



Current excitement in the field of Asset Management

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Leading Questions



What is asset management? Is it just another name for maintenance?

How do you justify Asset Management?

What is the latest on the international standard for asset management?

Where is South Africa on AM in relation to the rest of the world?





What is Asset Management?



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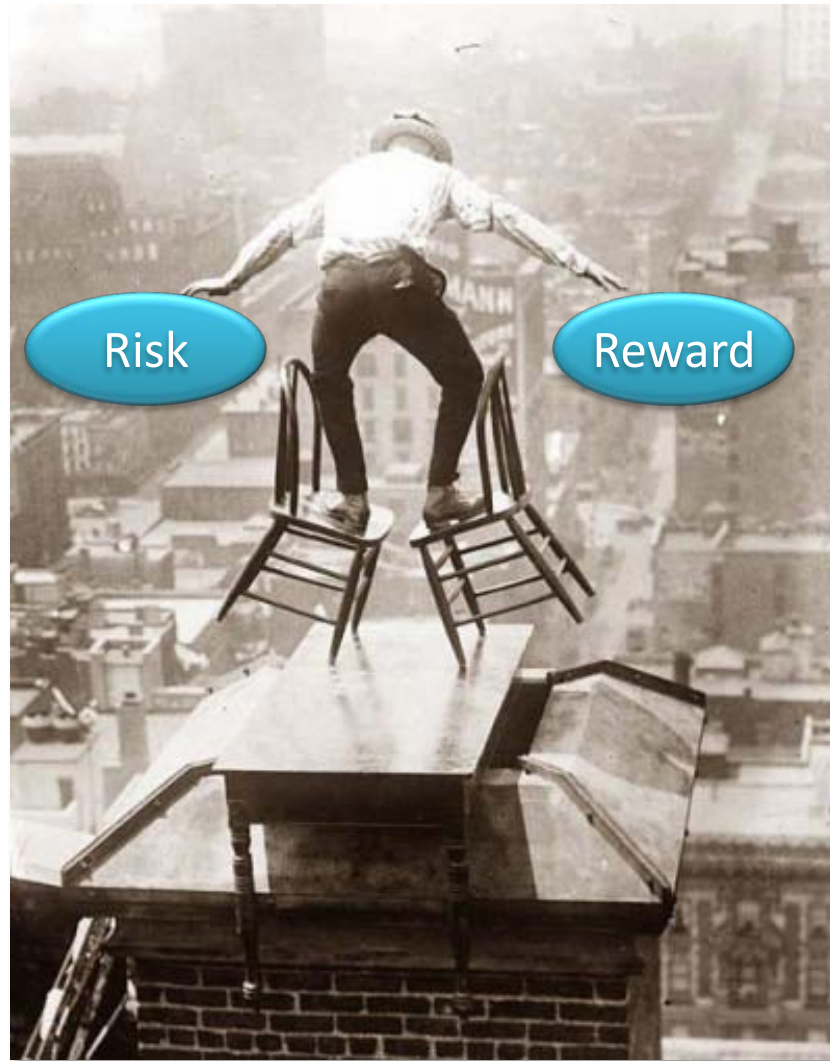


How do you optimise the utilisation and performance of physical assets ...

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while containing the risks ...



... sustainably?



Asset Management



Physical asset management

Systematic and coordinated activities and practices through which an organisation optimally manages its assets, and their associated performance, risks and expenditures over their life cycle for the purpose of achieving its organisational strategic plan.

