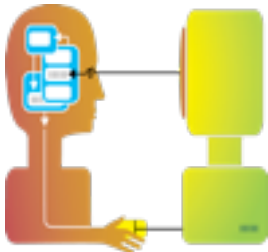


AMQ International's **STRATEGIC** # 333 **ASSET MANAGEMENT**



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A COMMON MENTAL MODEL?

Most Asset Managers are doing it tough!

It is rare nowadays to find anybody who is an Asset Manager, full time. Many of you will be doing AM 'off the side of your desk' as a colleague put it, in other words, whenever you can find time away from the more urgent doing tasks (projects, acquisition, maintenance or operations) for which you are also responsible.

Does having a perspective on how AM is developing help you to think about where it might go in the future – and what your role in that future might be?

In this issue

We ask whether a common mental model is possible amongst the many and varied players in the AM game. pp. 2- 4

We look at when the term AM was first used p. 5

We continue the AM Story: The Early Years of Asset Management pp 6- 8

Finally we look at two topics on the AM History Project Forum pp 9-10

Is History of any use?

Is AM still fun?

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Coffee Thoughts

IS A COMMON MENTAL MODEL POSSIBLE?

The other day I saw a comment that set me thinking. A clearly frustrated asset manager was railing against the lack of consistency in the way that we use the term asset management nowadays. I could sympathise. Some believe that asset management is nothing other than maintenance - and that they have been doing this 'forever'. Others believe that sustaining assets over the long haul, in other words, maintenance plus asset renewal, with a focus on risk and reliability, is the true measure of asset management. Both of these definitions focus on engineering tasks. 'Planning' is then interpreted as determining a list of future asset interventions, and hardly related at all to issues such as structural, demographical, demand or technology changes. Issues such as cost benefit analysis, valuation, and service levels hardly feature. Still less are these definitions inclusive of other issues - such as legal liability, political sensitivities, corporate reputation, etc. Yet all of these figure in real world asset decisions at some stage.

However, where I really sat up straight, was when the asset manager declared his hope and expectation that the current ISO standard, now in development, would overcome all these interpretation differences - and create a common mental model.

The way we see the world depends on the world we see!

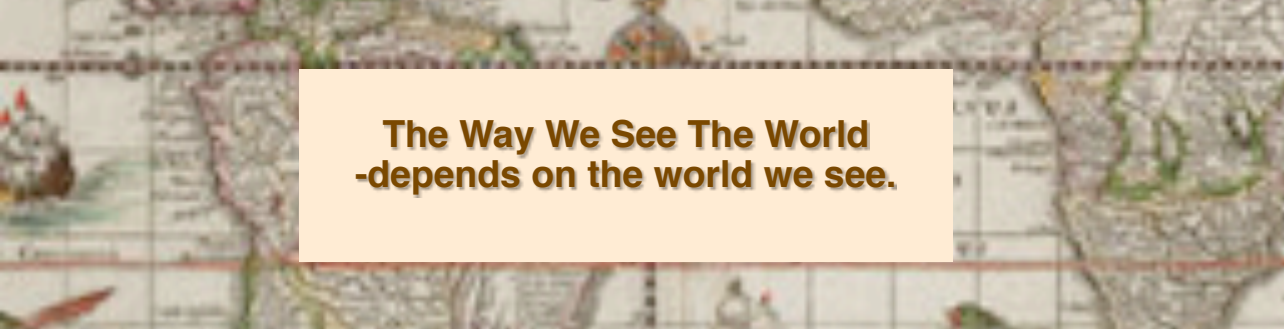
None of us see the whole world. Nor do we see a common sub-section of it. So how can we have a common mental model? There are many ways that we can, and do, slice and dice the asset management field. On the next page I have experimented with one possibility that I believe to be useful.

I welcome comments that suggest other views and expand understanding.

As always, consider - and enjoy!

Penny

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**The Way We See The World
-depends on the world we see.**

Let me illustrate with four very broad groups, three of them related to the type of assets dealt with (engineering, networks, facilities). The fourth is not specifically focussed on any asset rather the business that the assets serve. How might asset managers in each of these groups see the world of asset management?

