KEY PERFORMANCE INDICATORS

Developing Meaningful KPIs

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Introduction

Successful Strategy Implementation

The success of a strategy is not determined by its definition. Some of the greatest strategies have been defined carefully and with elaborate thought. They have been masterpieces that could not be faulted other than they have been left on the shelf in head-offices around the world and never implemented. Most companies and organisations are good at *defining* a strategy; very few are good at successfully *implementing* one.
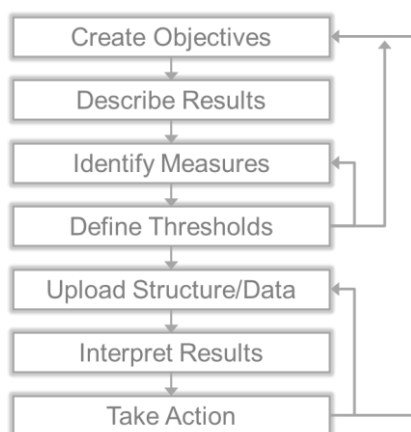
When a strategy has been defined, one of the most troublesome tasks an organisation faces is the next stage: developing meaningful objectives and their associated performance measures or key performance indicators (KPIs). This task has to be structured and has to be treated as a project in its own right. Without this follow-on activity, a strategy will never be implemented successfully.

Developing Meaningful KPIs

The following methodology is a guide through the process of developing clear objectives and key performance indicators (KPIs) to support a strategy. It describes the processes to ensure that KPIs have targets and owners. It shows how to build KPIs that provide evidence that objectives are being met, (or not!)

It does not end there though. Once KPIs have been defined, they need to be presented in a way that will allow quick and easy interpretation. The methodology provides examples of KPI automation that show how to link interpretation to action thus moving an organisation closer to its objectives and ultimately its strategy.

The methodology has seven steps as follows:

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┌──────────────────────────┐
│    Create Objectives     │◄──┐
├──────────────────────────┤   │
│     Describe Results     │   │
├──────────────────────────┤   │
│     Identify Measures    │◄─┐ │
├──────────────────────────┤  │ │
│     Define Thresholds    │  │ │
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│   Upload Structure/Data  │◄┐│ │
├──────────────────────────┤ ││ │
│     Interpret Results    │ ││ │
├──────────────────────────┤ ││ │
│       Take Action        │─┘┘ │
└──────────────────────────┘    │
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Performance Measures/KPIs

What are Performance Measures/KPIs?

In business, government and non-profit organisations we measure a multitude of things. We do this to keep on track, to make improvements and to drive our strategy. Unfortunately, where we may think we have a decent set of key performance indicators, actually we have a hotchpotch of tasks, objectives and projects with a few badly described metrics. So what is a performance measure/KPI?

Note: A Key Performance Indicator (KPI) is often referred to as Performance Measure. This is perfectly valid, the important thing is the definition not the label, if Performance Measure is term generally used in your organisation, then use it. In a formal Balanced Scorecard structure, as defined by the Balanced Scorecard Institute, the term Performance Measure is used. More frequently in business KPI is used. For the purpose of brevity, the term 'KPI' will be used throughout this document.

A Key Performance Indicator is something that can be counted and compared; it provides evidence of the degree to which an objective is being attained over a specified time.

The definition above includes a set of words that need further explanation to ensure the statement is fully understood:

Counted: This may seem a little trite, however, counted means that a quantity can be assigned. A number or value. It does not mean a percentage achievement. One of the most frequent mistakes in setting KPIs is to create a project and assess its success through how much work has been done. Just because an e-mail marketing campaign has been active for three weeks out of four does not mean it has been a success. Success is dependent on the outcome not the activity.

Compared: A number or value may be interesting but it only becomes useful when it is compared to what is optimal, acceptable or unacceptable. Every KPI must have a comparator or benchmark. Using an industry benchmark gives an objective quality to the comparator, objectivity is not required, but it is desirable.

Evidence: The evidence will fall out by 'counting' and 'comparing' correctly. It is important to strive for a measure that will be observed in the same way by all stakeholders. The evidence should be clear and have specific meaning.

Objective: A KPI only has significance if it is contributing to an objective. If there is no objective, why is it being measured in the first place? This does not mean we should ignore all operational measures; they still need to be in place – but even as sub-measures they should contribute to an objective.

Specified Time: Everything is time bound; progress towards meeting an objective and therefore a strategy must be measured over a specified period of time.

The Methodology

The design of this methodology for developing meaningful KPIs is based on years of experience in this field. The methodology is aimed at companies and organisations that already have a defined strategy and a reasonable idea about what their primary objectives are. The methodology has seven steps and utilises the templates that follow in this document. Although steps 5-7 are based on the Intrafocus preferred performance management system, QuickScore, other systems could be used.

In any business performance management system, the data added into the system has to help drive the business forward. It is tempting to measure far too much and not be specific in the hope the system will 'sort it out'. The following methodology ensures the right activities are pursued.

The key is to start small, even as small as a single objective will do. Once practiced in creating a few successful objectives and KPIs, then the company-wide challenge can be taken up.

Steps 1-4 of the methodology is template driven, these steps will be completed several times. The first time through may take a while, thereafter, it becomes much simpler. Steps 5-7 are more descriptive and will require the use of a performance management system.

Step 1 – Create Objective

The golden rule: KPIs are based on objectives. There is no reason for a KPI to exist unless it is contributing to an objective. It is true that the thought processes that go into creating KPIs and objectives can move so quickly that these activities may run in parallel, nevertheless, a KPI cannot exist without an objective.

Write down an objective that will result in a business improvement:

Objective

Here are a couple examples that you may have considered:

- Increase company profit

- Increase revenue by 10% next year

These are great objectives and easily measurable and starting at the top is admirable. However, think about some objectives that can be more easily controlled to contribute to these top-line objectives, for example:

- Increase the number of projects worth £250k or more

- Improve skill level of senior consultants

- Implement a sales plan

As this stage it is not important to be precise, the next stage will crisp up the objectives. Thought should be put into how the objective will contribute to an overall strategy; whether or not your organisation has any control over the objective (it's best to have some level of control); that the objective is a single objective and not several under the guise of a single objective and finally it should be something that is important and in need of attention.

Go back to the objective you have chosen and check:

1. It will contribute to the company/organisation strategy

2. It is important and will it make a difference

3. It is a single objective

4. You have some level of control to influence the result

5. It is something that can be measured

If required, refine the objective, it does not have to be perfect.   Move on to step 2.

Step 2 – Describe Results

Earlier, in the section that defined a KPI, it was noted that one of the most common mistakes in definition is to focus on *activities* rather than *results*. Objectives, like KPIs, are concerned with results. It is essential to create a result for each objective using a results-oriented language. This forces us to think more precisely about what we are actually trying to achieve. For example, if we look at one of the objectives given above '*Implement a sales plan*' this may seem as a very sensible thing to do but it is **not** a performance objective. It is an activity that can only be measured through the time it takes to implement the plan. It will tell us nothing about success or failure of the plan relative to the business strategy.

[Important note: Activities, initiatives and projects **are** important. They are the means by which we implement change to make improvements. We can measure things until the end of time but that will not change our results. Unless we know where we are today and where we want to be tomorrow any change activity will **only** have a positive impact through pure chance. Therefore we need results-oriented objectives. In step 7 we will look at actions and how they are linked to objectives and measures.

The previous example might be more useful if it included **why** we want to implement a sales plan. It may be '*to reduce the sales cycle*'. This is still a bit vague and may be still better expressed as '*to reduce the time taken to convert a qualified lead into a sale*'. This is much better and has produced and objective with a tangible result. This also illustrates the need to bring clarity into the language we use to create our objectives. That is, what are we *actually* trying to achieve?

In business we have a tendency to use words and phrases like '*best practice, optimised, world class, efficient, effective, productive*. Although the implied meaning behind these words and phrases is positive, the actual meaning is vague. Objectives using these words are not results-oriented and will therefore always fall short if used when related to performance improvement. It is always better to use words that have common meaning and cannot be vaguely interpreted.

Using words that relate to how we physically perceive things in the world is a good technique to sense-check you are on the right track. Using our previous example; '*reduce the time taken to convert a qualified lead into a sale*' if we think about how we would physically perceive this, it would almost certainly take us down the route of asking the question; in what time-scales do we mean? This in turn would lead to a more succinct expression that would include a physical parameter, for example: '*reduce the number of days to convert a qualified lead into a sale*'. We now have an objective that describes a result, has clarity in interpretation and in this case has a time parameter.

