



**AMQ International's**

## **STRATEGIC ASSET MANAGEMENT**

**#399 September 8 2014**

## **Regeneration!**

**Like Dr Who, AMQI is regenerating!** Our next SAM issue, SAM 400, will be the last in our subscription series which has now run for over 20 years - but it is being regenerated as a BLOG - See **Infrastructure Matters** below.

### **So what does this new incarnation look like?**

1. I am **restructuring the database**: the SAM issues are being split into individual articles, updated and tagged to make it easy to find exactly what you need. This is likely to take the rest of the year, because with 400 issues + AMQ, this is a big job. There will be limited access to past issues of SAM while the restructuring is taking place, SAM 2014, however, will become publicly available and every few weeks we will make other years publicly available - **So please tell all your friends and colleagues!**
2. I am working on a series of books, the first of which is an introduction, and is to be published on **February 19, 2015**. Each book in the series, "**The Asset Management Strategist**", will draw on the best of the 1600 plus articles that we have published over the last 20 years, together with new stories and anecdotes that introduce each topic, together with a short description of how the topic has developed over time (and why) and will serve to introduce asset managers to 'strategy', the art of asset direction setting - or, in the words of ISO 55000, 'aligning asset activities with corporate objectives'. **Again, please tell everyone!**
3. Finally, I am starting an irregular (but roughly weekly) blog, "**Infrastructure Matters**" Like SAM this is aimed at introducing interesting advances in asset management from around the world and ideas to stimulate strategic thinking, **and it will be free. And, please tell everyone!**
4. Other projects are also in the pipeline. But more about these later - in the blog.

**My sincere thanks to all subscribers who have made this regeneration possible.** I hope that the website will continue to provide valuable information - and food for thought.

**SAM 400 will be a very special issue** acknowledging some of the leading asset managers who have contributed to SAM over the past two decades. I have invited them to tell us what they passionately believe we should now be doing.

**As always, enjoy! Penny**

**Dr Penny Burns, Editor, AMQ International**  
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*My penultimate*

## **EDITORIAL: WHY THE CHANGE?**

### **REASON 1: I want to do more!**

Perhaps I am at a time in my life when ambitions should be scaled back, but damn that, there is still much that needs to be done. We have made great progress in improving our asset management skills and we can *supply* - but are we experiencing sufficient *demand* for these skills? In this issue I look at what we can do to expand demand. (*See p.5.*) Demand will only increase when those outside the asset management profession itself realise its benefits. So there is a lot of work yet to be done here. I also want to increase the ability of those asset managers at the state and federal level of the public service (*See p.3*)

### **REASON 2: I want to reach more!**

This is related to the above. I want to reach out to other professionals such as architects and project managers (*see p.7.*) as well as the infrastructure decision makers - councillors, state and federal politicians, senior practitioners in public infrastructure entities - not to tell them what to do (that's *their* job!) but to encourage doing it more advisedly and accountably. I also want to reach out to the general public so that we understand and cease to be passive recipients of poor decisions, and so that we *expect*, and *demand* greater transparency.

### **REASON 3: Something's gotta give!**

To do more of these things, I need to do less of others. When AMQ began in March 1994 there were no associations, websites or journals in asset management and we needed a way for asset managers to share with each other what we were jointly discovering. SAM (and its forerunner the Asset Management Quarterly) (1994-2014), the International Asset Management Competitions (1996- 2000), and the [amqi.com](http://amqi.com) website (1998 and continuing) were all means to that end. Today we have many associations, websites, conferences, guidelines and now, of course, an international standard. We also have a body of experienced practitioners and consultants. It has been great fun but I figure that my work in this space is now done - well, almost! I will continue to write on infrastructure decision making and strategic asset management (direction setting) for my new blog "Infrastructure Matters" - and I really hope that you will join me there.

*Penny*



## CONNECTIONS

There is a Barbara Streisand song that runs '*people who need people are the luckiest people in the world*'. I always thought this strange - surely *everyone* needs people? But my brother had another take on it - '*people*', he said, '*who need people are only lucky if they have people!*' I have been lucky.

