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Strategic Asset Management

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Editorial

Has "redundancy" been given a bad press? Is it time to rethink "integration"

Integration was the buzzword of the '80s. I was once taken to task because the building management system and the fleet management systems, both under my direction, were separate systems and 'not integrated'. No matter that no one could say *how* they could be, and still less, what benefits would accrue! That is in the nature of buzzwords, even if they are not understood (or perhaps *because* they are not understood) they are accepted as inherently desirable. There is no doubt that integration does bring benefits, but there may also be risks.

A very powerful demonstration of that was the threat to the underground space in New York as a result of the attack on the World Trade Center. A slurry wall, 3 metres thick and about 25 metres deep, had been constructed to keep out the waters of the Hudson River. This was held by the tiebacks/anchors, and created a watertight environment for construction and throughout the service life of the Center. When the basements, were completed, the wall was supported by the basement slabs and thus the tiebacks were released to avoid leakage of water. However, with the collapse of the 110 floor buildings, the slurry wall was no longer supported. It was reported that more than half of the wall had failed. This had to be addressed as a matter of urgency as failure or large deformation of the slurry wall could well have destabilized surrounding buildings and could have resulted in flooding of the entire underground space. The water could have flowed as far as to New Jersey through the PATH tube that crosses the Hudson River. The story of how the Public Works Engineers addressed this issue was one of the most interesting stories at the IPWEA Conference in Hobart recently. But beyond the engineering feats, it brought home to me both the benefits—and the risks—of integrated systems.

Another failure of an integrated system occurred last month when inability to contain problems with three transmission lines in northern Ohio just south of Cleveland triggered America's biggest power blackout ever. More than 100 power plants, including 22 nuclear reactors in the United States and Canada, shut down, most of them automatically to protect themselves against power surges – in just nine seconds! Closer to home, for me at least, South Australia used to be subject to electricity constraints and risks of its own making, but last summer the biggest concern was the potential shut-down of a major generator in Victoria! These extra risks are arguably acceptable in return for the greater efficiencies of integrated systems – but perhaps we should actually have the argument, instead of merely assuming positive outcomes?

Nature builds in redundancies; humans can continue to live and function without an arm or a leg, with just one kidney and numerous other faulty parts. Then there is the English language that has survived and thrived over centuries, in part, because of its *high level of redundancy*. Maybe it is time to learn a few lessons from systems that work?

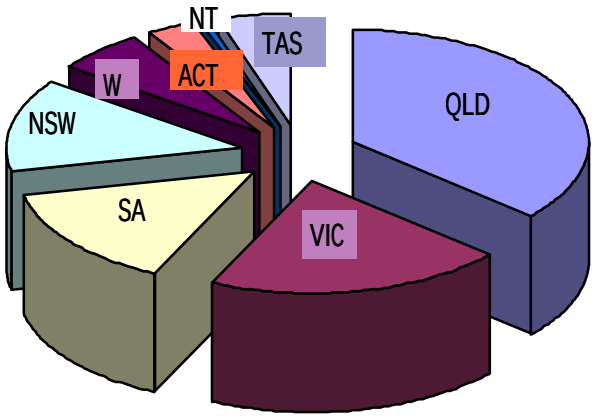
Penny Burns (Dr)
Editor

Comment welcome—www.amqi.com/forums

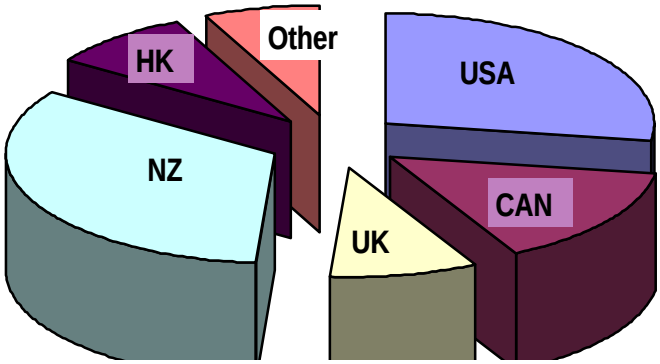
The Virtual Asset Management Community Celebrates its First Anniversary

The VAMC 'opened its doors' on Sep 4th 2003 and now has **387** members. Of these, **285** are from Australia and **102** are from everywhere else! Thirteen percent of Community Members are female.