At this stage it is not important to go so far as including a target within the objective. It would have been easy to express our example as "reduce the number of days to convert a qualified lead to a sale from 30 to 25'. Targets are the domain of the measure rather than the objective. When we look at measures in the next step we will look closely at how to set targets in the context of viable comparators or benchmarks.

In summary, the step 2 task is to:

1. Check that the objective is an objective (not an activity, plan or project)

2. Frame the objective using result-oriented language

3. Remove vague words and include things that can be physically perceived

Examples:

Original Objective	Result Oriented	Physically Perceived
Implement a sales plan	Reduce the time taken to convert a qualified lead into a sale	Reduce the number of days to convert a qualified lead into a sale
All senior consultants to be trained to deliver results chain analysis	Improve skill level of all senior consultants to deliver results chain analysis	Improve skill level of all senior consultants to stage 2 accreditation in results chain analysis or above
Increase the number of projects worth 250k or more	Increase the number of projects worth £250k or more*	Increase the number of consultancy projects worth more £250k in revenue

Note: not everything has to be improved/modified; as you get better at this process you will automatically start creating results-oriented objectives

Enter up to three objectives and go through the process of refining them into results-oriented objectives that are clearly defined with physical perceived outcomes:

Original Objective	Result Oriented	Physically Perceived

If you are happy with these objectives, go to step 3. If this process has revealed you are looking at the wrong things loop back to step 1.

Step 3 – Identify Measures

There are three key activities that need to occur when identifying a measure:

1. The measure needs to be clearly described (and based on an objective)

2. The measure needs to be rated in terms of importance

3. The measure needs to be calculated and ownership assigned

The measure needs to be clearly described – it does not matter at the moment if lots of words are used to describe a KPI. Later on the short measure 'label' will be created for convenience. For now it just needs to have a very clear description and therefore will end up as a statement or short sentence. The starting point is an Objective. Take one of the objectives previously defined.

Next, focus on the 'physically perceived' part of the objective, this will give you a clue as to the 'tangible' things you need to measure. In the example above "*Reduce the number of days to convert a qualified lead into a sale"* the tangible items are 'days' and 'qualified leads' and 'sales'. These are the things that can be measured and will be included in the final KPI. At a later point we will include descriptions for each of the 'tangible' items.

A word of warning: don't at this point simply go back to what you are measuring already and say something like *'got that covered, we already have a lead to sales ratio'*. It may be that you do have it covered, however, it is more likely that the particular measure you are thinking of was created years ago based on a formula that is no longer relevant. Clearly this will not be true of all measures, but the check needs to be made.

At this point we should consider '*lead*' and '*lag*' KPIs. Even a cursory study of the principles of business performance management will show that all too often our KPIs concentrate on '*lag*' measures. That is, those measures that occur after the event. Nearly all of the financial measures fall into this category, revenue, gross margin, profit, costs, they are all things that we measure after an event has happened. We need to do this, as we can learn and adjust, but the act of measurement does not cause change. Why do we concentrate on lag measures? Simply because they are easy to count and provide proof of success or failure. If I get on the scales they tell me whether or not I have lost or gained weight. If my objective is to lose weight, getting on the scales has not helped. However, if I measure how many times I go for a run and how much I have eaten (and plan for this) then I have put in place two '*lead'* measures that will help me succeed. Lead measures are harder to identify but they are the **only** measures that can be influenced and therefore make a difference.

We must not underestimate the importance of lead measures when identifying and describing our KPIs. It may take a little longer to identify these measures but it is worth the effort in the long run. Even if they are discarded they may provide additional insight into the way a business is being run.

The final quality of a typical *lead* measure is that it may not hold a guarantee of success. In the example below '*The number of sales people trained in selling our product portfolio to grade III certification'* we believe that this will have a positive impact on our objective

because common sense dictates that trained people will perform better than untrained people but we will only have the proof when we see a positive change in the other measures.

The tangible parts of the objective need to be written into a KPI that describes something that can actually be counted and of course relates back to the objective. For example:

Objective	KPI – Description
Reduce the number of days to convert a qualified lead into a sale	*The average number of days between a qualified lead and a sale* *or* *The average number of days between qualified leads and sales that result in an order value greater than £250k* *or* *The percentage of sales generated within 30 days of lead qualification* *or* *The number of sales people trained in selling our product portfolio to grade III certification (note this is a 'lead' measure)*

As can be seen from the above, each KPI is relevant to the objective but is measuring it in a slightly different way. Also, we can see that the type of measure has been added, in the cases above 'average' and 'percentage'. Furthermore we can see that a calculation is beginning to form, the KPI calculation is a very important part of the identification as it provides the scientific/objective basis for its accuracy.

For now, let's concentrate on the description, the key things to remember are;

- Write the description in the form of a sentence

- Include the 'tangible' words, the things that can be counted

- Don't immediately think you have 'got it covered'

- Think in terms of a calculation that will be performed

Write down an objective and two or three candidate KPIs:

Objective	KPI – Description
	or

	or
	or (for the last one, try to think of a 'lead' measure)

The measure needs to be rated in terms of importance – Time and effort should be put into rating KPIs. It is important to ensure the right things are measured. A relatively simple process can be used to build a decision matrix around:

- How applicable the measure is to a related business objective

- The relative worth of each measure, do you really *need* to know

- The ease by which data can be found to make the measurement

For each KPI ask the three questions above (in order, more later) and rate them High Medium or Low. As a guide the use the following:

For Applicability:

- High – This measure will give me enough information to determine whether or not we are achieving this business objective

- Medium – This measure will give me enough information to make an informed decision as to whether or not the business objective has been met, provided it is augmented with some additional information or another measure

- Low – This measure will not give me very much information at all and at best will allow me to make a reasonable guess

For Relative Worth

- High – This measure is really important to the business because it; 1. Is a top-line indicator e.g. Profit or 2. Is important to our shareholder/stakeholders regardless of its association with any business objectives

- Medium – This measure is not specifically associated with any business objectives but it can/does contribute to the effectiveness of other KPIs

- Low – This measure has been asked for but does not significantly contribute to very much

For Ease of Identification

- High – This measure is already available in existing data systems or can be calculated easily from existing information in existing data systems

- Medium – This measure does not exist and would require a new process to be put in place to collect the information. The task would not be onerous and would be worth the effort

- Low – This measure does not exist and would require a significant change to working practices that would seem unreasonable at this time

The matrix for a few sample KPIs might end up looking something like this:

Performance Measure/KPI	Applicability	Worth	Identify
The average number of days between a qualified lead and a sale	Low	Medium	Medium
The number of sales people trained in selling our product portfolio to grade III certification	Medium	Low	Medium
The percentage of sales generated within 30 days of lead qualification	Medium	Low	Low
The number of days between qualified leads and sales that result in an order value greater than £250k	High	High	Medium

The immediate result of creating a matrix such as the one above is the ability to exclude measures quickly. For example, we can see that the first measure has a low Applicability rating. In general all Low applicability rated measures would be discounted. The only time this might not be the case would be when there was pressure from stakeholders (High worth) to include a measure. The two Low ratings on the third measure also indicate that this measure should be discarded.

Build a matrix for you measures:

Performance Measure/KPI	Applicability	Worth	Identify
KPI 1			
KPI 2			
KPI 3			

KPI 4			

This exercise has to be gone through and it is essential that there is general agreement, but at the end of the day someone will have to make a decision based on the needs of the business. The table above should provide some supporting evidence that the correct process has been gone through to choose one measure over another, however, the important thing is to get agreement that a rational choice has been made. Using one of our examples above, you could imagine the rationalisation behind a decision could go something like this:

KPI	Rationalisation
The average number of days between qualified leads and sales that result in an order value greater than £250k	*80% of our business comes from projects greater than £250k, these customers are important to us. In general, the remaining 20% are very small customers and tend not to lead to larger sales. This together with the difficulty in tracking sales to very small customers means we should count the lead to sale conversion for our high-end customers"*

Choose your KPI:

KPI	Rationalisation

The above should provide the basis for focused effort and most importantly generate the right levels of discussion to ultimately gain agreement from all parties as to the inclusion/exclusion of KPIs for the business.