PAS 55-1:2008

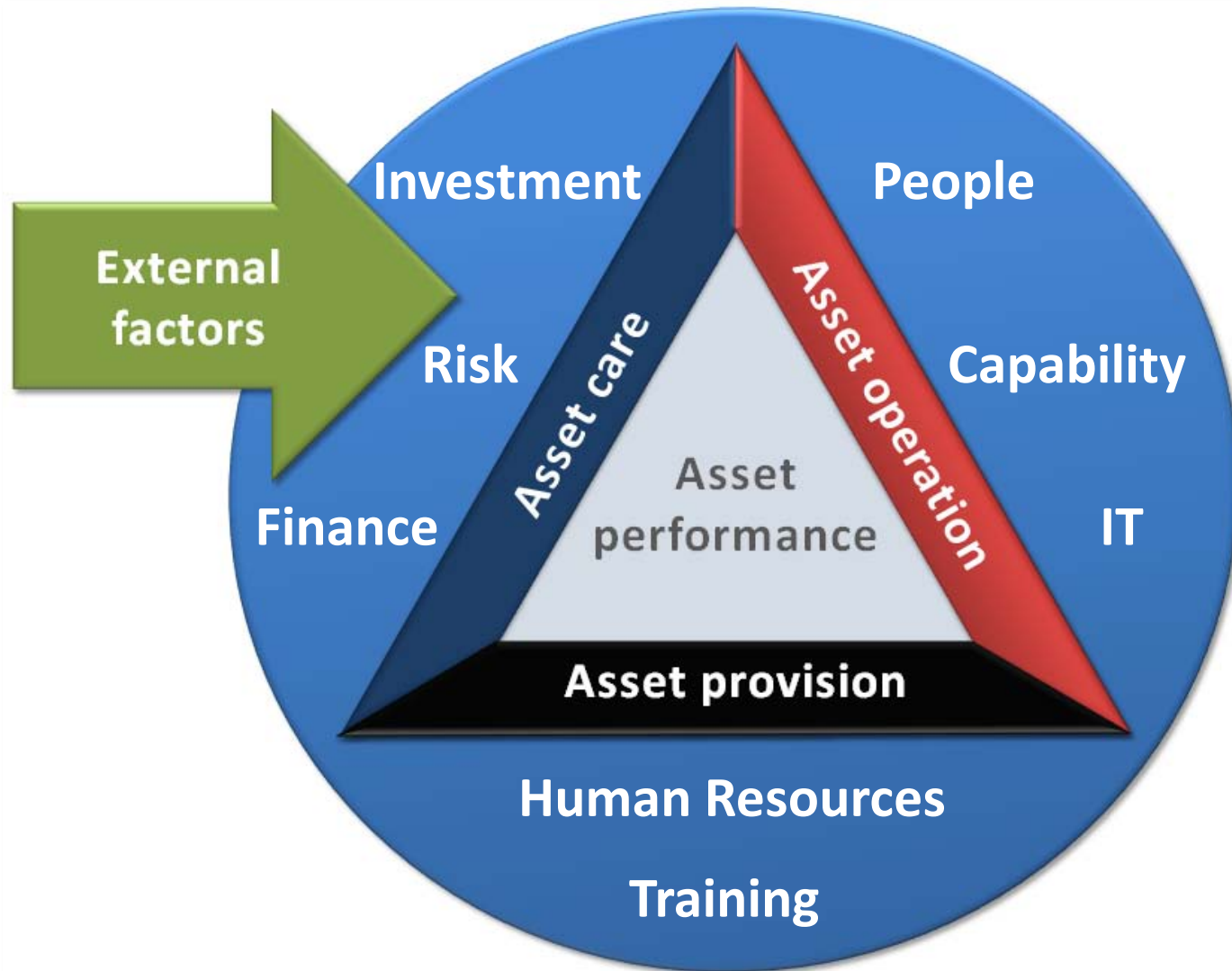
Or put more simply



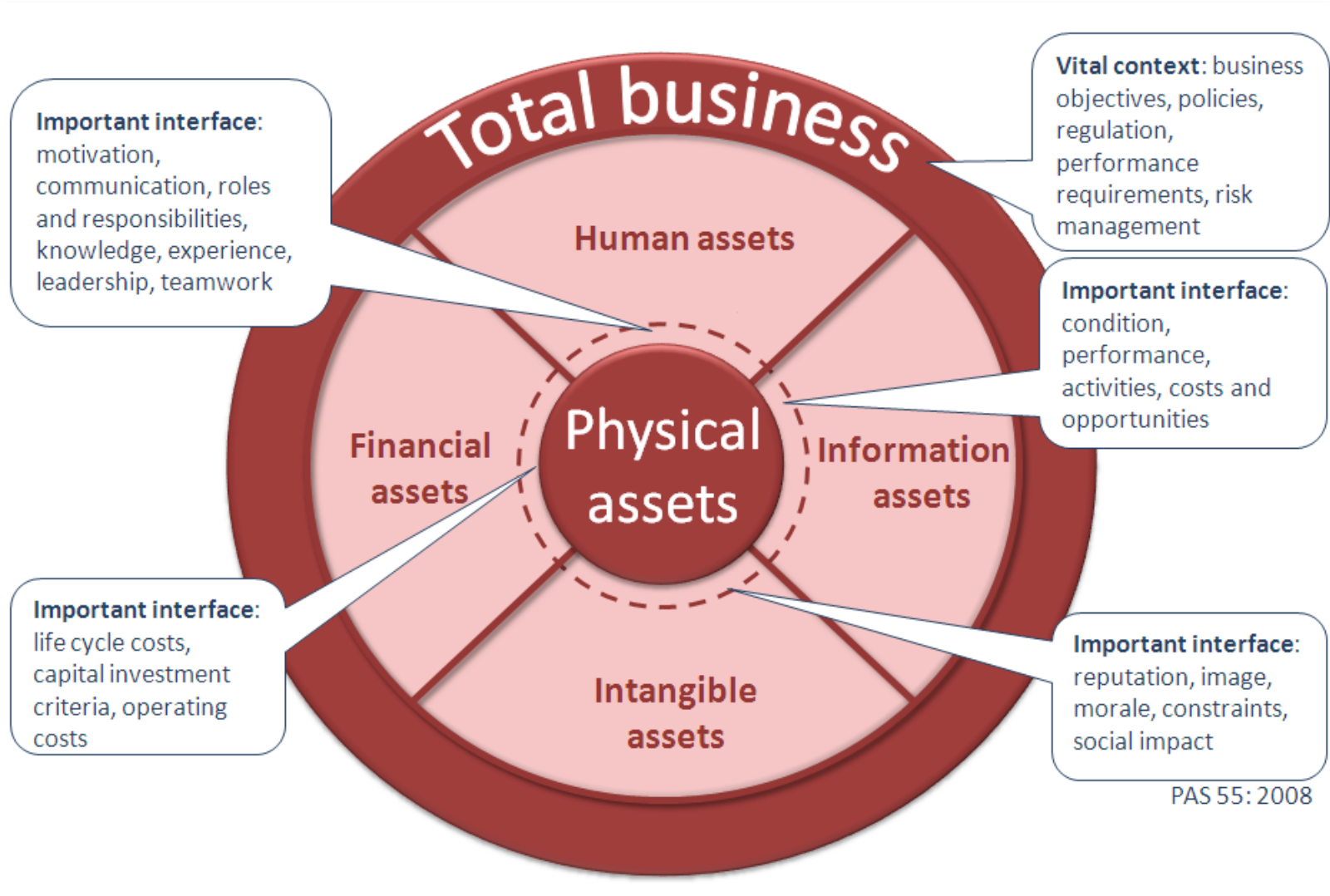
The optimum way of managing physical assets to achieve a desired and sustainable outcome



Asset Management Definition



Physical Asset Management



The Asset Management Challenge

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SA GDP Growth Rate still under pressure



When things were going well...

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Effects of Economic Downturn

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Mining Scaling Down!!

Asset Management Challenge

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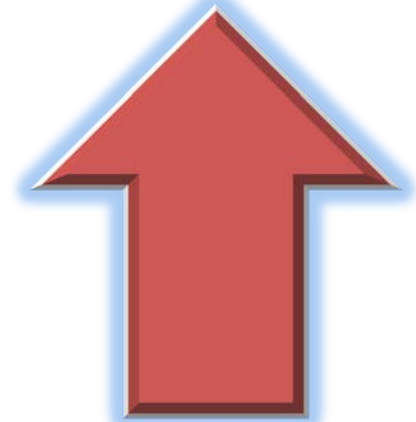
Current economic circumstances forces companies to retain their equipment longer in order to reduce capital employed



When do you maintain?



When do you replace?