Connections is about needing and getting what we need - and helping others to get what they need. There is no such thing as a 'self made man' - or woman.

When I was originally approached by the Public Accounts Committee to become a member of their research and investigations team, I told them that I would not investigate the Agriculture Department. When asked why, I explained that I had built up a good relationship with many officers in that department related to the work I was doing in the Water Supply department and I didn't want to jeopardise this. To my surprise the Committee understood the importance of such connections and immediately agreed.

I have been fortunate to have always had an extensive network of people interested in many of the same issues that were engaging me, such as the corporate planning liaison officers with whom I built up a great rapport during the conduct of the Public Accounts Committee's inquiry into the cost and timing of infrastructure asset renewal. After the reports were tabled we continued to meet and became the first informal asset management group. Gradually our group extended to include other state departments and even outside the state infrastructure circle, reaching the Adelaide City Council.

My first presentation on asset management - to the National Accountants in Government Conference in Perth in February 1987 - introduced me to the invaluable Auditors-General network as well as the Public Accounts bodies across the nation. Then in May 1987, I began my association with the CSIRO, the University Facilities Managers network, then called AAPP, and the incredibly generous minded members of the NCRB Facilities Management Sub Committee, members of which I am still in touch with today.

When in 1989 I took up a position as Advisor to the newly elected Minister of Construction, Resources and Energy in Tasmania (a portfolio that included the Hydro Electricity Commission), my contact network proved a lifesaver. The Victorian Water Resources Department and the NSW Energy Department gave me their time and expertise as I tried

to keep up with the multiple pressures of my Minister's mega portfolios at a time of the severest budget restraints affecting any state (Tasmania was almost bankrupt)

**Connections, to my mind, are what makes the difference between doing an OK job and doing a really good job.**

## **The Best Connections**

The best connections are those that are close enough to have similar interests - but different enough to be addressing them rather differently. (cf Malcolm Gladwell, *The Tipping Point*) In the last issue of SAM I reported the very interesting work that Hobart City are doing in risk prioritisation. The initial idea was sparked by an article in SAM by Peter Buckland some years ago. It was then developed with the generous help and encouragement of members of Trans Canada who had done something similar but over a much larger area and with a narrower range of asset types. The City's connections helped them start - and then progress - their work.

## **Depth of Connections**

In some ways connections are easier today with such things as Facebook and LinkedIn. These can develop into something more significant. Many of my own good connections started with a LinkedIn inquiry, but such virtual connections can oftentimes be very shallow.

Opportunities for face to face meetings may also be greater now, at least for engineers in asset management, because there are a number of engineering associations committed to furthering the cause, both here in Australia and overseas. However if you are an asset manager - but *not* an engineer - the opportunities may be more limited. Many asset managers at the State and Federal level are not engineers. Moreover the problems facing the state and federal asset manager are not the same as those facing the asset manager in local government, or in the private sector.

However, in some important ways, connections are now harder to develop - everyone is time poor and interstate travel and conferences are becoming more difficult with budget restrictions. For example, if you are in a State Health, Education or Justice department, do you know your counterparts in the other states? Do you know them well enough to ring them up and ask them questions? Do you know them well enough to know what is influencing their answers? And, in the spirit of balance, do you know their issues well enough to be able to help them? Would you like to be in this position? Would you like to know who is working on problems similar to yours, or perhaps has already solved them?

If you are in a state or provincial government office or a federal government office, I may be able to help you, read on...

## **May I use MY connection to help you make YOUR connections?**

**This is a special offer  
for those in the State/Provincial, or Federal, public sector**

I am working on a program to make substantive, useful, links between those involved in Asset Management Strategy at the higher levels of government - whether you are in what I might call the 'operational' arms of government (e.g. arts, public health, housing, education, justice) or in the central policy arms (e.g. treasury, premiers).

If this interests you and you would like to know more, please feel free to ring me in my office on **618 8359 0559**, or on my mobile, **61 434 406 751**, or (perhaps easiest) to email me at **penny@amqi.com**. This offer is open to asset managers in Australia, New Zealand and Canada.