The measure needs to be calculated and ownership assigned – Ownership and calculation have been put together intentionally. Practically speaking, assigning ownership of a KPI should be undertaken before the calculation is made to ensure the right person is responsible for the activity. This begins to highlight the importance of ownership. To get anything done, all objectives and KPIs must have owners and **that means an individual** not an entity such as a department.

There are two types of ownership we need to concern ourselves with: Owners and Updaters. An owner is the person who takes full responsibility for the KPI. The updater (who could be the owner as well) is the person who gathers the required data and updates the KPI when required. An updater could report to the owner or be a shared administrator. An effective owner should:

- Have some level of control over the KPI

- Own or actively contribute to the KPI's objective

- Agree to own the KPI (and not just be assigned to it)

- Know where to acquire the measurement data

- Ensure the KPI is updated on time with valid data

An owner who is in a position to comply with the above is much more likely to take the job of managing the KPI seriously

All too often, KPIs are foisted upon individuals who have no real control or interest in the measure itself (or the associated objective) and therefore update the information begrudgingly, or worse, with incorrect information.

The first job of the owner is to ensure that the KPI is properly described, that there is agreement on the validity (i.e. the right measure has been chosen) and that the KPI calculation (if there is one) can be based on available data. Available data in this context can mean data that will be made available in the future as well as existing data.

Using the example we have chosen above "*The average number of days between qualified leads and sales that result in an order value greater than £250k*", let's see what this means in practical terms. The KPI description usually provides enough information to give an indication as to where the data being measured resides. For example, in the KPI *'Total revenue generated for consultancy services'* the data will almost certainly reside in the company financial system. In the case of our example, the calculation is a little more complicated.

For each KPI the following things need to be taken into consideration:

- **Description:** A sentence to describe as accurately as possible what the KPI is for.

- **Label:** The short description, used for presentational purposes, generally 3-5 words.

- **Owner:** The individual who owns and will drive the KPI (this applies equally to objectives, indeed, ownership of objectives is more important than ownership of KPIs as the former drives the latter).

- **Updater:** The individual who is responsible for updating the KPI on at the pre-defined times

- **Calculation:** A mathematical formula that describes how the data elements (tangible perceivable items) are combined to provide a number, percentage or currency (sometimes a yes/no).

- **Frequency:** How often the KPI is counted and recorded.

- **Scope:** What should be included or discounted, often a cap or data range.

- **Metrics:** The data and the sources of data used in the calculation, it is important to provide a description of the metric items individually to avoid ambiguity

It is only when looking closely at a KPI requiring a calculation that it becomes evident all of this information is required. It is good practice to identify and record this information for every KPI during this phase. Typically a table, such as the one below, can be used:

Objective and Result	
Objective	*Reduce large order sales cycle*
Intended result	*Reduce the number of days to sell a large order*
Key Performance Indicator	
KPI Label:	*Large order sales cycle*
Description:	*The average number of days between qualified leads and sales that result in an order value greater than £250k*
Owner:	*Jim Jones*
Updater:	*Jill Johnson*
Frequency:	*Monthly*
Scope	*For sales that occur during the reporting month*
Calculation:	*All of (qualified lead date – sales date) / number of sales greater than £250k*
Metrics used in the calculation:	• *Qualified lead date – the date assigned to a lead moving to stage 3 (qualified lead) in the sales management system* • *Sales date – the date assigned to a lead moving to stage 6 (sale) in the sales management system* • *Sale greater than £250k – sale recorded in the finance system as having been invoiced and worth more than £250k* • *Month – Business reporting month = calendar month*

Describe your KPI in the same way:

Objective and Result	
Objective	
Intended result	
Key Performance Indicator	
KPI Label:	
Description:	
Owner:	
Updater:	
Frequency:	
Scope	
Calculation:	
Metrics used in the calculation:	

In summary, when calculating a KPI and assigning ownership take care to:

- Assign the right owners, it is the only way to ensure things will get done

- Create a realistic calculation that is based on metrics that exist or can be found

- Be realistic about frequency, not everything has to be done in real-time!

Getting to this stage can take a while; it gets a lot easier and much faster after the second or third go. When you have 3 or 4 KPIs go to step 4.

Step 4 – Define Thresholds

A KPI is meaningless unless it can be compared to something. The *actual* value of the measure has to be compared to what would be considered good, bad or indifferent. The comparator could be a target based on previous performance or on a notional future performance or even a made-up value. Whatever the target, it needs to be considered as reasonable and achievable.

Targets are well understood when looking at financial measures; we often look at a 'variance' to an expected result. For example if expected monthly revenue was £325k and the actual revenue recorded was £309k the variance would be -£16k. This may or may not be a cause for concern depending on what was considered an acceptable variation to the target.   For a KPI to be useful we need to clearly state both an acceptable and unacceptable result. This is known as defining 'thresholds'. There are several threshold models available, for the purpose of illustration let's look at the most common: Red, Amber, Green (RAG). In the RAG model there are two threshold points:

- When the KPI should turn Green

- When the KPI should turn Red

There are no hard and fast rules to the meanings attributed to each of the coloured areas but in general it is as follows:

- Green – an acceptable result, we are on target

- Amber – there may be a problem, we should investigate

- Red – an unacceptable result, there is a problem that needs rectification

By using our example from above "*Large order sales cycle*" we can illustrate as follows:

- Green – 60 days or less

- Red – 80 days or more

When these thresholds are entered into a performance management system like QuickScore the result might look like this:

As can be seen, by setting threshold values the viewer can instantly and very graphically see the current situation and equally importantly the history leading to this point.

Out of the numerous threshold models there are two more that need to be looked at, the first is a simple extension of the RAG model, the second a variant that accommodates measures that are not linear in nature.

Often there is a need to get a better understanding of an 'over-achieved' status. This is particularly true in the area of sales where sales bonuses may be based on not only achieving a target but over-achieving it as well. In this case an extension of the RAG model can be used; the Red, Amber, Green, Blue variant. Here it is normal to set five thresholds:

- The lowest acceptable result

- When the KPI should turn Red

- When the KPI should turn Green

- When the KPI should turn Blue

- The highest acceptable (or capped) result

This way an over-achieved status can be monitored and managed, most system will also put a 'cap' on the highest acceptable result. Again in sales this may be desirable to avoid run-away bonus schemes. The result might look like this:
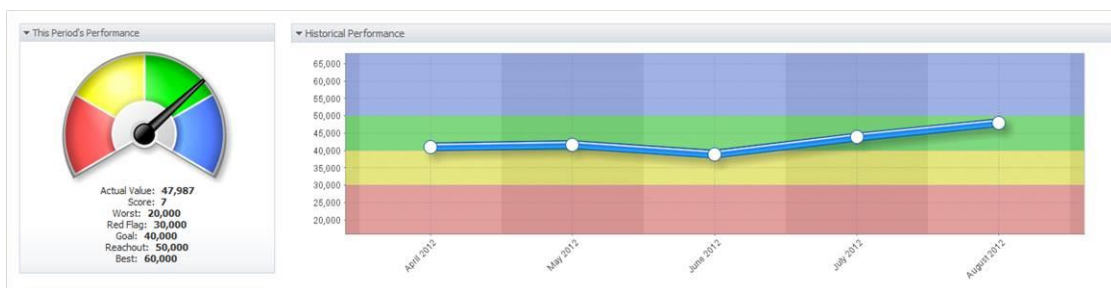
The third threshold example is the 'stabilise' KPI. Occasionally KPIs are deemed unacceptable if the result is either too high or too low. A good example is a training budget. In training we want to spend to the budget but not exceed or go below the budget. In this case we define what the 'best' result is and then determine acceptable and non-acceptable results below and above best. Using the example of a training budget, the result might look like this:
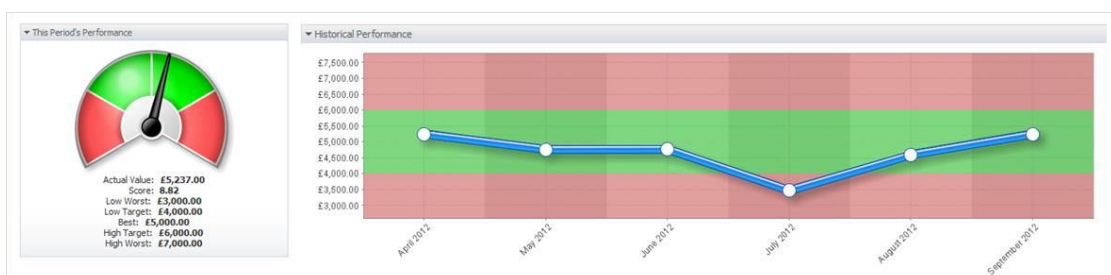
One of the by-products of defining thresholds is the ability to turn the KPI into a relative score. You may have noticed in the gauges above together with the actual value and the threshold values a 'score' has appeared. In the cases above, a calculation has been applied all of the actual values to create a normalised score out of ten. This allows the performance management system to compare 'apples' with 'apples' and roll-up the scores to higher levels including objectives and perspectives, departments and divisions and finally to an overall company score. (This becomes a very powerful feature when building company dashboards).

