



Asset Management – and our Conceptual Model

David McKeown

CEO, Institute of Asset Management

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My own experience



- Chartered Electrical Engineer
- Background in railways: primarily signalling, control and other safety systems with responsibility for maintenance and performance
- Military (Army Officer) and some air traffic experience
- Over 10 years experience as free-lance consultant: business process and major projects (UK Channel Tunnel Rail Link)
- Full-time CEO of the Institute of Asset Management since Sep09
- Direct experience of behaviours and organizational processes in public and private sectors, military, volunteer / charity, professional not-for-profit
- Focused on selection, training and personal development, workforce organisation and culture change including evidence of competence to do safety engineering

What about You?

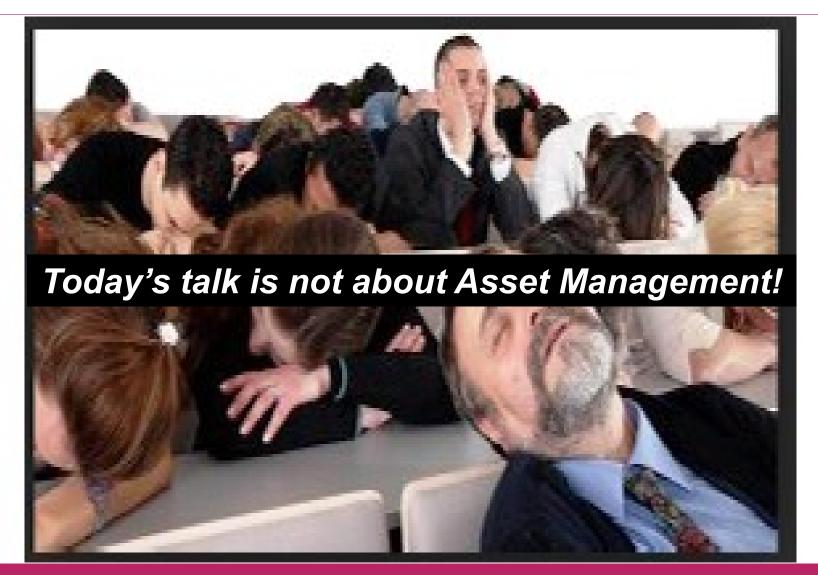


- What is your useful life?
- What is your remaining life?
- Do you have a strategy or even an asset management plan?

- Who for? Top management?
- Done a report card lately?
- What is your value!!!!!!

Asset Management is boring...







- What is 'Asset Management'?
- Is it the same thing as 'Management of Assets'?

Scope of Asset Management



- What is 'Asset Management'?
- Is it the same thing as 'Management of Assets'?

- Asset Management is the:
 coordinated activities of an organization...
 ...to realize value from assets
- NOT the management of assets!
- Business / purpose centric NOT asset centric The 'Line of Sight'



Asset Management is NOT just about the Management of Assets





"A man who knows the price of everything and the value of nothing."

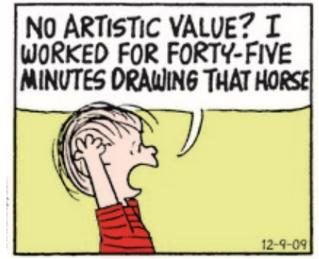
Oscar Wilde, Lady Windermere's Fan Answering the question, what is a cynic?

Value











Do you know what value your stakeholders want?

John Ruskin (1819-1900)



It's unwise to pay too much, but it's worse to pay too little.

When you pay too much, you lose a little money ... that is all.

When you pay too little, you sometimes lose everything, because the thing you bought was incapable of doing the thing it was bought to do.



Other Colas are available...

