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# 344

AMQ  
International's

# STRATEGIC ASSET MANAGEMENT

*What do Asset Managers do?*

This week we look at what asset managers do.

Nicholas Hastings in his book "Physical Asset Management" provides an excellent start indicating the numerous roles that asset managers play in guiding data collection, extracting information from data, and in policy development.

This is mostly all that needs to be done in organisations where the benefits of asset management can be demonstrated in a measurable bottom-line. However for asset managers in non revenue businesses in local and state government, there two more important roles, and these are:

Communicating asset management outcomes in ways that can be clearly understood by non-asset managers (decision makers, key stakeholders, the community), and

Creating a receptive audience of decision makers and key stakeholders. That this is largely a matter of developing trust comes out clearly in the story of how Edmonton, Canada, developed its international reputation for sound asset management. This story is full of worthwhile ideas that could be adopted by others.

**Asset management roles and functions**, pp 2-3

**Thoughts on Job Specifications** pp 4-5

**Communicate in Pictures:** what to do and what not to do, pp 6-7

**Communication with Stakeholders is the key to AM Success and it takes time** - the Edmonton, Canada story. pp 8-10

*Please consider, and enjoy!*

*Penny*

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# What do Asset Managers Do?

**What do Asset Managers do?** Consider the following list created by Nicholas Hastings in his book “Physical Asset Management” (Springer Verlag, London, 2010). With just two exceptions, all of them are concerned with attaining the goals of the organisation through generation information from asset data. (Cf SAM 342)

The two exceptions are No 6 ‘Management of asset acquisition and/or development projects’, which is not an asset management task so much as the task of a project manager or construction manager, and No 21 ‘Equipment disposal’, which is a line management function but I am inclined to leave it in the list since it seems to be a function that no other role has picked up and it does require a high level of asset knowledge.

## **How does this list accord with your own job specification?**

Remember - while you may think of yourself as an asset manager, and may even have the title of asset manager - you may also have additional responsibilities that are outside the AM role. (see the next article on ‘Job Specifications’ pp 4-5)

1. Input to asset related aspects of business development at the concept planning stages
2. Input to pre-feasibility and feasibility analysis for asset developments including requirements analysis, input to financial analysis
3. Preparing business cases for asset related activities, can include preparing proposals, evaluating proposals and advising on the preparation of proposals
4. Development of recommendations for acquisitions, process improvements, replacement, refurbishment
5. Life cycle costing
6. Management of asset acquisition and/or development projects
7. Development and implementation of logistic support policies
8. Management of introduction into service
9. Setting maintenance policy and procedures
10. Applications of asset related technology e.g. new equipment developments, condition monitoring developments
11. Managing asset policies in regard to health, safety, environment, security

12. Managing through life support provision, effectiveness and audit
13. Maintenance facilities and resources planning and provision
14. Maintenance outsourcing strategy and management
15. Configuration management
16. Technical input into computerised asset management systems structure and development
17. Input into the selection, implementation and user support for asset management information systems
18. Asset renewal/replacement/overhaul policy assessment and decisions
19. Arrange and carry out reliability and availability tests and evaluations
20. Equipment redeployment for asset management reasons
21. Equipment disposal
22. Asset related special studies
23. Asset implications of changed operating practices
24. Equipment leasing policy and management
25. Identifying and setting asset related emergency response strategies
26. Introduction and management of organisation wide asset related systems including the Computerised Maintenance Management System. Incident reporting systems, fault and failure reporting systems and responses
27. Spare parts management systems and spare control setting including rotatable repair parts policy and management, insurance spares
28. Pilot studies and trials organisation and evaluation
29. Liaising with stakeholders on asset related topics

### **Wait, there is more!**

This list was prepared with asset managers in utilities or commercial operations mainly in mind. If you are in a non-revenue raising organisation at the local or state government levels and do not have the advantage of being able to demonstrate the benefits of what you are promoting in asset management via a measurable bottom-line, nor the advantage of making your case to an executive that is technically skilled, there are two more - very important - functions that need to be considered, and these are:

**30. Clear communication of the benefits of asset management actions to decision-makers**  
*(and on this topic see 'Communicate in pictures') (6-7)*

**31. Education and Awareness Raising** *(see Success at Edmonton) (8-9)*

## Job Specifications:

Have you looked at your job specification recently? Chances are that the last time you did so was when you were applying for the job that you currently have. It then gets put away in a drawer to be forgotten unless there is some dispute, or to be reviewed briefly before any annual performance assessment.

