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AMQ
International's

STRATEGIC ASSET MANAGEMENT

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**We want a figure - and we
want it NOW.**



A few weeks ago the call went something like this.

"We want to persuade our Exec to take asset management on board, can you tell us what the likely range of benefit would be?"

To which I responded (accurately, but not very helpfully) "It rather depends on where you are at the moment and what exactly you are planning to do".

*(with desperation in the voice) "Well, yes, I guess, but we need a figure to throw at them **now**"*

You have probably been here - asked to produce the 'convincing figure'. However, asset management is not just 'one thing', it is many things, ideally, all working together in harmony, so pinning down and attributing the benefits is not an easy task. Nevertheless it is one we may be able to tackle together (see editorial). In the meantime, here are a few suggestions of where you might look to find solutions, things to be wary of, and ideas to improve your chance of success, plus some other useful and interesting ideas.

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*Please consider - and enjoy!
(Life may not be easy, but it should be fun!)
Penny*

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EDITORIAL

On Change



Last week I attended my last ICOMS. Regular readers will know of my regard for the ICOMS conferences. Even when they were predominantly operations and maintenance related (and for plant and machinery rather than infrastructure) I found the presentations enlightening and the delegates stimulating. Over the last twenty years coverage has broadened to include infrastructure and the ICOMS has transformed itself into an operations, maintenance AND asset management conference - and it is thus time for a new name to reflect this. So this year we celebrated the last ICOMS.



Next year it will be AMPEAK. A new name, but with the same attention to quality and detail. If you enjoy the ideas in this issue, either from, or inspired by, presentations at this year's conference, why not make a note to consider the AM PEAK conference in Perth next year. I look forward to seeing you there!

Evidence that AM works!

A propos of our lead topic in this issue, I have been asking leading asset managers for good case studies that illustrate the benefits from asset management. A 'good' case study is defined as one that describes

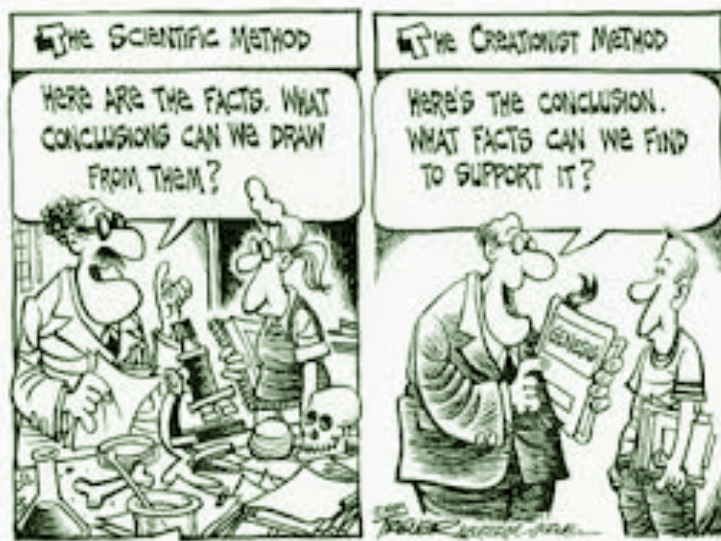
- The starting context and challenge
- What was done
- Capital (and expected ongoing) costs
- Quantification of the benefits.

Even if a case study misses on one of these points but otherwise you consider it well thought out and designed, I can work with the authors to fill in the blanks.



Let this NOT be one of those things that everyone wants - but that no-one will put effort into getting!

If you would rather talk than write, I am happy to have a phone conversation with you but contact me initially at penny@amqi.com



OK, Maybe it is a cruel joke - but how do we know that AM works? is it just a matter of faith?

Where can we look to find evidence that asset management works?

Here are some suggestions that arose at the ICOMS conference. Maybe one of them will work for you? Are you able to substantiate any of the following - *and quantify?*

FINANCIAL AND STRATEGIC BENEFITS

- Improved efficiency by integrating asset management life cycle processes and business processes
- Undergoing savings by applying processes and follow up with the application
- Carried out preventative maintenance better
- Automated management accounting and financial settlement processes
- Optimized fiscal and operational management by standardizing cost-planning functions
- Increased equipment availability
- Established product feedback loop to engineering

OPERATIONAL BENEFITS

- Made productivity and organizational improvements throughout the plants
- Achieved production and quality targets
- Eliminated reentry of data
- Increased efficiency in asset design by 5% within first 12 months with repeatability and standardization of compatible unit orders
- Improved productivity in financial settlement
- Anticipated inventory reductions

However, in looking for evidence

BEWARE THE LURE OF THE ATTRACTIVE FIGURE!

