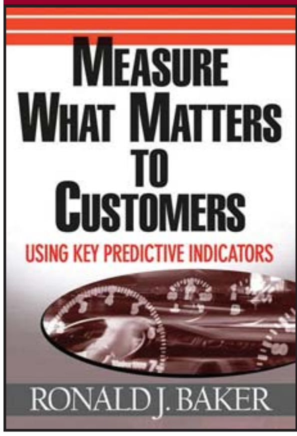
Managing by Results Versus Managing by Means



The debate rages on: Is it better to manage by results or manage by means? One can argue successfully in either direction, but the more defined path may actually veer more toward means. This article takes a clear-eyed view of this controversial topic. It was written by Ron Baker and is excerpted from the new book *Measure What Matters to Customers: Using Key Predictive Indicators*. The article is being reprinted with permission of the book's publisher, John Wiley & Sons. Ron, founder of the VeraSage Institute, blogs at www.verasage.com and will be speaking on this subject at the PPS Spring Conference being held in Atlanta on April 19-20, 2007. Ron can be reached by e-mail at Ron@verasage.com.

Sometimes the numbers don't explain everything. The numbers are not the business — they are symbols of the business.

— Gerald Deitchle
Former Cheesecake Factory Inc. CFO

Imagine four friends getting together every Friday night to play poker. Over the course of a year, Player A wins 75% of the time; Player B, 15%; Player C, 5% and Player D, 5%. Knowing these results with exact certitude, are you prepared to draw any conclusions regarding the outcome of the games?

We may be tempted to conclude Player A cheats, but we might also be tempted to surmise that Players B, C, and D have awful poker faces. In other words, looking at the results does not give us much indication of the process by which the games were played. For that, we would need to observe the games before making judgments.

This difference is the very essence of the debate between those who believe in what I am going to label "management by results," and others who advocate "management by means." The former claims its roots in the scientific method, while the latter draws on nature and biological analogies, describing businesses as interdependent systems that cannot be mechanistically manipulated, especially by measurements. This is such an important debate it is worth taking a historical detour to explore its origins.

Feuding Intellectuals: Results vs. Means

In 1987, Professors H. Thomas Johnson and Robert S. Kaplan published *Relevance Lost: The Rise and Fall of Management Accounting*, which was named in 1997 as one of the 14 most influential management books to appear in the first 75 years of *Harvard Business Review*'s history. The book is credited with launching the activity-based costing (ABC) revolution.

Despite their historical collaboration, these two thinkers have gone down very different paths as of late. Kaplan is doing pioneering work in the field of the Balanced Scorecard, and Johnson is moving on to what he calls "management by means." In fact, they are now feuding with each other, and have not spoken in years.

I thought it would be beneficial to compare and contrast the approaches these two seminal thinkers advocate, since this debate is far from over, and will influence management thinking for decades to come.

Management by Results

In their classic 1992 *Harvard Business Review* article, "The Balanced Scorecard: Measures That Drive Performance," Robert S. Kaplan and David P. Norton asserted their case for the Balanced Scorecard approach, suggesting companies link their strategic goals to measures in four areas:

- Financial Perspective
- Customer Perspective
- Business Process Perspective
- Learning and Growth Perspective

Declaring "What you measure is what you get," they also pointed out how the traditional measures of the industrial era were no longer relevant to the type of organizations many companies were aspiring to become — that is, knowledge-based. They also acknowledged "no single measure can provide a clear performance target or focus attention on the critical areas of the business."

On the Web site www.balancedscorecard.org, there is an example of measures used for a fictional airline, in each of the four areas just listed.

Here are the key predictive indicators (KPIs) suggested for each area, driven by the strategic mission of the airline:

Area	Objectives	Measures
Financial	Profitability	Market value
	Fewer planes	Seat revenue
	Increase revenue	Plane lease cost
Customer	Flight on-time	FAA on-time rank
	Lowest prices	Customer ranking
	More customers	Number of customers
Internal	Fast ground turn-around	On ground time
		On-time departure
Learning	Ground crew alignment	% Ground crew stockholders
		% Ground crew trained

Compare these KPIs to the three used by Gordon Bethune at Continental Airlines, as discussed in his book, *From Worst to First*: on-time arrival, lost luggage, customer complaints. Obviously, not all of these KPIs are going to be relevant hour by hour to each employee. Others are lagging indicators. Still, this is a superior approach to managing based solely on financial reports, because some of these KPIs do possess predictive capability.