I was recently asked to be a referee for a bright young asset manager whom I knew well and who was applying for a higher position in another organisation. Naturally I asked for a copy of the new job specification so that I could relate the qualities that I knew of the candidate to the roles and functions of the new position.



I was struck by the fact that nearly all the tasks were of the 'liaise' or 'coordinate with' variety and that there was no clear line of accountability for any action. Knowing that the development of sound asset management practices had been greatly complicated for the applicant in the current role because of turf wars, I wondered what the situation was like in the new organisation. During conversation with the recruiting officer I raised this question - and found it was no different in the new organisation! It made me wonder how much of a role job specifications play in creating these murky situations - and, in general, how useful job specifications are, or how damaging.

Here I would like to raise a few of the questions that have been bothering me. I don't necessarily have any answers, and there may not be any definitive answers, but that doesn't mean that the questions are not worth raising. So, here they are for your consideration.

### **1. How does your Job Specification align with the roles and functions identified by Nicholas Hastings?**

Or, if you are in a local government or state government position, with the two additional roles of communication and education or awareness raising?

### **2. How many of your roles are non-Asset Management roles?**

Even if you have the title 'asset manager' it is more than likely that you will also have a number of non-asset management roles or functions. This may be necessary because

your organisation is too small to support a full time asset manager, or it may be that those in charge of drawing up the specifications did not fully understand the role that asset managers play. Whichever, can you delegate these to others (either formally or informally) to free you up to do more asset management?

### **3. How useful do you find your Job Specification?**

When you need to 'liaise', 'coordinate' or in any way work with certain specified other roles in your organisation do you know, or can you readily access *their* goals or requirements (i.e. their job specifications)?

Do you know when 'liaise' means 'inform' and when it means 'get the approval of'?

### **4. Does your Job Specification expand or limit you?**



My interest in job specifications began almost 30 years ago when the then Secretary of the Public Accounts Committee suggested that I apply for a position with the Department of Construction. The job specification was almost entirely of the 'liaise with' variety and I said: 'Why should I apply for this? It is a non-job!' 'Exactly!' was his reply 'You can make of this anything that you like'. So I did apply - and I built that job into an asset management role (in a department that was at the time totally focussed on new construction. It

was an interesting challenge. )

It made me realise that just because a job specification does not say you CAN do something, it doesn't mean that you CAN'T.

### **5. Does your Job Specification make it clear 'where the buck stops'?**

This is the issue of accountability. Does your job specification make it clear where YOU are responsible for the outcomes, and if not you, then WHO?

### **6. Why not rewrite your Job Specification**

This is worth while doing as part of your work in succession planning. If you have been in your job for a number of years, changes will have taken place. More changes will need to take place in the future. What roles and functions will your successor need to take on?

*Your comments on job specifications and/or how to improve them, would be most welcome!*



### Information from DATA

Asset managers get information from data. But if that is ALL they do, their efforts are wasted.

For the right actions to take place as a result of this information it has to be **communicated to a decision-making audience that has been primed to hear and understand.**

This is where it pays to

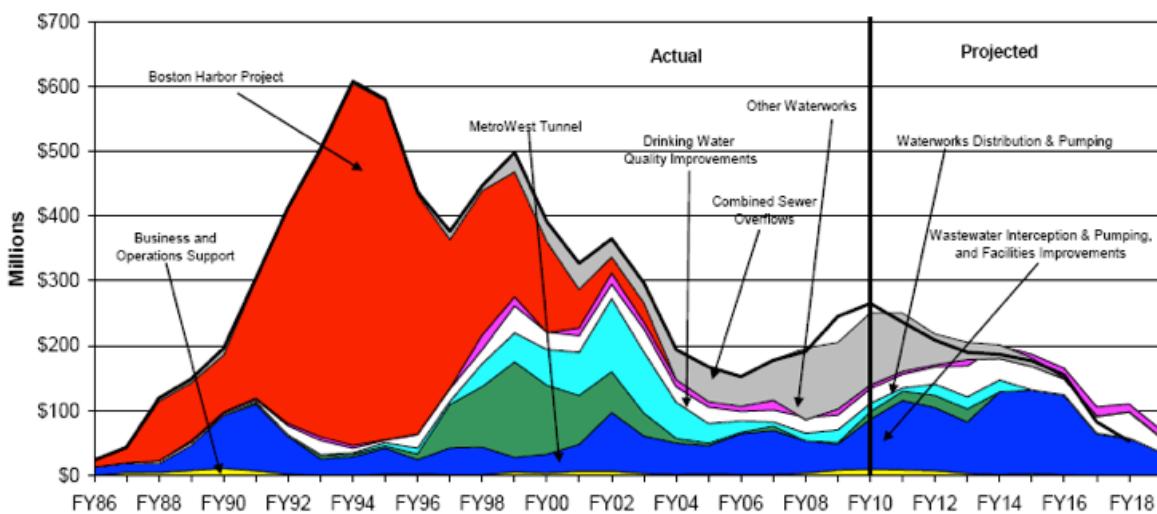
### COMMUNICATE IN PICTURES.

