The first step is usually to issue an instruction—"Do this," or "Don't do that." An instruction, however, tells people *what* to do but doesn't always tell them *how* to do it. In golf, the executors of the swing, the muscles and tendons, don't speak English or any other high-level language; they don't understand instruction. They are controlled through the use of images—pictures and feelings. Thus, for people to learn *how* to change their golf swings they have to be able to turn given instructions into timely, specific, visceral, hand-on-the-baking-sheet feedback. In short, verbal instructions have to be converted into visceral media—pictures and feelings—that can be used as feedback to control the processes that produce results.

Good golf coaches have an endless supply of analogies—images, feelings, and exercises—that allow

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their pupils to both understand and feel what the swing should be like. These coaches have a huge bank of metaphors and analogies to draw on, which is necessary because different people have different learning styles, and the same image may not work for everyone. Percy Boomer, an instructor who taught during the first half of the twentieth century and wrote the 1946 classic *On Learning Golf*, insisted that the golf swing consists of nothing but “remembered feelings” but that the feelings are not the same for everyone. “All good teachers must repeat,” he wrote, “but never in exactly the same words or with just the same connections. . . . I do not mind if I have to say the same thing in a dozen different ways so long as one of the twelve gets home with you.”

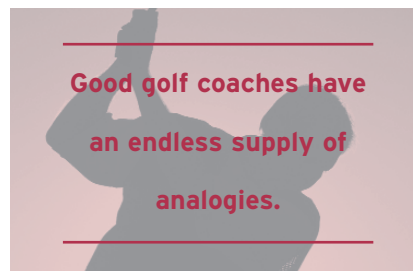
Once people have been given a feeling, they can reproduce it and know, via feedback, whether they have been successful. They can learn not only how to fix things that are broken but also to take preemptive action to fix things *before* they break. Butch Harmon, Tiger Woods’s coach, sets up on the practice tee physical “stops”—positions that Woods has to reach on his backswing. Woods controls these positions through feedback from the feelings in his body. And he is so good at it that he can make corrections on the fly. If the click of a camera shutter or the movement of a fan disturbs him, for example, he can stop his backswing at the top. In other words, his backswing, unlike that of most other golfers, is under feedback control.

This also means that Woods’s swing is much simpler than that of most other golfers, who have to program their whole swing in advance and can’t make midcourse corrections in response to real-time events.

## MANAGEMENT LINKS

From a systemic point of view, the challenges of improving at golf are

mirrored in management. The feedback available to managers is rarely timely, specific, or visceral, although at times it might appear that it is. When the economy is growing and things are going well, managers tend to take credit for good performance and claim direct connections between their strategies and results. When the economy slows, however, and results suffer, managers tend to blame outside factors that they claim are beyond their control. But those who take credit for the rain should shoulder the blame for a drought. The fact is that it is very difficult to



connect cause with effect in complex organizations.

The difference between knowing that something must change and knowing how to change it also bedevils management advice. There is a huge amount of counsel available on what to do in given situations, but very little on how to do it. Take benchmarking, for example. Many firms now measure their performance against that of other companies that are in the same business or carry out similar functions. This can be a great source of knowledge that a company must change, but benchmarking rarely gives a company many clues on how to change. Usually this is due to a mismatch between the scale of the advice and the scale of the problem, and the fact that people tend to compare results—outcomes—rather than the details of processes that lead to these outcomes.

In desperation, most managers resort to issuing instructions and applying incentives. “Improve our total customer satisfaction,” they might say to their subordinates, “and we’ll pay you a bonus.” Occasionally this instructional approach works, but usually it doesn’t.

A steel distribution firm that tried this approach found that its on-time delivery statistics improved but customers never saw the benefit. How could this happen? The company chose on-time delivery as its proxy measure for customer satisfaction and told employees that their compensation depended on the on-time statistics improving. When an order looked as though it might be running behind, however, the salespeople called customers and said something along these lines: “We promised you your steel for Monday, but is Wednesday OK?” If the customer said Wednesday was fine, the order went back to being recorded as on time. The statistics looked great and the employees got their bonuses, but the company’s actual performance didn’t improve, and employees’ behavior didn’t change. Improvement requires the ability to compare the actual with the ideal via timely, specific feedback, and measurement alone doesn’t usually provide this.

