



Measuring Strategy for Breakthrough Performance

An Introduction to The Balanced Scorecard

Written by Chris Lonsdale
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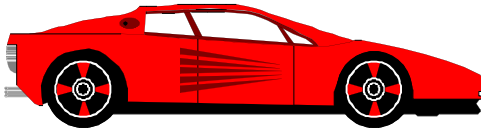
Many companies today spend a great deal of time, and energy, on developing the company's Purpose and Values. However, even after strategic direction has been agreed upon it is often difficult to know what action should be taken. This is a problem faced by all companies. A very good example of this problem has been documented by Rockwater International.¹

Like many companies Rockwater had spent a lot of time developing the company mission statement. Many of the company's managers were even involved in the mission development process. However, the mission statement was not giving the level of direction that managers felt they needed. Managers actually complained that they really supported the mission, but felt it gave no guidance as to how they should go about their daily work, or what decisions they should be taking in different areas. **There was a major disconnect between the strategy and action.**

Rockwater International was able to overcome this problem by using what is known as a Balanced Scorecard approach. The Balanced Scorecard approach has been used successfully by a range of companies in very different businesses. Through using the scorecard, all of these businesses have been able to successfully connect strategy to action. This paper briefly outlines the nature of the Balanced Scorecard approach, and discusses how it can be applied.

¹ Rockwater is an undersea oil field constructions services company headquartered in Aberdeen Scotland.

Driving Blind



Imagine for a moment that you have been asked to participate in a thought experiment. Before you proceed, you may want to recall in your mind the sort of things that are entailed when you are driving a normal car. For instance, when you think about it, how is it possible for a person to drive a car successfully to its destination?

In this thought experiment you will be asked to drive a specially equipped car for a distance of 500 kilometres from one location to another. The terrain you will be covering is about 50% flat, straight driving. It is desert country, and the outside temperature can go as high as 50 degrees Celcius.

The other half of the route will traverse steep, mountainous terrain. There is the possibility of icy conditions.

You have been given an undetailed map that shows only your starting point and your destination. There is very little information on what lies between.

In this experiment, you will gain points for time saved in getting to your destination, so speed counts. You have been asked to record and report your speed every 15 minutes. To help you with this the car is equipped with a speedometer.

Apart from the speedometer, the design of the car is very different from what you would normally expect. For a start, there is a 10-minute delay between data being received from the wheels, and speed information being displayed on the speedometer.

A distance meter (odometer) only reports distance traveled every hour.

There is no oil pressure gauge, no temperature gauge, and no fuel gauge.

In addition, the car has been totally soundproofed. You can hear no engine noise, and no road noise. Inside the car it is totally silent. You do not sit on a seat in the car, but hang from a sling, which totally isolates your body from any vibrations in the vehicle.

Also, there is no steering wheel. You steer by giving verbal instructions to an onboard computer that responds by controlling the steering of the vehicle.

The car is an automatic, and you control the accelerator and breaks using electric control buttons provided for the purpose.

There is one other complication. The car you are driving does not have a windshield. Instead, there is a television screen that you view as you “drive”. This



is connected to a closed circuit television that is pointed down at the ground, and only shows a two-metre stretch of what is in front of the car.

A second camera points rearwards, showing you the full view of the road that you have already traveled over. This is shown on a second television screen, located beside the first.

Every 15 minutes the second television screen presents you with an updated aerial photo showing the location of your vehicle and the surrounding terrain for about 100 metres on every side. You can switch between this view and the rear view at will.

By this stage, you will no doubt agree, the task is becoming increasingly difficult. You have little idea of what is in front of you, except for the first couple of metres and the limited information that you get from the aerial photos. You can only see clearly where you have been. You have only delayed information about how fast you are traveling. And, you have almost no information about the status of the vehicle. You could overheat the engine and not know it. You could run out of petrol and not know it. You could have mechanical problems, or a flat tire, and be totally unaware.

Of course, you would not drive a car with such limited information. In order to get to your destination, you need to see where you are going, you need to be able to anticipate what is coming in front of you, and you need to have constant information about the status of the vehicle. All experienced drivers know how it feels to suddenly become aware of a change in the sound of the vehicle on the road – where the slightest change in the engine sound, for instance, catches your attention.

The question of course is, if we wouldn't drive a car with such poor information input, why do people run companies using limited, backward looking information?

The car example is, of course, far fetched. And, it does serve to illustrate the problem that most companies have. Every company today uses financial measures to judge how it is faring – measures like profit, return on investment, return on capital employed, etc.