1. Australian Members—285



2. International Members—102



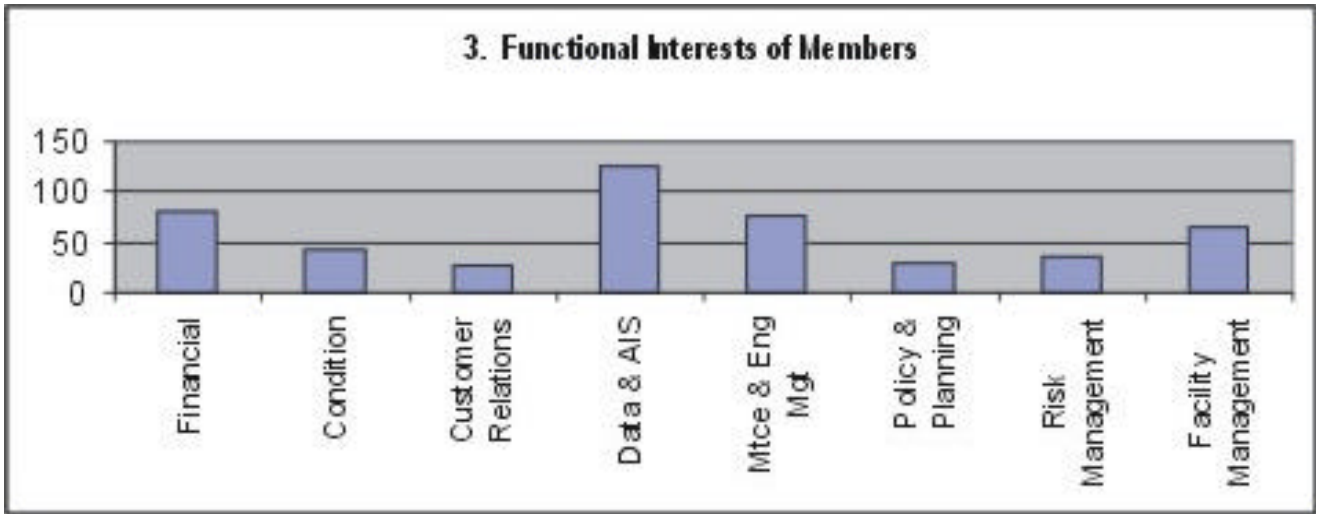
Queensland dominates the Australian membership as can be seen in Chart 1 with over one third of the total membership.

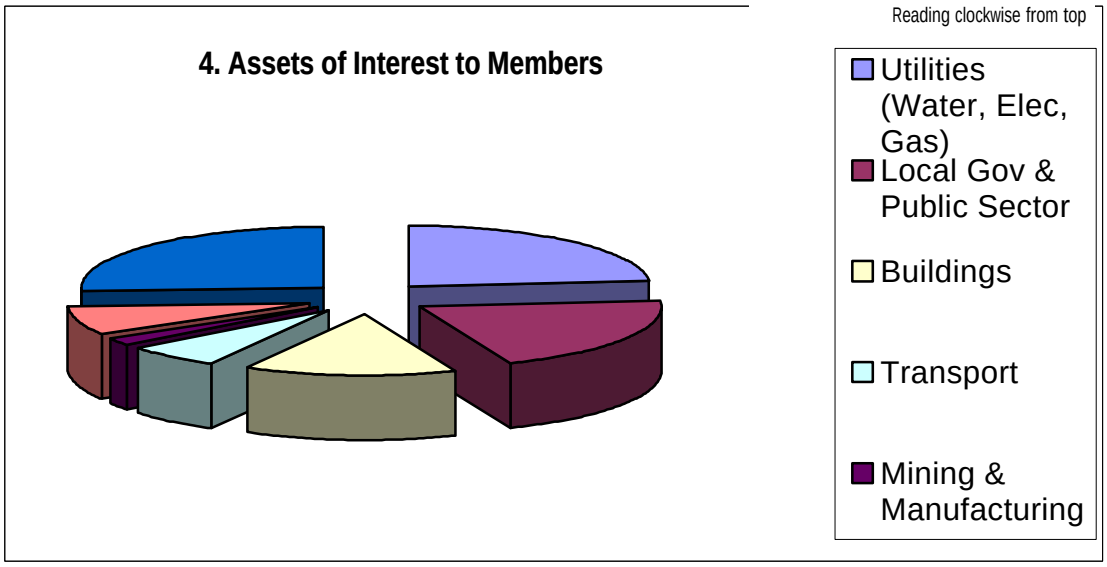
Of the International Members Chart 2), 34 are from New Zealand and are predominantly local government members or consultants working closely with local government. There are 28 members from the United States, nearly all of whom are interested in the management of water assets. With many billions of dollars of replacement currently being debated in the Senate, this is a big topic of professional conversation.

US membership was boosted recently when the Virtual Asset Management Community site was recognised as a best practice community site by the Wastewater Environmental Research Foundation.

There are 15 Canadians, 9 members from the UK, 9 from Hong Kong, 2 from Singapore, 2 from Indonesia, 1 from Germany, 1 from Spain and 1 from Mongolia.