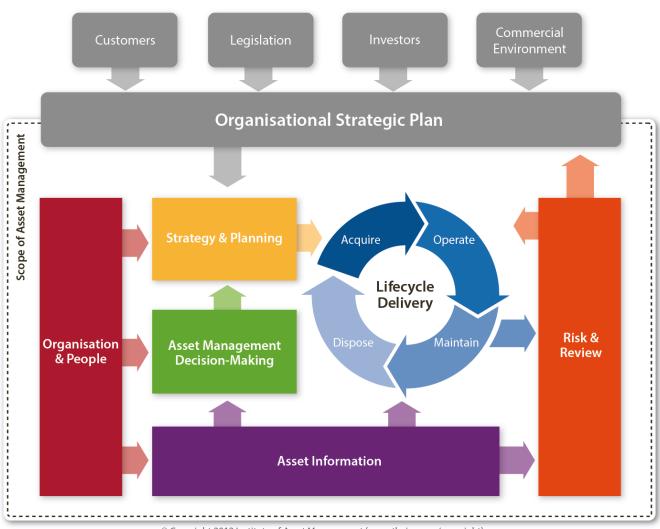






Conceptual Model





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39 Subjects

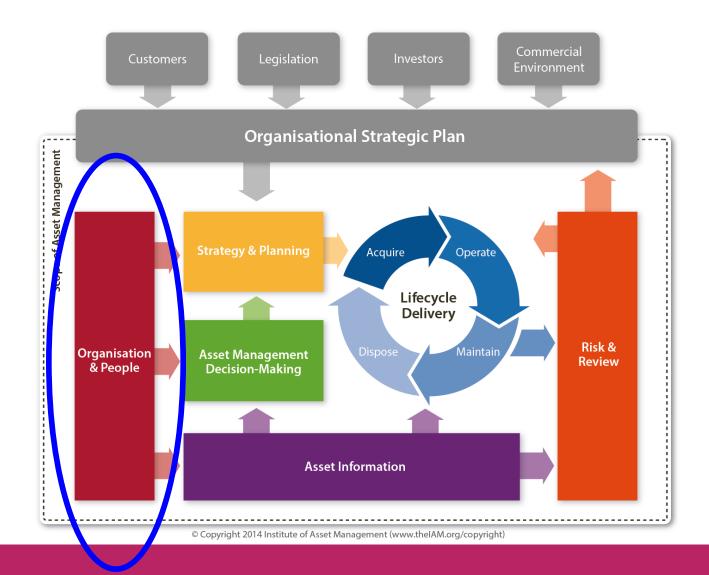


Strategy & Planning	Asset Management Policy		Asset Inform
	Asset Management Strategy & Objectives	A	Asset Inform
	Demand Analysis	Asset Information	Asset Inform
	Strategic Planning		Data & Infor
	Asset Management Planning		Procurement
Asset Management Decision-Making	Capital Investment Decision-Making		Asset Manag
	Operations & Maintenance Decision-Making	Organisation & People	Organisation
	Lifecycle Value Realisation		Organisation
	Resourcing Strategy		Competence
	Shutdowns & Outage Strategy		Risk Assessm
Lifecycle Delivery	Technical Standards & Legislation		Contingency
	Asset Creation & Acquisition		Sustainable
	Systems Engineering		Managemen
	Configuration Management	Risk & Review	Asset Perform
	Maintenance Delivery		Asset Manag
	Reliability Engineering		Managemen
	Asset Operations		Asset Costin
	Resource Management		Stakeholder
	Shutdown & Outage Management		
	Fault & Incident Response		
	Asset Decommissioning & Disposal		

	Asset Information Strategy	
A + !	Asset Information Standards	
Asset Information	Asset Information Systems	
	Data & Information Management	
	Procurement & Supply Chain Management	
	Asset Management Leadership	
Organisation & People	Organisational Structure	
	Organisational Culture	
	Competence Management	
	Risk Assessment & Management	
	Contingency Planning & Resilience Analysis	
	Sustainable Development	
	Management of Change	
Risk & Review	Asset Performance & Health Monitoring	
	Asset Management System Monitoring	
	Management Review, Audit & Assurance	
	Asset Costing & Valuation	
	Stakeholder Engagement	
<u> </u>		

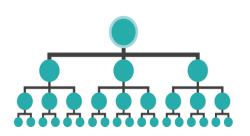
Scope of Asset Management



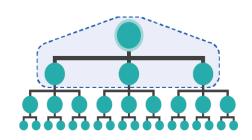


ORGANISATIONAL STRUCTURE WHERE DO WE PUT ASSET MANAGEMENT?

