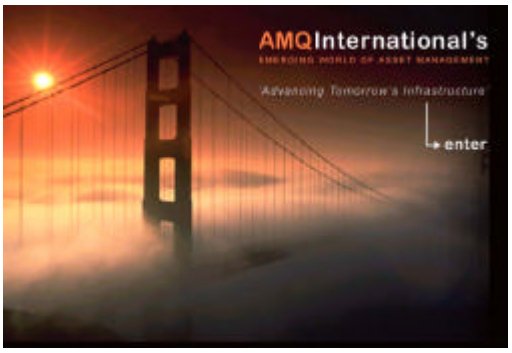
AMQ International

Strategic Asset Management

Issue 162, March 18, 2005

Why a bridge?



The opening screen of the www.amqi.com website – *the emerging world of asset management* is a bridge. Why a bridge?

Because that is what asset management is!

It is a bridge between *corporate or community objectives* and the *asset operations* that need to be carried out in order to achieve them.

Asset operations are those important things we do to assets to achieve required service delivery – maintenance, capital projects, facility management. Asset management is not about *doing,* but rather about *deciding what should be done*. See p890

Research *into the production of better engineering tools* such as intelligent diagnostics and life prediction tools, or systems integration and IT, is also *not* asset management. But research, *using those tools*, into the potential impacts of a company or government decision *is*, because it is part of the decision-making process.

What this comes down to is that asset management *can only be done from within, and to the extent that you have input into the decision-making process.* I have such input when I am working as an advisor, but not when I am researching, writing or editing "Strategic Asset Management"

I have taught and examined many PhDs on asset management topics (See p 888) and, while they may have careers in asset management or later go on to have such careers, they are not doing asset management whilst researching and writing their theses.

Is this not all pretty obvious? I would have thought so.

Yet still we have groups who think that simply calling a goat a sheep makes it so. As this can have damaging impacts it pays to be aware. (cont. on inside page)

Commercial Models and The Economy

Someone who is in no doubt that asset management is about decision making is Dave Openshaw. In this week's episode of his "World Class Asset Management Series", Dave considers the impact of commercial models, and the economy in general, on asset management.

Enjoy!

Penny Burns

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PhInisheD!

That was how Neville Binning announced that he had reached the conclusion to his research work—after eleven years!

I announced his research work in the very first issue of the newsletter way back in March 1994.

If anyone is considering doing further research but thinks that having a family or a demanding job will prevent success, let Neville inspire you.

During these eleven years, Neville has taken on a number of 'special postings' within and without his home state and he has been an active member of numerous national working parties and steering committees, in addition to managing his own branch—all part of his job.

His research sought to determine the influence of performance information in achieving an acceptable yet sustainable service level from public infrastructure at the least long-term (life cycle) cost. As is common with all research, the topic developed as he discovered more, and gradually refined itself.

My involvement with Neville started from an email inquiry and morphed into becoming an external thesis supervisor. I have had two more PhD students since and a couple of masters students, all of whom have been successful, but none that gave me more pleasure for sheer determination and persistence. It was with great pleasure that I attended his graduation ceremony at the University of Western Australia last week.

Neville, an *engineer,* undertook his post graduate work in this *management* topic within the discipline of *Accounting and Finance* – which is most appropriate for such a multi-disciplinary subject as asset management. And to add to the significance of the evening, the Chancellor who presented his degree was formally a public servant, the head of the Main Roads Department - and Neville's old boss.

Congratulations Neville!

Why a Bridge?

(cont. from front page)

What asset management is not.

We have asset sales groups who go by the name of 'asset management' and groups doing engineering research who take the title of asset management.

Such misnomers can cause great confusion and do damage.