Although necessary, these financial measures suffer from an important problem – they are backward looking and historical in nature. They tell a company how far it has gone down the road, and how fast it is traveling, but not where it is going, what is ahead, or the current health and balance of the company overall.

Financial measures are outcome measures. They tell you that you have been successful, but not why or how. They tell you when you have a problem – after it has happened. And they can't really tell you why a problem exists. For that, we need different information.

The Balanced Scorecard – A Company’s Instrument Panel

Like a car, a company is a complex, interconnected system. To manage such a system it is not enough to work with only one or two measures. Rather, we need a range of measures that tell us about the status of the system from different perspectives.



If you are driving a car, you need to know where you are going (unless, maybe, you are driving just for the sake of driving), so you need to know information about the traffic situation of the road, your location, speed, direction. You need to know about

the status of the engine. You need to know things such as whether your headlights are dipped or on full.

Knowing how far you have progressed towards your destination is useful, but inadequate, information. It would be silly to run out of fuel, or blow the engine up because it overheated, just two miles before you arrive –and all just because you failed to notice a critical change in the car.

It’s just as silly to have problems in your business because of not making use of the best information available.

The Balanced Scorecard can be thought of as the instrument panel for measuring company performance on an ongoing basis. It operates very much like the instrument panel of a car, giving you a range of information that tell you about the health and stability of the company overall.

Cause and Effect

The Balanced Scorecard is not simply a tool for measuring performance. It is, in fact, a powerful mechanism for Strategic Management.

Figure 1 Strategic Cause and Effect Chains

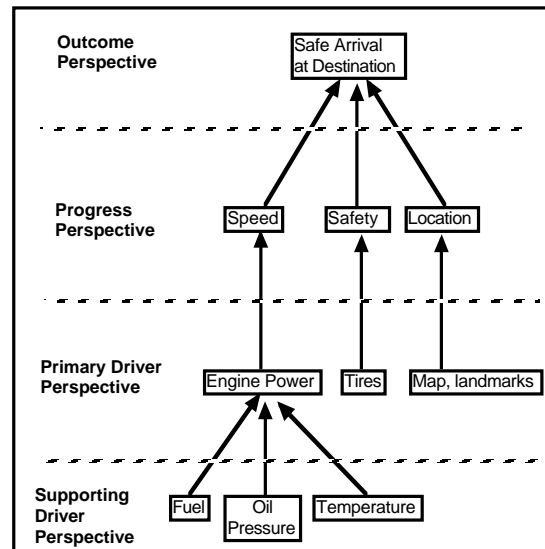
Taking the car dashboard metaphor further it is possible to determine that different measures refer to different aspects of a cause and effect process. In a car, arriving safely at our destination is an outcome measure.

Speed, safety (i.e. we haven't crashed yet) current location etc. are progress measures – they tell us how we are getting along in relation to our ultimate goal. However, they don't tell us how we got to where we are.

Engine power, tire pressure, our knowledge of where we are on the map, etc. are drivers that control the behavior of the car. I call the perspective that relates to these as the Primary Driver perspective.

Oil pressure, fuel, etc. are also Driver Measures. These are Supporting Drivers, that tell us about the underlying status of our Primary Drivers. For instance, a change in oil pressure or fuel levels, if sustained, will ultimately affect the primary driver of Engine Power. So, we need to be aware of changes in these parameters, even before they start having an effect.

In the above model, notice how drivers and outcomes are linked together in a causal chain. In a business we can do the same thing, linking outcomes to processes that drive those outcomes in a causal chain.



Linking Activity to Strategy

Conscious Choice of Activity

As suggested above in the car metaphor, in order to properly monitor our business we need to link Business Outcomes and Business Drivers together in a causal chain, and then measure at different steps along the chain.

There are several reasons for doing this. The first is that we Consciously and Deliberately link strategic directions with specific activities that we undertake in the company. This ensures that we are focusing our attention on those activities that are most important for achieving the strategy.

A classic example, used by Kaplan and Norton (the developers of the Balanced Scorecard approach) refers to a company known as Metro Bank (not its real name). Metro Bank is the retail banking division of a major bank with 8,000 employees, a 30% market share of the region's core deposit accounts, and about US \$1 billion in total revenue.

