AMQ International's STRATEGIC
347 ASSET MANAGEMENT

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Examples of Doing More with Less

A reader asked me for examples of AM 'doing more for less'. I couldn't help thinking that 'doing' is the wrong word here: your clients or community are not really interested in what ***you do***, they are interested in ***what they get***.

So rather than think of how '*we can do more',* perhaps we should focus on '*how they can get more'.* More specifically, how they can get more *of what they really value*.

The real secret to ensuring that your customers or communities get more of what they value - for less expenditure of resources - generally lies, not in doing more efficiently what you are currently doing, but in doing *something different. So here to provide some inspiration are:*

As always, Enjoy!
Penny

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SEVEN STRATEGIES & NINE EXAMPLES

Here are a range of strategies you could consider to do 'something different' with examples.

Facilitate rather than provide

1. The CEO of Onkaparinga Council in South Australia, used to say, **"The best assets are other people's assets"** and you can see why in SAM 5 in the archives where we look at the range of services Onkaparinga was able to achieve - with the help of other people's assets.

Sometimes it may pay to give away assets.

2. A good example of heritage restoration is the conversion of the Lands and Administration Building in Brisbane to a first class international hotel, now the Treasury-Casino Hotel. The lease cost is believed to be the typical peppercorn but the gain to the Government in avoided maintenance and renewal cost savings is considerable. The Government could never have afforded to do what the private owners have done, and the gain in amenity to the community is immense.

Challenge your assumptions to align your goals with those of the community

3. Dean Taylor, Wanganui, developed a new road expenditure model based on understanding what was important to his community and found that none of the community's top priority items would have been addressed had he followed instead the traditional path of setting actions according to engineering standards.

Consider reconfiguring your assets

4. Buses are full to overbrimming at peak times, close to empty once the peaks have passed. A solution is to reconfigure the asset: remove three rows of seats to make more standing room in the peak periods for short trips. Provide more hanging rails. The seats won't be needed in the off peak periods and the space can be used for mobility access vehicles for which users normally have free or concession tickets during off peak periods. Benefits are increased passenger throughput, facilities for the handicapped, overall reduced cost by reducing the number of buses that need to be employed in the rush hour.

Challenge the way you provide services

5. What can now be digital? South Australia has developed a 'one card' system that enables borrowers from any council library to access the holdings of all councils resulting in increased service and a reduction in costs of book stocks and library space. Websites could be used to expand the services of art galleries, museums, modern art, and modern dance companies at relatively little cost.

Consider increasing transparency and accountability

6. British Rail, Network SouthEast found a way to greatly reduce its costs. They insisted that every single asset was to be pinned down to a single business owner and then down again to a single owner within a business. Common assets 'held centrally' were, they declared, 'a recipe for waste'. Application of this principle reduced their locomotive fleet by 17% and wagons by 25%, saving $210 M (1998 dollars) in annual depreciation.

Multiply benefits by multiplying uses.

7. Community assets can be made more valuable by seeking extra uses. For example, the City of Marion uses its council chambers as an art gallery for local artists to display their creations. This not only provides an excellent display facility for art lovers and uses a vastly under-utilised resource in most councils, but it also improves the cultural awareness of elected members and staff.

8. In Stockholm the underground railway tunnels are a community art gallery.

Challenge your attitudes

9. In the early 1990s, Brisbane City faced a challenge. It had little remaining capacity for treating sewerage and a new treatment plant was both difficult and costly, yet without it the city's industrial expansion would be limited. They decided on a new approach and employed some recent university graduates to visit the key industries and show them how they could save money by recycling rather than disposing of key metals into the sewerage system. This, combined with heavier costs for heavy metal treatment, (a carrot and stick approach) enabled them to secure many years of industrial expansion before a new plant was needed.

Also worth considering

Risk costs - but so does risk avoidance. Are you trying to avoid too much risk?

Two suggestions from the SAM 5 Issue on Onkaparinga - **1. Help Decision Makers to 'see' the options and to challenge the status quo and 2. Prioritise according to governance and financing method as well as asset condition**

FOUR CASE STUDIES OF SUCCESS

Here are some winning ideas from the International Asset Management Competitions which I conducted between 1996 and 2000. All were innovative in their time - and bear up surprisingly well today.

YARRA VALLEY WATER
Created Value and Lowering Costs by Opening Up Asset Data to the Community

Yarra Valley Water took asset data from a number of different systems accessible only to in house specialist users and developed a robust open architecture form that could make the data available throughout their organisation - and to customers. In 1996, the use of data on the internet was still in its infancy. YVW made its asset data available through software and hardware located in plumbing shops in the region.

A plumbing contractor, plumber or home owner who simply wanted to view data as a map or tabular data to know what was in the street or boundary information, could do so with the information stored on the hard drive on the machine in the plumbing shop. This information was updated regularly using CD-ROM.

The more innovative part of the system was the ability of the system to dial into Yarra Valley Water's central office, via modem, to get real time data from the current approved data base. The customer at the plumbing shop could get access to copies of approved certificates and other documents through a fax server at the water company. This system saved hours of wasted transit time to YVW headquarters.