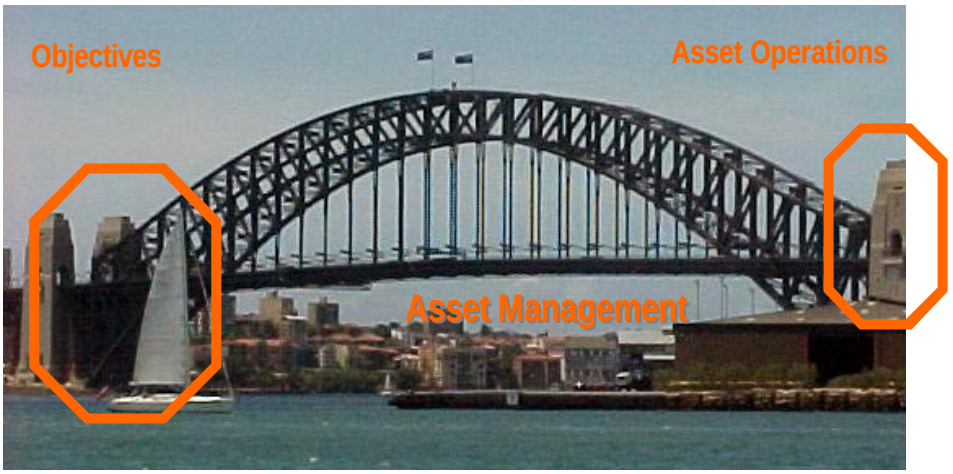
For example, a council that had been convinced to spend a lot of money on an expensive asset IT solution, set up a data entry unit and called it 'Asset Management'. After several years of collecting (but not using!) the data, it abandoned the project and announced – 'we are not doing asset management any more, *it doesn't work*!'

As a general rule

if anyone tells you that they have all the answers, or 'the' model, be suspicious, be very suspicious. Asset management is not a tool or a model, it is a process. (And I would even say, 'an attitude'.) There is no 'one size fits all' model. Bridges are custom designed for a very good reason.

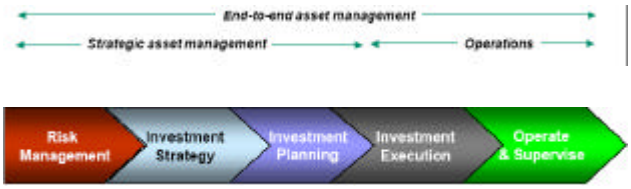
So perhaps it is timely to reconsider what is required of asset management? (see pp.889-890)

What does it take to build a bridge from Objectives to Asset Operations?



Organisational Structure – does it matter?

In the Feb 18th issue (p 877) I asked Mark Nicholson's question "Is Organisational Structure really so important?" You will remember that he argued that irrespective of the organisational shape and orientation, the logical sequence that is asset management remains the same and that, as he says, 'much time has been wasted in trying to define what was asset management and what was not." He said that it was perhaps more helpful to recognise the logical sequence (risk management – investment strategy – investment planning – investment execution – operate and supervise) and focus processes and organisations on operational excellence in each of these different areas.



Yes, it does

While not arguing that there is ONE structure that will suit all organisations, and indeed no ONE structure that will suit any one organisation for all time, nevertheless there is one very good reason for focussing on organisational structure – and that is clarity. Structures help people to know what they are responsible for. And it helps them know who is responsible, if they are not. Both are critically important if we are to build a sound bridge between objectives and the asset operations necessary to implement them.

Avoiding conflict of interest

Many organisations have not given much thought to the organisational structure needed to build a sound bridge between outcomes and inputs when it comes to assets.

As a result, we have many situations where individuals are unsure what their role really requires. Are they to be responsible for maintaining an asset; for deciding which assets are to be maintained and to what level for what purpose; for conducting research into asset performance; service performance; or for creating new tools to do any of these jobs? As a result they frequently move from task to task with little direction, doing none of them as well as they would like, creating overlaps between them and others and inevitable gaps (which might become chasms) where nobody is filling the role at all.

Do you still have no clear distinction between asset management (decision making and the work and recommendations that go into making decisions) and asset operations (maintenance, capital works projects)? This could be one of the prime reasons that when it comes to budget time, your requests are seen as self-serving – rather than as serving the organisation!

Do you have all the bases covered?

You may like to issue the checklist over the page to your own team and ask them to indicate what are their responsibilities (and who is responsible for things that are not their responsibility) – and see what gaps and overlaps you come up with.

Strategic Asset Management: The roles and functions

Understand asset performance

Measure asset performance
Understand operational issues
Understand customer issues
Assess asset risk
Assess asset performance trends
Model asset performance

Optimise planned maintenance

Apply policies
Measure maintenance performance
Optimise maintenance performance

Prioritise asset needs

Understand business plans/targets
Assess asset performance v targets
Conduct investigations
Identify intervention options (capex, opex)
Select programmes of interventions
Investment plan

Manage policies and standards

Design standards
Operational guidelines
Asset policies and strategies
Develop new methods and tools
Contingency plans

Asset information

Liaise with users on needs
Liaise with IT
Manage AI and other core databases
AIM strategy and prioritsation
Develop and monitor data processes

Enhancements to meet new legislation or service levels

Investigate scope of legislation
Assess performance shortfalls
Scope and cost enhancements

Not strategic asset management, but rather asset operations are:

Maintenance service delivery
Capital acquisition/ project management
Facility management
Data collection

This checklist was prepared by Ruth Wallsgrove, Sarras Ltd. Ruth is also the author of the paper on the Cost of Information that was published in SAM Issue 143 (June 25, 2004)

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Continuing our series on World Class Asset Management

Understanding the Business Environment

Dave Openshaw, Head of Strategic Network Development, EDF Energy

Part 4: Commercial / Economic

This section addresses the manner in which different commercial models and the economy in general, can impact on the normal operations of a distribution company, but also provide opportunities in new business areas.

