

Issue 1*, January 15th 1999

Strategic Asset Management - Making a Positive Difference	1
AIS - What to know before you choose, a 5 part series - Pt 1: Why it pays to be 'lean and mean'	4
Asset Preservation?	5
Benchmarking - the Hare and the Tortoise	6
Glossary - Benchmarking and Benchmarking Metric	8

Strategic Asset Management - Making a Positive Difference!

Welcome to the New “Strategic Asset Management” that will put the fun and challenge back into asset management - and enable you to make a positive difference.

What is Strategic Asset Management?

I have often been asked how SAM differs from, say, maintenance management, or facilities management, or property management.

In past newsletters (*Asset Management Quarterly; AMQ International*) I have tried to answer this question from an organisational or functional viewpoint – that is, how organisations are structured, or what Strategic Asset Managers do. But *structure* or *doing* is not the real key.

Being Strategic

The real key to being strategic is where you focus your attention. If you focus on *what you are doing* you are carrying out an operational task; if you focus on *how you are doing it*, seeking to ‘tweak it’ or do it better, then you are engaged in a tactical activity. Both of these are necessary and important. However, they are not strategic. The strategic task is the one that focuses on the outcome, or the purpose.

**The successor to AMQ International and the Asset Management Quarterly, first published in March 1994.*

*Researched and written by Dr Penny Burns, AMQ International.
Published fortnightly. \$A200 p.a. Subscriptions, Comment, Inquiries to*

The Questions You Ask

By way of illustration, take the construction of a new hospital. If the questions you are asking yourself are ‘what is the purpose of this new hospital; what needs are we providing for, should we be providing them or should they be provided by others, or should they not be provided at all; is a new hospital required or are there better means?’, then you are focussing on the *outcomes* - ie being strategic.

Asking yourself ‘should this construction be carried out as a ‘design-construct’, ‘build-own-operate’ or some other form of contract’ is asking tactical questions. If you ask ‘how do I ensure this construction comes in within time and budget and is of the right quality’ then you are engaged in an operational task.

‘Strategic’ is not the same as ‘Important’

Recently there seems to have been a tendency to use the word ‘strategic’ as a superlative: Putting ‘strategic’ in front of, say, planning or management to make it ‘more important’. Using ‘strategic’ in this way is to demean it and reduce its usefulness.

Potential Gains from ‘Being Strategic’ are high.

A focus on outcomes can avoid unnecessary capital acquisition and their subsequent operational and maintenance costs. Focussing on service needs enabled Launceston Hospital to replace its existing maternity hospital with a much smaller and more efficient unit, saving 75% of the capital cost and providing maintenance and operational savings.

Strategic Asset Management (*SAM*) is *not limited to saving costs* - it can also increase benefits. And here, well, the sky’s the limit!

SAM can be applied by maintenance managers or facility managers, it is not confined to decisions concerning new assets. Maintenance Managers *are strategic asset managers*, when they are focussing on how to refine maintenance processes to achieve *better* outcomes.

What is a ‘better outcome’?

What constitutes a ‘better’ outcome, however, is not for the maintenance manager to decide. A ‘better’ outcome is *one that moves the agency in the direction of its strategic vision*.

In this sense, a ‘better’ outcome may be one that makes the asset worse!

That is, it *could* be better, say, to *reduce reliability* (if the consequences are slight and the cost savings by so doing are substantial), or to *increase cost* (if, by so doing, operations costs were reduced or operating revenues increased, by a larger amount).

A *strategic* decision is one that takes all of the outcomes into account, not just the impact on the section’s budget.

Outputs are not Outcomes.

An output is the product of your activity, ie getting a task completed within time and budget. That is good, but it is *not strategic*. The strategic task is deciding *whether* the job needs to be done at all, and in *ensuring* that *the benefits* are greater than the costs. That is the strategic task focusses on the purpose for the activity.