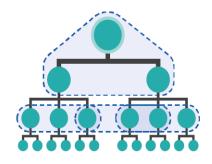




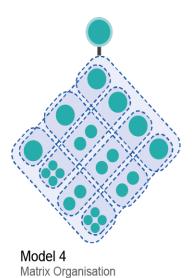
Model 1 Rigid Bureaucracy



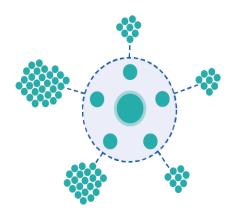
Model 2
Bureaucracy with a senior 'management' team



Model 3
Bureaucracy with Project Teams & Task Forces



Model 5
Project Organisation



Model 6 Loosely-coupled Organic Network

People do asset management



Leadership & Culture

- Good asset management is practiced by people who understand:
 - financial, operational and technical realities (of their business)
 - quality and price expectations of customers.
- And because doing asset management well REQUIRES:
 - listening to and convincing people...
 - with different agendas, at different levels, in different disciplines...
 - integrating a coherent and balanced plan.
 - ...there is a premium on personal and leadership skills.
- Who does this / is responsible for doing this well?

Organisational Culture?



It is intangible, affects everything and has many definitions

"the way things are done around here" (Deal & Kennedy, 1982)

"a pattern of shared basic assumptions that the group learned as it solved its problems" (Schein, 2010)

"a company asset that can be used to increase business performance" (Peters, 2009)

Scope of Asset Management



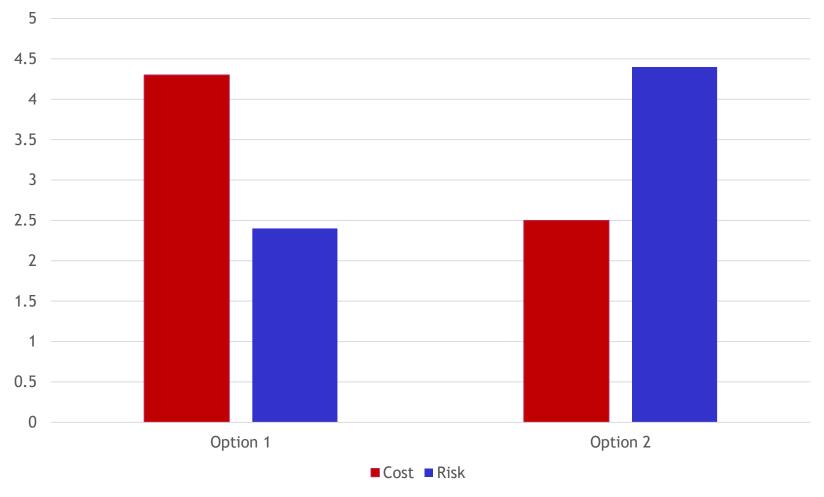


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Stakeholder Engagement







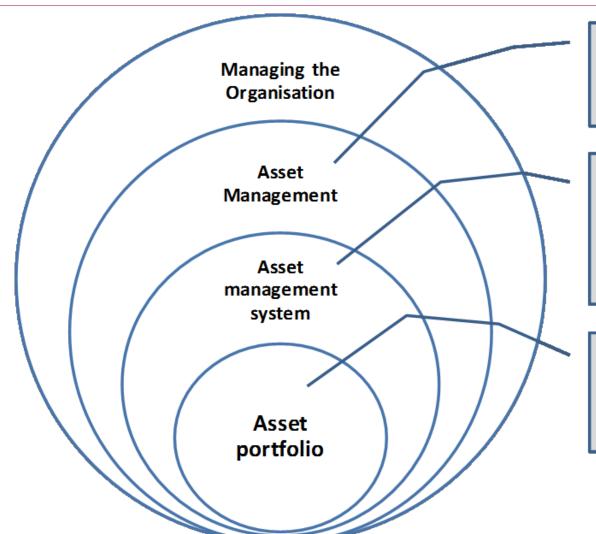
Business Drivers



- What asset costs can be reduced, deferred or eliminated?
- How can we spend less on assets and achieve our targets?
- How can we get better returns on capital employed?
- How can we avoid the risk of assets being unavailable when we need them?
- How can we demonstrate levels of asset related risk are known and appropriate?
- How can we improve the deployment and maintenance of assets?
- How can we achieve our aims better?

