Challenges for Asset Management

- An exploration of possibilities

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The World of Asset Management has changed

♦ Yesterday
  – The world was different. How different?

♦ Today
  – Where are we now?
  – Where are we going?
  – How will we get there?
Yesterday

♦ Emphasis on individual assets and short term

Today

♦ Emphasis on asset systems and long term

This has made asset management more holistic in approach
Yesterday

♦ Our focus was project based (eg building a bridge)

Today

♦ Our focus is program based (decisions center on the whole lifecycle of asset collections eg a transport corridor)
Yesterday

- We considered design and construction options

Today

- We consider design & construction AND operations and maintenance, renewal and replacement, and eventual disposal as parameters
Yesterday

♦ Work was mostly in-house

Today

♦ There are more options; e.g. buying services rather than assets, contracting out, integrated facility delivery
Yesterday

- Finance was by government borrowing or tax revenues

Today

- We have PPP/PFI of incredible variety (and complexity)
Yesterday

♦ Our approach was piecemeal and ad hoc

Today

♦ We are moving towards a process which is holistic and systematic

In today’s world, input and feedback are essential
So, today we are

- SYSTEMIC and
- SYSTEMATIC

What does this mean for asset management challenges?
Strategic Challenges

- Alternative arrangements for facility
  (Delivery; Operations & maintenance; Systems operation & maintenance)
  Presents new challenges

- How do we determine system objectives?
- How do we evaluate the options?
- How do we measure and monitor the outcomes?
Integration Challenges

- Integrating functional and condition driven requirements
  - Functional lives are usually far shorter than physical lives- and less predictable

- Integrating asset classes and sectors
  - Services are not provided by one asset class or sector alone – eg rail services with public track, private rolling stock

- Linking appropriate management and decision support systems — the problem of re-integrating separate business units
Measurement Challenges

- Identifying appropriate indicators
  - The things that REALLY matter for service delivery (not the things that are easiest to measure)
  - Skills at interpreting indicators in related groups rather than as isolated measures
- Establishing comparative baselines
  - Where the context and objectives are comparable
Analytic Challenges

- Improving data collection and management
  - Collecting less, updating more
- Constructing and evaluating alternative lifecycle scenarios
  - The maintenance/life trade-offs
  - The maintenance/operation cost trade-offs
  - The maintenance/service quality trade-offs
- Incorporate flexibility
  - Life is changing, models need to change with it
Institutional Challenges

♦ Effecting coordination between or reconfiguration of silos
  – E.g. cross functional groups or asset management co-ordinators working from a corporate perspective

♦ Defining roles of public and private sectors
  – What is core? (Strategy, research, data management?)
Conceptual Challenges

♦ Clarifying objectives
  – Defining, measuring and monitoring service levels

♦ Clearly linking activities to outcomes
Accounting Challenges

♦ Activity based costing
  - Few can say how much any activity, any service, is costing. Without this it is not possible to make sound service decisions – and hence sound asset management decisions
    (Strategic Asset Management # 111, April 4 2003)

♦ Commitment budgeting
  - Short term financial planning requires more than simply knowing what expenses have been accrued, it means knowing what have not yet been accrued, but have been committed
Costing Challenges

♦ Valuation
  – Despite much attention, some basic issues still need resolution – e.g. not merely the cost but also the value of community obligations, the extent to which replacement costs builds in inefficiencies, etc
  – Estimation of value from broad 1-5 condition scales is still a hit and miss business

♦ Depreciation
  – We need depreciation measures that recognise the faster degradation that occurs when maintenance is inadequate
What else?
And where to next?
Time to Vote!

- What issues are very important AND you would like to be involved in their solution?
- Which issues are pretty important and you would be pleased if someone else tackled them?
- Which are less important, solved, or well on their way to solution?
Collaborative Practical Research

♦ The web presents the opportunity for good practical ideas to be developed by groups of people who may be quite distant from each other geographically
  – But close in interest and commitment
♦ Idea exchange by email or internet is time effective – even more so if the exchange is formally facilitated
I shall return!

- Virtually, that is.
- Think about the challenges you are facing.
- I shall write shortly to find the challenges that you would like to commit to finding a solution to.
- And, where there are viable groups sizes, I will facilitate research exchange through private discussion forums.

- Start thinking!  
  
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