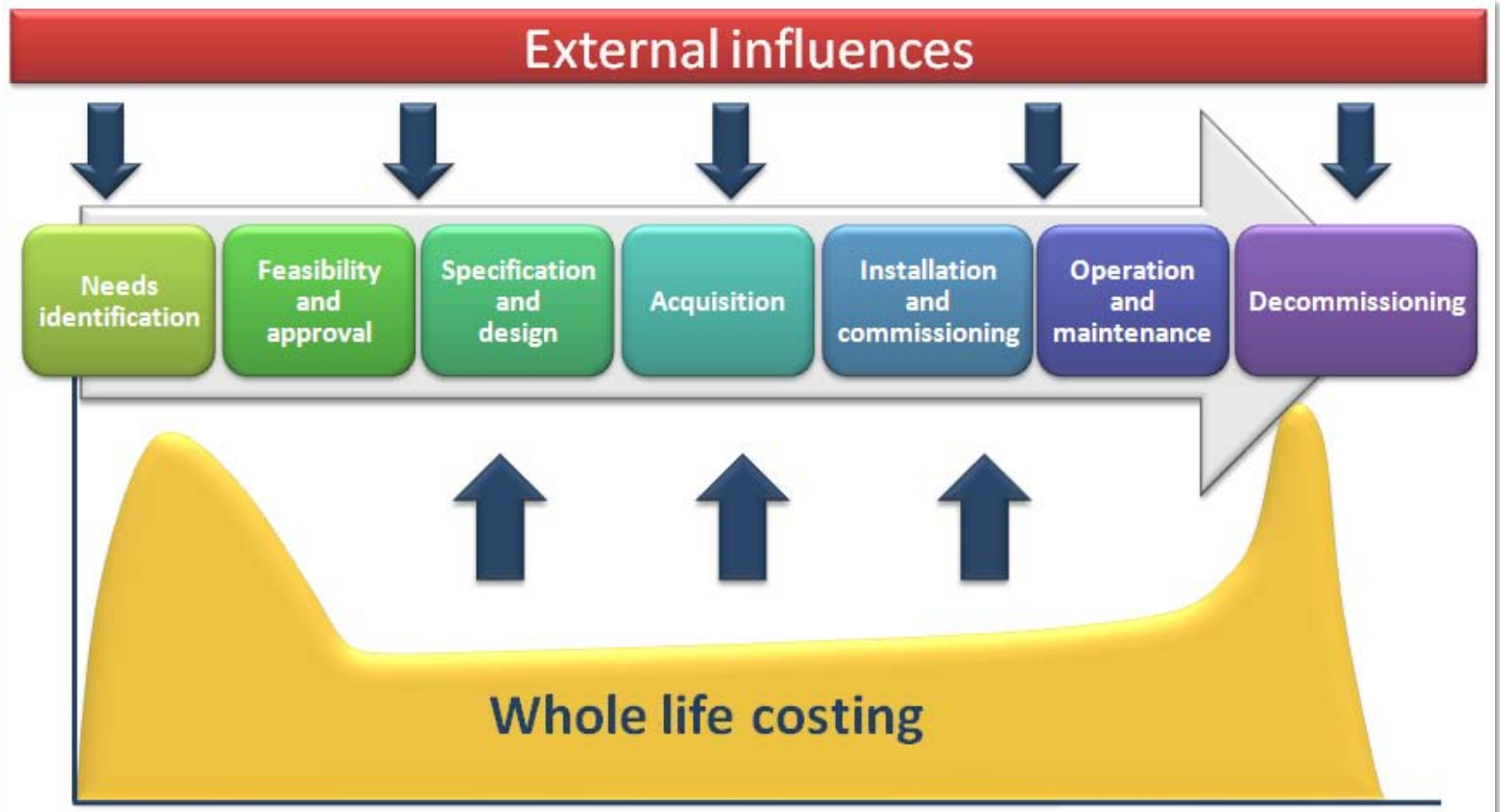




How to justify AM?