ISO55001 is the start of a journey





Coordinated activity of an organization to realize value from assets

Set of interrelated or interacting elements to establish AM policy, AM objectives and processes to achieve those objectives

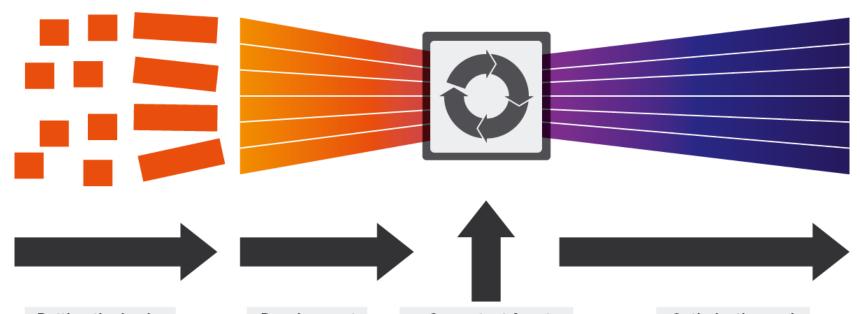
Assets that are within the scope of the asset management system

Asset Management Maturity



Convergence to a joined-up, managed system for Asset Management

Divergence best appropriate practices (context-dependent)



Putting the basics in place

Development & integration

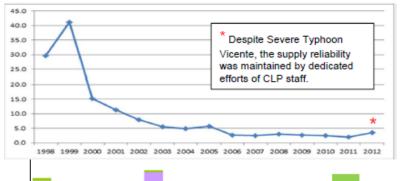
Competent Asset
Management
(to independently
certifiable standard)

Optimisation and further integration

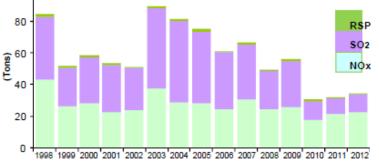
Paul Poon - CLP



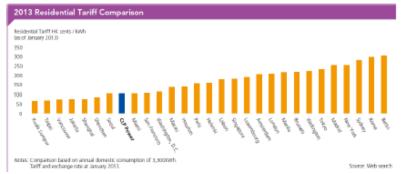
CLP performance since adoption of Asset Management



Significant improvement in supply reliability (Unplanned Customer Minutes Lost reduced from ~30 minutes in 1998 to ~3 minutes in 2012)



Despite growing electricity demand, emission levels have improved (e.g. SO₂ emission was reduced from ~40 tons to ~11 tons over the same period)



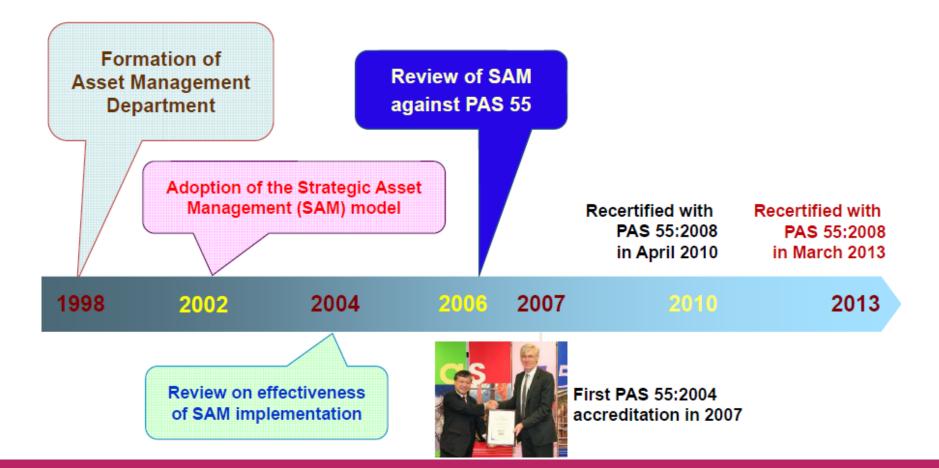
CLP's tariff is among the lowest in metropolitan cities

Paul Poon - CLP



Asset Management Journey of Network Business

Over a Decade of Asset Management Experience



BSI PAS 55:2008





- BSI PAS 55:2003 effective April 2004:
 - Part 1 The Specification Part 2 Guidelines
- PAS 55 : 2008 effective September 2008
- Key principles:

Inclusive Risk-based

Whole Life Data-supported

Optimized Continuous improvement

Pragmatic

- BSI 'best seller' global default 'standard still needs improvement (eg 'infrastructure' -v- the rest)
- The IAM Toolkit:
 - PAS55;
 - Competences Framework; and
 - PAS55 Assessment Methodology.

