**Scorecard Whitepaper**  
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**Why Scorecard?**

Organizations have always had a scorecard of one sort or another long before the concept of balanced scorecard came along. Measuring the performance of a business or government organization is hardly new. There have been accountants in companies for hundreds of years. What is new, is to balance out the performance measures by looking at stakeholders other than owners, looking at more than just measures having to do with money, and balancing out the past-focused measures with some that look at the present and future performance of the organization.

The reason so many organizations have become interested in the balanced scorecard approach to measurement is that they have found that their traditional lagging indicators of financial performance do not provide an adequate view of the overall health of the enterprise. Companies have shut their doors with good sales and profits until the day they went out of business. Labor problems, customer dissatisfaction, a poor image, failing to meet regulatory requirements, lack of new products, and a variety of other factors have caused the demise of businesses. These problems are easy to see when there are catastrophes such as Sears loosing several billion dollars, or Enron, Adelphia, Worldcom, and others finding that their executives are being carted off to jail or that the company has to file bankruptcy. By the time problems get this bad, you don’t need a report or scorecard to know you are in trouble. The key is to have measures that predict problems like this before it is too late to deal with them. Most scorecards in companies include “heart attack” measures like this, but lack cholesterol measures that could have predicted problems years before the heart attacks occurred.

What balanced scorecard is all about is putting together a well thought-out set of gauges that provide a picture of the organization’s health yesterday, today, and tomorrow, and from the point of view of all of its important stakeholders. Balanced scorecard is not about trying to measure everything. In fact, most scorecard projects I’ve been involved with entail eliminating about 60% or more of the measures that do not provide meaningful data. Balanced scorecard means every manager from first line supervisor up to the CEO has 12-20 gauges to provide them with data on how their part of the organization is performing.

Even an organization as small as mine (one person) needs a scorecard. I don’t do employee or customer surveys, but I do track several measures of financial performance and several leading indicators such as book sales, business cards received at speaking engagements, and a few other things. All non-profit and government organizations need scorecards as well to show them how they are performing for groups like taxpayers that pay their salaries.
How does scorecard tie in with strategy, budgeting, operational planning and other systems?

The scorecard is not a separate project or set of numbers, it is the set of numbers used to run the business. About 75% of the measures or gauges should relate to the mission of the organization or what it does for a living. There should be goals for financial performance, customer satisfaction, employee satisfaction, and meeting operational requirements for things like quality and productivity. The remaining 25% of the gauges on the dashboard should provide information on how the organization is progressing toward its vision. The vision is a future-focused statement that identifies where the organization wants to be in 3-5 years. These strategic gauges link to the most important things the organization needs to focus on to achieve the vision. For example, when Ericsson was trying to go from number 8 in market share in the cell phone business to number 3, one of their strategic gauges was brand recognition.

I see some big corporations that try to link all of their measures to the vision of the company and this is a huge mistake. Most of the measures will have nothing to do with the vision, but should link to the mission or the basic business the organization is in. Part of why this happens is that the vision statement is often a re-statement of the mission, which describes what the company does for a living. Both a mission and vision are important for all organizations, but they should be clearly different. While you are out chasing your vision of market share, growth, recognition, or whatever the vision is, you still need to mind the store and take care of basic things like sales, margins, customer service, employee morale, and other things. Hence, 75% of the gauges on the scorecard should tell you about how those basic factors are performing. The remaining 25% should be more strategic in focus and link to the vision. If you ignore the core mission-related gauges you won’t be around next year to think about things like vision.

What I am saying is that the scorecard is the foundation of the company’s core business strategy. It needs to link to planning, performance appraisal, compensation, budgeting, and other major systems. More than half of the business and government organizations I consult with do not have a clear mission, vision or set of values to start with, and hence their scorecard is built on a shaky foundation. The basics of your core strategy need to be figured out before the scorecard can be built. Once you are certain that the metrics are valid, then you can think about linking other things to the scorecard such as compensation, budgeting, and improvement initiatives.

How does a scorecard compare with ‘key performance indicators’, or other measurement systems and processes?

There is no difference between scorecard measures, key performance indicators, process measures, etc. All of these things are measures of how all or part of the organization is performing. Each part of an organization cannot be assessed by looking at a single number or measure, so a number of measures need to be identified that address different aspects of performance, such as financial results, quality, and customer satisfaction. The scorecard for a person running a company or business unit would include different
measures than the scorecard for a person running a machine in the plant. However, both individuals need a scorecard to tell them how they are doing.