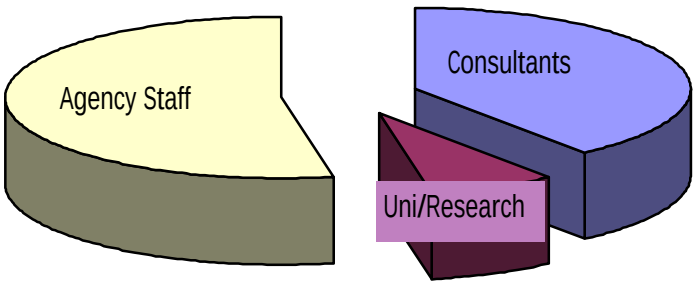
Chart 3 shows the major functional interests of members. Many have more than one interest.





The assets in which members are interested span a large range. As to be expected, public sector assets, particularly local government, loom large. The major interest in water reflects both the interests of the American members and those from Queensland where local government is responsible for the provision of water and wastewater services. However, the water forum is yet to develop its full potential. Mining and Manufacturing, Telecommunications, Defence, Forestry, Gas and Petroleum, and Recreational Facilities are amongst the minor interests at this stage.

5. Who are the Community Members?



The majority of the Virtual Community members are finance, policy, and engineering staff of agencies with assets to manage.—53%.

40% of members are consultants, actively working in the area of asset management.

And 7% are members of universities, polytechnics, and research institutions.

Here are some sample statements from members. They range from the experienced to the newly aware.

Background in Architecture. **"**I have recently entered into a purely asset planning role from an Architectural background - we are looking to create a forward thinking and proactive approach to asset management especially considering implication of Local Government Act 2003 in respect to Local authority asset planning and financial projection requirements"

Background in Engineering. **"**I am an civil engineering graduate currently studying dip. in engineering (transportation), my fields of interest are maintenance or roads, i would like to learn more about various failure modes and treatments."

Background in Property and Research. **"**A key interest is in office space utilisation practices - how people choose to occupy their offices and why. I have carried out some post-grad research in this area and often write non-academic articles on the subject for NZ & Australian business and property publications."

*I genuinely believe that the discussion forums at **www.amgi.com/forums** are the most informative of any chat group or forum you can find on the web today. Consider this exchange, which I have chosen for our case study this week, as an example - and feel free to join the discussion. (You will find it in "Other Topics" under the heading of "prioritising capital expenditure')*

Case Study:
Prioritising Capital Expenditure Projects
(By looking back from where you want to be!)

This is an exercise in bringing short term and long term planning into sync

Mike Starkey had asked

> As an early first step to put the brakes on the 'more is better' mentality, we are trying to formulate a decision making framework that will prioritise the various competing projects and which is robust enough to take into account not only infrastructure, but all the capital works projects, and service increases the elected officials are likely to come up against.
>
> It's a big ask I know, but ***does anybody have any process, system or mathematical method*** of doing this? ***Maybe a model for just prioritising capital expenditure projects?***

Vladimir Jovovic had provided a very interesting response from an industry perspective (see the discussion on "prioritising capital expenditure' in the Forum on "Other Topics")

Graeme, aka "RedCarMan" responded as follows:

"On the surface, this seems easy and criticality analysis is a very valid tool to which to assign priorities. However, my limited experience with local government and years of industry experience, is of a stark contrast between the two.

The local government that I am currently working is formulating a 5 year plan for the city, including a 5 year Capital Works program. Whilst that is a great start, it is a "feed forward" plan built largely on what can be seen happening right now.

Looking out

In order to…..

What is missing is the "big picture" strategic plan of "where we want to be in 50 years time". If you look at the forecast population at that time, and then start working out how to stack them into the city - and at least two scenarios are required to do this - one with a "planned city approach – à la Canberra", and the other "just grows – à la Gold Coast". I'm not saying that either is right or wrong, but there is a significant difference between the satellite approach in Canberra and the linear city approach of the Gold Coast.

...look back!

Once you have the demographics worked out, you can then say "What infrastructure will be required in the city to meet the demand". In some cases, this will be depend on the demographic growth pattern, but in some cases it won't. For example the CBD development and major sporting facilities, freight facilities, external transport (airport, rail etc) facilities, water supply requirements, etc will be common to both scenarios. As the infrastructure is worked out for the 50 year scenario, you can start to work out what future land reservations are going to be required for transport corridors, waste disposal, fuel storage, heavy industry, power generation, power distribution etc

What do you need to do now, to get to where you want to be?

THEN, you need to look at how to get from where we are now to the 50 year plan, in 10 year blocks - i.e. what the demographics look like, and what infrastructure will be needed in 40 years, 30 years 20 years, and 10 years. THEN you can put in place an infrastructure development plan, that shows what Capital works are going to be required to meet the city growth requirements (in 10 year blocks).

