AMQ INTERNATIONAL
STRATEGIC ASSET MANAGEMENT

The Core -
Excelling by Tracking Outcome Performance & Reinforcing Values

Asset Management Strategy comprises three distinct layers of decision making:

- the OUTER CIRCLE where the organisation connects with the wider world and makes decisions concerning its goals and vision. Strategic changes in direction are made here. Think "Where do we want to go" (Issue 269)

- the INNER CIRCLE where the organisation's strategic decisions concern how the organisation should be structured to best achieve its goals and vision. Think "How do we get there?" (Issue 270)

- the **CORE** where the organisation monitors its achievement of its goals and vision, where it reinforces its values, where it receives and analyses feedback. Think "How are we doing?"

It is the **CORE** that we examine in this issue.

Coming Up

In future issues I intend to look at practical applications of the principles that we have studied in these last 4 issues. What, in particular, would you like to see? Email me at info@amqi.com

Please consider - and enjoy! Penny

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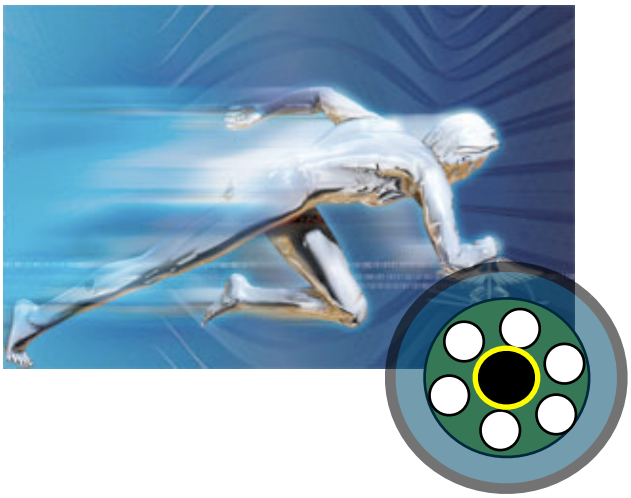


THE CORE: Excelling by Tracking Outcome Performance & Reinforcing Values

Decisions made at the core anchor the vision, goals and values of the organisation. Consciously or unconsciously, decisions made here at the core determine the actual values held by the organisation, regardless of public pronouncements. Decisions at the core determine the morale of the organisation and thus how easy it is to recruit newcomers and to hold onto staff. It is at the core that decisions determine the credibility of your organisation and your success in achieving your goals and vision.

The core is where you find the answers to "How can I encourage the organisation to perform beyond mandatory levels of compliance?", "How can I ensure that key performers think ahead beyond the end of their term or tenure?" and "How can I get key performers in different divisions to work together for the common good?" It is also where you determine whether your people will be prepared to take sensible risks, take ridiculous risks, or take no risks at all.

The two critical factors are what you measure and respond to, and what you reward. The design of these measures and response mechanisms, and the reward practices established are key strategic decisions that determine whether your goals and vision will be achieved and whether anything, including organisational structure, needs changing.

Measurement

Measurement at the core is not by KPIs.

KPIs (Key Performance Indicators) are useful *efficiency* measures for divisions, but they make poor *effectiveness* decisions, as is shown in the following illustration, an actual case of a new quality control manager in the white goods industry trying to make a change that would net the organisation an improved, more reliable product for its customers, a pleasanter work life for workers and a sizeable profit. One would think that the change would have been welcomed by all. Yet read the case study opposite to see how adherence to individual KPIs blocked the achievement of a good organisational outcome.

KPIs and the Corporate Good - A salutary story!

The company's statistics showed that the "V" belt in their washing machine product was the cause of a high percentage of machine failures and call-outs. When called out to fix a fault the technician fitted a different brand of belt to that used originally, a brand widely regarded as a 'fit and forget' belt as the service technicians had used them for five years with only one known problem. A few sums by the new Quality Control Manager showed that the 'fit and forget' belt cost 10 cents more than the one the factory used, but in terms of warranty costs the 'cheaper' belt was costing about $1.10 for every washer produced. Switching to the new belt would save $1.00 per washer - a small amount but with the quantities produced it would amount to $200,000 per year *per plant*.

But although it was a clear corporate gain, the KPIs by which individuals were measured meant it couldn't happen.