Therefore, we need to add the final elements to our KPI definition. Using the *'large order sales cycle'* example it will look like this:

Objective and Result					
Objective	Reduce large order sales cycle				
Intended result	Reduce the number of days to sell a large order				
Key Performance Indicator					
KPI Label:	Large order sales cycle				
Description:	The average number of days between qualified leads and sales that result in an order value greater than £250k				
Owner:	Jim Jones				
Updater:	Jill Johnson				
Frequency:	Monthly				
Scope	For sales that occur during the reporting month				
Calculation:	All of (qualified lead date – sales date) / number of sales greater than £250k				
Metrics used in the calculation:	• Qualified lead date – the date assigned to a lead moving to stage 3 (qualified lead) in the sales management system • Sales date – the date assigned to a lead moving to stage 6 (sale) in the sales management system • Sale greater than £250k – sale recorded in the finance system as having been invoiced and worth more than £250k • Month – Business reporting month = calendar month				
Thresholds	Worst	Red	Green/Best	Blue	Best/Cap

Add the thresholds for your KPI description:

Objective and Result					
Objective					
Intended result					
Key Performance Indicator					
KPI Label:					
Description:					
Owner:					
Updater:					
Frequency:					
Scope					
Calculation:					
Metrics used in the calculation:	• • •				
Thresholds	Worst	Red	Green/Best	Blue	Best/Cap

Once you have defined the threshold values for a number of KPIs go to step 5.

Step 5 – Upload Structure/Data

It is only at this stage that the objectives and metrics should be loaded into a performance management system. It is possible to manage your KPIs using a spreadsheet system, however, spreadsheets are notoriously difficult to centralise and maintain. Given there are numerous cost effective options available we would **not** recommend the use of spreadsheets (except for setup and trial purposes).

There are two parts to step 5:

1. Creating a KPI structure

2. Uploading or entering data on a regular basis

Creating a KPI structure. This requires some thought, at a later date you may want to restrict access to certain parts of your structure. Most performance management systems will allow you to move things around so don't be too concerned about getting the structure perfect, just keep it in mind. In most cases the overall structure can be based on your organisational structure or a matrix structure or a combination of both. Experience suggests that at the HQ strategic level a balanced scorecard approach is best and that this is supplemented by a divisional/departmental sub-structure that feeds KPIs into the top level.

For the purpose of illustration we will be using the QuickScore performance management system. This starts with a 'node' structure upon which all permissions to the system are based. A typical organisational/balanced scorecard structure would look like this:
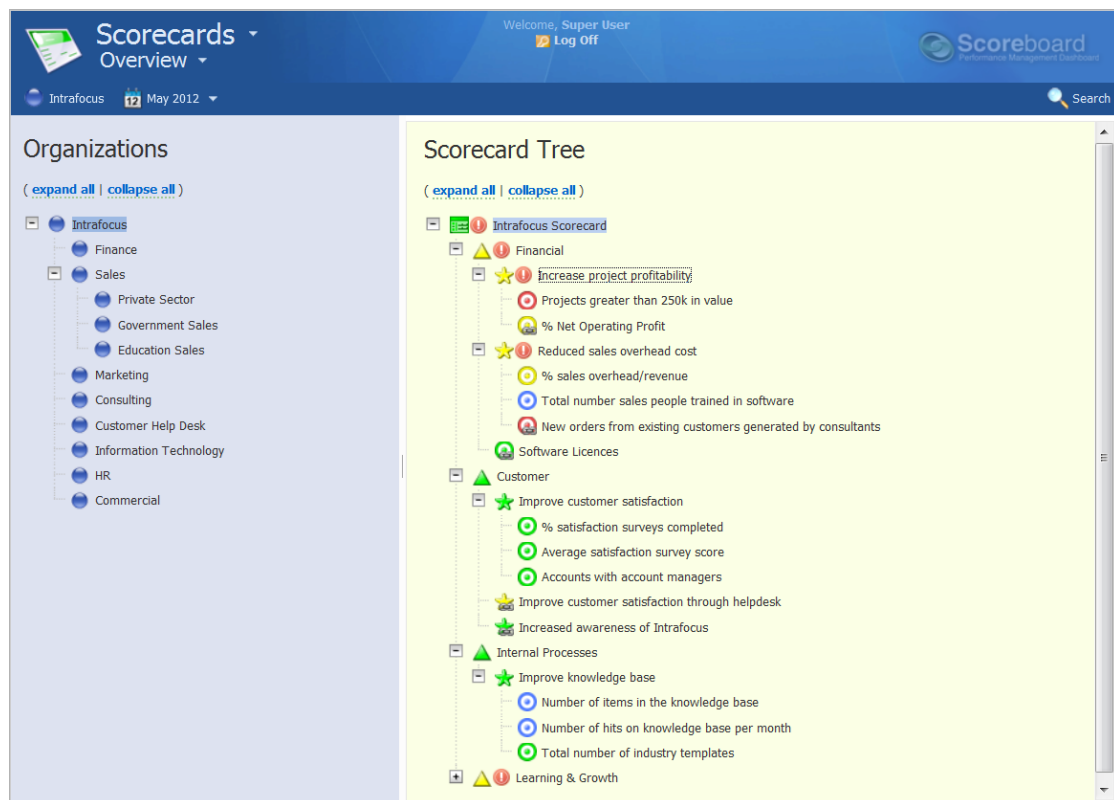
On the left are the organisational nodes and on the right the objectives and KPIs for the selected node. In this case you can see on the right is the company HQ balanced scorecard set out in the classic four perspectives: Financial, Customer, Internal Processes and Learning & Growth. You will notice that there are symbols denoting the perspectives (triangles), the objectives (stars) and the KPIs (circles) and each is colour coded to reflect the current status of the object.