Preamble

I was in Parliament House listening to an address by a visitor to the Public Accounts Committee. In her address she mentioned that 'South Australia got 2% less'. The politician next to me got quite excited. "Wow, 2%! - I can do something with that", he said. I asked him "2% of what?" He neither knew nor cared. "2% over what time frame?" Again he neither knew nor cared. He just reiterated "2% - I can do something with that!"

Remember those figures that promised 10% savings from outsourcing? or from Private Public Partnerships? Where did they come from? Who knows? But equally, who cared? Decision makers were just mesmerised by the attractive figures.

At Conferences we are blitzed with figures.

They may be well designed and honestly presented but in a 30 second exposure on an overhead what are we to make of them?

On page 7 I cite Achim Krüger's interesting observation on Strategy. Achim presented a keynote at the ICOMS conference which I chaired. During that session, in support of asset management, he put up a slide containing some quite large figures, figures ranging from 17% to 79%. What was interesting is that the explanation of these figures referred either to a group of many things all implemented together (e.g. quality systems supporting supply chain planning, root cause analysis, quality notifications and advanced product quality planning) - which implied that all of these things pre-existed in order for the quality systems to be applied, or they referred to things which many would not consider to be asset management at all, for example the 79% lower recordable accident frequency with establishment and monitoring of strong safety measures for people and assets. With the resources of his company, SAP, behind him, I do not doubt that each of the figures presented is backed by evidence. But how do we understand and apply it? The next time Exec asks 'what are the benefits of Asset Management?' will one of these half remembered figures surface?

Let us make ourselves two resolutions:

- (1)** Never quote figures that we cannot support - and then, if they are critical, make sure we provide supporting documentation in an appendix, reference, or web link.
- (2)** As Einstein exhorted, 'never stop asking questions!' particularly about figures that you wish to use to support your proposal.

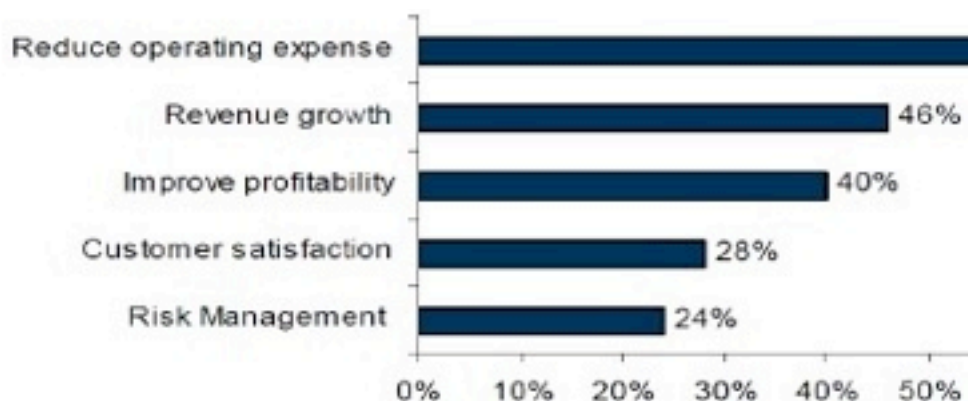
HOW TO PERSUADE YOUR CFO

The trick is to realise that others are always interested in their own problems - not yours!

Consider the following results from a benchmarking study of 139 companies. The figures come from a *Report by Aberdeen Group: Asset Performance Management: Aligning the goals of CFO's and Maintenance Managers, November 2009*)

Imagine that they are reasonably reflective of your own organisation (they may not be, but for this learning exercise, pretend they are.)