PAS55 to ISO55000



Background

- The IAM wrote PAS55 in 2000 published in 2004 developed by 49 organisations from 15 industries in 10 different countries
- UK submitted NWIP in July 2009 for an Asset Management ISO
- London Meeting resulted in formation of a Project Committee
- BSI PAS 55:2008 adopted as the 'Base Document'

ISO/PC251

- Melbourne Mar11: Initial Plenary Meeting 40 representatives from 14 countries
- Calgary (last meeting) was biggest ever with 80 delegates approx

ISO/TC251

- Now 29 participating countries with 13 observers
- Latest meeting last week in Redlands, CA

Asset Management



- We don't know it all yet!
- But doing Asset Management is simple, not easy
- Culture & Leadership as much as the system...
- Challenges:
 - Compliance driven or 'project'
 - Proprietary names & confusion (physical/enterprise/etc)
 - Short term costs and other measures
 - Focus on assets not value

Simplifying the Vision



Asset Management is:

Clarity of Purpose
Thinking Long Term
Foreseeing Outcomes
Consistent Collaborative Behaviour
Everybody's Job

The Institute



"To be recognised as the leading, international, professional body for asset management"

Individual & Corporate Members Finance / accountants as well as engineers Source of good practice & cross-industry thinking. Alliancing and collaborating world-wide























