The big advantage of implementing a balanced scorecard from the top down in an organization is that it forces alignment. If you start with the big boss, and then do scorecards for the boss’s direct reports, those scorecards need to collectively make the boss’s gauges hit the targets. As you cascade down the organization you see lower level measures of products and processes that need to contribute to the higher level gauges. Hence, all performance measures must somehow link to an important outcome for the organization. Outcomes are not just profits either. An outcome might be happier customers who bring in more business or refer others, or a happier safer place to work for employees. All the ‘under the hood’ measures need to somehow link to the success of the organization or the measure does not belong on anyone’s dashboard.

I see a lot of superstitious process measures in service organizations. Manufacturing organizations tend to have good process measures because they are based on research to identify the critical process variables and standards that link to product quality dimensions. Service organizations often have stupid or superstitious process measures that do not link to important outcomes. For example, airlines measure whether or not they can shut the door of the plane on or before the scheduled departure time. What this sometimes means is shutting the door early and turning away customers who did not arrive at the gate 10 minutes before the departure time, shutting the door, pulling away the jet way, and sitting on the runway waiting for 45 minutes to take off. Shutting the door is considered ‘take-off’ according to the FAA. Salespeople are often measured on ridiculous behavior measures such as how often they call on customers, whether or not they prepare clearly-written call reports, show up for sales meetings, go to training, and any number of other process measures. Yet, the most successful salespeople often get the worst scores on these process measures. Training managers judge their success by counting butts in the classroom. There is no end to the superstitious behavior-based measures I have seen in government and service organizations.

The test of a good process or behavior measure is that there is proof indicating that it predicts a meaningful outcome and that it drives the right behavior from employees. Rarely do I see such research backing up process measures. Rather, there is a lot of faith, hope and other factors in place driving these metrics. These superstitious process measures are very dangerous because they give the management a false sense of security that everything is fine when, in fact, it probably isn’t.

**How do quality initiatives like Activity Based Management (ABM), Six Sigma, and Baldrige tie into the scorecard process?**

There is a huge difference between the Baldrige model and approaches like ABM/ABC and Lean manufacturing or Six Sigma. The Baldrige model is the most widely accepted systems model for looking at any kind of organization from business to government, to school. Just about every major country in the world has adopted it. **The Baldrige model**
is not about quality or TQM and has not been since 1995. Section 7 of the Baldrige model (where 45% of the points are) asks for four categories of results: customer, financial, human resources, and operational. These correspond to the four types of performance data in most balanced scorecards. The Baldrige model also asks about scorecard measures in the Leadership (1.1) section, Strategic Planning (2.0), and Information and Analysis (4.1) sections. Human resource and process measures are asked about in sections 5.0 and 6.0 of the Baldrige model. Hence, having a good balanced set of measures is a huge part of implementing an approach like Baldrige in an organization. There is much more in the Baldrige model than simply having a good scorecard, but it is certainly part of the foundation of any Baldrige-winning organization. So, balanced scorecard and Baldrige are not two competing models. Baldrige looks at all major components of running a successful organization, and is a very broad model. Balanced scorecard is much narrower and simply looks at the way the organization measures its performance. All Baldrige winners can be found to have good scorecards, but most organizations with good scorecards could not win a Baldrige Award.

Now, on to the other approaches like Six Sigma, Lean, or ABC. These are all very specific ways of improving quality, productivity, or reducing costs. All involve collecting data, analyzing the data, and making changes to the way things are done to improve performance. All of the measures involved in these performance improvement programs should ultimately link to scorecard measures for the big boss. In other words, if programs like six sigma or lean are successful, they will lead to reduced costs, higher profits, greater customer satisfaction, and other key outcomes. So, the measures for these programs do directly link to the balanced scorecard of an organization. For some individuals in the organization, these measures from initiatives like six sigma may be part of their scorecards. For example, a manufacturing manager might have defects per million as one of his scorecard measures. Even the big boss might be interested in having some of these measures on her dashboard. The point is that the measures linked to any of these improvement initiatives should link to important outcomes for the organization or you should not be doing them.