## **FOUR WAYS TO INCREASE DEMAND FOR ASSET MANAGEMENT**

In SAM 398 I argued that while we had developed our skills and could supply asset management services, we needed more people to demand (and fund) their use. Here I look at how we can do that.

### **One: We must stop thinking that only we have the right of it!**

In other words, we need to stop thinking - that *only if* the CEO would listen, or *only if* the CFO would fund, *only if* the board would sanction and support, or *only if* the Government would mandate asset management - *then* we would be able to do our job properly! In other words, we have to stop thinking that the rest of the world must change. The truth is that WE must change. And while any change is difficult it is much easier to change ourselves than it is to change the world!

### **Two: We need to better understand what Asset Management is - and what it is not**

#### **A) Asset Management is NOT maintenance and NOT operations.**

Instead, the asset management job is to decide what level of maintenance is appropriate to cost effectively achieve the organisation's objectives and how that needs to change over the service life cycle.

**B) Asset management is NOT about minimising risk and maximising reliability. That is the job of the risk manager.**

Instead, the asset management job is to determine what level of risk is appropriate for the criticality of the task in hand, having understood the risk appetites of the organisation. The asset management job requires knowing the business of the organisation and the temperament of decision makers.

**C) Asset Management is NOT about achieving the lowest life cycle cost, despite decades of being told that this is the case.**

Instead, the asset management job is to achieve the organisation's objectives at the lowest life cycle cost. There is a significant difference here. It is a difference of priorities. We do not sacrifice objectives for the sake of achieving the lowest life cycle cost, but we may well have to sacrifice the lowest cost for the sake of achieving objectives.

**In other words, efficient maintenance, good risk management and managing the life cycle cost of assets are all MEANS TO AN END. They are not ends in themselves.**

No one - except us - is really interested in efficient maintenance, *they just want things to work easily and all the time*; they don't want good risk management, *they just want a world of no surprises*; and they are not interested in achieving the lowest life cycle cost of asset, *they just want to make profits, or manage within their budgets, whilst satisfying their customers*. Understanding this leads to our third and fourth prescriptions:

**Three: Knowing what others want is the Key - Sell the outcomes, not the process.**

**Four: We need to stop paying lip service to the notion that Asset Management is multi-disciplinary, and seek the active involvement of other professionals. There is strength in numbers!**

Maintenance, operations, risk management, even life cycle analysis may require engineering talents - but these things are NOT Asset Management. Until we realise this we will remain locked in a trade based silo, unable to move up the management ranks, and unable to influence those who have the power to demand, support and fund Asset Management (the decision making aspects). For example, we need to work harder at increasing the interest of architects and project managers, (see p 7.) When all the senior executive panel recognise the benefits of asset management, it will be funded! But as long as some executives see Asset Management as a drain on resources that should or could be coming to them, there will be resistance. The implication here is that the engineering associations now working to develop supply skills, need also to reach out to the wider world, to ensure that the demand for those skills will also increase.

*If you want to have good ideas, you must have many ideas.  
Linus Pauling*

I have been lucky in many ways. I spoke of some of these in the article 'Connections' with which I began this issue. I have also been the recipient of many great ideas from people willing to engage with me in dialogue. which I greatly enjoy. *So it is appropriate that I should close this issue, and thus all regular SAM issues, with an example of an ongoing dialogue - and to invite you to join in.*

## **The role of the Architect in Asset Management, or, alternatively, the role of Asset Management in Architecture.**

I have chosen this topic for a number of reasons:

- (1) Asset management started with **economic infrastructure** (water, electricity, road, rail), areas which are generally the preserve of **the Engineer**.
- (2) But many of the important asset management issues today are with **social infrastructure** (education, public housing, health, justice) which, being provided through buildings rather than linear infrastructure systems typical of economic infrastructure, are the natural preserve of **the Architect, and architects have generally been relatively ignored in asset management**.
- (3) It has been standard practice to say that although economic and social infrastructure address different objectives, the asset management principles are common. And so they are. **Yet it may be that the differences are what is the most interesting for further development**.
- (4) ISO 55000, largely developed by asset managers with economic infrastructure in mind, - talks about '*aligning asset activities with corporate objectives*' and sees no conflict with longer term sustainability of assets and services because objectives in economic infrastructure change reasonably slowly. **Physical longevity** thus makes sense: **life cycle analysis is built around maintaining physical capability**.
- (5) With social infrastructure, **shifts in policy direction take place frequently** and we need to think, not physical longevity but **functional flexibility and adaptiveness to change**.
- (6) With social infrastructure, **flexibility and adaptiveness to change** can thus be far more important than physical longevity. **Life cycle analysis needs to be adapted to this purpose**.

*Patrick Whelan, (Architect and Project Manager with the Department of Finance, Perth, WA) and I have been discussing the role of the Architect in Asset Management. With Patrick's agreement, we are sharing our thoughts with you. Neither of us would lay any claim to 'the*

*last word', indeed it would be much less fun if that were to be the case. Now we invite you, if you would like, to join our dialogue.*

*Some of the issues we have discussed so far are*

- service and the use of building codes in a world of change
- life cycle analysis and its use in architecture
- buildings and their role in developing culture and attitudes

### **Issue 1. Building Codes**

*Our discussion started, as so many do nowadays, trying to figure out what we meant by service and how we could measure it.*

*Patrick led with:*

The more I think about it, the more I am convinced that to measure the Level of Service of a building (how well the building supports the delivery of the human service) depends on the agency having accommodation standards. To that end, I am sending you the scoring model I devised (and was adopted) for the recent survey of all Police buildings in WA.

In brief, we determined a score for building fabric condition and for the condition of services, and by multiplying them together, we determined an overall condition score for the building. We then determined the building's suitability for purpose by comparing scores for compliance with the Building Code of Australia, and for compliance with the Police Building Code (the agency's accommodation standards) for each of the five parts of a police station. By comparing the Condition score with the Suitability score, we determined a Works Priority Score for the station. My contention is that this WPS is, in effect, a quantity displaying the Level of Service offered by each station.

I worked out the criteria for building condition by raiding the Property Council's building condition assessment criteria, and I make no apologies for that.

What I am contending is that building condition and suitability for purpose are constituent parts of a building's Level of Service (how well it supports the delivery of human service).

*I replied:*

Whilst building condition and code compliance are important, they are important from the perspective of the building maintenance manager. To get at the idea of service we need to look at what the building user wants to get out of the building. A building may be in excellent condition and meet all code conditions, yet still fail to work efficiently for the user. It may be that the design is no longer suitable for the new work that needs to be carried out, or it may have the wrong capacity - either too much or too little. It may be in the wrong place!

*Patrick elaborated:*

In the case of the WA Police, their Building Code articulates everything needed of a building to progress policing: Planning criteria, technical criteria, functional relationship diagrams, room data sheets, formulae for calculating room sizes and the number of ablutions facilities, guidelines for the compliant design of custodial facilities, *etc.* It is an extraordinary document that was the brainchild of Michael Webster, and architect who is

now a senior project director here in Infrastructure Delivery but back then was the head of the Police Land and Buildings Branch. The Police, being a paramilitary organisation, have a very strong handle on what is needed to do the job. However, things change over time, and the building code changes with them.

*I could not see how such a building code would lend itself to change and I pondered on this for some time, eventually coming up with the following:*

I realise my problem was not with anything you said but rather with the concept of building codes themselves. It seemed to me that they can be immensely efficient in the short term because your people needed only to respond 'on the dotted line' as it were. Within the normal range of variation of construction crews this does provide a welcome degree of consistency. However, my conflict is that what is so efficient in the short term could be detrimental in the longer term because the 'not having to think' that makes the codes so efficient, is the last thing we need when it comes to effectiveness.