You may also notice that one or two of the KPIs have a small 'link' sign, for example *'% Operating Profit'*. This indicates that the KPI, although in the balanced scorecard, resides somewhere else. *% Operating Profit* resides in the Finance department's organisation (the blue dot on the left). The scorecard structure in the Finance department follows a traditional Profit and Loss format like this:
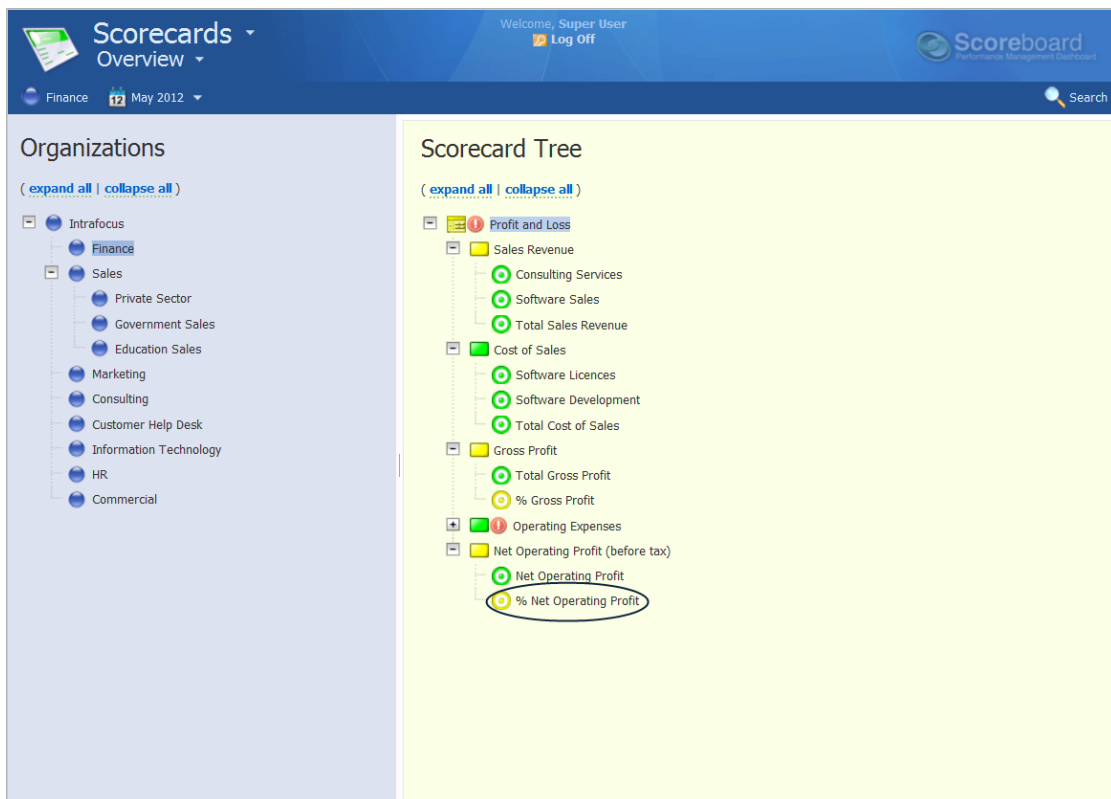
Although you should not consider all of the *metrics* in a profit and loss statement to be KPIs, it is the one area where it is sometimes useful to hold a copy of a full set of financial metrics to allow drill down as and when detail is required. Update of a monthly P&L or balance sheet to systems like QuickScore is a trivial task.

Once you have decided on the overall structure you can build the system. Most systems will allow you to manually create the structure and some will allow you to create the structure in a spreadsheet template and then upload it. The latter approach is less time consuming and can allow you to setup and tear down structures quickly and therefore introduces an element of experimentation.

When looking at performance management systems, be sure to check they allow you to input **all** of the data in the tables you have created above for each of your KPIs. If you find that the system does not allow this then we would suggest you keep looking.

Using our example "*Large order sales cycle"* we can see from the example below where all of the data resides:
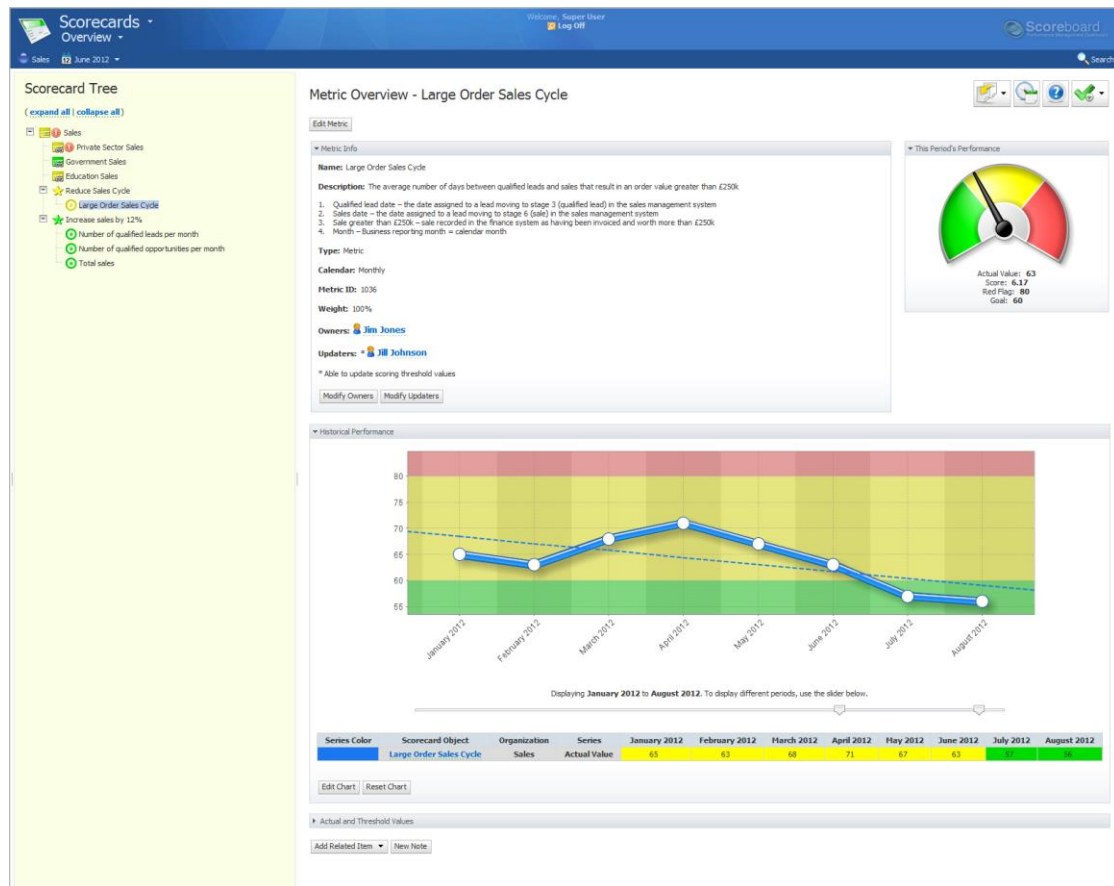
In summary, to create a structure for your KPIs answer the following questions:

- Who will be looking at the system and what do I want them to see? This will provide the first insight. If there are areas you want to restrict access to e.g. a financial balance sheet, then place it in an organisational node by itself.

- Do I want a cross-organisational view? In which case think about a balanced scorecard approach

- Do I want a strategic scorecard and departmental scorecards? This is a traditional approach, it allows you to maintain a few strategic measures (a good thing) and allows department heads the flexibility to measure other things that may be important to the department.

Once again, start small. Work on a few objectives and a few measures, get proficient, you can always add more.

The second part of step 5 is to look at how the data is entered or uploaded into the system

Uploading or entering data on a regular basis. This should be easy. If you have followed the previous guidance you will only have three or four objectives and each will have no more than three KPIs. A maximum of twelve items to update! There is a very good chance you will have many more KPIs. It is never a surprise that companies want to measure much, much more than is necessary. This being the case you need to look very carefully at two things:

- How frequently updates take place

- How to automate updates where required

Frequency - Previously we included a 'Frequency' item in our KPI description but did not say much about it. We are living in a 'now' world and as such we often feel the need to know what is happening at this very moment. This forces us down a route of measuring things in 'real-time'. Operationally this may be very important. On a production line you need to know about the health of the product at every stage of the manufacturing process. However, strategically this is of little importance. What may be important is the *result* of the measurement, for example the number of defects per week or per month. All businesses are different, but as a guide:

KPIs should be part of the monthly management reporting cycle; occasionally there may be a need to measure things weekly and rarely under extraordinary circumstances daily.

Why? For any strategic measurement to be meaningful there has to be some historical data available to examine. That together with the time it takes to implement a corrective action means even for a small light-of-foot business, the time to react will be days or weeks and not hours.

Updates – whether to automate or not will become a trade-off between the expense of building an automated system and value of the 'released' time of the individuals that are in the firing line to update the system on a regular basis. Most Corporate Performance Management systems will provide built-in automation capability to allow a direct connection to spreadsheets, databases and in some cases to the more popular back-end ERP systems. This is useful particularly if you want to include metrics (as distinct to KPIs) as part of the system to allow users to drill down to detail when required. A good example of this may be an end of month financial summary.