The key with any of these programs is to think about balance. There are a lot of organizations that implemented TQM or continuous improvement programs in the 1980s and 1990s only to find that other aspects of performance got worse. Quality improved but morale deteriorated, or profit margins declined because of the costs associated with improved quality. All of these improvement initiatives tend to focus on either quality or costs. These two factors by themselves do not make for a healthy organization. The scorecard provides data on quality and costs, but also provides information on employee satisfaction, safety, new product/service development, customer relationship building and other factors. Management fads come and go and five years from now you can bet there will be some new three-letter programs everyone is enamored with. Balanced scorecard is not a fad or program, it is a logical way of measuring how the organization performs on its mission and vision.

What are the usual suspects of measures and how do these differ from industry to industry?
Most industries have their own preference for financial measures and some operational statistics. Some like economic value-added rather than profit, some like EBITDA, some like defects per million, or cost of goods sold. It is rare that I need to go in and re-do the financial or operational measures of an organization. Most of these are tried and true, and have been proven to be valid. Almost all of them are lagging or past-focused metrics though. Where most of the work needs to be done is coming up with predictive or leading indicators that link to these outcome measures. Also, it is rare to find an organization that does a good job with its employee or customer measures. I still see a lot of annual surveys of customers and employees that provide mostly useless data. There are a few good ones out there that actually link to outcomes, but 90% or more of what I’ve seen are garbage. The Gallup organization’s 12-question employee survey is the only one I know of that is based on sound research and is linked to important outcomes. Most customer surveys do not do a good job of predicting customer-buying behavior. The customer and human resources sections of the scorecard are the ones needing a major overhaul in most companies. I have seen a few companies that have good measures in these areas, but not many. FedEx has some pretty good measures in these areas, as does IBM.

Here’s a list of some of the most common bad metrics I’ve seen:

Employee turnover
Training attendance
Annual employee satisfaction survey
Cost of non-conformance or re-work
Customer complaints
Customer surveys
Lines of code per day for software developers or pages/day for writers
% Budget spent for government organizations
Average call length for call centers
# of lost time accidents.

Some of these measures are questionable because they may show positive or negative performance – some turnover of poor performers is good, for example. Customer and employee surveys are easy, but are not done often enough and rarely predict future behavior. Measures like call length in a call center or lines of code for software developers end up driving the wrong behaviors from employees.

Most of the good measures I have seen are indices made up of several sub measures. For example, Ciba Pigments, a division of Novartis, has a safety index that is 50% based on accidents and severity, and 50% based on preventive measures like safety audit scores, training, and wearing protective equipment. It is rare to find a single metric that provides a good overall view of something complicated like customer satisfaction, employee morale, or safety.
Why automate the scorecard, what value does this bring?

A small shipping company I worked with in Long Beach, CA used a manual approach to communicate performance data. In their customer service department they made a big bulletin board that looked like the dashboard of a car, containing about 10 measures. Every morning, the manager would compute performance from yesterday, using worksheets, and move the needles on the dials to show performance on the dashboard. Employees checked out the dashboard each day because it was fun to get feedback on how they performed, and their bonus was linked to making all the gauges ‘green’ or hitting their targets. This low-tech approach actually worked quite well, and the company ended up putting dashboard bulletin boards in other departments as well. The big upside to an approach like this is that it is cheap and easy. No software to buy, no system that can malfunction, and no computers to use in creating reports or performance charts. The downside is that it was very time consuming to calculate performance on a dozen or so measures each day and keep the gauges updated on a daily basis. Further, the dashboard showed the performance of the whole department, and people like to see how they individually performed.

Another government organization I worked with had a more high-tech approach. They had a full-time employee compute performance and create graphs and charts each day using existing software like Excel Spreadsheet and PowerPoint. Charts were then distributed electronically to managers, prepared as slides for meetings, and hard-copy reports. Again, no money was spent on software the organization did not already own.