Unfortunately, some companies have put together lengthy scorecards with a hodgepodge of indicators, many of which are lagging. Some consultants suggest upward of 25 KPIs, which is an attempt to boil the ocean. If the Balanced Scorecard is truly rooted in the scientific method, then surely many of the scorecards could benefit from a shave from Occam's Razor. There is no such thing as a free statistic, as Jeffrey Pfeffer, the Thomas D. Dee Professor of Organizational Behavior at Stanford Graduate School of Business, explains in an interview in *Fast Company*:

> There's an old saying in business: What gets measured is what gets done. What's happening today is the flip side of that. Measurement has become a tyranny that makes sure that nothing gets done.
>
> I've developed what I like to call the Otis Redding Theory of Measurement, which is named for his song, "Sittin' on the Dock of the Bay." In that song, Redding sings, "I can't do what 10 people tell me to do, so I guess I'll remain the same." That line sounds as if it could be about companies' misconceptions about measurement.
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> Companies have managed to convince themselves that, since what gets measured is what gets done, the more they measure, the more stuff will get done. Last summer, I met a woman who works for a large oil company, and she told me that the company has 105 measures for which she is responsible. So I asked her, "How many of those 105 measures do you pay attention to?" Her answer? "None." Because in the end, she's measuring so many things that she doesn't pay attention to any of them — 105 equals zero.

Some of the criticisms leveled against the Balanced Scorecard approach are patently unfair. Kaplan and Norton were very cautious and realistic about its shortcomings, writing:

> Even the best objective can be achieved badly. … Even an excellent set of Balanced Scorecard measures does not guarantee a winning strategy. The Balanced Scorecard can only translate a company's strategy into specific measurable objectives.
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> Senior managers may know what the end result should be, but they cannot tell employees exactly how to achieve that result, if only because the conditions in which employees operate are constantly changing.

As with any tool, the Balanced Scorecard can be used well or badly, and the originators should not be held accountable for faulty implementation of their ideas. That being said, the jury is still out on the effectiveness of this approach. As anyone who has ever worked in an organization can tell you: "Hold me accountable for a specific measurement, and I'll figure out a way to game the system." This is the intrinsic beauty of human nature.

Gaming the Measurement System

[Workers] will likely meet the targets — even if they have to destroy the enterprise to do it.

— W. Edwards Deming

There is an old medical school joke that asks: "What do you call a student who graduated hundredth out of a class of 100?" Answer: "Doctor." Without the context, this statistic is meaningless, as even the last-ranked student may still be a better doctor than all the other graduates from lesser-quality schools, or the alternative of no doctor at all. Even so, it is simply statistically impossible for everyone to have the top-ranked doctors.

Any measure is going to require judgment, otherwise manipulating numbers will become more important than creating value for customers. Consider the many ways clever people can improve on what is measured, especially if the focus is on quarterly results:

- Measuring on revenue per employee? We'll outsource what may be vital tasks, even at the expense of destroying customer value.

- Measuring time to market? We'll just make incremental, minor improvements to existing products.

- Measuring sales growth or imposing revenue targets? We'll add unprofitable customers. (See my previous book, Pricing on Purpose, for a more in-depth discussion of the harmful effects of this practice and what to do about it.)

- Measuring number of patents filed? We'll simply bypass the internal review process and file any idea we can.

It is hard to argue with results, and Toyota is one of the most respected companies in the world, having produced one of the highest-quality products at the lowest cost in the industry for years.

Heisenberg's Uncertainty Principle applies to all measures: that the observer in a scientific experiment affects the result. Consultant and author David Maister captures the essential difference between a measure and a judgment in a post on his blog:

> There is no quantitative system that cannot be "gamed." Some firms like to think that financial measures are "objective," but that's a delusion. They are not objective if people are making the numbers look good by hoarding work, failing to share and collaborate and thinking of their own metrics. What's objective about that?

Nevertheless, this one-metric mentality has recently been popularized by James Collin's 2001 best-selling book, *Good to Great: Why Some Companies Make the Leap… and Others Don't*:

> [W]e did notice one particularly provocative form of economic insight that every good-to-great company attained, the notion of a single "economic denominator." Think about it in terms of the following question: If you could pick one and only one ratio — profit per x (or, in the social sector, cash flow per x) — to systematically increase over time, what x would have the greatest and most sustainable impact on your economic engine? We learned that this single question leads to profound insight into the inner workings of an organization's economics.
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> Walgreens switched its focus from profit per store to profit per customer visit. Convenient locations are expensive, but by increasing profit per customer visit, Walgreens was able to increase convenience (nine stores in a mile!) and simultaneously increase profitability across its entire system.