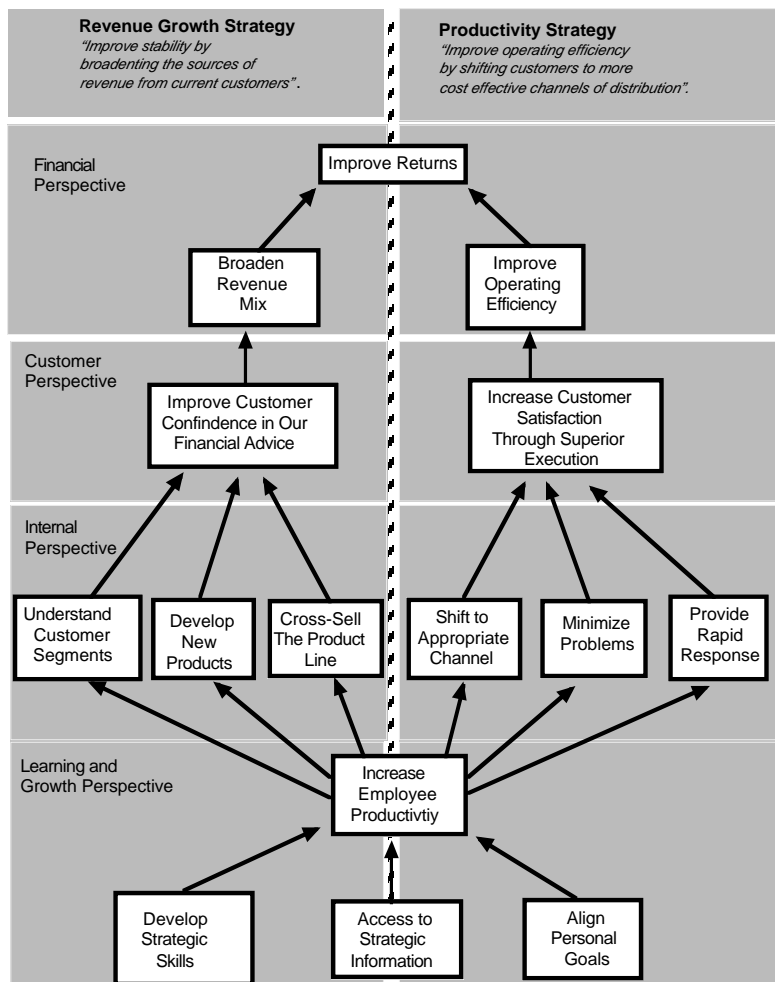


Figure 2. The Metro Bank Strategy



Metro Bank was confronted with two problems: (1) excessive reliance on a single product (deposits) and (2) a cost structure that made it unprofitable to service 80% of its customers at prevailing interest rates. The company decided upon a two-pronged strategy to deal with these problems.

The ultimate outcome desired by Metro Bank was to improve returns. The company decided that there were two ways to do this – broaden revenue mix and improve operating efficiency. These are, of course, financial goals.

Senior management at the bank decided that these two strategic outcomes would be best addressed by increasing customer confidence in the company’s financial advice, and by increasing customer satisfaction through superior execution. Achieving these Customer Outcomes was seen as strategically necessary to drive the desired Financial Outcomes.

Once Metro Bank had decided on what objectives were required vis-à-vis their customers, the next step was to decide upon a series of internally focused activities that would result in the desired changes with the Customer Outcomes.

From the diagram (Fig 2) you can see the range of internal activities that were undertaken to achieve the two customer outcomes. As with the car metaphor in the previous section, these internal activities can be thought of as primary drivers that lead to the customer outcomes.

Testing Business Theories

How often have you been surprised either by your success in a business activity, or by a failure? All too often, we are not really aware of the dynamic chains that underlie the outcomes that we generate in our businesses.

Given this, a second, very important reason for measuring from cause and effect chains is that we can state, and then test, theories about how our business actually works. For instance, for many years now companies have invested heavily in quality. Recently, however, there has been a change in heart in some companies as they realize that their investments in quality have far outstripped the returns that have been generated.

The initial reason for investing in quality was the belief that this would lead to strategic advantage and hence to better returns. Stated simply, the Theory of Business applied by these companies was “Better Quality=Better Returns”.

As these companies measured both improvements in quality, and company returns, and then linked the two together, a disconnect was identified. In some cases, it turns out, “Better Quality \neq Better Returns”, at least beyond a certain investment level. In other words, there is a need for these companies to modify the theory of what drives success in their businesses.



When we discover a disconnect between outcome measures and what we believed were drivers of the business it is time to re-examine the theories that we hold about the business. The point of this re-examination is to discover which drivers are now most important for the business to move forward.