Figure 1: Goals for Chief Financial Officer

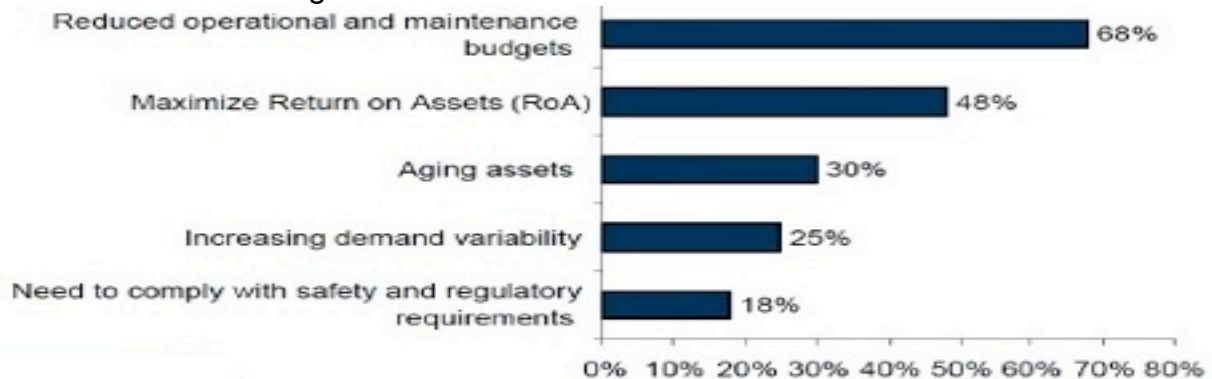


The goals for these Chief Financial Officers are clearly drawn from organisations that have a revenue bottom line. If you do not, consider substituting 'budget growth' for 'revenue growth' and 'increased productivity' for 'improve profitability'.

There are two important things to note here. The first is that not all the concerns of the CFOs are equally important to them. The second is that issues that may be of concern to others in the organisation, such as customer satisfaction or risk reduction, rank low in the CFOs priority lists.

This benchmarking study also looked at the pressures that were being felt by the AM group. (see next page)

Figure 2: Pressures Driving Asset Performance Management



Straightaway you can see that there are going to be problems. The top goal of the CFOs is to reduce operating costs and the top stress factor for the AM Performance group is reduced O&M budgets!

With this set of goals and pressures, if you wished to argue for a larger maintenance budget, you are up against the number one finance goal of reducing operating costs - so you would either need to present a case that demonstrated that increased maintenance would reduce costly outages, or you could appeal to the other goals of revenue growth or increased profitability/ productivity. What would be likely to be less successful is to make a case for improved customer satisfaction or reduced risk.

You could also make a case to show the impact of ageing assets on the goals of most concern to the CFO - and then show how the financial impact can be lessened by a discrete increase in your maintenance budget.

In other words, you must address the key goals of those you are trying to influence. In general, it is safe to say, that they are not interested in your concerns as an asset manager.

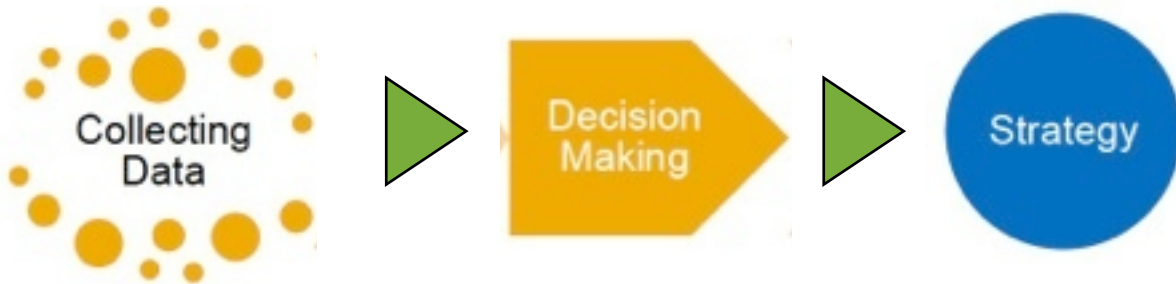
So, again let us make two resolutions:

1. To find out the key concerns of those with whom we must deal (finance, operations, planning, etc.) - and the relative strength of those concerns.
2. To always address our arguments to *their* concerns. WHAT we choose to do will be guided by our own set of priorities but HOW we sell the message should be based on theirs.

STRATEGY: the end point or the beginning?

In his keynote address, Dr-Ing Achim Kruger, VP Operational Excellence Solutions, SAP, Germany, made an extremely interesting point concerning Strategy. Where he asks does it come in the process? Most of us would argue - from a position of logic and principle - that it comes at the beginning. But in practice, does it?