A “Four-Step Process”

How can YOU be a Strategic Asset Manager and *make a positive difference?*

- | | |
|--|---|
| <p>1. <i>Understand the outcomes (objectives)</i> required by the organisation's strategic vision - what is the <i>most</i> important outcome, the <i>next most</i> important outcome, etc?</p> <p>2. <i>Focus on the outcomes</i> to be achieved, not outputs – ie 'better reliability', not 'a back-up motor'. The back-up motor is one way of providing greater reliability. Your task as the strategic asset manager is to ensure that it is the <i>best</i> way of achieving the outcome.</p> | <p>3. <i>Actively seek out alternative ways</i> to achieve the outcomes, set criteria for achieving the outcomes and evaluate the various ways in the light of these criteria. (certain benefits will be more important than others, depending on the strategic vision)</p> <p>4. <i>Review</i> the success or otherwise of the action taken. Did it work? Did it work as well as expected? Better than expected? Note that review is impossible unless you have written down your objectives, options, analysis and expectations.</p> |
|--|---|

What are the KNOWLEDGE AND SKILLS required by the Strategic Asset Management Team?

- | | |
|--|--|
| <ul style="list-style-type: none"> ▪ Sound knowledge of the <i>organisation's business and processes</i> ▪ Sound understanding of the <i>organisation's strategic vision</i> ▪ Ability to <i>project and analyse demand</i> (modelling ability) ▪ Ability to <i>generate options</i> (including 'no asset' and 'demand management' options) ▪ Ability to <i>evaluate options</i> (cost and benefit estimation, CB analysis, matrix analysis) ▪ Knowledge of the "<i>economics of asset management</i>" – e.g. costing (full costing, output costing, cost allocations), pricing, valuation, depreciation, budget allocation, | <p>capital charging, cross charging, costing 'idle time', when and how to use input – output techniques (multiplier analysis)</p> <ul style="list-style-type: none"> ▪ <i>Ability to use data</i> – how to collect it, how to know what to collect, how to record it, how to recognise and work within its reliability limitations, how to marry regular data collections (asset register) with special purpose data (inquiries) to generate questions and to evaluate options ▪ <i>Technical Understanding</i> <ul style="list-style-type: none"> • of the asset and how to get the most out of it, and • of the social, environmental, legal and political impacts of constructing, using and disposing of the asset. |
|--|--|

In the Next issue: "Strategic Asset Management: A triumph of Mind over Matter"

AIS – What to do before you choose

Unless it is *usable* and *used*, the data in your Asset Information System are just so many black marks on white paper – or their electronic equivalent. It may have been expensively gained but it is *not information*. In this five part series we look at mistakes that have been made – and how you can avoid them in setting up your own database.

Part 1: LEAN AND MEAN.

Anecdotal evidence suggests that less than 10% of asset information systems are in use three years after purchase, and less than 3% after 5 years! How can you avoid being a casualty statistic?

In-house or “Off the Shelf”?

With such excellent packaged systems now available, there is less tendency nowadays than there was about ten to fifteen years ago to design a system in-house “from scratch”, nevertheless, everybody wants to ‘customise’ their purchased system. Be aware that when you do so, these modifications may make it difficult for you to benefit from upgrades of the basic system.

Can you retain the necessary IT staff?

If you are going to design or modify your system in-house, consider whether the size of your information technology unit now, and in the probable future, can sustain it. One agency had a computer system for seven years and had not generated any output! When a Parliamentary Committee asked why, the answer was “Well, we had a programmer setting up the system but he was made a salary offer we could not match and he left. It took us 6 months to find a replacement and another 6 months for him to get familiar enough with the system to actually make some headway. He was with us about two years, then *he* got a salary offer!

We have now been through 3 programmers – and quite frankly we are so busy getting the thing to work, and to put data in, that we haven’t had the opportunity to start getting any information out!” The system was eventually scrapped.