1) **Engineering** - The washer division's chief engineer had been aware of the problem but he'd not seen it quantified. Could he specify this "fit and forget" belt? Only if he wanted his performance to look bad, for he was evaluated on the basis of keeping down the "Factory Variable Cost (FVC)"

2) **Purchasing** - The purchasing manager could appreciate the advantages of the new belt but was also reluctant to take action. He could introduce a FVC saving immediately but if the cost of any item went up then he had to be prepared to be grilled unmercifully at each monthly meeting. His primary yardstick was the FVC reduction target- and if by his actions there was a saving in warranty it would give him no kudos. (all pain - no gain.)

3) **Production Manager** - The factory belt as it came through the door had too hard a surface and would slip on the pulleys. Thus the special equipment people had built a machine that wire brushed the faces of the belt - scuffed them. The extra labour cost of this operation was about 10¢ per belt! Not only that but the special machine fouled the air with fine rubber dust with the result that the nearby lunch area was never used. What an opportunity! Using the new belt would get rid of a particularly messy operation and save the cost of an operator. A great opportunity? No, the Production Manager was evaluated by the ratio of direct operators (good guys) to indirect operators (bad guys). Removing a direct operator, even though unneeded, would send the ratio the wrong way.

(4) **Divisional Manager** - At least the divisional manger would understand! Sure he did. His yardsticks were the collective sum of the other yardsticks - so the below deck logic applied at the top. He was also responsible for the warranty cost of the product. But being no fool he knew what his main yard- sticks were - he had his grilling each month in front of the Board and he knew exactly what was important.

(5) **Chief Financial Officer** - Could divisional managers increase the FVC and offset this with greater warranty savings? "Well I suppose if a divisional manager actually wanted to increase the FVC he could always come to Head Office and make a proposal." There it was again - the No.1 yardstick - Factory Variable Cost - was all pervading.

Fortunately the company had a good CEO who had the foresight to have asked the Quality Control Manager to sit with him and his key managers on an irregular basis and advise them on what they could do to improve quality. He raised the story of the "V belt" prefixed by "here's a story that I think might amuse you".

(6) **The CEO - was not amused!**

If not KPIs, then what?

Here it is necessary to determine between *asset* performance and *asset management* performance. They are different and each is important.

As we saw in the story on the previous page, KPIs are related to processes, not to outcomes and not to assets, and whilst their original purpose was to 'measure unit performance' they quickly become objectives in their own right for the units concerned, producing the distortions that the story illustrated.

The measures that are needed for Asset Management Strategy decisions are those that relate assets and asset performance to the organisation's desired outcomes. They are easy to distinguish from KPIs because they all require analysis and interpretation, i.e thought.

Asset Performance and Asset Management Performance

Most asset-based companies have in place some indicators of current *asset* performance. Ideally, these show the assets' contribution to service or production outputs. For example, if you have a service measure of lost customer minutes (as in electricity generation), you will wish to see what is causing the loss. Is it a failure of the assets (plant breakdowns) or is it a failure of overall capacity (a strategic issue)? If your service measure is the number of trains delayed (as in some rail companies) the reports will usually tell you whether this is a problem with the assets such as the track, signals or train, as opposed to, say, drivers not being available.

Working out the 'asset' and the 'asset management decisions' contribution to outcomes is not always straightforward but the principles need to be clear. Why did an asset fail to deliver? Is it because of a failure of the asset (under-maintained or wrong thing done during maintenance) or is it a failure of the *asset decision* - wrong asset in the wrong place?

How to measure Good Asset Management Performance

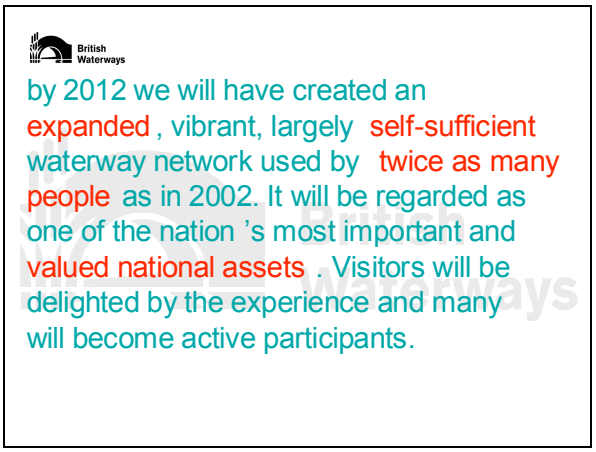
Performance indicators for asset management can be tricky because asset managers' decisions are inevitably related to future circumstances. Ruth Wallsgrove, in "A Basic Primer on how to manage Asset Management Performance -with practical examples" SAM 176, argued that part of the answer to the question "How good are we as asset managers?" is the extent to which we can relate our plans to future demand and the quality of the processes used to produce the demand estimates as well as the plans.