Dr Kruger suggested that, in practice, the process might rather be one of

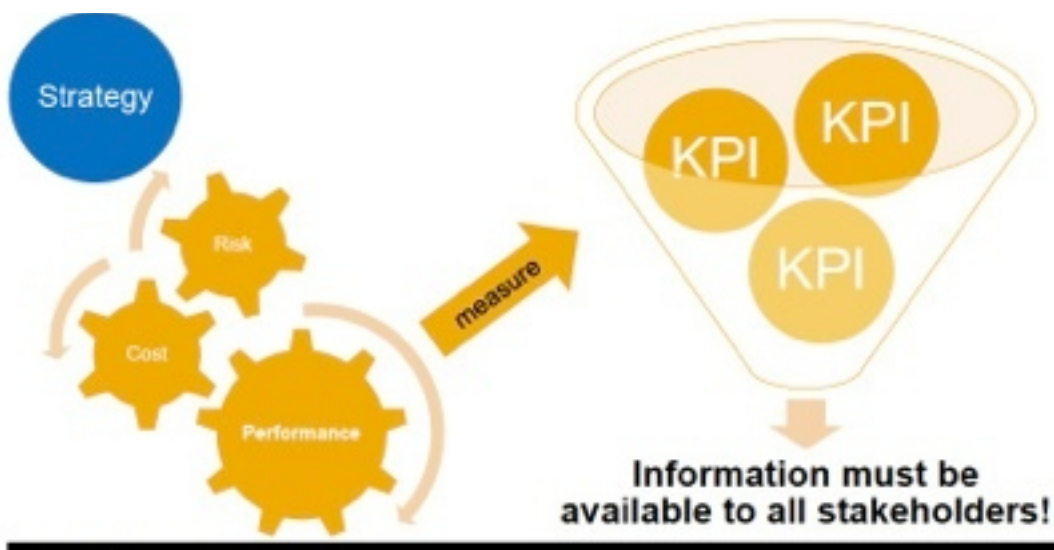


Collecting data - Today's environment produces big data and requires us to navigate through a sea of data.

Decision making - Deriving alternatives and then selecting courses of action

Strategy - Is it just 'ex-post', Kruger wonders. Just a pattern in a stream of decisions? Perhaps in many cases, it is.

To avoid this, he suggests we need to be completely transparent, we need to demonstrate that our risk, cost and performance objectives follow the business strategy, that the measures we set up for this purpose are also consistent with the strategy and that they can be tracked through KPIs that are available to all stakeholders.



PERFORMANCE AND MANAGEMENT CULTURE

I am grateful to Achim Kruger for drawing my attention to this. It is adapted from "The Wall Street Journal Guide to Management" by Alan Murray, published by Harper Business.

**If strategy is deciding what to do,
execution is all about making it happen. It's the follow through.**

The main requirements for successful execution are:

- 1) clear goals for everyone in the organization, that are supportive of the overall strategy;
- 2) a means of measuring progress toward those goals on a regular basis; and
- 3) clear accountability for that progress.

Those are the basics. Beyond that, good execution requires having a "systematic way of exposing reality and acting on it," argue Larry Bossidy and Ram Charan in the book "Execution." Most organizations, they say, don't face reality very well. It's the manager's job to force his organization to face reality, and then to deal with it.

You don't have to be a management expert to diagnose whether an organization has a strong culture of execution. It's usually obvious. Just sit through a couple of top management meetings, and you'll quickly get the idea.

If the meeting consists of a long Power Point presentation, filled with slides purporting to show all the wonderful things the presenting group has done; if others in the meeting sit quietly throughout, unwilling to ask questions or poke holes, knowing their own presentations will soon follow; if everyone leaves the meeting with no clear sense of what happens next; and if the lead manager sits quietly throughout, then you have every reason to be concerned. This is not a culture of execution.

On the other hand, if the presentation is short and to the point; if the presenter clearly highlights both successes and failures; if others feel free to question and debate the presentation; if there is a common understanding among everyone in the room on goals and timelines, and if all leave the room with a clear sense of what needs to happen next and who needs to do it, then you are likely witnessing a strong culture of execution.

Interestingly, it's not always the actions of the lead manager in the meeting room that will signal the nature of the culture. If a manager sits silently through a long and uncritical and unquestioned presentation, he or she is probably failing to do the job. Same for a manager that raises questions or suggests goals that seem a total surprise to others in the room.

But if a manager sits silently as the presenter does a hard-headed critique; as others freely weigh in; and as everyone leaves with a clear sense of goals, timelines and next steps, then the manager is doing the job. He or she has created a successful culture of execution that can govern itself.