Life Cycle Management



Life Cycle Definition

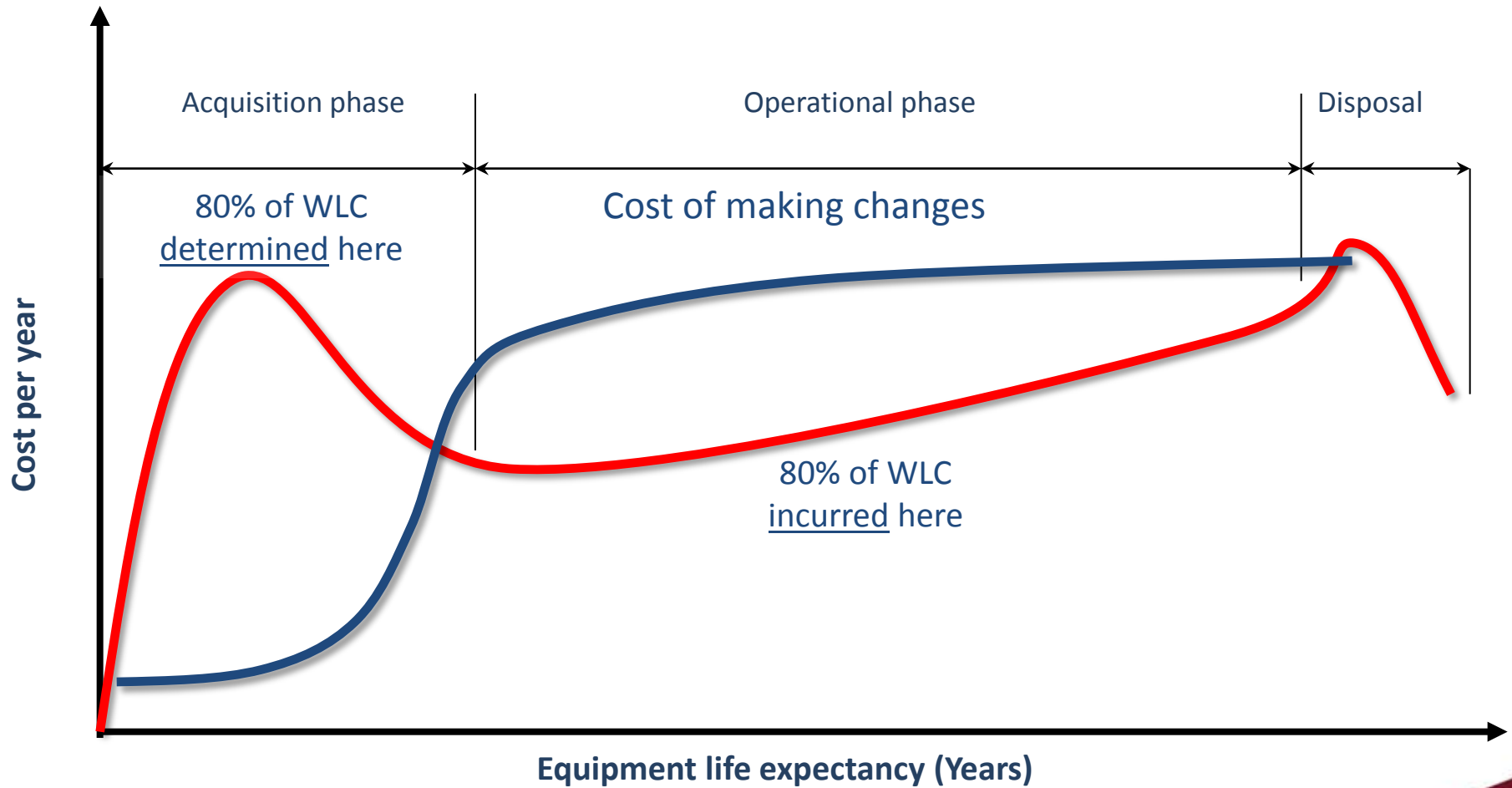


time interval that commences with the identification of the need for an asset and terminates with the decommissioning of the asset or any associated liabilities