Engineering Assets (e.g. power utilities, manufacturing, mining, military, large and complex water treatment and sewerage treatment facilities)



The kind of world that asset managers in this group would see would be one that is predominantly characterised by:

- **plant and machinery** assets and asset components with relatively short lifespans - say 10 to 30 years
- a range of intervention options that can be adopted at any one time where the decision depends on careful data analysis and assessment.
- criticality is usually high and considerable analytical data is available
- each asset will generally have just a few, technically trained, operators/ maintainers who are responsible for just that asset or cluster of very similar assets.
- there will be some specialist outsourcing but much of the work will be done 'in-house' or with private partners who work on-site alongside in-house staff in close relationships.

Such asset managers will be the most likely to see asset management as a matter of optimisation; they will often use terms such as 'systems engineering' to describe what they do. The focus of their interest is to manage cost, risk and reliability. Decisions are based on improvements to the 'bottom line'. These asset managers realise that if you can't prove something is worth doing, it probably won't get done. They are the most likely to say "if you can't measure it you can't manage it".

In sum, they will generally feel that they have a fair amount of control over their world.

Network Assets (e.g. pipes, wires, roads - power distribution, water distribution, sewerage collection, local government roads, state and federal highways, storm water drainage systems)



The kind of world that asset managers in this group would see would be one that is predominantly characterised by:

- passive civil structures with long lifespans (around 30 to 100 years)
- relatively limited intervention options particularly for buried assets
- criticality is not high, the service will generally slowly degrade rather than dramatically stop;
- because of the great extent of these assets (and for buried assets difficulty of access) measurement is generally by sample and extrapolation.
- Operators and maintainers require simpler skills than those responsible for the more complex engineering assets. They will generally be responsible for a wide scope of very similar assets across a geographical area.
- Outsourcing of maintenance and especially data collection is common. Generally not such high individual AM commitment to a particular asset.

Network asset managers are more likely to see asset management as asset preservation rather than optimisation because there is no ready 'bottom line' of profitability that enables them to determine the optimum level of intervention. They are more likely to feel that decision makers (those who determine the budget) fail to appreciate the importance of their assets. There is thus a focus on long run modelling. Whereas they would like to be making long run decisions that would determine the budget, they probably find themselves making short run decisions on the best way to allocate the budget that has been given. So although their assets are the longest living of any of the groups, their actual work may be far more short term.

In sum, these managers may not feel as much in control as our first group and are more likely to believe that they are underfunded. They are more likely to feel that the route to success is not analysis so much as achieving more political clout within their organisation or with the community more generally.

How different are the two remaining groups? In the next issue I will look at facility asset managers and those asset managers who, rather than being responsible for a certain type of asset are responsible for all assets supporting the business and take a business perspective.



THE ASSET MANAGEMENT

STORY:

When was the term asset management first used?

The earliest public reference using the term 'asset management' that I have seen dates from 1987. After the final report of the Public Accounts

Committee's series on the cost and timing of asset renewal was tabled in April 1987, the Government set up a *Government Task Force on Asset Management* to examine the implications of the Parliamentary Reports and shortly afterwards, in 1987, the first "*Asset Management Cabinet Sub-Committee*" was established by the South Australian Government.

However, I was using the term in my journals as early as 1985 and, to the best of my memory, it originated in early work done by what was to become the Office of Water Regulation in the UK when water utilities were being privatised. Certainly that would seem to be the context of my journal reference (June 24, 1985) following a UK visit by the then CEO and Engineer in Chief of the Engineering and Water Supply Department. That journal entry runs:

"Keith Lewis was telling me of the attitude taken by the British towards *asset management*, discovered on his recent overseas trip, in which they set priorities for assets. Those assets which are fundamental to the operation of the service, in our case, dams, pumping stations on the Murray, large diameter mains and sewers, are maintained to the nth degree to minimize the risk of failure. Less important assets, such as reticulation mains, are allowed to run their course and are replaced only when they fail."

Another reason for believing that the notion of asset management, as we understand it today, was being developed in the UK water industry around this time was a proposal by one of the leading accounting firms of the time that maintenance should be assumed to be the equivalent of depreciation for water assets since they were being continuously maintained. This very early approach to 'renewals accounting' was justly rejected by the accounting standards bodies for 'assuming what it was intending to prove'. But this was the first instance that I recall of infrastructure depreciation being related to the nature of infrastructure assets. It showed, if nothing more, that the regulation needed for the control of privatised water bodies, was bringing to the fore both the physical and the financial issues associated with asset management.