Using our example system, QuickScore, this can be easily achieved in a couple of ways. The first and most simple is to dump the financial data to a spreadsheet of a specified format, place the spreadsheet into a common area (usually a secure ftp server) and then schedule a regular upload. Typically in an operation like this there will be a one-off task of 'mapping' the spreadsheet data to the appropriate measures you have previously defined to the QuickScore system. For example, if we take a look at the Finance node in our sample system it might hold a Profit and Loss configuration that looks like this:
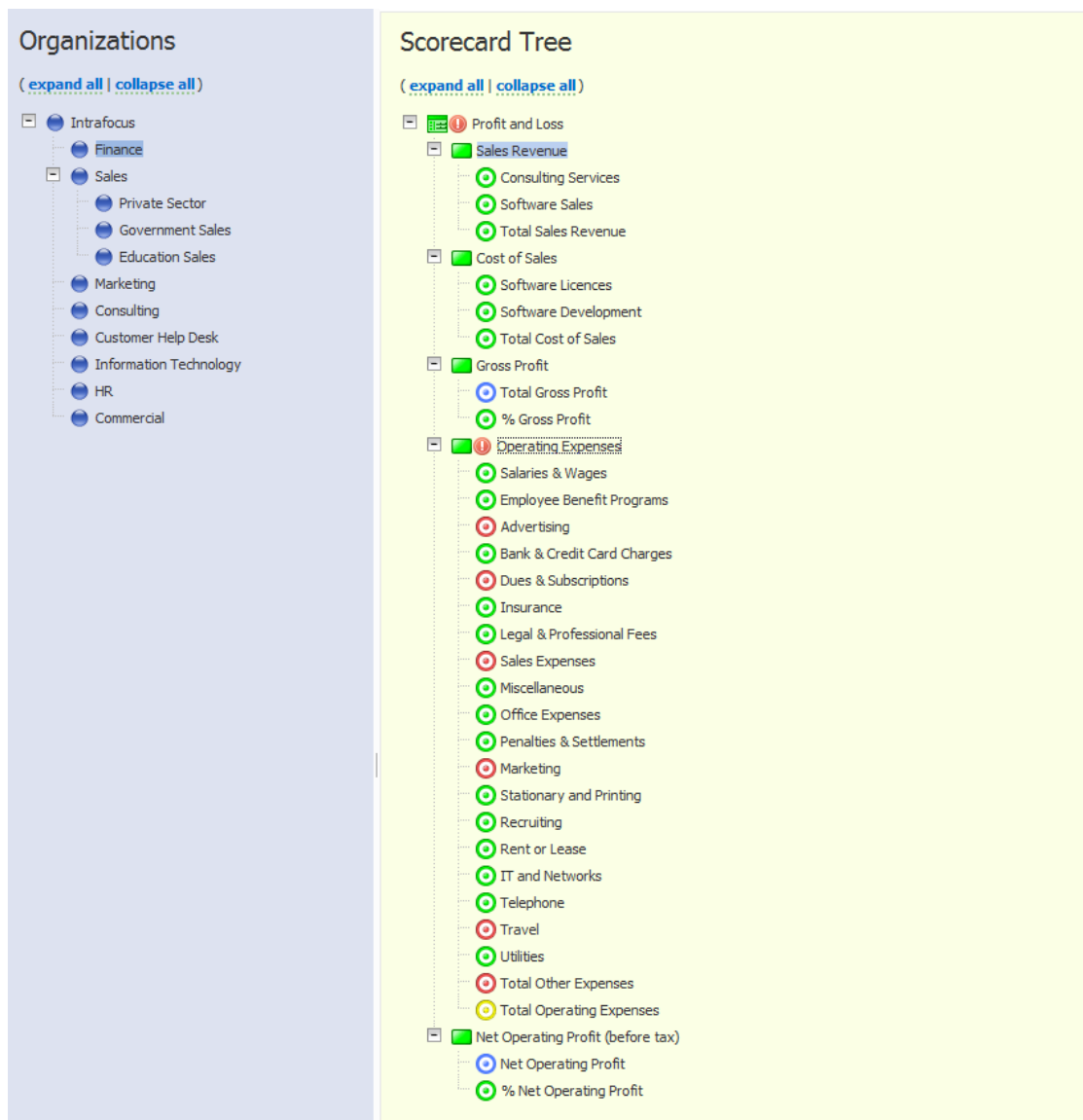
The metrics are useful in drill-down scenarios but the job of updating each one manually every month would be tedious. Most financial systems have an 'export to spreadsheet' function, so the data above could easily be exported to a spreadsheet and imported into QuickScore. This is a very low-cost mechanism that not only speeds up the process but ensures greater accuracy.

It is possible to link the performance management application, in this case QuickScore, to the financial system (e.g. QuickBooks, Sage or Oracle Financials), but this will almost certainly require the intervention of the IT Department and can become costly.

Once you have decided on an update mechanism, be it manual or automated, you can start adding *actual* data to the structure. For the data to be meaningful, you will need at least 3-6 months history. This may mean feeding in some historical data or waiting until there is enough data to work with. You will then be able to move to Step 6.

Step 6 – Interpret Results

Once a there is a meaningful set of *actual* data in a corporate performance management system then the job of interpreting results can be started. There are two phases to this activity, first to create a set of meaningful dashboards from the data and second to interpret the results as displayed on the dashboard when *actual* values have been entered.

In phase one dashboards are created to provide an overview and enough detail to enable a business/organisation to be managed effectively. Unlike paper based or PowerPoint reporting, using dashboards means the data is updated automatically when any KPI is updated. You do not need to have a long history of *actual* data to create a dashboard, but two or three months' worth will be useful to allow you to see trends. Care needs to be taken when designing a dashboard, the key questions to be asked is:

Who is the audience for the dashboard?

All dashboard creation has to start with the audience in mind. A chief executive will want a very different view of a business as compared to an operations manager or a financial director. One-size will never fit all in dashboard creation. Typically the dashboard will be a management tool that can in the first instance provide an overview or at-a-glance view of the business. The example below is a classic strategy map using the Kaplan-Norton balanced scorecard approach:
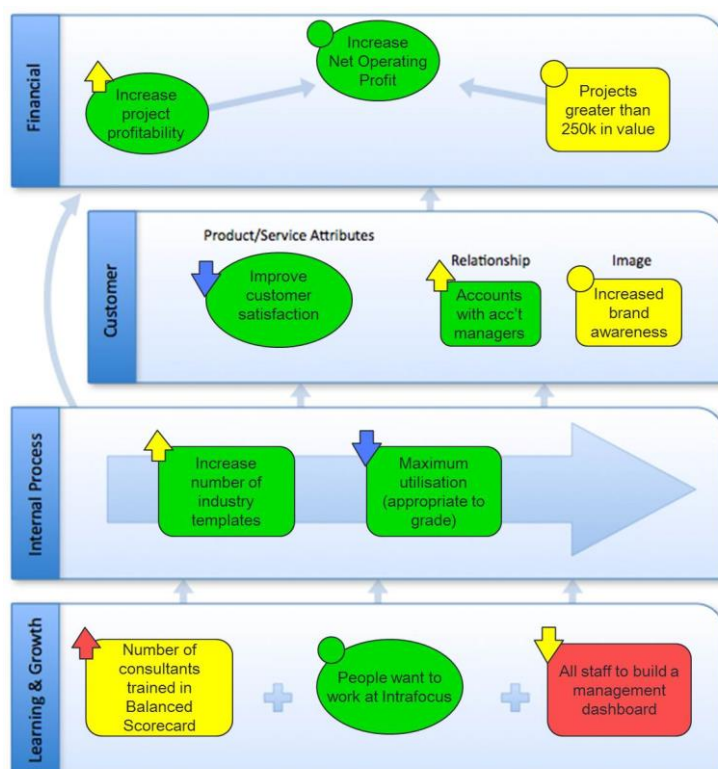
We can immediately see through the 'RAG' colours where the problem areas are and interestingly in this case there are also arrow and circle symbols that show the status from the previous month providing us with some limited trend data. The elements can be clicked on to drill-down into lower level KPIs.