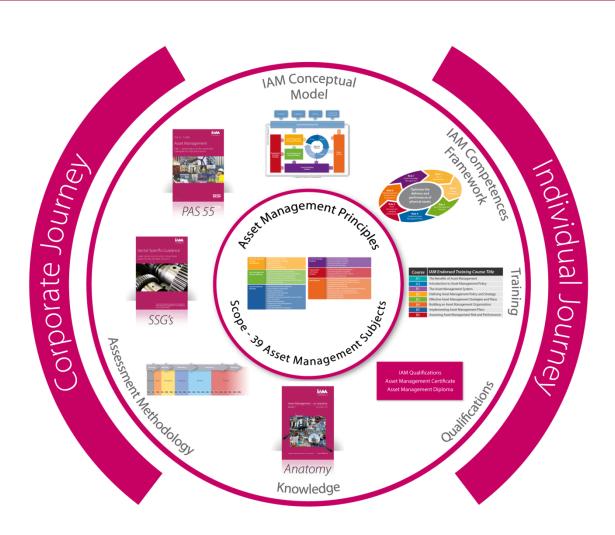






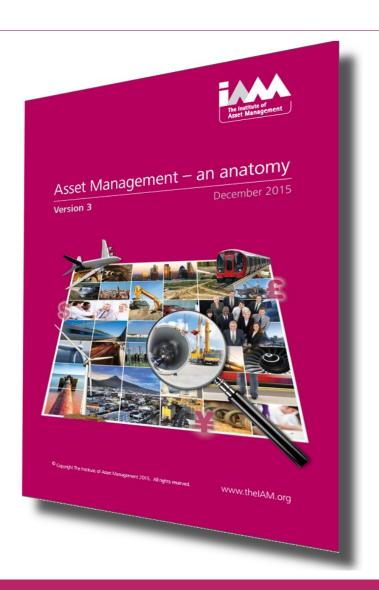
IAM Framework





Asset Management Anatomy



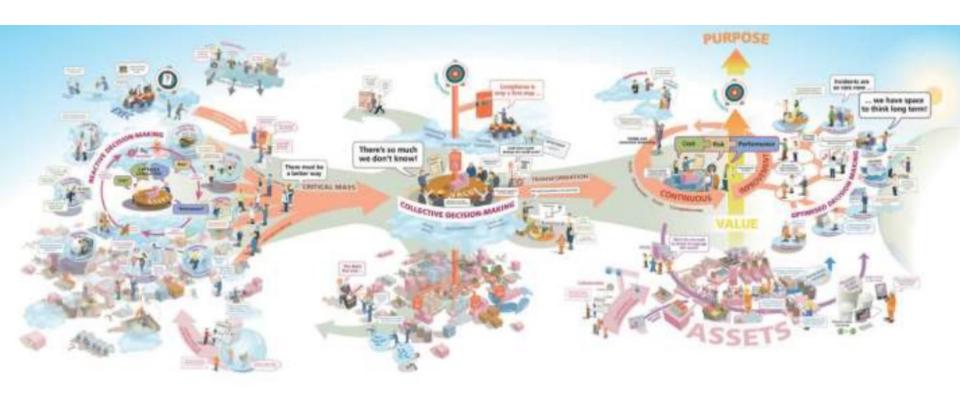


- Introduction
- Principles & Philosophy (history, PAS55, ISO uses PAS55) and using the ISO Principles;
- Scope of Asset Management (uses model and similar diagrams – linking strongly with LoS etc;
- 39 Subjects

Download free of charge: www.thelAM.org/AMA

Spreading the Word – Big Picture



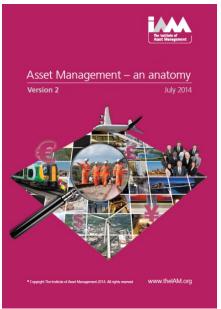


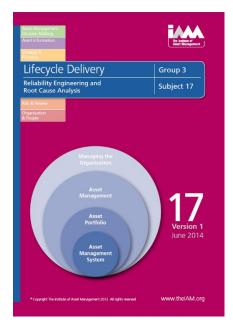
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Corporate Journey – 'How To' and 'How Much To'











Takeaways...



You're not the first...

Be encouraged – you can do this!

Takeaways...



You're not the first...

Be encouraged – you can do this!

Value – not assets

TOTEX (CAPEX + OPEX)

Line of Sight AND merge silos

Everyone! (Culture & Leadership)

It's a philosophy, not more work!

You can make this complicated...

Takeaways...



You're not the first...

Be encouraged – you can do this!

Value – not assets

TOTEX (CAPEX + OPEX)

Line of Sight AND merge silos

Everyone! (Culture & Leadership)

It's a philosophy, not more work!

You can make this complicated... DON'T!



Thank you for listening



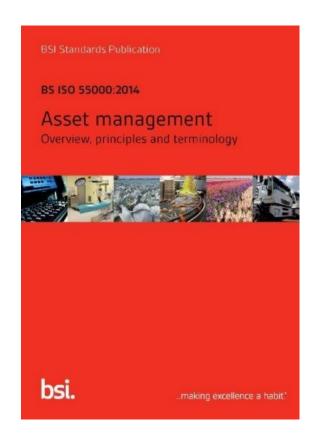
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ISO55000





"coordinated activities of an organization to realise value from assets"

Do we agree?

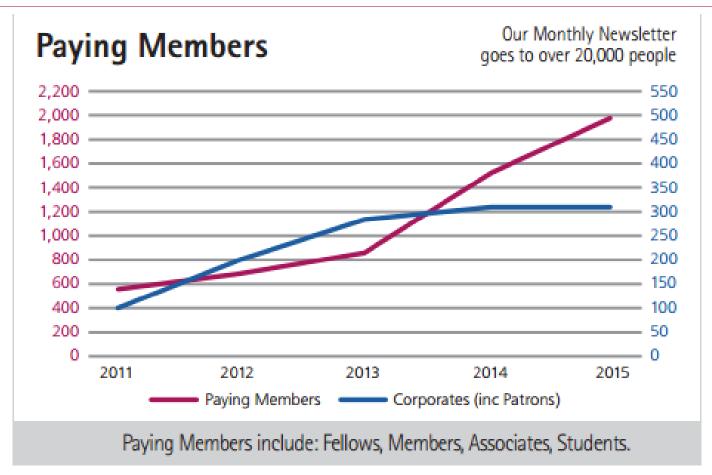


Asset Management is...

- Transformation rather than a Project
- Long-term Thinking
- Clarity of Purpose
- Line of Sight
- VALUE centric (not assets or system)

Member Growth





The IAM has not actively marketed or recruited members

IMAGINE..