While both of these approaches do work, most of my clients in both business and government have elected to purchase one of the scorecard software packages on the market. Such a system pays for itself or provides a good ROI several ways. First of all, no one has to key-in data. Data are pulled from existing databases and put into the scorecard format. No one has to manually create charts and graphs, which often saves over $100,000 that you might may for a few administrative employees to do this. A second way this saves money is that analysis of the data is possible very quickly. This saves time in extra meetings, phone calls, emails, and other methods of trying to figure out why a particular performance gauge is red or yellow. The software packages on the market today allow managers to ‘drill down’ many layers into the data to determine the root cause of a problem. This speeds up problem solving and allows for more accurate decision-making. Another big advantage of automating the scorecard that I have seen with several of my clients is that the amount of time managers spend going to meetings looking at performance data declines significantly. A military organization I worked with, for example, used to have a monthly meeting of all the top leaders (20+ people) for an entire day (8-10 hours). After they implemented the balanced scorecard and put everything on their intranet set, the length of the meeting went from 8 to 2 hours. Multiply the cost savings times hundreds of managers experiencing a similar reduction in meeting time, and the software paid for itself in the first few months.
I have been to user group meetings of several scorecard software vendors and I have seen a lot of bad scorecards with dumb metrics put into nice green, yellow, red intranet-based charts though. First make sure that you have good measures, and then think about using the software to automate the system and communicate performance in an easy-to-understand fashion. Don’t wait until you think the scorecard is pretty well finished. It will never be finished. You will always be adding, deleting, and changing measures as you learn things, new strategies are developed, or problems arise. Most of my clients buy the software at the beginning of the scorecard initiative and start gradually ‘lighting up’ the dashboard as data are collected on each of the metrics. At the risk of sounding like a software salesman, I think these programs do allow organizations to dramatically improve the extent to which they manage with data by getting real-time access to performance, and being able to look under the hood, or drill down as deep into the data as needed to find out why targets are not being hit. There is still way too much ‘shoot from the hip’ management going on out there, and this allows you to put more science into running an organization.

What would you tell a client to look for when evaluating scorecard software?

**Compatibility**
A first concern might be whether or not the software will work with the existing hardware and software the company has. A client of mine purchased one of the software packages and was told by the salesmen that everything would be hooked up with a few days work from a Systems Engineer(SE). The client ended up having to hire several SEs from the company for several weeks to get everything to work properly. They also had to pay thousands of extra dollars that were not in the original bid.

**Graphics**
Another thing I would look for is the graphics. Some of the software has charts and screens that contain way too much information and is hard to read. I would use some of the same data and present it to a sample of employees using the two or three software graphic formats you are considering and see if they understand what the charts are saying, and which format they prefer. Some software uses gauges that look like the dashboard of a car, some have color-coded bars, some use other graphing formats. See which one your people prefer.

**Flexibility**
Some software requires that you use Kaplan & Norton’s model for your measurement categories, others allow you to use whatever you want. Some only allow red,yellow green colors to show performance, others allow a rainbow of colors. Some scorecard software requires that measures are all weighted in percentages and roll up to one overall measure of a dimension of performance such as financial results or customer satisfaction. Some packages allow connections to other performance information like word documents or spreadsheets; others do not.

**Analytical Capability**
Some of the software allows many different types of analyses to be done with the data. For example, most organizations like to be able to ‘drill down’ into the data to determine why targets might not be met in a particular part of the company. Finding links or correlations between softer measures like employee morale or customer satisfaction and
hard measures like profits or margins is also important. See what sort of analytical capabilities the software has and how cumbersome it is to use. One of the main benefits of using a scorecard software package is being able to quickly and accurately identify problems and diagnose their causes, so make sure the software can do this. Some of the packages I’ve seen are not much better than on-line data bases with improved graphics.

**Stability of the Company**

This is one of the most important factors. You want to buy from a company that is going to be around in the future. Several scorecard software companies have gone out of business in the last few years, and you don’t what to buy from a company like that who may not be around to provide you with new releases and other support.

**Customer Service**

Try talking to some of the software company’s other clients and ask them how long they wait on hold when calling in with a question or problem. Ask about the competence of the people they deal with at the software company. Ask about how the company incorporates customer feedback into new releases and how often. In short, find out what kind of service you are going to receive after the software is installed. Software companies are not generally known for their service, so if you find one that is really customer-focused, this is the company to buy from. If you compare prices and features of the different scorecard software packages on the market, the best ones are all very similar. The differentiating factor is the company you are buying it from and their service level and stability.

### What are some of the biggest mistakes you have seen organizations make in designing or implementing the balanced scorecard approach?