It may be that the dashboard primary function is to educate a workforce about a company strategy; a simple three point dashboard like this could be used:

Or the dashboard is aimed at the Sales community and therefore more complex:
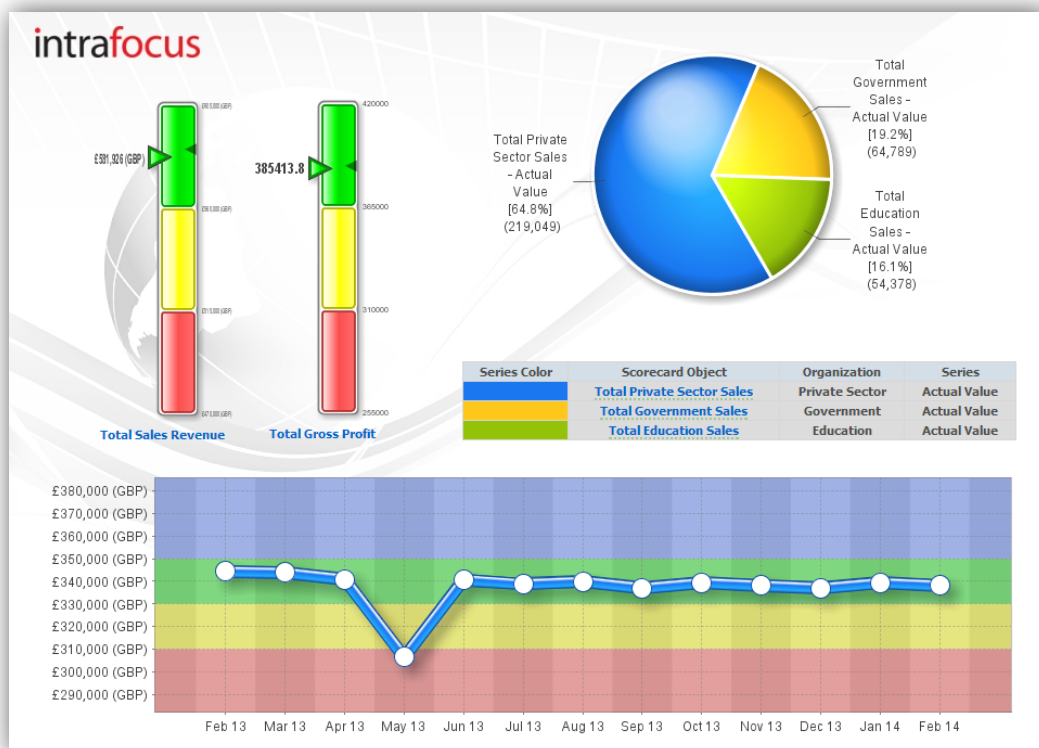
Whoever or whatever the dashboard is to be used for, consider the following questions during the creation phase:

- Is the dashboard suited to the audience it is being built for?

- Does the dashboard have an intuitive user interface and navigation?

- If providing drill-down capability, does it provide enough additional information?

- Have the right access permissions been set up?

- Is the balance between current and historical data correct?

- Visually, do the important items stand out?

Finally for dashboard creation; don't get carried away with the technology or colourful charts, sometimes a simple spreadsheet style is the best way to get over a complex message. The most important thing is to summarise your KPIs and not simply reflect them. It is this last point that takes us to the interpretation of the actual data.

Interpretation - Earlier we spent quite some time on 'thresholds'. By defining threshold we have given ourselves the means to look at colour-coded KPIs which allow us to interpret the data quickly. However, this is not the whole story. We have taken a big step forward but we cannot simply rely on a RAG status to enable an informed decision or to put in place a new plan. Why? Because businesses are complex entities, no single or identifiable cause can hold the key to a solution. Just because a KPI is 5% down on last month's performance or is different to last year's performance or has gone below an artificially imposed threshold does not automatically mean there is a problem. It is however, an indicator that there is a potential problem.

There is a book's worth of information around Statistical Analysis, for the purpose of this exercise we will concentrate on the difference between 'point' analysis (looking at KPI thresholds) and 'pattern' analysis (looking at changes over time).

Using thresholds gives us all we need to undertake a 'point' analysis of a KPI. Simply put, if the KPI moves from an acceptable position (green) towards an unacceptable position (red) then there may be a problem. The first line of enquiry should be to ask the 'owner' of the measure for an explanation. If the explanation is reasonable then no action needs to be taken. If not, then the second line of enquiry should be to look at associated KPIs. The rational here is that in business it is rare that poor performance in one area will be isolated; there is usually some form of knock-on effect. If everything else looks fine, then it may simply be an anomaly during the current months reporting. At this point however, it would be prudent to start looking for 'patterns' within the single KPI and across related KPIs. In summary, the process up to this point should be:

1. Look for movement towards or into 'red'

2. Request an explanation from the KPI owner

3. Look at related KPIs (for associated movement to 'red')

4. Start to look for patterns within and across KPIs

The last item on the list 'looking for patterns' is the most crucial when interpreting KPIs. To illustrate this we will use a new example from the Intrafocus QuickScore demonstration system. The KPI of interest is "*the average time to contract in days*" and measures the time

between a sales order being taken and a contract being finally signed, in days. Driving down contact negotiation time is a common objective as legal/commercial fees are usually priced in hours and can be very expensive.

The first thing to check when looking at a KPI over a period of time is the 'stability' of the measure. In the graph below we can see that during the period January to October 2011 the KPI results were highly erratic. This in itself is a cause for concern. However, it is important to recognise the difference between rectifying 'unpredictable' behaviour and attempting to improve performance. Any performance improvement plan needs to be based on performance that is reasonably predictable or stable.
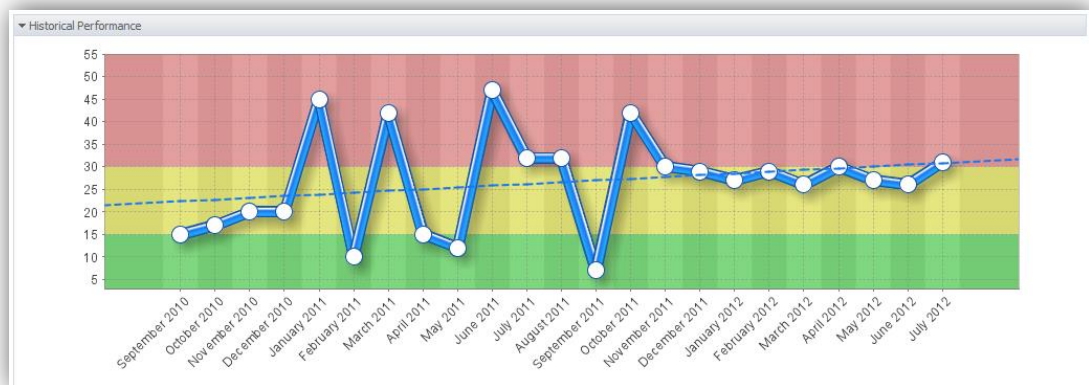
In the example above we can see that from November 2011 onwards the historical performance – "Average time to contract in days" KPI has begun to stabilise, the variance is plus or minus 3 days. This provides a good base to think about improvement. It also indicates that something happened in November 2011 to cause this change.

In this instance the change was due to resourcing; up to December 2010 two commercial managers were working for the company, in early January 2011 this was reduced to one. If we look at an associated KPI *"Number of sales per month",* we can see that during January to October 2011 the time to contract pattern is almost the inverse of the number of sales:
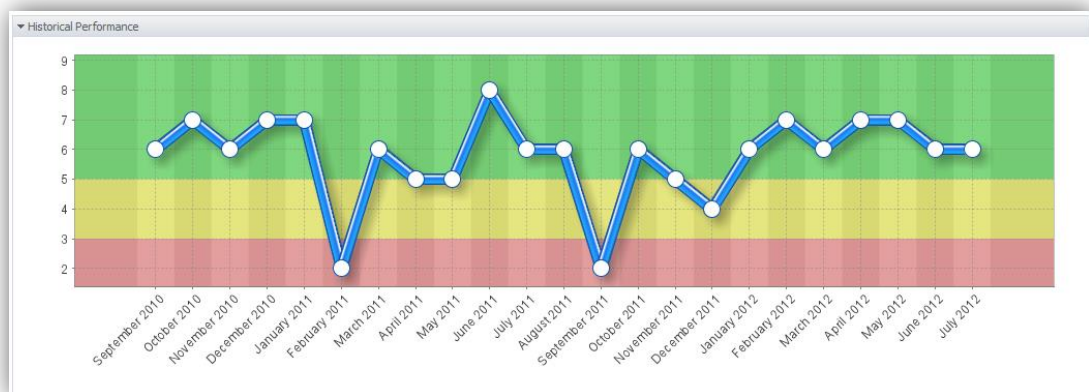
this indicates that when more sales occurred more time was taken to negotiate the

contracts. During the 'unstable' period, the commercial manager simply could not cope with the volume of work.