It used to be said that a picture is worth a thousand words. Today, when no-one has the time to read even a few hundred let alone a thousand words, a good picture that tells the right story is priceless.

I came across the following picture in “What side of the infrastructure hill are you on” by Warren Briggs of CIPPlanner Corporation in the USA. It is interesting for the fact that it shows where the organisation HAS BEEN in terms of its capital spending, and WHERE IT IS GOING to maintain that new level of infrastructure service. Infrastructure spending tends to be lumpy and it pays to know whether the lump is behind or ahead of you. It can influence your borrowing policy as well future capital additions.

Commonly we tend to illustrate only the future (i.e. future renewal requirements), but by including the recent past we not only put the future into context, we add to the credibility of what we are saying. The recent past is known to your audience, they can vouch for that! By extension they then also vouch for the future story you are telling.

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It would be possible to overlay this picture - which is concerned only with past capital spending and the future consequences (renewal) of that spending - with the first up and consequential capital requirements of planned capital additions.

Or, you could take just one of the past projects and illustrate its ongoing financial consequences for operations, maintenance, management, security, etc.

Or, you could focus on future financial commitments and perhaps include future pension or superannuation payouts.

**What else could you show in pictures using the life cycle framework?**

Many years ago when I was in Tasmania, the Hydro Electricity Commission was caught in a difficult redundancy problem. The two small hydro stations that they were currently building were going to be the last because any other economically viable location was locked away within a heritage zone. This meant that they would have to lay off a lot of their construction engineers and other staff. They were also aware that their older stations were approaching the time when they would need renewal so they didn't want to release staff that would be needed then as, being a small island, it would mean the difficulty and expense of attracting new staff from the Australian mainland.

The solution? We used life cycle modelling to determine not only which stations but which elements of which plant would need addressing - thus determining the skills that they would need to retain.

**What pictures are best *not used* when we want to communicate *with decision makers*?**

*Anything that does not tell an instant story*

*Anything that has to be studied in its parts to understand the whole*

*Anything that is complex, and particularly*

*Anything that focuses on the process rather than the outcomes*

*So save process pictures like those below for communication with other asset managers. They are 'back-room' stuff. For communication outside the AM 'inner circle' we need pictures that address the needs of our listeners; pictures, in other words pictures that tell us where we are going.*



***Communicating with Stakeholders is the Key to Successful Asset Management - and it takes time - lessons from Edmonton, Canada***

The City of Edmonton has achieved international recognition for its strategic approach to infrastructure asset management. By engaging both City Council and key public stakeholders it has enabled the City to better manage its infrastructure assets and minimise its 'infrastructure gap' - defined as the disparity between funds needed and funds available to complete necessary capital projects projected over a ten year period.

Edmonton, a city of 700,000 people, is the provincial capital of Alberta. In 1983, recession drove up interest rates and Edmonton City Council adopted a zero-debt policy to ensure its fiscal responsibility. Ten years later fiscal restraints adopted by provincial and federal governments resulted in reductions to municipal grants. There developed a gap between what was needed for infrastructure and what was available.

**1998 - The First Infrastructure Strategy was received with suspicion**

"In 1998, at the administration's urging, Edmonton City Council adopted its first Infrastructure Strategy. The strategy was conceived in response to a looming infrastructure crisis, captured in the City's first Long Range Financial Plan (LRFP). The LRFP, also adopted in 1998, included a ten-year projection of required capital investment compared against anticipated revenues that came to be known as the infrastructure gap. The administration projected the infrastructure gap over the period 1998 to 2007 at \$1.8 billion in its first LRFP.

The first Infrastructure Strategy consisted of 15 inter-related tasks intended to reduce the impact of the gap, which included capturing more accurate asset data, implementing advanced management techniques, creating a municipal agency to coordinate the strategy, and engaging other orders of government whose own fiscal restraint policies had worsened the gap.

City Council initially received both the first LRFP and the infrastructure gap with suspicion. At first, it regarded the LRFP as the administration's ideal capital project 'wish list' and the gap as an unsubstantiated figure intended to coerce Council into action it was reluctant to undertake, such as raising property taxes or reducing services.