My job often involves coming in a few years down the road to help companies fix dysfunctional scorecards, so I am grateful for the mistakes. I could write an entire book on the mistakes I have seen organizations make in designing and implementing scorecards. (Come to think of it, I have already written two books on this – enter my name on amazon.com.) I have talked about a couple of the more common problems already. Not having a clear mission, vision, and set of values is a huge problem with many scorecards. I have seen two what I would call architecture flaws in scorecards, and one that is a flaw in deployment versus design.

1. **Designing the Scorecard Architecture Around Key Processes**

   One fairly common mistake is to use the organization’s key processes as the overall framework of the scorecard. A major Fortune 100 manufacturer designed their scorecard this way. The categories of measures were key processes such as research and development, marketing, manufacturing, supply chain management, distribution, etc. Since all units of the company had processes like this, it seemed like a good common architecture for the scorecard. The problem with this approach is that it does not focus on outcomes or satisfying the needs of various stakeholders. Producing outcomes like happy customers and profits involves many processes – not one or two. The scorecard architecture should be focused on the different stakeholders and their needs – not processes. The two most common scorecard
models are Kaplan & Norton’s four categories: 1.Customer, 2.Financial, and 3. Internal, and 4.Learning, Innovation, Growth, or the Baldrige result categories of 1. Customer, 2. Financial/Market, 3. Human Resources, 4. Organizational Effectiveness. Both these models are quite similar and provide a balanced set of categories that address the different stakeholders. You do not need to adopt a textbook model like one of these as is, but it should approximate one of these approaches.

2. Designing the Scorecard Around Goals and cascading it Down Using Strategy Maps.
This approach appears to come from Kaplan & Norton’s most recent book about the ‘Strategy-Focused Organization’, and the model seems to have been misinterpreted by many. I recently reviewed the dashboard of a major Fortune 500 energy company that designed their scorecard around 12 or 15 goals, and then cascaded this same architecture down to the units and departments. The goals made sense at the corporate level and addressed things like reducing supply-chain costs, improving diversity, and increasing margins. When this architecture got down to the unit or department level, the categories of measures did not make sense. Each department or unit had to come up with measures that linked to all of the goals, and many had no relation to some of the goals, and putting measures in place was meaningless. For example, a department that had no real suppliers struggled with a metric linked to improving supply chain management. Another department that has 11 people suggested tracking diversity and turnover, which would both be obvious without collecting any data.

The U.S. Army has adopted this “Strategy Map” approach to designing a scorecard for the entire Army and then cascading it down to other units and locations. There are some serious structural flaws in this scorecard as well. Some of the goals sound good, but the measures do not provide data on achieving the goal. For example, one of the goals is to improve leadership of the Army, which is fine. The measure of this is how many people have attended some three-day leadership course – butts in chairs. I highly doubt that there is a link between effective military leadership and attending some management-training course. Some of these bad measures and goals are now being cascaded down throughout the army and units are having trouble finding the link between what they do, and some of the overall Army goals.

Strategy mapping is a great concept for ensuring that lower-level gauges lead to success on higher-level gauges. However, too many of those lower level gauges are being identified without any research to prove their validity.

3. Not Cascading the Scorecards Down far Enough in the Organization.
Many business and government organizations design scorecards for the big boss, and the next couple of layers, and then communicate performance to all employees of a department or unit. Unless the scorecard is cascaded down to small teams and even individual employees, it has very little chance of changing behavior. Most of the people work at the bottom of the organization, not the top. People are only interested in data that they can influence. Showing an hourly worker how the whole plant
performed is kind of meaningless. Salespeople are not really interested in how the entire team did in meeting sales goals; I want to know how I did. People like to get feedback on their performance. To make that feedback interesting it has to be on measures that we can strongly influence. Many, if not most, large organizations make the mistake of not developing scorecards for teams and individual employees and then wonder why employees are not more interested in company performance.

There was a fad that became popular several years ago called “Open Book Management”. This involved teaching all employees to read a balance sheet and communicating company performance to all levels of employee. While this sounds great in theory, many found that employees’ eyes glazed over quickly in these courses designed to teach them to understand concepts like gross margin, assets, and productivity. The answer is not to run classes to teach workers how to understand the boss’s dashboard. The answer is to give each employee his or her own dashboard that measures things about their job performance. I am all for open communication and sharing of performance data with employees. But, not everyone needs to understand all of the measures on the boss’s dashboard.