The company added extra resource in November 2011 and the KPI stabilised. The long-term trend indicates that the problem has not been solved, the performance is trending to the red and the last month's red threshold has been entered. At this point a decision could be taken to do one of three things:

1. Live with the problem because it is too costly to fix

2. Add further resource in an attempt to resolve the problem

3. Change the thresholds because things have moved on

Looking at the three options above may not be the whole story; the latter option forces the need to look at a time period closer to the current date. If we do this and pull the dates into the October 2011 to July 2012 timeframe the result is as follows:
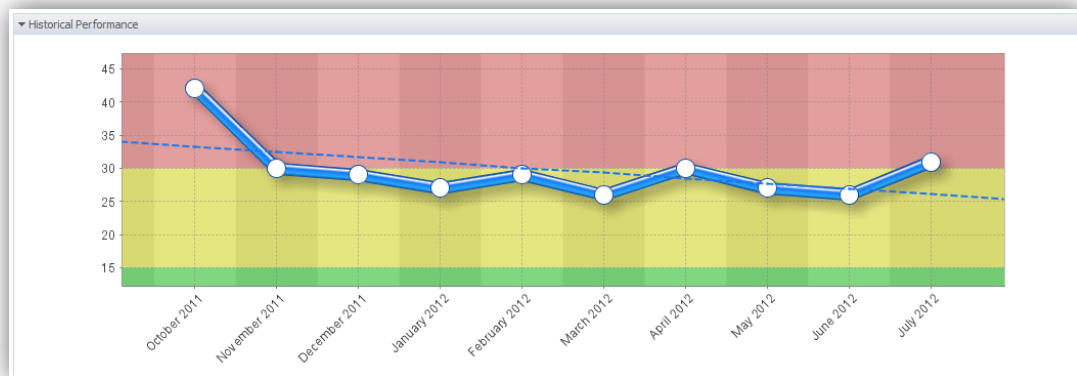
Here we see that although the long-term trend was suggesting an adverse performance swing, the shorter term view (still 10 months long) indicates a positive trend. Although the KPI has veered into the red this month, the trend suggests this is an anomaly and things will get better over time.

All situations will be different; here is some guidance to be used when interpreting the results provided by your KPIs:

• Do not rely on 'point' analysis, business is too complex for that

• Always question the owner of the KPI

• Always look at related KPIs

• Be prepared for more questions rather than answers

• Check that the KPI is stable and predictable

• Drill down into source data for more information

- Look at long-term and short-term trends (short = 6 months, not less)

- Train yourself to look at patterns within measures and across multiple measures

- The key is to see the difference between 'normal' variation and 'abnormal'

- Look for ways to change and not control outcomes

The last item on the list leads into step 7. When it is clear a KPI (or and objective) is moving in the wrong direction then action needs to be taken. The action needs to be linked to the KPI and progress monitored and managed over time to correct or improve.

Step 7 – Take Action

The raison d'être behind KPIs is to take action when improvements or changes need to be made. KPIs provide the evidence that an objective is either being met or not. Any KPI that shows (through the correct interpretation) that an objective is moving in the wrong direction needs to have an action associated with it to remedy the situation. The action may take the form of a task, project, activity, budget change or simply to remove the objective.

The action must be something that is going to cause a change; it is useful to think in terms of *change* rather than *control*. One of the most common mistakes with actions is to simply re-state the KPI. Using phrases like "we need to work harder" or "if they don't meet their target, they will be in trouble" are not helpful. If all of the previous stages in developing successful KPIs have been gone through properly, then a failing KPI/objective needs to be linked to a positive action that will cause change.

Unfortunately there is no easy answer to what the action might be. It will require a further analysis of the problem utilising all of the available business tools to help understand the context and cause of the results. Studies have shown that choosing a deliberate course of action with a task, goal and milestones together with assigned ownership always provides the best outcome. The following example looks at how to put a physical *link* between failing objectives and a task to ensure action is not only taken but monitored until successful conclusion. Using the Intrafocus QuickScore demonstration system we can see below that the objective "Increased awareness of Intrafocus" has taken a dip into the red.
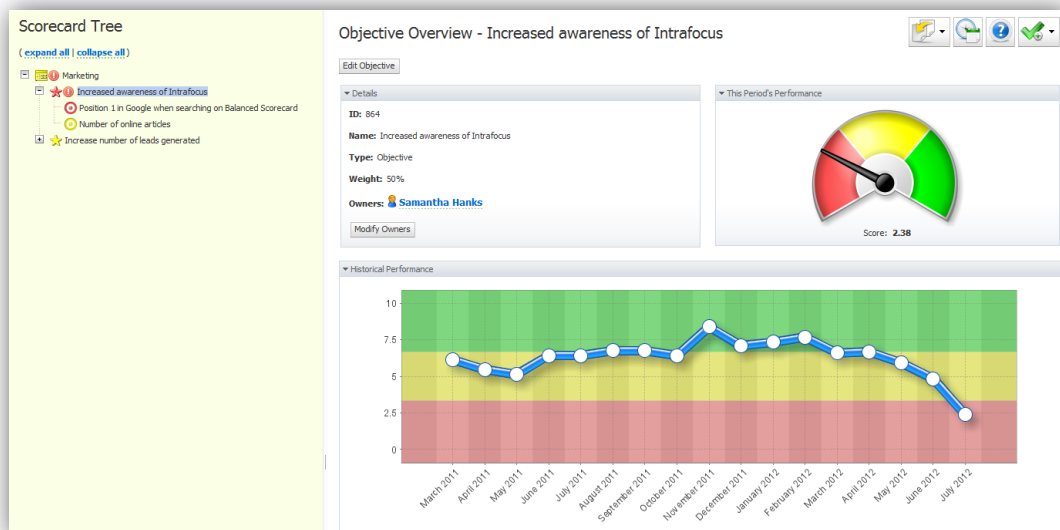
Let us assume that the process of interpretation has been gone through successfully and that this is not a monthly anomaly but a trend that need to be rectified. The first thing we can see is that there are the measures associated with this objective. One is a 'lag' measure i.e. "Google position when searching on Balanced Scorecard" and one is a 'lead' measure i.e. "number of online articles". This is a good sign, it is always better to have a mix of lead and lag measures. Indeed a simple action in this case may be to increase the number of online

articles. The KPI is amber so this should certainly help. However, in this example we will assume the problem has been deemed to be more serious so another action needs to be created. To help resolve this problem, a 'Related Item' called "*Position 1 in Google search*" has been added as follows:

The item links directly to a set of tasks and milestones that have been defined with clear ownership as follows:

Linking the Action to the KPI which in turn is linked to the Objective is essential to ensure a positive outcome. In this way everyone concerned is aware of the problem and has a high degree of visibility to all of the performance management elements required to successfully manage the business or organisation.

In Conclusion

This methodology has a primary goal to ensure that valid KPIs can be created, monitored and acted upon to ensure that the right objectives are established and that they contribute to a company strategy.

Here are a few things that need reinforcement:

- The golden rule: KPIs are based on objectives. There is no reason for a KPI to exist unless it is contributing to an objective.

- Think about objectives in terms of results, they should have a tangible element, something that can be measured.

- Objectives should use words that relate to how we physically perceive things in the world. This is a good technique to sense-check you are on the right track.

- When creating a KPI it needs to be clearly described, based on an objective, rated in terms of importance and assigned ownership.

- There should be a good mix of '*lead*' and '*lag*' KPIs, do not rely heavily on lag measures, they cannot influence an outcome.

- Assigning 'thresholds' is not only a good discipline (it forces discussion about good, bad and indifferent results *ahead* of time) but enables highly visual reporting.

- Think about the structure of your reports and ownership, when you start to use a performance management solution it will help with permission definition

- Think hard about the need for real-time reporting; will it make a difference to the way the business is managed?

- Dashboards are a great way to provide an at-a-glance view of the business, take care during construction to think about who the target audience is.

- Interpreting results is a *process*, it is not a *reaction*. Any 'dip into the red' needs to be examined carefully and in context, the measure own must be involved.

- Actions need to be physically linked to objectives/KPIs and managed together; they are all part of the process.

And finally, review your scorecard structure at least every six months. We have a tendency to consider this as an annual job, in today's environment that is not good enough. Keep competitive, keep on top of your measures.

If you would like more information, then please contact us at helpdesk@intrafocus.co.uk or go to our website at www.intrafocus.com or hit the Helpdesk button at the top of the any Intrafocus webpage and fill in the request form.