This company eventually realized that it had to take an in-depth approach to the customer satisfaction program. It had to take the strategy conceived in the boardroom down to the roots of the organization and convert abstract concepts into visceral images, pictures, and feelings. This is the challenge of strategy implementation: how does one take a great insight and turn it into hand-on-the-baking-sheet feedback across the organization? Frontline operators, just like the muscles and tendons that execute the golf swing, don’t understand the action implications of high-level concepts. They might understand the words *customer satisfaction*, but they don’t under-

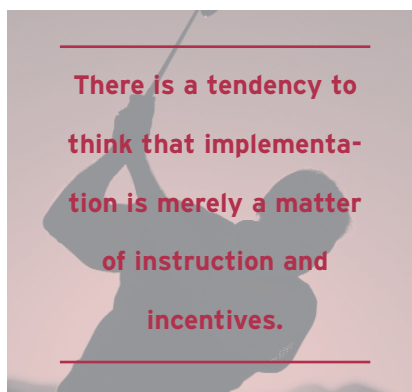
stand what they personally have to do, let alone what they personally have to change.

So the company's executives asked the question, "Why is steel delivered late?" They came up with seven reasons that accounted for the vast majority of the late deliveries. The reasons ranged from the sales-force promising delivery earlier than was possible to delays in credit approval to problems with the company's equipment and trucking systems. Each reason revealed a pathway leading deeper into the organization. "Why is credit approval delayed?" the firm's leaders asked. "Because we are selling small quantities of steel to lots of small businesses, and Dun & Bradstreet doesn't cover them," came the answer. The company's senior managers encouraged small orders because they carried healthy gross margins—profit before selling, delivery, and administrative costs—in a business in which gross profit rarely exceeds twenty cents on the sales dollar. But the executives pursued this line of thought to another question: "Why do we think small orders are profitable?" This led to still another question: "Why do we think the costs are low?" The answers to that one rocked the executives: "Because we allocate costs based on weight of order." Why? "Because it's easy for the accountants to make the calculations at the end of the month."

## DRILLING DOWN

"Do you realize," one of the shop floor operators asked the senior managers—who by now were deep in the roots of the system—"how all those small orders clog up the warehouse? Our processing equipment is sitting around waiting to be loaded while the cranes are tied up with all these small orders. The crane doesn't care how much it lifts, but its speed is fixed. A hundred-pound load takes the same amount of time as a twenty-ton item."

Then the penny dropped for the managers: weight of order is not a cost driver; crane time is. And when part of the cost of filling orders is based on crane time, small orders look a good deal less profitable, and the bottom line on big orders looks a lot bigger. At the suggestion of the warehouse workers, the company put the popular sizes of steel in pigeon-hole racks on the outside of the building, where the steel could be pulled and loaded without a crane. And a till was set up to take cash and



credit cards, eliminating the need for credit approvals. The flow of steel through the warehouses improved dramatically.

By asking the question *why* over and over, the managers drilled down to the roots of the organization. They took a strategy—an abstract instruction to improve total customer satisfaction via on-time delivery—and turned it into timely, specific, visceral, hand-on-the-baking-sheet feedback across the entire organization. The machine operators, for example, could for the first time connect what they were doing with the overall corporate objectives. They realized that if the main drive motor on a cut-to-length line were to fail, the consequences for on-time delivery could be disastrous. So they installed sensitive microphones that picked up warnings of impending failure long before the motor actually stopped. Like Tiger

Woods, they could fix things before they broke. As far as they were concerned, on-time delivery had been changed into something actionable—the vibrations in the bearings of a drive motor. Throughout the organization the desired fruits of success were tracked back to their process roots—the activities that could be measured to yield the timely, specific, visceral feedback that is so essential to learning.

## POWER OF IMAGES

There is a tendency in North America to think that implementation is merely a matter of instruction and incentives: *do this and we'll pay you to do it*. But the evidence suggests that failure to implement is rarely a problem of instruction and incentives; rather, it's usually a problem of failing to learn from one's experience because of the lack of timely, specific, visceral feedback. Thus there is a discipline of implementation. Like good golf coaches, effective leaders use compelling images—pictures and feelings—to engage the people who work for them. And they can adjust their images to appeal to any audience. These powerful pictures and forceful feelings create the conditions for timely, specific feedback and the space and freedom for the exercise of initiative, allowing people not only to innovate but also to fix things before they break. When one reads of the employees of great companies doing extraordinary things to innovate in products and services, going well beyond the call of duty to keep customers happy, one realizes that these employees aren't following instructions; there are no rules. Rules emerge only after learning, as rationalizations of what worked. But during the creative process it's the senses that matter. When it's right, it just *feels* right, and when it's wrong, effective learners know it just as surely as if they had put their hands on the baking sheet. ✍