**What is the value of standalone versus integrated performance management?**

There is no value in making the scorecard a standalone project or initiative. In fact, it could be hugely detrimental and confusing to the organization to do so. Embarking on a scorecard initiative means that you are going to fundamentally change the way you measure success in your organization. It means that you have to reject the paradigms that say financial performance is all that matters, and that these soft measures of things like customer and employee satisfaction do not really translate to the bottom line. It also means accepting the idea that shareholders or owners are not your only important masters.

Without linking the scorecard to strategic plans, compensation, performance appraisal, monthly company review meetings, annual reports to shareholders, operational plans, budgeting, improvement initiatives, and other systems, it is a waste of time. Aside from communication, the single biggest problem I see in just about all large government and business organizations is alignment. In fact, Drs. Kaplan and Norton have a new book out in 2006 that is about alignment. People are going off in too many different directions participating in too many conflicting three-letter management programs and improvement initiatives and trying to get better at too many things. All this leads to chaos and confusion. The main benefit of an approach like balanced scorecard is that it forces an organization to think through important issues like where do we want to be in 5 years (vision) and what do we stand for (values) and it asks that you measure these important things. Every employee understands the direction and mission of the company and has a dashboard that tells him how am I doing at my piece of the mission and vision. This is how organizations get aligned and accomplish great things.
Any final thoughts on measuring performance or scorecards?

I was with a company last week called K&N Engineering that grew from a garage business in the 1960s to being a major firm that is the market leader in their industry, with hundreds of employees and an outstanding brand image without a scorecard or strategic plan of any sort. A great product idea, some smart and hard working people, some luck, some experience, and good timing are how this company became a leader in their field. We can all think of companies like this. However, the founders retire, some of those smart hard-working employees retire or leave. The market changes. Someone rips off your great idea and makes it cheaper, and running by intuition and experience no longer works. Having the right numbers to look at is the key to success in any operation. Bad numbers lead to bad plans and poor decision making. Balanced scorecard is about figuring out what those right numbers are for your organization. A balanced scorecard will not make you more money, just as three day physical from UCLA will not make you healthier. The key is looking at those numbers, finding the important ones for you, and then use your experience and the expertise of others to improve the numbers and achieve your goals.

About the Author

Mark Graham Brown has been consulting with organizations on performance measurement and management systems since 1979. He is the author of the first and best selling book on the Baldrige Award criteria, currently going into its twelfth edition. He has consulted with companies and government organizations in the U.S. and fifteen other countries, and his clients list includes companies like Ericsson, Motorola, Ford, IBM, Cargill, Medtronic, Anheuser Busch, Bose, Navy, Marines, Coast Guard, Department of Energy, Environmental Protection Agency, and Department of Transportation. He has written two books on balanced scorecard: Keeping Score – Using the Right Metrics to Drive World-Class Performance (1996), and Winning Score – How to Design and Implement Organizational Scorecards (2000). His latest book was released in 2004 and is called: Get it, Set it, Move it, Prove it – 60 Ways to Get Real Results.

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EXECUTIVE SUMMARY

Every organization keeps track of some numbers that tell them about the health of the enterprise. The trick is coming up with the right mix of measures that provide a balanced view of how the organization performs for its various stakeholders, and how it will likely perform in the future. Selecting the right measures is important because people focus on what gets measured. In order to drive the right behavior, it is important not to trade off one measure for another, and to make sure there is balance in the measures. For example, short term profits can be increased by cutting back on service to customers, but this may lead to the long-term failure of the organization.

Measures also need to link to the organization’s vision for the future, so it can track progress toward this and other future goals. Once the right measures are selected that provide a picture of overall organizational health, the next task is to communicate the data to the right people in a timely fashion. Having access to real-time performance data is crucial for most organization’s today. Waiting until the next monthly meeting to see how we are performing is not sufficient in today’s world. Products like Hyperion’s scorecard software allow an organization to communicate performance in easy to read on-line charts, and to drill down into the data to analyze the causes of problems. Having the right numbers to review in a timely fashion is only a small part of achieving excellence, however. You still have to know how to interpret the data and decide the right course of action to make performance hit goal levels.