THE ASSET MANAGEMENT

STORY:

The Early Years

1987 - 1992

South Australia 1987

Asset Management in Australia began with the publication of the South Australian Public Accounts Committee's 8 reports on the cost and timing of asset renewal. These reports covered electricity, water, highways, hospitals, public housing, transport, schools and colleges. Each report provided more information about asset portfolios than had ever been presented before - extensive tables covered the age, condition, anticipated economic life and renewal cost of assets, broken down by significant renewable component. Descriptive commentary on the nature of the assets, use of pre and post war models where appropriate, and sensitivity analysis on the major results, all added up to a situation where, for the first time, all agencies accepted the PAC results. They didn't necessarily like the conclusions - in fact most of them didn't. But they agreed that the picture presented was the most accurate possible with the level of information then available.

When I say Asset Management began with the production of these reports I do not mean that there was no prior interest in the issue of ageing assets. Of course there was. Some of the earliest interest was shown by the CSIRO's Division of Building, Infrastructure and Research in, e.g. "Infacts" and "Rebuild". Also, engineers responsible for maintaining assets had long been arguing that they were not getting sufficient funds to do the job properly.

However with the publication of the PAC reports, there was at last high level acceptance of the problem and an accepted model for projecting asset renewal with clear definitions and, for the first time, extensive information. It was no longer necessary to rely on anecdotes.

The Key Message

Writing up the combined results of two and a half years' intensive research, data collection and analysis looking at the cost and timing of major infrastructure renewal in South Australia we were trying to decide how best to communicate our major findings. Our decision to go with the following statement was probably the best decision we made for it got the attention of all the senior players, not only in South Australia but across the country.

"Asset renewal falling due is set to quadruple in the next 25 years. By 2010, instead of accounting for 25% of total construction activity, needed renewal will account for 100% by the year 2010, if capital budgets remain constant in real terms."

This turned out to be extremely effective because it made it clear that unless changes were made that would reduce the need for such renewal (better maintenance, hard decisions on what assets were really needed, better ways of providing service) - then public servants would be at risk of being able to do less of what they really like to do - create new assets! The likelihood of capital budgets remaining constant was looking dimmer. Nobody really expected at that time to see them rise. (As an indication of how serious this was, shortly afterwards hourly rates for engineers and architects fell to a half of their pre 1987 levels).

New South Wales 1988

NSW had a major influence in the subsequent development of asset management for two reasons. One was that in the early 90s it was the only state that still had a large investment program. It is much easier to consider moving resources to renewal when funds are still relatively freely available. The second was leadership.

Nick Greiner, Premier of NSW

When Nick Greiner became Liberal Premier of NSW in 1988 he brought with him a new attitude to government - and to the assets it owned. He regarded government as 'big business'. Importantly he came out in support of accrual accounting for government, not only for income earning agencies but for all. He wanted to put government accounting on a par with commercial accounting so that government performance could be compared with the private sector. Initially the Treasury argued that this required valuing assets at historic cost because it was believed that this was what the private sector did - forgetting that those private firms with assets that lasted as long as those in government revalued periodically (or else they would have been at risk of takeover and asset stripping). At the 11h hour, however, they changed their minds and adopted current replacement values, a decision that had profound implications not only for NSW but for all Australian Governments. As the largest of the states, NSW was a trend setter.

Nick Greiner acted like a CEO¹. He established performance agreements with each of his ministers. I have been told, although have no way of proving since these agreements were confidential between the Premier and the Ministers, that these agreements included a requirement for asset management. If true, it would certainly explain why, when the NSW Total Asset Management Manual was released in early 1993, the first to seek their copies were the Ministerial offices.

¹ "An Act of Corruption?" (ABC, Sydney, 1992) the story of Nick Greiner's fall from grace and from power, shows that the decision he made would, in a business context, have been considered eminently sensible. In the political context it was seen to be otherwise. However, this did not stop subsequent politicians and analysts adopting the 'big business' model.

The first 'Asset Management' units in departments

The twin pressures for asset management from the Treasury and from the Ministers (Nick Greiner was both Premier and Treasurer), meant public sector departments were eager to demonstrate compliance by creating 'asset management' units in their organisation charts. However, most of this was for show, as the new positions were often filled with the newest, and/or most disposable, employee.