Future Orientation

A third, very important reason for measuring along a cause and effect chain is the time perspective. As mentioned above, financial measures only tell us how successful we have been. They give us little or no information about what is going to happen in the future.

If our theory of the relationship between drivers and outcomes is correct, then we can notice what happens at the level of our business drivers and, from those measurements, predict what is likely to happen to outcomes in the future. It also allows us to take action at the appropriate level.

In our car example, if we notice our fuel levels dangerously low, we know that we will sooner or later be stuck, possibly in the middle of the desert. If we get onto icy roads, traveling at a speed that is too fast, we could be in for a very rough ride.

In the Metro Bank example, management would know that, if development of new products started slowing down, sooner or later customer confidence in the bank's financial advice would start to drop. They would also know that this would subsequently have an impact on the revenue mix.

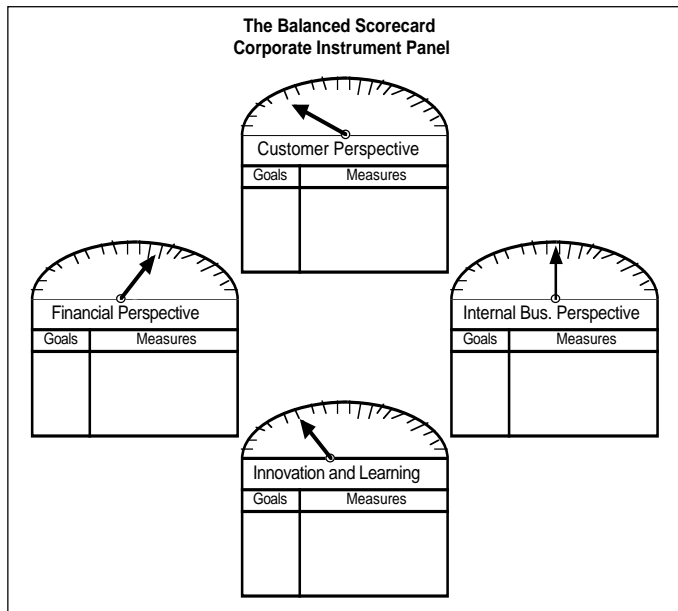
In cases where employee motivation is a critical factor in a company's ability to provide service to clients, any change in staff turnover, or the loss of key people, would indicate that there are fundamental problems in the business that need addressing if long-term success is to be assured.

The Four Measurement Perspectives

You will probably have noted in the Metro Bank example (above) that outcomes and drivers were broken into several different perspectives. In working with the Balanced Scorecard it is customary to use four different perspectives with which to analyze a business. These are the Financial (Shareholder) Perspective, the Customer Perspective, the Internal Business Perspective and the Innovation and Learning Perspective. You may choose to use more than these, however these four are considered to be the core areas that are most useful for tracking the ongoing health of a business.

Figure 3. Structure of the Balanced Scorecard

The **Financial Perspective** makes use of standard financial measures such as project profitability, ROI, ROCE, etc.



The **Customer Perspective** looks at the customer, how the customer views your company, and issues that are of concern to the customer.

The **Internal Business Perspective** looks at things which you do in the business that influence different customer outcomes. This perspective reminds organisations they must measure their processes, because it is process

improvement and the addition of new processes leading to new products and services that create competitive advantage. *The measures in this perspective are key drivers of future performance.*

The **Innovation and Learning Perspective** examines those activities which you carry out in the company and that, over the longer term, will contribute to the ability of your company to learn and adapt to changes in the marketplace. This perspective challenges you to think about how you expect process changes to occur. Innovation deals with empowerment, skill development, and the adoption of new technologies and fresh approaches to traditional ways of working.

The concept of key result areas (KRA's) is a good way of understanding the different perspectives. In Table 1 (below) you can see the link between Key Result Areas and performance issues as they appear in the scorecard.