Keeping Board Commitment

It takes time to set up a data capture and asset information system and the more complicated and complex the system, the longer it takes to get the software working and the longer it takes for data capture. *This is important since most boards have short attention spans!*

In the first flush of enthusiasm, it is not difficult to get the board to approve even quite substantial budgets to install a new system. It is harder to get the funds year after year to manage the system and collect the data. And even harder to get the funds to upgrade the data once it has been collected.

The major costs for an AIS are not the initial software but the training required for ongoing operator support and the costs of data capture. Most agencies underestimate both of these. When the recurrent costs of system operations starts to escalate it is very difficult to keep the commitment of the board, particularly if there are no results being generated.

Organisational Change

Hardly has the ink dried on the organisation chart before the next restructure is underway.

Units are aggregated, split up, reconfigured almost continuously. Can your AIS cope? I was once engaged in developing a long run marginal costing model with a few colleagues. We thought long and hard about how to design the system in modules for greater flexibility, but we did not foresee that the recently amalgamated department would, within 12 months, be split into a number of competitive units that would not even speak to each other! The system could not cope with that.

Showing Results from Your System

When and if your system is eventually operational, are the results what you intended?

Did you know what results you wanted, or did you have some general idea that the information would be useful and you would figure out later what to do with it? Surprising as it may seem, the latter is more often the case.

This is the main reason why the results of AIS are often less than awe-inspiring. A vast amount of time is spent collecting data to populate the database but little or none is

spent working out how to use the data to make better decisions. I know of more than one agency that has an AIS section whose job it is to put data in and 'manage' the system, but no section responsible for getting decision-worthy information out. One hospital showed me its 'user manual' for its AIS – it was not instructions on how to get information out of the system, but rather a manual for technicians to put data in!

They were serving the system, the system wasn't serving them.

Keeping your system lean and mean is the best way to ensure that it gets completed before other events like the loss of your key people, loss of high level support or a major re-structure intervene - and gets results.

And the best way of keeping it lean and mean is to ask yourself, *before designing the system and collecting any data*: "What information do I need?" and "What decision will be improved by having this information, and how will it be improved?" *If you don't know now, don't kid yourself you will know later.*

Next issue: AIS, Pt 2: "Never get a system

Asset Preservation?

The council had just spent \$60,000 resurfacing the local airstrip and questions were raised at the following council meeting. It went something like this:

Q: "How many airplanes use that airstrip?"

A: "Well, none, actually, they prefer to go to the next town where the airfield is bigger, staffed and more convenient".

Q: "You mean no-one uses the airstrip?"

A: "Not at all, it is used by gliders!"

Q: "Isn't it true that gliders don't like to land on hard surfaces and they use the unsurfaced edges?"

A: "Well, yes"

Q: (in exasperated tones) "Then why did you resurface the airstrip?"

A: (indignantly) "*To preserve the asset, of course!*"

Unfortunately, a true story.

Moral: Assets are only a means to an ends. "Preservation" treats them as an end in themselves and leads to wasteful decisions. Doing only what is necessary to retain or enhance *needed* services maximises the value of the asset - as well as the council dollar.

The Hare and the Tortoise

An emphasis on 'quick gains' can lose you the race.

Conversely, a steady and systematic approach, continuously monitored, can lead to real improvement. This is well illustrated by the Rover Company in the UK.

Real gains take time

Real gains from benchmarking take time: time to identify the change areas, time to target them and then more time see them through. In 1998, the Rover Company (makers of Rover and LandRover cars) won the 'most improved' award (issued each year by the MCP-AMIS Company, a leading world benchmarking organisation) with a massive 39% improvement in audited performance. *But it did not happen overnight.*

As can be seen from the diagram of net benefits on the next page, no net gains were made in Rover's first year. Indeed there were net losses! This is to be expected because substantial improvements require the investment of front end costs. In the second year, there were still no net gains - but no net losses, either. The profit position did not change. In the third year there were moderate gains. It was in the *fourth* year that benefits really started to accrue, and the growth of benefits has been steady since then and is expected to continue for another two years.