So what would be the one metric for a knowledge company? I don't know. Perhaps value created per unit of intellectual capital, but we do not yet have the tools and methodologies to measure this (though models do exist that try).

On the other hand, perhaps it is the wrong question. I side with management thinker Charles Handy. In a lecture to the Royal Society of Arts in London in 1996, he described "the fallacy of the single criterion":

> Trying to find one number that is the sum of everything is misguided. There is never any one number that will actually explain success in life, and we are foolish ever to think that it might be there. Money certainly isn't it. Businesses know very well that profit is not the only measure. Sensible organizations now have about 18 different numbers they look at. Nevertheless, the myth pervades our society that if you are profitable, you are successful. Or if you're in the public sector, then efficiency is what matters. But efficiency is not quite the same as effectiveness. You can have a very efficient hospital if you don't take in very sick people or people who are not going to get better, like the old ones. So you push them outside. You're efficient but you're not terribly effective. Looking for the one number has corrupted our society.

Handy is right in one respect when it comes to the productivity of knowledge environments: the one criterion is not inputs based on cost or man-hours. That metric tells us nothing about how well a company is creating value. Maybe a more holistic, interdependent approach is needed, one whereby we strive to improve the means and enable the ends to take care of themselves. This is Professor Johnson's argument.

Management by Means

We had been collecting tons of statistics because they were interesting. But statistics will not construct automobiles — so out they went.

— Henry Ford, *My Life and Work*, 1922

Imagine you're planning to construct a building, let us say a 50-story hotel. It has been estimated that most of the mistakes are made in such a project on the very first day. When just 1% of the project costs have been spent, up to 70% of its life-cycle costs have most likely been committed. It certainly pays to get the process right before you spend the first dollar, so you will end up with the results you want, at the right total cost.

This is what makes the H. Thomas Johnson and Anders Bröms book, *Profit Beyond Measure*, such a seminal work, although not yet fully developed. And while I have severe misgivings about some of the environmental rants in the book, when he profiles Toyota and Scania — the latter now owned by Volvo — as two manufacturers that do not have a standard cost accounting system, he is on firm ground. It is hard to argue with results, and Toyota is one of the most respected companies in the world, having produced one of the highest-quality products at the lowest cost in the industry for years. It has an unbroken record of profits, with zero layoffs, since 1960 — a record unparalleled in the industry — and is a fierce innovator, and ranks top in any measure of productivity you care to analyze.

As Glenn Uminger, a financial controller at Toyota Motor Manufacturing-Kentucky (TMM-K) — which Johnson studies in depth in his book — since 1988, says: "TMM-K has never had a standard cost system to track operating costs, and we probably never will." So how do they do it? How can a manufacturing company run without a standard cost accounting system? First, Toyota understands price drives costs, not the other way around. Here is how Johnson and Bröms explain it in *Profit Beyond Measure*:

> None of these comments is meant to imply that Toyota does not have accounting and production planning information systems. Of course it does. Toyota has a comprehensive array of information systems, accounting and otherwise, with which to plan, in advance of operations, and to report results of operations after the fact. But information from such systems is not allowed to influence operational decisions.
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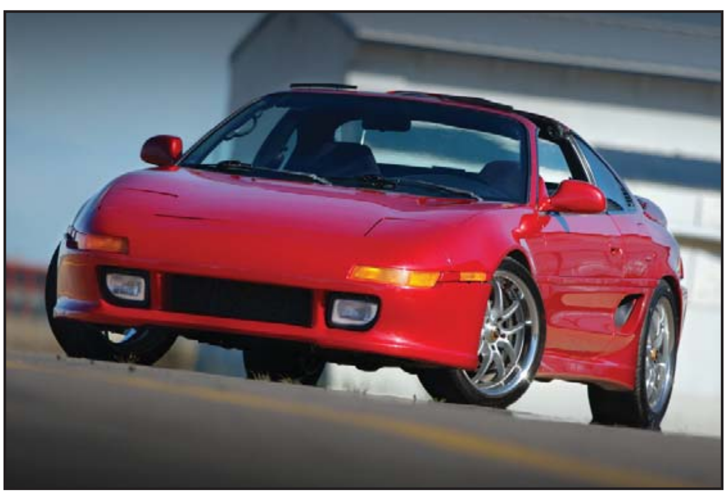
> Toyota management discharges its responsibility for costs not by taking arbitrary steps to manipulate operations, but largely in the vehicle planning stage. During the design stage, long before the first penny has been committed to making a vehicle, Toyota has always placed enormous importance on setting and achieving cost targets. To do so, over the years Toyota has developed a famous technique for target costing. Simply stated, target cost is the maximum cost the company can afford to incur to produce and sell a vehicle and still earn a required profit at the price customers are expected to pay.