At the same time, Council agreed that neither it nor the administration could plan effectively for the future without more complete knowledge of the state and condition of the City's infrastructure and the capital investment required to rehabilitate existing assets or to build new assets to accommodate population growth."

## **2000 - City Council established the Office of Infrastructure.**

“The Office was charged with a stewardship function to coordinate improved management of Edmonton’s \$18 billion infrastructure asset inventory and to implement the strategy collaboration with all civic departments. Although the Office was mandated by Council to act as the steward of municipal infrastructure, it had little practical authority within the administration. Its financial and human resources were limited, it had no responsibility to deliver services to citizens, and it had little ability, at least in the early stages, to influence budget decisions. Its involvement was welcomed by some and viewed as an infringement on their jurisdiction by others.”

The following pattern will be familiar to those in Australian and New Zealand Councils.

“Among the Office’s first activities was a widespread internal consultation to ensure that civic departments understood and were capable of supporting the implementation of the Infrastructure Strategy. Historically, civic departments competed with one another for scarce resources, a practice that tended to reward competition rather than cooperation. The so-called “hard” infrastructure departments and branches - e.g. transportation and streets, drainage, transit - had much better data concerning their assets than their ‘soft’ infrastructure equivalents - e.g. parks and recreation, social housing - and so were generally more successful at securing funds to manage them.

This internal consultation effort enabled the Office of Infrastructure to complete Edmonton’s first comprehensive infrastructure inventory and, with the implementation of a common rating system, a framework to evaluate the state and condition of existing assets and, at least in part, to compare the need for rehabilitation and to construct new assets to meet service targets across all civic departments.

Another unanticipated but no less important benefit was the creation of a common language to describe infrastructure assets that could be used in the planning and budgeting processes. Although departments still had to make the case for funding as separate entities, they were now on an equal footing with respect to how their cases to Council could be made. This led to greater harmony within the administration, which reduced the scepticism of City Council when presented with funding requests for specific projects.”

## **Third Party Validation - ITAC**

“Shortly after its creation, the Office also hosted a by-invitation briefing on municipal infrastructure that targeted not only elected officials at the municipal and provincial (equivalent to state government) levels but key stakeholders in the private sector, including architects, engineers, planners, landscape architects, accountants and academics.

Following the briefing, the Office of Infrastructure asked professional associations like the Consulting Engineers of Alberta and the Alberta Association of the Canadian Institute of Planners to appoint members to an Infrastructure Technical Advisory Committee (ITAC) that would provide third-party advice and counsel to the Office regarding implementation of the Infrastructure Strategy. ITAC is an expert committee composed of technical stakeholders and opinion leaders with expertise in infrastructure design, development and management, the members which represent broad cross-section of professional organisations, business associations, academia and community groups.

An independent consultant provided secretariat support to ITAC, as well as strategic advice and counsel to the Office of Infrastructure.

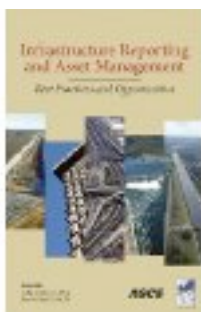
In the beginning, ITAC met monthly to review and validate methodologies and tools proposed by the Office of Infrastructure. To perform this work more effectively, ITAC members or alternates from their appointing organisations sat on working groups with specific mandates - such as the infrastructure asset rating system, a review of building standards, a life-cycle costing protocol, risk assessment methodology and more. ITAC's participation added a level of independent corroboration on infrastructure issues that particularly contributed to City Council's change in attitude."

### **2003 Outreach - The Christmas Function**

"In addition, the Office began in 2003 to host a Christmas function - usually a guest speaker with standing in the field of municipal infrastructure and finance - to which it invited City Council, key civic administrators, and ITAC members. These occasions permitted elected officials, administration, and the private sector to formally share their thoughts and feelings about the management of municipal infrastructure and related financial issues."

These short excerpts reveal three important elements in Edmonton's success. (1) That success takes time and it takes commitment. (2) Independent assessment by ITAC provided credibility and trust. (3) Asset management success requires that asset managers get 'out and about' - e.g. extensive internal consultation; the Christmas function.

There is much more to the Edmonton Success story and you can read it (and many other case studies) in "Infrastructure Reporting and Asset Management" edited by Adjo Amekudzi & Sue McNeil and published by the American Society of Civil Engineers, 2008.



You will also find more at [www.edmonton.ca/infrastructure](http://www.edmonton.ca/infrastructure)