Organisations fixated on 'quick wins' could

have abandoned the improvement program well before the substantial gains in Year 4!

Process Performance Benchmarking

The secret of Rover's success is that they were part of a process performance benchmarking audit. This benchmarking may be distinguished from the mere collection and presentation of comparison statistics (metric) by the fact that

- (a) many factors are ranked against high, low and average *performance* in other firms *within the same industry*. It is not sufficient to consider inputs only - the essence is what outputs are being achieved for that level of inputs or for that type of process.
- (b) It then evaluates the performance against the *specific needs and objectives of the firm itself*. No two firms, even within the same industry, will have the same overall objectives. It follows that the 'highest' performance in a particular area is not necessarily the goal for the firm being benchmarked.
- (c) In addition to scoring individual aspects of performance, the audit provides an overall measure. The measure is calibrated against other firms but then provides the benchmark (or target) against which this agency marks its own improvements.

If you are serious about benchmarking

Compare the passive 'clearinghouse

benchmarking metric' approach to the active 'benchmarking audit' approach above.

With the clearinghouse approach agencies that do not wish their data identified, submit input ratios (cleaning dollars per square metre, staff per customer, etc) to a central clearinghouse which collates and presents a distribution from lowest to highest.

It is possible to compare your position against others, but you have no way of knowing what outcomes are being achieved from the different input ratios and no way of comparing different ratios. (E.g. what is the replacement rate for that agency with low cleaning costs?)

With the *clearinghouse benchmarking metric* approach, there is

- no framework within which the different aspects can be aggregated to provide *an overall result* which measures the position of the agency

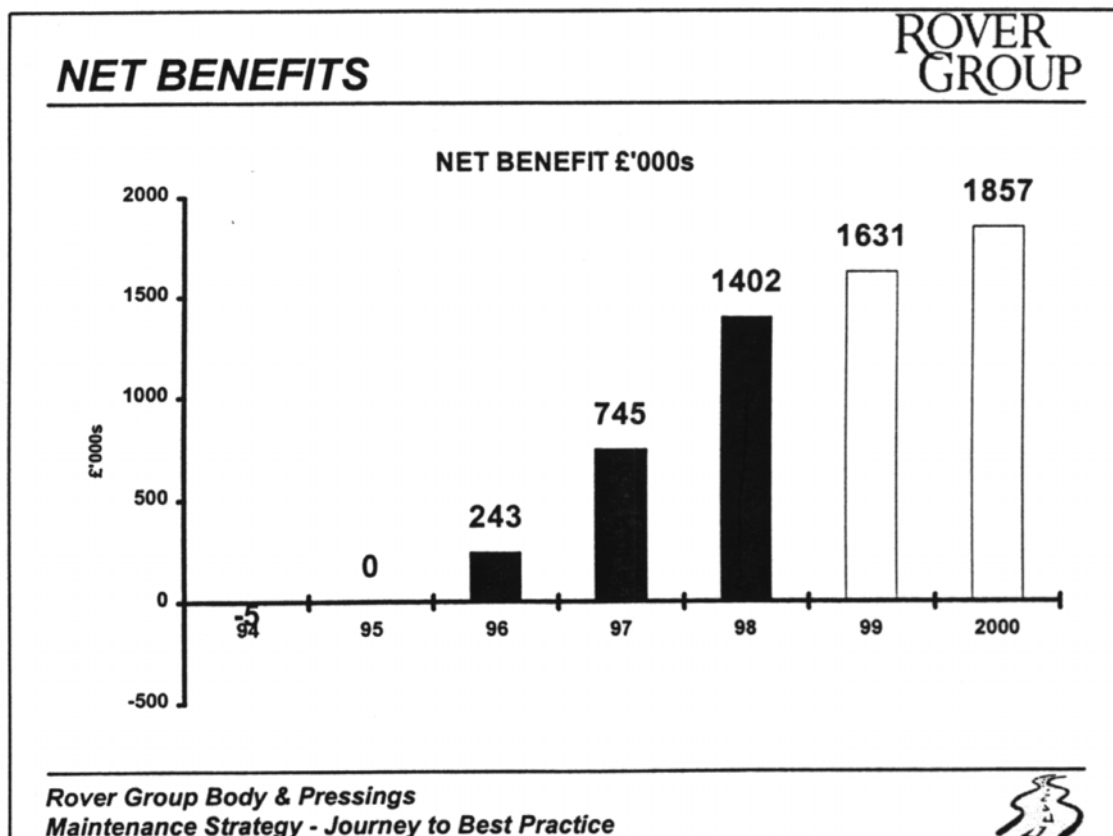
- no ability to interpret the individual measures against outputs to determine a *program of improvement*,
- no ability to *tailor the goals to suit the needs* and objectives of the agency, and hence
- no ability to determine what would count as improvement and to measure the progress made toward that end