**HOW DO YOU/ YOUR ORGANISATION RANK ON THIS SCORE?
WHAT ARE YOU GOING TO DO ABOUT IT?**

IS YOUR DIESEL FUEL AN ASSET OR A LIABILITY?

This was a most intriguing title for me since I normally think of diesel fuel as a consumable and neither asset nor liability. But Richard Baldwin, the owner/manager of Diesel Now P/L, makes a compelling case for recognising both the asset and liability aspects of diesel fuel storage for emergency power systems. Consider the following abstract:

“If your Emergency Power System (EPS) asset is NOT managed correctly the consequences could be very serious, expensive and even life threatening. The most common reasons for an EPS failure are;

1. Dirty Fuel - most diesel generators include an in-line filter, however they are designed as a final safeguard, NOT intended to clean the diesel fuel and maintain its integrity. Unfortunately, many people assume that Diesel Fuel will stay clean and dry.
2. Dead Batteries - weekly maintenance of generator batteries is essential.

Dirty Fuel and Dead Batteries are the most inexpensive components of an EPS and are quite easy to eliminate.

ELIMINATE THE RISK

Asset Managers can virtually eliminate the risk of "Accelerated Ageing" in stored diesel tanks, by maintaining the fuel in clean, dry, uncontaminated condition at all times. This best achieved by installing an Automatic Diesel Fuel Maintenance System that will;

1. Ensure that the Diesel Fuel will be in optimum condition 24/7/365 (by correct programming and servicing).
2. Alert the operator when any aspect needs attention (PLC with OIS to control room, computer, or phone).
3. Recycle gently from the lowest point of tank (25mm off floor) and back into the opposite top end of tank.
4. Include several stages of micro-filtration (100, 30, 3, 1) plus water separation (99.9%)
5. Treat 25% of tank capacity once a week (40,000L tank = 10,000L over 8 hours = 1250 L/Hr.)

[Ed: further details on how to follow through on these recommendations are to be found in Richard Baldwin's paper.]

CONCLUSIONS

Consider the financial consequences of a Data Processing Centre being lost or unavailable for several few weeks.

More seriously, imagine an extended power failure in a major hospital. The emergency power generator starts, dirty fuel feeds the generator, generator coughs and stops after a few minutes! Such an extended power outage will dramatically affect the Operating Theatre, Life Support machines, Communications, Computer records, Lifts and lighting and very probably could result in loss of life.”

COMPLACENCY and COMMERCIALITY



An intriguing presentation at the Young Asset Managers Group at ICOMS consisted of an examination of the twin cases of the Titanic and the Apollo.

Whereas the Titanic was, as we all know, a disaster, the Apollo was an outstanding success. Why? And how much was due to asset management?

Take the Titanic. There was poor equipment management - only one pair of binoculars and even that was not with the look out, no safety training for the staff (some of the lifeboats were launched with only a fraction of the passengers they could have held.) Safety regulation then was largely non-existent. Lifeboats were not really considered necessary (the ship was unsinkable) and they occupied space and interfered with the view of the passengers. There was also little operational training either as this would have slowed down the departure date.

The presentation pointed out that the ship was a commercial venture and that, although this was the latest and most modern of ships, nevertheless the company had been operating ships for years, so there was a certain amount of complacency. It was a failure: Commerciality and Complacency.

The Apollo 7 was also a new venture, but it was a public project. The goal was not simply to get off the launch pad but to take a man into space - and bring him back safely! A year earlier Apollo 1 had suffered a cabin fire during a launch pad test which killed all three crew members. The subsequent inquiry discovered a great number of design and construction flaws - and these problems were corrected, Apollo 7 launched successfully in October 1968. Attention to safety paid off! Pre flight safety checks and operational training won the day. Apollo 7 was not commercial, not complacent - and a success.

And there the story could have ended. Were it not for Challenger. Less than 20 years later, in January 1986, the Challenger broke apart 73 seconds into its flight killing all 7 of its crew. The cause, as we all know now, was found to be the O-ring seal which became brittle in low temperatures and disintegrated. The O-rings, as well as many other critical components, had no test data to support any expectation of a successful launch in low temperature conditions. NASA managers had known the design contained a potentially catastrophic flaw in the O-rings since 1977 but failed to address it properly and they disregarded warnings from their engineers about the dangers of launching posed by the low temperatures that morning.

There were internal financial pressures to get the launch happening, and they had launched successfully many times before. **So complacency and commerciality can affect us all! Being a publicly funded and operated venture is no protection!**