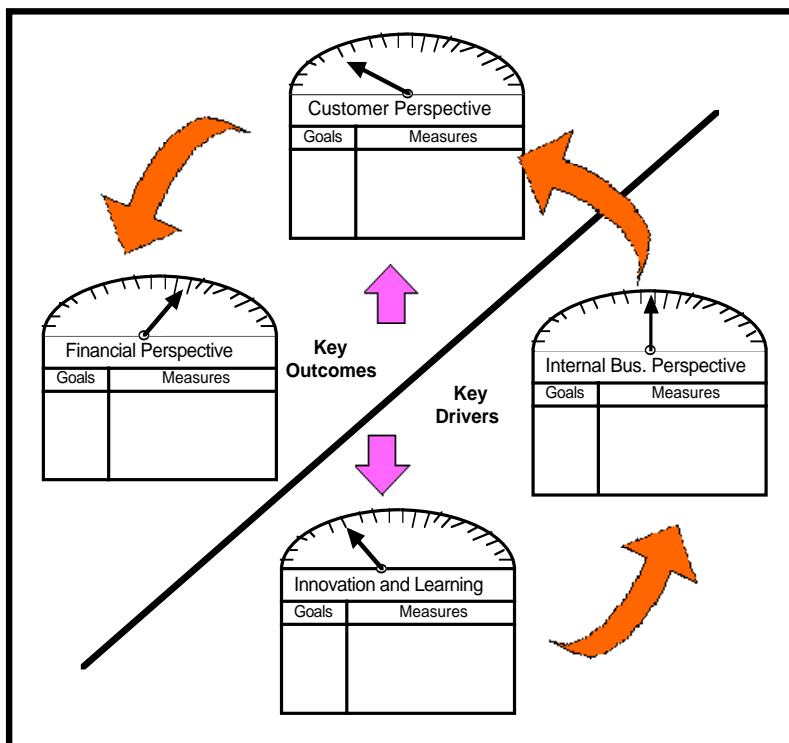
Table 1. Key Result Areas and Performance Issues

Key Result Area	Performance Issues
Financial Perspective	How do we look to our shareholders? Are we producing the right financial results?
Customer Perspective	How do customers see us? Are we meeting the needs of the market place?
Internal Business Perspective	What processes are critical to achieve strategy? Where do we need process improvement?
Innovation & Learning Perspective	How can we make critical processes work better? What initiatives do we have to undertake to develop our people, technologies, and work practices for the future?

Creating a Balanced Scorecard

How useful the Balanced Scorecard is depends to a large extent on the measures that are selected.

However, as discussed above, the power of the Balanced Scorecard approach is not simply in measuring things, but in linking drivers with outcomes in a way that aligns with the company strategy. In this way, the Balanced Scorecard can be seen as a



strategic management tool.

When the measures in each perspective have been appropriately chosen, the linkages and cause-effect chains can be clearly identified.

In Figure 4. you can see the relationship between drivers and outcomes.

Figure 4. Linking Balanced Scorecard Perspectives

To start the process of developing a scorecard, you must first decide on which financial measures are most important. The easiest way to do this is to ask the shareholders, or senior executives responsible for financial performance.

Once financial measures have been determined, you move to dealing with the other perspectives. In deciding key concerns, and elements to measure, you must work your way back down the cause-effect chain. So, after finance, the next area to consider is the customer perspective.

In looking at the customer perspective, you must first agree on what are the core customer-facing processes in your business. These are the 3-6 core processes that summarize at a strategic level what you do to attract, supply, and service your clients.



In deciding what customer facing processes are critical, you actually need to decide what is important for customers so that they will continue to support your business. In Rockwater's case, this involved the managers sitting down with their customers to clearly identify customer needs, and the criteria that were important to them. Different businesses deal with this step in different ways.

Only when you are clear on what is important to customers do you go on to look at core internal processes that generate customer outcomes. In looking at internal processes, as mentioned above, the focus should be on those areas that generate desired outcomes in the customer perspective. There's really no point in generating changes that don't translate into happier clients and better business.