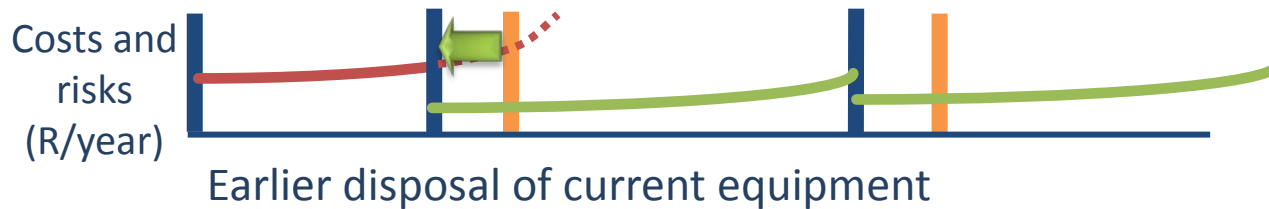
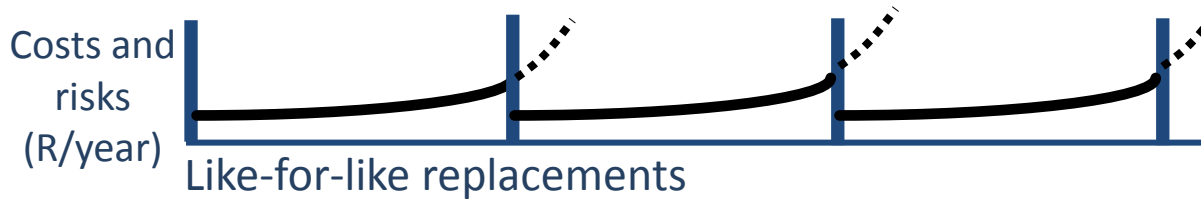
PAS 55-1:2008



Scope for Improvement



Typical Life Cycle Decisions



Whole Life Costing

The calculation of the present value of all costs an asset will incur throughout its life cycle in order to make balanced and informed decisions about the acquisition, refurbishment and disposal of assets