This will form the basis of a long-term strategic business plan, as the renewal requirements (as distinct from new infrastructure developments) can be overlaid on top of this, and with the population estimates, the revenue can be estimated. Some estimates (based on historical) for development grants can be added in, and then the level of sustainability of the rate base assessed.

All this does, is to put the city development into 10 year blocks, and what needs to be done then is to build the "feed forward plan" into the strategic framework, and DON'T START BUILDING NOW THINGS THAT WON'T BE REQUIRED FOR ANOTHER 20 YEARS!!! The whole exercise needs to be repeated every 5 to 10 years, as the development will NEVER occur as you postulate that it will.

Having put the framework in place, the Capital Works program becomes eminently clear, and it is really easy to see which projects need to happen and when, and which ones are low priority.

The industrial plants that I have worked in have taken this approach, and it is not as hard to do as you might think. It is really about developing strategy and framework, and not the specifics of "leaves on the trees" level of detail.

My 2 cents worth.

Graeme.

World Watch

Issues from other places that may have relevance for you

PFI – It can come back to bite you!

At first it was State Governments, now local governments are now looking at PFI contracts to help them out of a budget hole. But this assistance comes at a cost. It was recently reported that in the UK official spending figures drastically understate spending levels because vast sums of money were pouring into the public sector under the private finance initiative, and this spending would not show up on the Government books for years to come. According to the budget Red Book, there are $110bn of outstanding PFI payments due between now and 2029, with payments for existing projects set to peak in 2008 at $6bn.

The effect of PFI is to translate capital payments into recurrent payments.

The question to be asked is not "Will this contract enable us to acquire more capital than we could without it" (The answer to this one is always YES)
but rather "Is the addition to our recurrent expenses something that we can (a) justify in terms of benefits and (b) afford?" (the answer to this one is an open question!)

Is your street ***over-furnished***?

'Our cities have become a steel jungle', says Matthew Parris, writing in *The Times*. 'Walking from Paddington to Lancaster Gate the other day, I counted, over a stretch of 700 yards, no less than 201 signs on 130 steel poles. Traffic and pedestrian directions, lamp posts, parking notices, steel bollards – the hideous clutter of municipal command-and-control just keeps proliferating.

Because the ownership of public space is split between so many public and private bodies, there is no one to keep our rampant street furniture in check. Much of it could easily be disposed of. '

'In a recent report, a group of MPs cited Nottingham- ***where the council is planning to remove 10,000 'no parking' signs from the city centre, on the basis that double yellow lines can suffice*** – as proof of what can be done by one small shift of onus: on the motorist to ascertain, rather than the highway authorities to inform'. 'Iron', he says, 'has entered the urban soul. But it is within our power to begin pulling the metal out, splinter by splinter'.

Feedback

Do We Need A National Infrastructure Policy? (Issue 121)

Most of your comments to the question asked in last issue's "Do We Need a National Infrastructure Policy" have been along the lines of "is it even possible?" Geoff Webb pointed out that the nearest thing that we have attempted to a national policy recently would have been AUSLINK (a plan to develop and integrate road and rail transport to cope with the expected increased demand over the next two decades) and that is now stalled. The Australian (Aug 20, 2003, p.27) reports that while the transport lobby groups are in favour, because they see extra dollars in it, the Treasury is opposed for the same reason. The Prime Minister & Cabinet's Department is concerned that it could lead to a row with state governments – not desirable in the run-up to next year's federal elections.

Asset managers may not be able to fight against finance and politics. But the development of systematic and consistent principles of asset management to guide infrastructure decisions may not be beyond us. We just need to realise that the decision to acquire an asset falls within our remit.

The Best Of ...

Additions to the Community Resource Library

www.amqi.com

Creating Productive Offices, by Phil Kerslake, DTZ

'In the days before employees were held to be a company's 'most valuable assets', the term 'staff motivation' was something of a misnomer since coercion and compliance were the order of the day and loyalty was demanded as part of employment contracts. Work/life balance was a non-issue of course, while productivity was a mechanised outcome from a (Frederic) Taylor designed production-line process in which our forebears were simply cogs in what surely must have been slow, joyless and very squeaky wheels. Today business and society have evolved. With them the needs for offices have also moved on.' Phil considers 5 maxims for office buildings today and draws on surveys in New Zealand to illustrate his points. (9 pp)

Commercial Property – a manager's guide to understanding the future, by Phil Kerslake, DTZ

Phil looks at social paradigms, changing ideas of work/life balance and demographics in his view on what an asset manager needs to know about office buildings of the future. The focus is New Zealand. (4 pp)

Reminder

All references cited in this issue can be easily retrieved from the Community Resource Library at **www.amqi.com** by simply typing in 'SAM122' (as one word)