Win-win-win

1. Plumbing contractors supported it because it saved them valuable down time.

2. The computer-equipped plumbing shops supported it because it gave contractors another reason to use their store (and because they learned more about the contractors business and were able to increase their customer service).

3. Yarra Valley Water supported it because it eliminated customer bottlenecks at the YVW headquarters service counter, reduced the number of staff required to handle counter traffic and perhaps most importantly it positioned YVW as the most technologically advanced and customer service oriented water company in the area.

GUYRA SHIRE COUNCIL
Used Demand Management to
Improve community and environmental value with reduced cost

For some years prior to 1988 Guyra Shire Council had been concerned about the reliability of the Guyra water supply and its ability to supply the community and the Guyra Abattoirs during long spells and drought conditions. They considered that the continued operation of the abattoirs was a key factor in the prosperity of the community and considered that there was a community service obligation to provide a reliable water supply. They considered three options: Do nothing; Raising of the current dam wall; The construction of a pipeline from Malpas Dam. These solutions were all rejected, mainly on political grounds and a range of demand management actions over an extended period of time were undertaken instead.

These actions included:

To obtain an overall perspective of the situation, a water consumption graph was prepared and presented to the water supply management committee. This showed that

the water consumption from 1986 to 1991 was well above the 1987 projections and it was clear something needed to be done.

To facilitate the effective management of the raw water resources during drought conditions, a draft Headwork's Management Strategy was prepared and public comment widely sought. In particular, comment was sought from Guyra Abbatoirs.

> *Discussions here showed that during a prolonged drought it was likely that there would be no suitable livestock available for killing and therefore no demand upon the Guyra water supply.* ***This key piece of information changed the previously assumed demand requirements.*** *This proved very valuable since the abattoir closed in 2003 and had water capacity been sized up as previously planned the community would have been left with costly overcapacity.*

Actions were taken to reduce waste of raw water from dams by wave action during windy weather; a pump was installed to enable the reuse of water from the water treatment plant sludge lagoon saving an estimated 1% of the total volume treated; the abattoirs changed their management practices to conserve water; a major leak was identified on the rising main which linked the treatment works and the town; all remaining unmetered properties and the council parks were fitted with water meters; user pays charging system was introduced; water consumption records were maintained and analysed on a regular basis and community co-operation sought.

Outcomes: Water consumption dropped substantially and water security was thereby managed without resort to heavy capital outlays.

SOUTH EAST WATER

found a better solution to a water supply problem by actively using consumer consultation and a willingness to focus on providing exceptional customer service.

This is an excellent reference model, involving all aspects of asset management: design, data usage, consultation, cost management and innovative pricing.

The Situation: An open irrigation channel supplied a large number of rural customers but had high maintenance and operating costs and the water quality was low and considered unsafe by Melbourne Water Corporation, who owned and operated it. They approached South East Water (one of the three metropolitan water companies in Victoria and who shared a common border with the channel) with a proposal for abandoning the channel and developing an alternative. When news of the proposed channel closure became known, there was an immediate reaction from the public that led to South East Water and the Melbourne Water Corporation to implement a public consultation program to negotiate an acceptable outcome to all parties. **The challenge was to provide a suitable alternative supply to customers *at a minimal, and acceptable, cost.***

What was done:

1. Extensive consultation with all stakeholders at all levels including an initial public meeting followed by a representative committee that identified and explored options, and worked through local/specific options with focus groups.

2. **The design was tailored to suit the needs.**

The existing pipe network was used to reduce costs.

In consultation with customers, SEWL Assessed the state of the existing BMR private extensions to ensure that they were in suitable condition for SEWL to take over. Data on pipe lengths, diameters, material and even their location was sometimes very unreliable. Using a combination of digital mapping data, field investigation and site surveys a database of all existing private pipelines was developed. Using the existing pipe network data and customer location plans, the proposed mains supply scheme was designed so that it would allow all existing customers to connect to the new scheme. Hydraulic modelling was used to determine the suitability or otherwise of existing mains.

System Demands were modified to reduce costs.

Determining what was a reasonable demand to use as the basis of peak design flow was difficult as no reliable metering data existed at the BMR off-takes. Instead, consumption data from each of the metered properties was used. Consumption varied according to whether customers were classified as rural residential, rural industrial/commercial. Also many customers had two sources of water; the BMR in combination with rainwater tanks. This provided a difficulty as a piped supply of cheap, potable water meant that customers may begin to rely more on this new source rather than unreliable rainwater tanks. To account for this uncertainty, an extra 33% was added to the peak demand.

Demand scenarios were analysed to avoid over design.

Supply pipes were sized to as to provide the minimum acceptable pressure at the adopted peak design flow. SEWL chose to forgo the normal urban standard of minimum 15 metres supply pressure and to adopt a BMR customised minimum standard of 10 metres and to downgrade the strength of pipe used. The increased risk was acceptable as there was back up supply in rainwater tanks; the recommended pressure was a guideline only; and the economic benefits substantially decreased the total capital costs. They also risk managed the pump choice and liaised with council to locate the water mains in the road shoulder (thereby avoiding trees) which enabled significant installation cost savings as well as minimising environmental disturbance during construction.