"Providing more data is not the answer", she argues. "Giving other people ever more information doesn't really help them if they don't have the resources to use it. So the way forward is not so much about more performance indicators, more data per se, but transparency about decision-making.

If our methods and models are clear, we should be able to show how we come up with our answers with the inputs we used. The Board, owner or regulator can check our input data and prod our models. If we're halfway competent, they can't know more than us, not about the assets; we'll have the data and should have the knowledge, the access to best practice methods, the means to develop them for our business. Then, how efficiently the plans were implemented is the success or failure of Asset Delivery, of programme and project management and maintenance - not asset management."

How to Measure the Performance of your Vision

A detailed Vision



In order for an AM strategy and its related implementation plan to forward the organisation's vision, that vision has to be clearly understood. Broad generalities are useless for providing guidance. A detailed vision statement not only provides the direction needed for decision making - but, importantly, it allows you to see when circumstances may require a change. This is a key function of measurement and vision tracking.

You will recall the following from Graham Holland's "A Compelling Case for Vision (part 2)" which is very relevant here.

"There has to be real excitement embodied in the Vision about the benefits for our business and customers from improving asset management. Start with a view of where we want to be in 10 or 20 years, and what outcomes we want to deliver, and then work back to where we are now. Our asset management strategy is about how we get there and what things might affect the journey

My organisation has a vision, set in 2003. Things were looking good then. Let's pull out some key words – expanded, vibrant, self sufficient, doubling of visitors, valued national asset. These words were important for our asset strategy. An expanded network meant more km of canal, more new assets, higher maintenance standards. Largely self sufficient meant we had to drive more income from our assets, our land, and our customers. But the reality of the last 6 months is making us look at this anew.

Can we really believe in continued expansion when money will be tight? Can we believe in self sufficiency when Government is looking greedily at selling our property portfolio. Can we expect continually increasing numbers of boats on our system in these harsh economic times?

So we now need to revisit the Vision. We need to give it a reality check and perhaps adjust it to reflect the new realities. Our Asset Management Strategy will need to change to match this."

What gets rewarded?

Many a company claims that they have a high regard for their excellent staff, but their actions belie their words. Many a company claims to put environmental sustainability first but then focus on short term profits.

What you DO trumps what you SAY.

So what do you reward? Rewards are not only monetary rewards or promotions. In fact, non-monetary rewards speak louder. What gets praised in your organisation? What stories are told with pride at board meetings and social functions? What do you write about in in-house journals? What papers are selected for presentation at conferences? Who gets chosen to head up prestigious interdepartmental or inter company groups?

If you want your key people to look beyond their term or tenure, ask yourself whether this is something that the company publicly rewards. Are previous key people recognised for their contribution to present day successes? Is co-operation publicly recognised and rewarded or are the plaudits saved for individual gains and excellence? Who gets extra staff, the leader who puts effort into working with other divisions, or the leader who jealously guards information within his own division? The rewards mechanism in any organisation will determine what is valued by the staff - and therefore what gets done.

Is the reward structure consistent and transparent? Does it seem fair? If so, morale will be high and it will be easy to attract new staff and retain the staff you do have.

A case in point

Recently I had occasion to consider with a group of about 20 reasonably senior council officers a project that had been hovering for about ten years and if it went ahead was scheduled to cost at least $35 million and quite likely a lot more. We were using the Investment Logic Map framework that has been described in previous issues. The group found it very difficult to define the problem that the 'solution' was expected to solve. They could find NO drivers, objectives - and especially NO benefits that could come anywhere near justifying the $35 million price tag. Despite this, not a single one thought to challenge the status quo and suggest that the project be cancelled - or, at the very least, rethought at a senior level.