Changes in the Economy

The state of the economy will ultimately influence the number and type of customers connected to a network (and/or the demand they will impose on that network). An increasing customer base creates challenges in connecting new customers, as well as coping with the growth in demand for existing customers. A decreasing customer base can lead to stranded assets. The nature of any new development is a factor in determining impact. For example, in the case of electricity transmission and distribution networks, an increase in numbers of commercial premises with air-cooling load will affect daily and seasonal load shape, and ultimately create a summer rather than traditional winter peak demand.

General growth in the economy is normally sufficiently slow and predictable to be unlikely to create a sudden and unexpected need for general network reinforcement. A much greater impact is likely to arise from hotspots of development, which can lead to the need for immediate network reinforcement. Moreover, if such reinforcement is dealt with in an ad hoc manner, it is unlikely to be either co-ordinated or optimal, and potential investment synergy opportunities will be lost. Asset managers therefore need to keep in contact with local authorities and regional development agencies in order to understand, and influence, the local developments that might have an impact.

Sometimes, quite obscure changes in government / economic policy can have a significant impact on infrastructure networks. If, for example, farmers are encouraged to plant more trees (for example, as part of a government's CO_2 emission reduction strategy), this may create problems with clearances to overhead lines in years to come, unless agreement can be reached as to types of trees and required clearances at the time of planting. If agreement can be reached, it may be that the overall planting scheme can also address existing 'problem' trees.

Changes in the Commercial Model

Commercial developments in the industry can also bring both challenges and opportunities. An example which is prominent in the UK is the growth in privately owned infrastructure, which brings the risk of 'islanded' networks, and the potential loss of interconnection opportunities that might otherwise improve network resilience and flexibility. But introducing competition into infrastructure provision also creates opportunities for building and operating networks outside the regulated / licensed area. Another example is the rapid growth in distributed generation in the UK that also brings new opportunities and risks for electricity distribution asset managers.

All of these 'problems' can become opportunities if the technical possibilities and potential synergies are recognised, and if the necessary relationships and commercial arrangements are established.

Changes arising from developments in the commercial model need to be fully incorporated into network designs and infrastructure development plans, even though the regulatory arrangements that are in place may not adequately reflect the risks and opportunities. The strategic development of the network into the future will be influenced by the commercial demands and performance requirements placed upon it, as well as the commercial arrangements that will be created for the industry between regulated monopoly and private developments.

Solutions will need to embrace commercial as well as technical challenges, and it is important that these solutions are not derived in isolation from each other. Asset managers need to be innovative and willing to challenge convention if the essential linkage between the two is to be fully exploited.

Current Practice

Information regarding new developments is usually collected throughout the year, but often in a fragmented way. For example, network planners may receive information from local authorities and development agencies, dedicated 'connections' businesses may simply collect information from developers, and income management organisations may rely on regional economic indicators.

Learning Points

A world class asset manager must help influence the market as well as respond to it.

Therefore, discussions should take place at an early stage to help development opportunities to be identified, rather than simply waiting for developers to make contact before identifying if a specific development is feasible, or if the network reinforcement required would make the development uneconomic.

An asset manager can facilitate this discussion through publication of non-sensitive material that could inform prospective developers of available capacity headroom, or of any network capacity constraints.

Reference to economic data should be made in deriving models to forecast demand growth. Simply relying on past demand growth trends overlaid with known new development proposals may lead to seriously incorrect forecasting. A good example of this might be failing to understand the potential growth in air-cooling load in central city areas, or the potential growth in distributed generation. Worse still would be failing to recognise the opportunities that commercial and technical innovation could bring.