Johnson goes on to explain his theory that Toyota operates under "management by means" rather than "management by results." It is an interesting viewpoint because it treats the organization as a living system, based on interdependent relationships, and those are nearly impossible to quantify. He notes Dr. Edward Deming's observation that over 97% of the events that affect a company's results are not measurable, while less than 3% of what influences final results can be measured:

> Managers who adopt the new thinking offered here will accept as second nature the idea that what decides an organization's long-term profitability is the way it organizes its work, not how well its members achieve financial targets. This chapter compares the long-term records of Toyota and the American "Big Three" automakers to demonstrate the truth of this proposition. It posits Toyota's principles as an example of new management thinking called "management by means." Management by means is the antithesis of "managing by results," practices identified … with Toyota's American competitors. Those who manage by results focus on bottom-line target and consider that achieving financial goals justifies inherently destructive practices. Those who manage by means consider that a desirable end will emerge naturally as a consequence of nurturing the activities of all employees and suppliers in a humane manner. Managing by means requires a profound change in thinking that is a bold alternative to conventional management thinking and practice.
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> Management accounting simply takes accounting revenue, cost and profitability information, which is appropriate for measuring the overall financial results of a business, and inappropriately attempts to trace it to the particular activities and products of the business that gave rise to those results. Assigning such quantitative measures to parts of a mechanistic system makes sense. However, the parts of a natural living system cannot be so treated. Accounting measures are unable to penetrate the organic, multifaceted union between customer and company that ultimately is the source of a company's financial results. This union is the reason any company exists.
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> Because cost and profit are not objects, but are properties that emerge from relationships, quantitative measures can only describe them, they cannot explain them. Quantitative measures, unlike art, music or the stories and myths that humans fashion with words, cannot convey understanding of the multidimensional patterns that shape the relationships from which results, such as cost and profit, emerge in a living system.

Henry Ford certainly agreed with this target-costing approach because the most optimal time to plan total costs is before you build something, as he makes clear in his autobiography, *My Life and Work*:

> Our policy is to reduce the price, extend the operations and improve the article. You will notice that the reduction of price comes first. We have never considered any costs as fixed. Therefore, we first reduce the price to the point where we believe more sales will result. Then we go ahead and try to make the prices. We do not bother about the costs. The new price forces the costs down. The more usual way is to take the costs and then determine the price; and although that method may be scientific in the narrow sense, it is not scientific in the broad sense, because what earthly use is it to know the cost if it tells you that you cannot manufacture at a price at which the article can be sold?

Notice Ford "never considered any costs as fixed." He understood, in the long run, all costs are avoidable, and by subjecting every cost to the test — does it add value to the customer? — he was able to lower the costs in the factory:

But more to the point is the fact that, although one may calculate what a cost is, and of course all of our costs are carefully calculated, no one knows what a cost ought to be. One of the ways of discovering what a cost ought to be is to name a price so low as to force everybody in the place to the highest point of efficiency. The low price makes everybody dig for profits. We make more discoveries concerning manufacturing and selling under this forced method than by any method of leisurely investigation.

Ford also understood the division of labor between a cost accountant and an effective factory foreman:

> The rate of production and the cost of production are distinct elements. The rating of a department is gained by dividing the number of parts produced by the number of hands working. The foreman need not be a cost accountant — he is no better a foreman for being one. His charges are the machines and the human beings in his department. When they are working at their best, he has performed his service. The rate of his production is his guide. There is no reason for him to scatter his energies over collateral subjects.

As opposed to the cost accounting, or activity-based costing, concept of "cost drivers," managing by means uses "cost purposes." Cost drivers assume certain activities drive costs, irrespective of their relationship to revenue. Cost purposes, by contrast, are driven by those items that create value, hence are "blessed by revenue"; therefore, cutting costs to increase profitability is the equivalent of cutting purposes, reducing value and, hence, profits.

> Today's business leaders use cost accounting to control and assess the work that leads to results. You can use accounting to describe a business' external condition, but it offers little insight into the particular inner relationships that determine those results. It is unable to penetrate the organic union between customers and company that ultimately is the source of a company's financial results.

Johnson's argument particularly makes sense when you consider that in an industrial-age enterprise, value is largely created through transactions, and accounting systems are very proficient in recording these. Conversely, in an intellectual-capita enterprise, value is created by intangible investments in human, social and structural capital, and precedes, sometimes by years, any transactions. This is certainly true with Amazon, Google, AOL or pharmaceutical R&D. Accounting is far less proficient in understanding how these costs create value; hence, it tends to treat them as period expenses, subject to cuts if times get tough. It illustrates well the dichotomy of cutting activities that drive cost at the expense of those that drive purpose.