Were these people stupid? Not at all! However the 'system' did not provide any means by which the appropriateness of the project could be challenged.

Not stupid people, but also not a good system! And this story can, I am sure, be replicated in many other organisations. Yours?

A second case in point

In another example of examining a project from the standpoint of the Investment Logic Map framework, I took a project currently under discussion. Again present were a group of senior middle management. Again the project was unanimously seen to present no benefits that could anywhere near justify the costs, moreover the project was also seen to

present the possibility of creating a dangerous precedent whereby other similar projects could also be justified. BUT the group believed that they were obliged to go ahead with it. The possibility of not doing so did not occur to them. So they applied their considerable ingenuity to 'creating' a justifying case - a case that no-one believed in!

Again, were they stupid? Not at all! But a system that does not encourage full consideration of project worth IS a stupid system. Again, I have seen this situation replicated many times over the more than twenty five years that I have been involved in observing government decision making.

Do your systems permit such behaviour, indeed do they force such behaviour? Not only does this prevent organisational outcomes being achieved in the short term, it does long term damage by endangering worker morale - who wants to be responsible for projects they do not believe in and how can they seek to optimise when they do not know what is to be optimised?

The two examples above are reasons why incorporating ILM into your system's project evaluation approach is a good move!

The role of information technology in Asset Management Strategy

"I have a program for that!"

No you don't! In their enthusiasm, and perhaps lack of understanding, many software producers will tell you that they have a program to "do asset management strategy".

Programs can help illustrate the consequences of a given set of assumptions, but they cannot *generate*, or *test*, or *choose between*, those assumptions. Programs do only what their programmers tell them to. If your programmer has not foreseen the (many possible) consequences for your particular assets in your particular current configuration, in your location, with your current and future likely customers, customs, rules, and regulations - and under a wide range of future possibilities for climate change, commodity prices, demand change, etc. - then you may have a generated list of works orders, but you don't have an asset management strategy. And no program can make the many reward and appreciation decisions that determine a successful company.

Information for Asset Management Strategy

Less is more

It is surprising, yet nevertheless true, that when it comes to strategic (as distinct from operational) decisions, less information is required. After all, if you are being chased by a tiger, you do not need to estimate the speed of the tiger, you just run as fast as you can! Similarly for many decisions that need to be taken at the strategic level - whether to do more or less of something - it is often not necessary (and most often not possible) to know *how much* more or less, it is just necessary to know in which direction to move - *and then review frequently.*

Strategic Information is different

A good proportion of the information needed at the strategic level does not come from the Asset Information System. At best the AIS can tell you how much is required to maintain and renew the current assets in their current formation and for current needs. But this is only part, and often a small part of what the strategic decision maker needs to know. Strategic decisions require to know, or rather need to best estimate, future client demand, likely technology changes, possible future scenarios with respect to legislation, and the impacts of such things as global warming, political regime changes, peak oil, etc., etc.

Asset information support for strategic decisions

Nevertheless some asset information systems are more useful than others in supporting strategic decisions.

- **History** - Systems that reset to current data are ideal for operational tasks, but not for strategic decisions, these require a sense of where we are in time and for that, a system that retains history is necessary.

- **What if** - Systems that allow simple (or complex) 'what if' analysis are desirable for strategic decision making. Trend analysis is essential to strategic decision making.

- **Aggregation - Systems that allow different levels of aggregation - say a 'roll up' of all expenditures** and interventions by asset, asset type, or region, lend themselves to strategic decision making more so than systems that provide only one type of aggregation, for example, accounting systems that record expenditure by facility but do not distinguish what assets or components in that facility are requiring intervention may serve the accounting function but are of limited use for strategic decision making.

- **Asset life** - Systems that record only remaining life but not economic or useful life are sufficient for short term operational interventions but are of limited value for longer term strategic decision making.

Asset Management Strategy - Art and Science

For all of the above reasons, asset management strategy is as much art as it is a science. It is continually evolving. Like the law it develops by the acquisition of case law. Unlike the law, that case law is often not documented! "*Strategic Asset Management*" is one of the few easily accessible sources of ideas, case studies and techniques in asset management strategy. In future issues we will bring you examples of the principles discussed here - as applied!