Potential opportunities need to be rigorously explored to identify the scope for developing new business models that can protect existing revenue or, better still, create value by exploiting opportunities to earn additional revenue from both existing and new sources of income.■

See also earlier parts of this series in World Class Asset Management:

Understanding the Business Environment:

Part 1: "Financial" - SAM 159, pp. 560-870

Part 2: "Environmental, Health and Safety" - SAM 160, pp. 875-76

Part 3: "Regulatory/Statutory" -SAM 161, pp. 880-81

Dave Openshaw will not appear in the next issue of SAM which is a special issue dedicated to expanding the reach of the asset manager in the wider community. **Part 5** " Political/Public Image " will appear in Issue 164, April 15th.

Bridging to the Community

In our work as asset managers we are continually impacted by emotional, knee-jerk, and generally non-informed reactions of various stakeholders. Does it matter? And if so, is there something we can do?

Does it matter?

Case 1. The Media. When the South Australian Public Accounts Committee released its final report on the Cost and Timing of Asset Renewal for the state's infrastructure, the local daily paper, the "Advertiser" sent along a young female reporter. After the press release I found her wandering in the bowels of Parliament House looking lost and dazed. All she could say was "He was talking billions! I don't understand billions!" Admittedly that was 1987 and a lot of inflation has taken place since then. But with that reaction you will not be surprised at the absence of any reasonable reporting of a study that was to have so much of an impact on asset management in every state in the following ten years.

Case 2. Politicians South Australia was considering applying to hold the Commonwealth Games. In support, one politician was recorded in Hansard as saying that they should hold the Games because then 'we would get lots of new sports stadiums and recreation centres'. Presumably he felt that they fell from the heavens – or the Commonwealth Government, which is probably pretty much the same thing. No thought was given to the State's contribution – or to the ongoing life cycle costs.

Case 3. Senior Managers After completing the report on housing renewal I delivered a copy to the head of the State's housing authority who immediately responded with his written response. He had written the response without reading the report, assuming that asset replacement meant, in his words, 'bulldozing houses needed for the poor in the community" (rather than, as the report stated, ensuring that they would be maintained and renewed to avoid the necessity of this happening). He then floored me with the comment that I was biased against the poor because 'rich people did not provide for renewal' and questioned my calculations that the average life cycle of a house (the period of time in which the cost of renewal would equal in real terms the initial capital cost) was just under 53 years. "Nonsense", he said, "there are thatched cottages in England that have lasted for 300 years". This man was responsible for managing a housing stock of 53,000 units, and growing!

Case 4 The Public My mother, aged 80, complained that the new Salisbury overpass was wasteful and too late. "They should have done it 50 years ago, before these houses were here", she said, "then they wouldn't have had to knock them down!" OK, she was 80 but there were many others, much younger, who agreed with her. The notions of opportunity cost, just-in-time, and asset life cycle costs are not well known in the community.

You can all, I am sure, supply many more examples - in fact, I would be absolutely delighted if you would! (an email to amqi@amqi.com will bring a grateful response.)

So, if the situation is one that is not conducive to good decision making in infrastructure and asset management—

Can we do something?

I think that we can

Can we do something?

To create a world where we make wiser decisions for our future

When communities really understand the issues they make wise decisions.

You may recall that in June 2002, (SAM # 89) we reported on the community consultation work done by Boroondara Council in Victoria.

Unlike much of the work that goes by the name of community consultation (and could more accurately be called community persuasion), Boroondara made a real effort to educate a panel of 30 community representatives in the issues impacting the council.

The representatives—chosen to reflect the demographic make-up of the council area—were exposed to the council's vision, trends, demographics and the council's asset portfolio.

They were bussed around the area so that they could see the kind of assets on which they were making decisions and they were not only paid but treated with the respect due decision-makers.

Over a period of several months and six separate sessions, the community representatives built up an understanding of the assets and the decisions that the council needed to make.

A sensible decision

During their investigations they noticed that providing a grass wicket for the local cricket club cost about ten times as much in terms of water costs and maintenance than hard surface wickets. They considered that this was inequitable, given the small number of users involved and resolved that a similar level of council commitment should be made to this wicket as to others and that the users could pick up the difference in costs.

This was a decision that came spontaneously from the group—but had been one that the council had previously not been prepared to move on because of the imagined backlash.

Years ago I was involved in a meeting between two warring neighbouring councils that could not agree on anything. When they put in the same room and trusted to reach a solution—they did!

How then can we help communities to understand the issues involved in making decisions on infrastructure that may impact them, their children and their children's children long into the future?

Is community understanding an asset management problem?

Well, lack of community understanding certainly causes asset management problems!

And there is something that we—as asset managers—are uniquely equipped to do.

See our 'Special Issue' in a fortnight's time!