An interesting illustration of this was provided at a conference on infrastructure asset management. In the early days of asset management there were few female delegates and, to encourage them, whenever I was a speaker or Chairman at one of these conferences, I would make a point of speaking to each one and asking them their interest in asset management. One day a young woman floored me by saying that she was the 'asset manager' - in charge of the office photocopier! I asked her why she had chosen this particular conference. "Oh, I didn't" she replied brightly, "My boss did - he said it was my turn."

The role of commercial conferences in the early dissemination of information

"It was my turn" is not such a strange comment when taken in context, for in the late '80s, to increase the skill levels in the country, the federal government required organisations to spend a proportion of their salary and wages bill providing training and development. In this environment, the commercial conference companies flourished. Conferences were provided on every conceivable subject but asset management had an edge in that it was new - and therefore potentially interesting. In these early years, conferences on infrastructure asset management could attract up to several hundred delegates and it was a very profitable business. Most of them were held in Sydney.

Even before accrual accounting was formally in place at either local, state or federal level, there was great interest in how it would work. Agencies were desperate for information on how they should collect information about their assets. Determining the 'unit of account' was the first problem, followed by questions about how to record all the information they would be collecting, how to assess condition, how to value and how to depreciate.

Asset management in these early days was mostly a problem of data collection and data management.

Infrastructure Perspectives



When you download the latest issue of 'Strategic Asset Management' you might want to take a minute to look at the new Infrastructure Perspectives that we upload once a fortnight - links to interesting issues about attitudes to and the management of infrastructure assets. At the moment (23rd January) we are featuring some articles from "The Guardian", one of the few major

newspapers to have the foresight to create a special hub for property and asset management in its "Public Leaders' Forum". You can subscribe to these articles and have them emailed to you.

LinkedIn Forums

If you are a member of LinkedIn you can join the Asset Management History Forum. If you are not a member of LinkedIn but would like to be and don't know how to go about it, email me and I will invite you. This makes setting up your account a little easier and automatically links you into my network.

However, if you would like to contribute to these topics but don't wish to join Linked In, feel free to send your comments directly to me at penny@amqi.com

This month we have two new topics:

Why bother with history ? (started Jan 10)

This forum attracted a lot of interest, thanks to Jan Korek's opening comment:

"I have never subscribed to the suggestion that you need to know where you've been, to know where you're going! History, to me, is little more than a badly-drawn representation of the past, based on an exaggerated impression of successes..... and an amnesia of the failures.

Having been deeply fascinated by Asset Management for a score or more years, and am still working at the blunt edge of the process, I have had to change, adapt, forget

much and learn more along the way. So what do practitioners or the process gain from a knowledge of when (or why) some obscure government department became notionally interested in the stewardship of infrastructure assets? I would suggest very little.

Anyone who has been in Asset Management for a period of time will have grown their own unique history based on any number of influences. So what is to be achieved in distilling each individual story into an homogenised, badly-drawn fiction? Experience shows that we even fail to avoid the mistakes of the past, even when we know the history involved. The news, each day, is full of such examples.

What seems more important is the future, “Where are we now”, and “Where to from here”? Or to put it another way, you need to know where you are now, to know where your going.”

Do you agree? Or are you more inclined to agree with John Hardwick’s comment:

Wow!

What a start to the year you go away for a couple of days and a great discussion begins. I can only say that everything i have implemented has come from others. I have implemented knowing what worked and what didn't. I have used this to significantly change the way my organisation does Asset Management. I am only new in comparison to many of you but it is your collective knowledge i have used.

Also I have used your history and stories that have helped many other companies not make the same mistakes.

I am a strong believer that we learn from our mistakes and not to make them again. If this is the case it is critical for new organisations implementing Asset Management to have access to some of the good the bad and the failures.

I have given more then 20 organisations access to my staff and myself over the last twelve months to learn from what we have done and the mistakes we made. The best part is I learnt so much in return it has been amazing.

History allows us to tell stories that help others conceptualise their path to hopefully a more successful future.

Why not go onto LinkedIn and see all 36 comments.

And while you are there, you might want to contribute to our latest topic: Is AM still fun? (started Jan 21st)

Is AM still fun for you? Has our concern for efficiency (doing the same with fewer resources) driven out our interest in effectiveness (doing better by doing differently)? Does this matter? What is keeping up your interest levels? Or, if they have fallen off, what could be done to get them back up?