Departments are not silos

Accountancy fits the real world

Maintenance is also 'investment'

People are our greatest asset!

Politicians are strategic!

Organisations have clarity and enduring purpose

'Investment' = OPEX and CAPEX

David's perception!



Barriers to implementation

- Lack of awareness (why?)
- Senior management hard to convince
- Hard to demonstrate 'value' (maybe the same as above?)

End Game



Initially it will be process and hard graft
Then comes 'culture' and dawning realisation

Then it will be every leader's natural approach

Then everyone will expect it - everywhere

Then everyone will claim it as common sense!!! (or that it was their idea in the first place!)

What about **your** assets?



- When you maintain your home, what are your criteria?
 - Performance?
 - Level of Service?
 - Spend the money on a holiday instead!
- Do you do it out of OPEX or CAPEX with a loan?
- How do you value it / cost it?
 - Historic / Fair Value?
 - Or outcomes more than valuation?







ISO55000 – a Brief History



Background

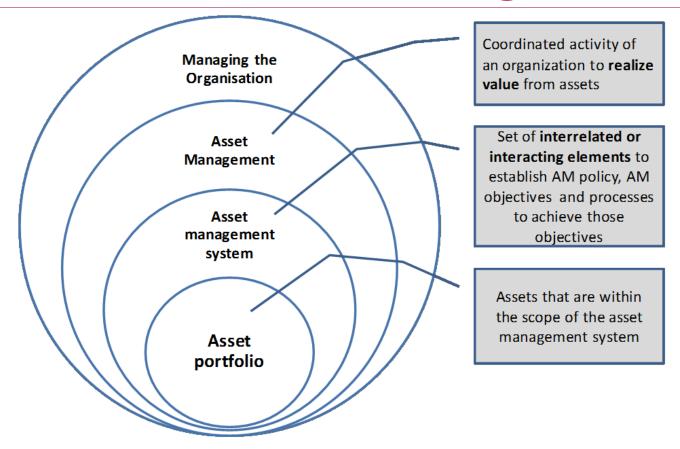
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ISO/PC251

- Melbourne Mar11: Initial Plenary Meeting 40 representatives from 14 countries
- Now 31 participating countries with 11 observers (number of delegates varies)
- Calgary was biggest ever meeting with 80 delegates approx

David's perception! ISO55001 is not enough





Culture & Leadership is of fundamental importance - over and above Management System itself (but significant range of views!)

Limitations of ISO 55001



- Can encourage a 'compliance culture' where certification becomes the goal – not actual business results
- Provides the benchmark for competent Asset Management, but no more
- Does not help organisations determine 'best appropriate practice' for their business – what they really need to do in order to deliver stakeholders' objectives
- It deliberately says nothing on 'how to'...
- etc

Strategic Priorities



- The IAM is a Professional Association comprising a Learned Society complemented by a Membership Body
- Our focus is therefore the discipline as well as competent people
- We need to develop and disseminate knowledge, training and good practice to support the Corporate Journey and the Individual Journey
- We need to support people and organisations at all stages of this journey
- We need better engagement with all our members and the wider Asset Management community
- We need to develop the Institute to enable our objectives to be achieved

Developing the Institute



- Our priority will remain the development and dissemination of Asset Management knowledge, products and services
- Increasingly this requires funding to support volunteers
 - in order to deliver our ambitious programme of work
- We are looking to our commercial activities to support this
- Membership fees will support member services only
- We are reviewing office resources worldwide to ensure we can adequately support committees and projects (Virginia office)
- We are looking at the governance of the Institute (including the effect of an application for Chartered Status)

Enduring Objectives



- 1. Collect / Collate / Disseminate existing knowledge and good practice
- 2. Generate and extend knowledge and good practices
- 3. Influence public policy and stakeholder expectations
- 4. Promote capability and excellence in asset owning organisations or their suppliers and structured schemes for recognising these achievements
- 5. Promote knowledge and competence of individuals and objective schemes for recognising these achievements
- 6. Deliver Member publications, engagement and networking opportunities and other valuable Member Services
- 7. Raise profile and respect for IAM and the profession
- 8. Collaborate and support other bodies having similar objectives
- 9. Develop and maintain an appropriate and sustainable organisation



Value Purpose / Line of Sight Long term