By contrast, a benchmarking audit provides

- a measure of current position
- a goal *and a program to attain* that goal
- measure of success in reaching the goal

MCP-AMIS PACIFIC, the Australasian/Pacific Branch of MCP- AMIS has been a Sponsor of the International Asset Management Competitions since 1997. If you would like to speak to someone, generally, about benchmarking audits and performance improvement

Contact (Australia and the Pacific): Gary Livermore, MCP- AMIS Pacific on 1300



GLOSSARY

‘Benchmarking’ and ‘Benchmarking Metric’

There are many definitions of benchmarking, most are philosophical, few are functional . This is simple to understand and to use.

“**Benchmarking** is a comparison *process*. It involves comparing what you are doing (and the outcomes you are getting) with what another organisation is doing (and the outcomes that it is getting).”

“**Benchmarking metric** is a tool used in the benchmarking comparison process. It is a way of measuring steps in a process being compared. (Note: A lot of what passes for “benchmarking” today is simply the collection of data (metric) without comparing processes at all.)

Discussion:

While benchmarking studies involve in-depth comparison of processes with a benchmarking partner, the first task is to understand one’s own processes. Much of the improvements that have come from a benchmarking exercise come from this first step – before approaching any other organisation at all.

Within recent years there has been a tendency to gather information on steps of the process (benchmarking metric) *without* the in-depth comparison of processes, and more especially the outcomes of the processes. This is NOT benchmarking, although it is usually referred to as such.

There are now a number of organisations that collect comparative benchmarking metric which is then graphed to show the distribution and marked to indicate one’s own position in the distribution. Thus one might collect comparative data on cleaning costs per square metre. The range produced may run from, say \$5 per square metre to \$75 per square metre. *What does it*

mean? Unless there is a way of understanding the underlying reasons for the difference in costs (different cleaning standards required, different climatic conditions, wage levels in different locations, etc) and, more especially, a way of *understanding what outcome has been achieved for the input*, these figures can be dangerous to use. Organisations can be misled by these figures into adopting ‘targets’ that bear no relationship to their real needs.

When the difficulties of accurate and consistent measurement between organisations is taken into account, the benefits of benchmarking metric, *in the absence of a comparison process between benchmarking partners*, must be considered suspect.

Good benchmarking is holistic. That is, it looks at the impact of the process being examined on processes elsewhere in the organisation – as well as the impact on outcomes.

SELECTED REFERENCES

“Benchmarking Special Feature” P. Burns, *Asset Management Quarterly*, Issue 10, July 1996, pp 6-10

“Constructing Benchmarks” P. Burns, *Asset Management Quarterly*, Issue 6, June 1995

“Review: Benchmarking Asset Performance in Victorian Public Hospitals” AMQ International, Vol 2. Issue 6, Sep 30th 1998, p.5

Benchmarking Asset Performance in Victorian Public Hospitals, Report by the Construction Industry Institute, 1998.

“Asset Benchmarking Down Under” Gerald M Hubbard, *FM Magazine* 1997.

“*Benchmarking*” by Anne Evans, The Business Library Melbourne, 1998.