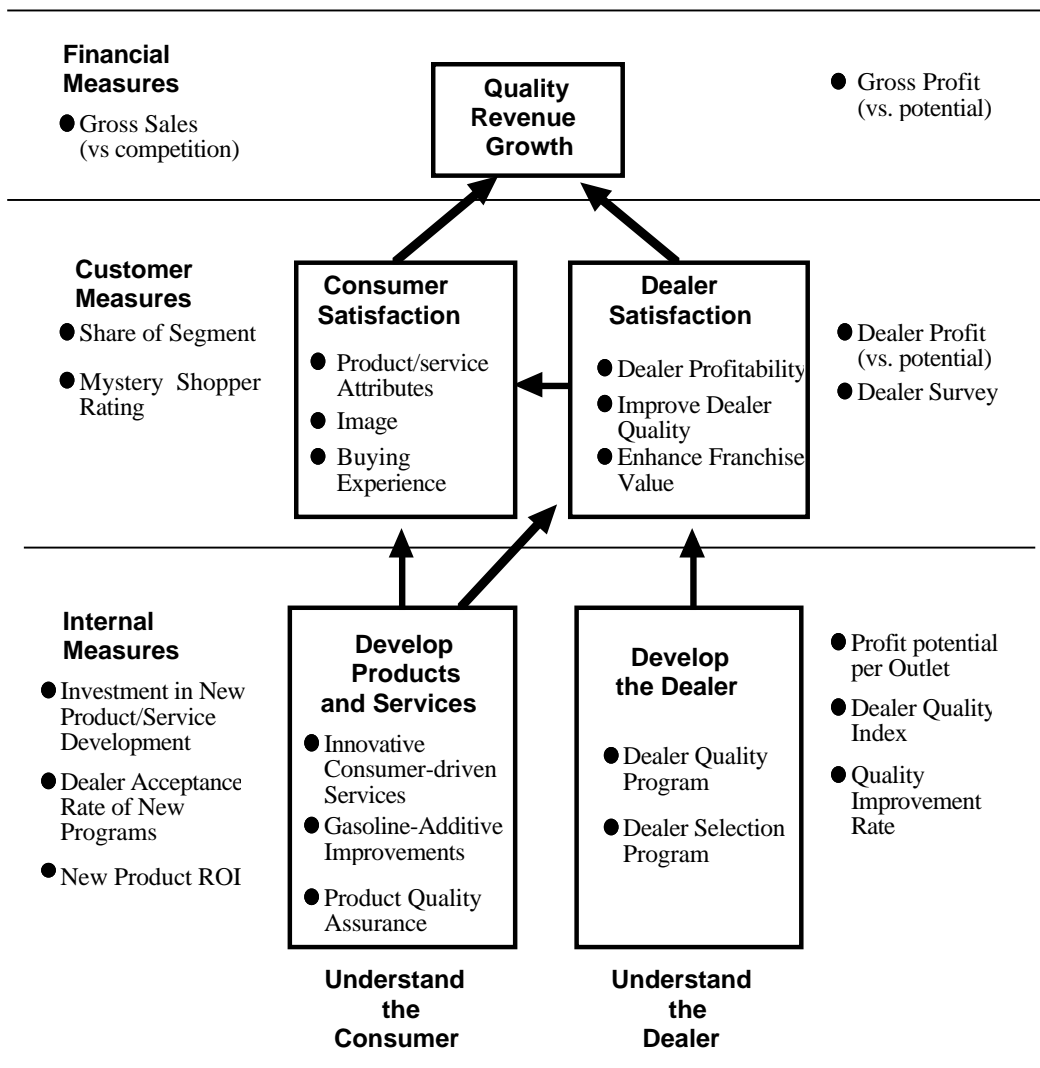
The Nature of the Measures

Depending on which perspective you are dealing with, you may decide to measure different things. The measures, however, need to relate to the strategic objectives that you have at each perspective. Whenever possible these should be quantitative measures. Nevertheless, especially in the Learning and Innovation perspective, qualitative measures or project completions are often used (because of the difficulty of developing quantitative measures in these cases).

To understand how different measures relate to objectives within each of the perspectives, you can refer to the figure below. This diagram outlines the strategic goals and measures used by "Pioneer Petroleum".² In the diagram you can clearly see the goals at each of the strategic perspectives, along with measures that have been designed to check progress against each of the defined goals. This, in essence, is how the Balanced Scorecard should operate.

² "Pioneer Petroleum" is the U.S. marketing and refining division of a large world-wide integrated petroleum company.

Figure 5. Measures for Strategic Goals





Conclusions

Today you may be at the point where you have worked hard to decide on a set of values that will drive the company, and a vision for where you want to be. You have decided on what sort of organization you want to become. A value proposition that supports this vision has been formalized, and a strategy for achieving the value proposition mapped out.

The next step involves making the vision a reality – I call this Operationalization. In other words you must decide which actions will be most effective for implementing the strategy, and then you have to go and do them. No-one else can.

Today, it is a truism in business – you get what you measure. So, whatever you decide to do next you, you will need to measure it in order to get continuous feedback about how you are performing against the goals that you set yourselves.

The Balanced Scorecard provides a disciplined approach for deciding what, and how, to measure, and it does it in a way that allows you to link all of the key elements of your strategy and business processes together. The development of a Balanced Scorecard will greatly support you as you turn your vision into reality.