The 'long term' is not far away, with policing aims likely to change every 5 or 6 years. So what we end up with is **short term efficiency versus longer term ineffectiveness**.

Can we do something about this, to make it both efficient AND effective?

It occurs to me that if the building code were to have a preamble stating (1) the key issues of the policing paradigm at the time and (2) the construction solutions that were adapted to deal with it, it would be possible - even easy - to review the code every few years to see whether the code was still in sync with policing ambitions (or education, or health, or whatever). This would only work if the preamble was a reasonably solid piece of work - a one sentence or one paragraph description would be mere lip service. The role of the preamble would be similar to the role of the executive committee for standards change in electrical and other codes. Only it would be written down!

*Patrick agreed, added some extra reflections and our discussion moved on to other topics*

The idea of short term efficiency versus long term ineffectiveness is, most likely, correct. What has been on my mind for some years is the need for the hard surfaces of a building, the floors, walls, windows, ceilings and roofs, to be arranged as spaces that allow flexibility in service delivery so that multiple different service delivery models can be used with minimal change. Refurbishment, which always stems from changing needs (the subject of my undergrad thesis), should be a simpler process than it tends to be now. *(He then provided several examples of building for technology that was fashionable then but hardly used at all today.)*

No code is necessarily a measure of suitability for service. Suitability is really a function of everything that affects the building user, and by this I mean the condition and supply of building fabric, services, finishes, layout of rooms, presence and positioning of functionally specific rooms, ambience and aesthetic. They all conspire to say whether a building is suitable for purpose. It is how we measure suitability that concerns me. The Police Building Code was the only available and consistent tool available for this assessment.

## **Issue 2. Life Cycle Costing and the Architect**

*I thought that there was immense scope for the Architect to contribute to more efficient and effective building life cycles and I wrote:*

Many years ago (about 25 now) I asked our public works department to build in life cycle analysis to their public works briefs. They did. Then the architects came to me and asked what that meant. I said that it meant that they needed to explain how the critical decisions that they were making in their design translated into improvements in life cycle costs - i.e. the impacts of their materials choices, design choices etc. They thought this to be too difficult so they approached a senior retired Architect Professor who told them that all they needed to do was to say what needed to be replaced and when (no explanation required) and they went with this. Unfortunately I had failed to properly educate the Public Works officials who were, in effect, the client, and they let them get away with it.

I think that if we were to spend more time on saying WHY we are doing something, rather than simply WHAT, we would be in a far better position to do sound strategic asset management. But it requires a higher level of asset management awareness of all who are responsible for public infrastructure decision making.

*Patrick responded:*

Regarding life cycle analysis, it is an unfortunate reality that architecture is forgetting its roots. The word itself comes from the Greek, "arch tecton", roughly translated as "master builder". The building practicalities, the study of materials science and air conditioning and acoustics and lighting principles and structural performance under load and ... and ... and ... have either disappeared or have been watered down so much that they provide no structure on which design can be built. Design in all its manifestations is now the only thing taught, and the ability to understand life cycle choices has gone. It saddens me, but that is the reality. That's why I am now a project manager working at the planning end of projects.

I wonder if we could get life cycle analysis into risk analysis, and conduct a risk analysis on every materials choice? There are hundreds of choices in every building, some easy to change, others impossible. I can understand the reticence of architects to be involved, but I can also understand the absolute necessity to have them involved. It's not rocket science to start by looking at simple elements, structure, external cladding, internal lining, and base the lifecycle analysis on them. You can then build up with services and applied finishes (paint, carpet, etc.) It's not rocket science, but seems to be too hard for pure designers to get their heads around.