The British philosopher Ludwig Josef Johan Wittgenstein wrote, "That which you do not know, you should shut up about." This is good advice for cost accountants, who are often wrong but never in doubt when it comes to determining the correlation between costs and creating value. Conventional training in cost accounting offers little help here, since it not grounded in theory. Being able to audit the drunk's bar bill offers little help in changing his or her underlying behavior.

In a paper entitled, "Reflections of a Recovering Management Accountant," which was presented at the Society for Organizational Learning prior to the publication of *Profit Beyond Measure*, Johnson included an open conversation with Peter Senge and Bill O'Brien:

> **Senge:** Tom, I don't think you said Toyota doesn't measure anything. You did say something about how they don't use the measures.
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> **Johnson:** Yes, it's the way they don't use them that I find interesting, not the fact that they do not measure. Toyota measures; they just don't drive actions with quantitative targets.
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> **O'Brien:** They don't use it to motivate action.
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> **Johnson:** Right, they don't use measures to drive decisions about how work should be done and what work should be done and so forth. Of course, they have an excellent accounting system. They invented what we call "target costing." But that's a descriptive measurement concept, really. It's an ex-ante tool, employed before the work is even started. But once the work begins, cost targets play no role in influencing operational decisions. The things that guide the work come from a different level of abstraction than quantitative measures come from. Guiding the work are things that aren't measurable. Over time, they develop systems and patterns of behavior that are deeply ingrained in people. These are deep disciplines they have in order to know "how is the work flowing?" Do we have a capability to detect normal from abnormal? These are the types of things they focus on, that everybody comes to know.

Andrew Carnegie's favorite saying was, "Watch the costs, and the profits will take care of themselves." Kaplan would say, "Measure the result, and the means will take care of themselves." Johnson is saying, "Nurture the means; the results will take care of themselves." And I argued in *Pricing on Purpose*, "Watch your value, and the profits will take care of themselves." The truth, most likely, lies somewhere in between, which is why I have borrowed ideas from both of these thinkers. Though, I suspect even Peter Drucker might have agreed more with Johnson's approach:

> I do not believe that one can manage a business by reports. I am a figures man, and a quantifier, and one of those people to whom figures talk. I also know that reports are abstractions, and that they can only tell us what we have determined to ask. They are high-level abstractions. That is all right if we have the understanding, the meaning and the perception. One must spend a great deal of time outside, where the results are. Inside a business, one only has costs. One looks at markets, at customers, at society and at knowledge, all of which are outside the business, to see what is really happening. That, reports will never tell you.

Not Last Words

No one business book or article will be able to settle this debate conclusively, and I will leave it up to the reader to think for him- or herself which method — or combination thereof — you believe is best for your organization.

Perhaps a good way to think about this dichotomy is if you know exactly the behavior needed for a worker to perform his or her job, then input and productivity measures will probably work. If you don't know what a worker needs to do — as is the case with most knowledge work — then leave the worker alone to figure out the means and measure the results.

Theories only progress through dissension, so I look forward to the feud between managing by results vs. means continuing. Central bankers have long understood what they term Goodhart's law: Any target that is set quickly loses its meaning as it comes to be manipulated. There has been a debate raging ever since the creation of central banking systems over whether monetary authorities should pay attention to interest rates or changes in the money supply. One finds compelling arguments on each side. But this may be a false choice. The Good Lord gave us two eyes, and one can be used to monitor results while the other watches the process.

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To the extent companies continue to track lagging indicators, even with the Balanced Scorecard approach, this is nothing more than modern-day pantometry — that is, universal measurement, or simply counting for the sake of counting. To the extent they posit leading indicators that can actually be falsified, they will make progress in determining the real value drivers for customers. The experience with the Balanced Scorecard so far has been mixed, with some companies abandoning them. This, of course, does not falsify the basic premise — the companies in question could just have bad strategies — but it is a sign that companies need to pay closer attention to the processes that drive financial results.

It is for this reason I find Johnson's argument more compelling, and more conducive to a knowledge environment. Of the two eyes, the one focused on financial results will always be more myopic. In the intellectual capital economy, we are just going to have to become more comfortable with judgment and intuition over measurement and counting.

We will have to pay more attention to the process that produces the measurement, rather than blindly thinking, "What you can measure, you can manage." After all, you do not change your weight by measuring yourself.