3. General Agreement was secured - in writing.

Once a viable alternative was developed with all stakeholders, including MW and SEWL, the customers, the Country Fire Service, Council and local politicians, customers were asked to agree to the proposal. Individual letters with a plan of the pipe network configuration were sent out to each customer to be signed and returned to SEWL. Due to extensive prior consultation, more than 80% of customers supported the scheme.

4. Costs and Revenues were re-examined

Local contractors submitted pipe-laying rates considerably lower than those experienced in urban situations and significantly reduced overall cost.

On the revenue side, the project highlighted the issue of unaccounted water (i.e. unpaid for water). The BMR being an open channel made unauthorised abstraction relatively easy. SEWL also identified some properties without water meters and in some cases standpipes were also un-metered. These issues were addressed:

Innovative Pricing was adopted

Funding of the new scheme was made acceptable to users by negotiation and by recognising the potential for new users to join the scheme. Under the arrangement SEWL and MW provided the “up-front” capital to install the new works; customers paid an annual service charge together with the current volumetric rate to cover the capital and operating costs of the scheme; and SEWL operated and maintained existing pipework outside property boundaries. Existing customers were responsible, where necessary, for reconnecting their internal facilities to the new pipework and new customers that were fronted by the new pipeline were asked to pay a contribution charge to connect and then the annual service charge and volumetric charge thereon.

A financial model for the scheme was developed and the charges fixed to ensure financial viability for the scheme over a 25 year period based on the estimated capital costs and an expectation that 150 new customers would connect to the scheme over the first 12 years. (In the event, 85 new customers were connected within the first few years)

Measures of Success

Acceptance by virtually all users (against initial rejection); Reduction of capital cost by almost 50%, Growth exceeding expectations; improved water quality; better service - and increased customer loyalty.

THE SHIRE OF YARRA RANGES

reduced costs and improved service through intelligent contract revision.

The rush to comply with AAS27 put the cart before the horse. Data was collected before its role in the management of assets was understood. Complicating the picture was that at the same time as councils were struggling with the new accounting rules, other things were happening – council amalgamations and the requirement for councils to compulsorily put their maintenance tasks out for competitive contracting.

Contractor Can't Manage the Assets

Initially, like many other councils, the Shire Council had thought that the contractor could play a major role in managing assets. But early tenders showed that contractors were reluctant to invest in the business infrastructure required to manage the vast amounts of data and complex systems that might become redundant if they lost the next tender. They came to realise that not only did Council have the business infrastructure for this task but it was Council's responsibility to carry out strategic functions including long term planning, life cycle management and financial plans.

The Situation

Council had allocated a budget of $100,000 to implement a pavement management system but the scope of works was estimated at between $135,000 -$140,000, a gap of $35,000 plus. Liaison with the Contractors discovered a contract requirement for two road network "Present State Condition Surveys" (PSCS). The initial survey (PSCS) was video based, had never been viewed and was of no benefit for analysing the network, defining failures nor did it have the ability to be interrogated or to allow analysis of the data.

What was Done

Contract Revision

Through negotiations, the two road maintenance contractors agreed to a contribution in lieu of the survey and agreement was reached through a contract variation securing the

Council an extra $30,000. This was a win- win arrangement, saving the contractor time and money and it enabled the Council to build a better data set and system.
Council agreed to forward reports generated from the system to Contractors to help with operational and maintenance activities and the Contractors agreed to provide condition reports in a compatible format for input into the PMS for updating purposes.
Both planning and operations functions benefitted from this arrangement which was brought about by co-operative discussions between contractor and client.

Building on success

1. A similar process was followed for street sign and furniture information, eliminating a contractor requirement for information that was, in effect, useless for management purposes, and, through contract variation, applying the differential to better information collection.

2, Improvement in the asset management data base through the information collection was made possible by the re-direction of contractor payments and this had flow on effects. Analysing the 90,000 calls received annually that were related to specific asset maintenance/systems issues determined what systems were affected. Then, making the relevant asset management information available and accessible to the Customer Service and Operational areas meant about 35% of calls could be answered before referral.

Measures of Success

Better and quicker service to customers, improved council reputation, reduced costs and better relationships with contractors.

What we can learn from these examples?

With the exception of Yarra Valley Water (*and they were an exceptional company winning many awards)* all of the issues above deal with problems overcome. Often turning around hostile community opinion. Where this happened there are several things to note: (1) the great attention to detail (2) the importance of relationships and (3) that nothing happens 'overnight'. In all cases it took time and commitment.

Yarra Valley Water took the initiative and their information innovations were to be the source of many advances made over successive years, proving that if you have a sound foundation you can continue to build on it and reap the rewards for many years to come.

But don't expect your good work to be instantly recognised. The world knows what you tell them. So take control of the media exposure around your innovations and solutions.