You could even base the need for life cycle analysis on lessons learned. When I designed, documented and administered the construction contract on the Mullaloo Surf Life Saving Club, a lot of my materials choices were based on life cycle decisions, e.g. plastic brick ties (because galvanised wire ties rust when the sacrificial zinc disappears), a timber framed roof (because rotting timber is more easily replaced than rusting steel), Colorbond Stainless roofing (25 year guarantee, 2<sup>1</sup>/<sub>2</sub> times the guarantee on standard Colorbond), visible connections between timber members (if you can see the connector, you can see its deterioration and replace it when damaged). It went further to a grossly oversized box gutter that would be very hard to overflow, very soft pointing mortar for the limestone walls (sea breezes will erode the limestone in preference to the mortar if the mortar is too hard) It's been there 25 years and is still looking good, except for the ceiling in the hall which is one of my failures – changed colour, but the acoustic properties are still good. That whole building was based on lessons learned, the things known to fail or cause problems.

*discussion ongoing*

### Issue 3 A Building's Impact on its Occupiers

*In a very early issue of Strategic Asset Management I cited a speaker at a Facilities Management Conference who had told the story of a German Company that wanted to instill the quality of integrity into its employees. It made the decision that 'if it looked like wood, it was wood' and 'if it looked like marble, it was marble'! This made a marked impression on me. I began to think about how much impact a building may have on its occupants and I shared the following two examples with Patrick*

On the Salisbury Highway there is a house that has always caught my eye because every single window is barred. This is not necessary for safety in Australia yet for the refugee inhabitant it may be the only way that he now feels safe. The other is a policing example. Because of growing conflict with the community that was detrimental to community peace, it was decided that policing should be more open and friendly (basically going back to the type of policing that I grew up with as a child in England where 'a policeman is your friend') however when the architects supplied the design for a new police station it was decidedly unfriendly. It has been designed to protect the inhabitants from attack, and it looked it. Windows were basically slits, the building was foreboding. I wondered how would police living and working in this space (and similar other spaces around town) react to the community - as open minded and friendly? or closed, secretive, and protective? We talk a lot about culture today but perhaps not enough about the impact of our buildings on that culture.

*Patrick replied:*

Buildings have an enormous effect on their occupants. I remember Greg, a cartographer I used to eat lunch with when I worked in local government. He used to say "space is empty, it's a vacuum. How can you have 'positive' space?" Oh, you can. Space has multiple properties that can be manipulated. That's called architecture. The idea of creating a police station that looks like a fortress is, to me, 100% in the opposite direction to where I think it should be. It should be a place where a member of the public can expect support and a fair hearing. Public access and facilities is one of the 5 elements of a police station, the others being General Policing (offices), Custodial, Amenities and Operational Support (stores, armories, etc). If the public is not comfortable approaching the station, 20% is knocked off its mark immediately.

There are colour palettes that are used to quieten people down, like classrooms and hospital wards. There are colour palettes to encourage conviviality, like pubs and night clubs. The regal and opulent works with reds and creams and golds. The "working class" is characterised by different shades of brown and grey. A very poor daylight gradient in a building makes the building feel oppressive. A very light and sunny space brightens peoples' spirits, but if the space is all white and clinical, it will be cold and unfriendly. There is no doubt that building have an effect on their occupants.

*discussion ongoing*

**Please join us!**

**Or write to me on any issue that is engaging your attention in asset management strategy. I will be happy to correspond with you.**

**Finally,**

## **I have never met an Asset Manager I didn't like!**

### **How could you not like**

- Someone who swims against the tide and instead of thinking of themselves in the here and now, thinks about others in the continuing future?
- Someone who seeks always to do better, who asks why, who works hard to get the answers, and then applies what has been learnt?
- Someone who goes beyond the technical, who is engaged in real relationships with other disciplines, who knows that others also have strengths and knowledge?
- Someone like you!
- And someone like the hundreds of contributors to SAM over the years, many of whom have become valued friends and colleagues. **In the next issue, SAM 400**, I have asked a number of them to share what they believe is most important task facing us NOW. I hope that you enjoy and benefit from their contributions - and that they inspire YOU to think of what you believe is now the most important, and what you can do about it.

**So a sincere thank you to ALL.**

You have made my life considerably more meaningful and enjoyable over the past 20 years and I hope we will continue to connect.

I will let you know when the BLOG is up and running,

but in the meantime, please remember

**My email is always open!**

[penny@amqi.com](mailto:penny@amqi.com)