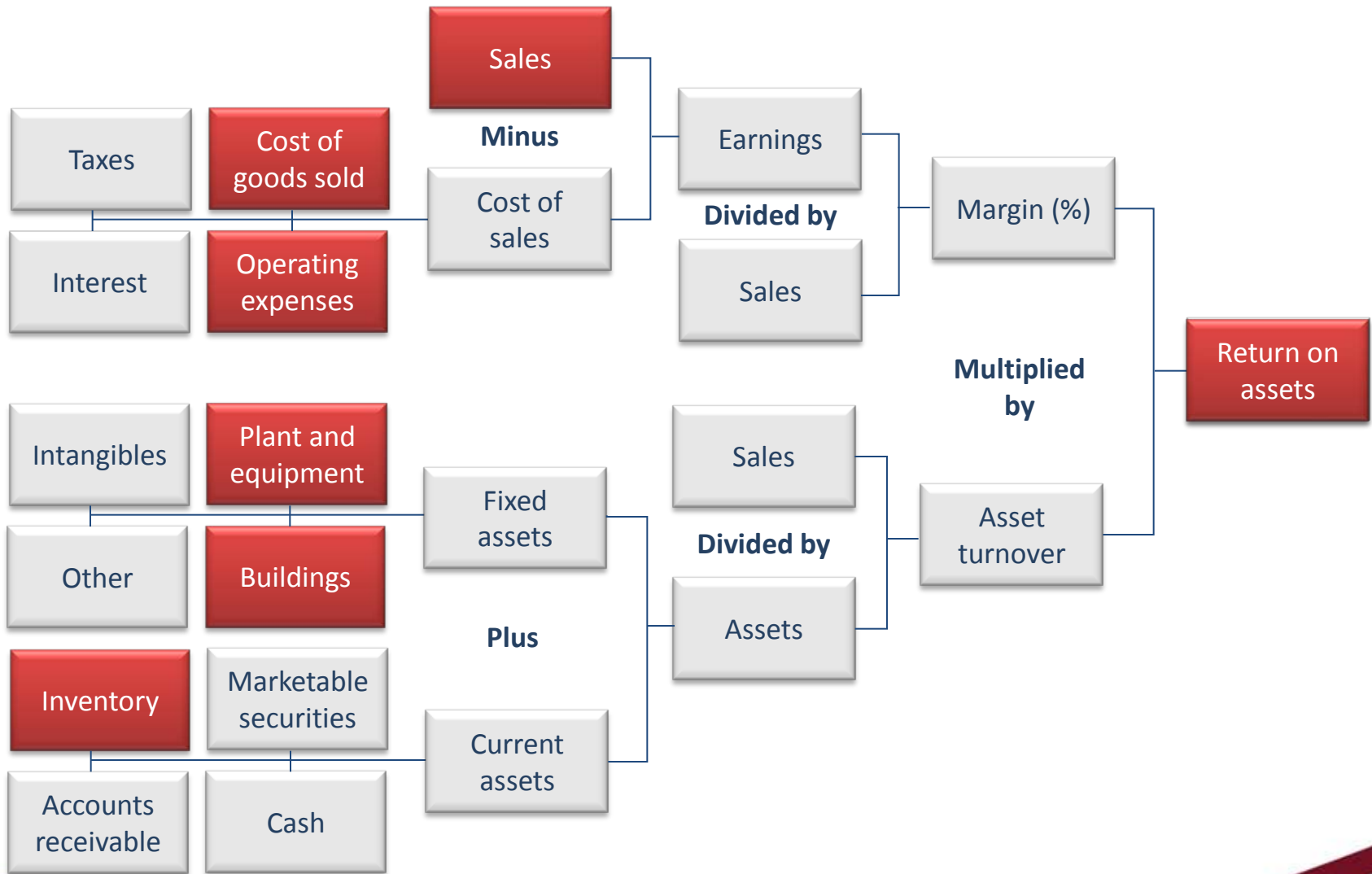


Need for benefit
Acquisition
Operation

Truck	Units	Chosen Option					
		240 Ton	320 Ton	Year 1	Year 2	Year 5	Year 10
Production							
Hours per annum		6,500	6,500	6,500	6,500	6,500	6,500
Tons /Hour		481	608	600	550	550	600
Annual Tons		3,126,500	3,952,000	3,900,000	3,575,000	3,575,000	3,900,000
Capital							
Capital Cost	US\$	2,500,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
Life	Hours	80,000	70,000	70,000	70,000	70,000	70,000
Capital Unit Costs	\$/hour	31	43	43	43	43	43
Working Costs							
Parts	\$/hour	39	52	52	65	90	45
GET	\$/hour	1	1	1	1	1	1
Lub	\$/hour	7	8	8	8	8	8
Maint Labour	\$/hour	9	10	10	12	18	10
Overheads	\$/hour	6	6	6	6	6	6
Operator Costs	\$/hour	10	10	10	10	10	10
Tyres	\$/hour	25	50	50	50	50	50
Diesel @ 0.60	\$/hour	71	81	81	81	81	81
Other	\$/hour	3	3	3	3	3	3
Total W Costs	\$/hour	171	221	221	236	267	214
	\$/Tonne	0.36	0.36	0.37	0.43	0.49	0.36
Total Costs	\$/hour	202	264	264	279	310	257
	\$/Tonne	0.42	0.43	0.44	0.51	0.56	0.43
For 4,000,000 Tonnes							
Truck Op Cost/Anum	\$/Anum	1,422,037	1,453,947	1,473,333	1,716,364	1,941,818	1,426,667
Revenue/Month/Truck	\$m @ XYZ	3.6	4.6	4.6	4.2	4.2	4.6

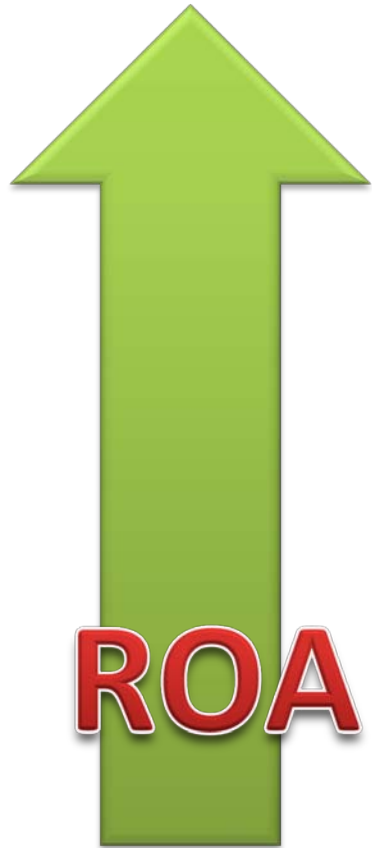


Financial Justification



The Benefits

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Asset performance



Cost reduction



Risk reduction





International Standard for AM?



PRAGMA

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A Standard for Asset Management?

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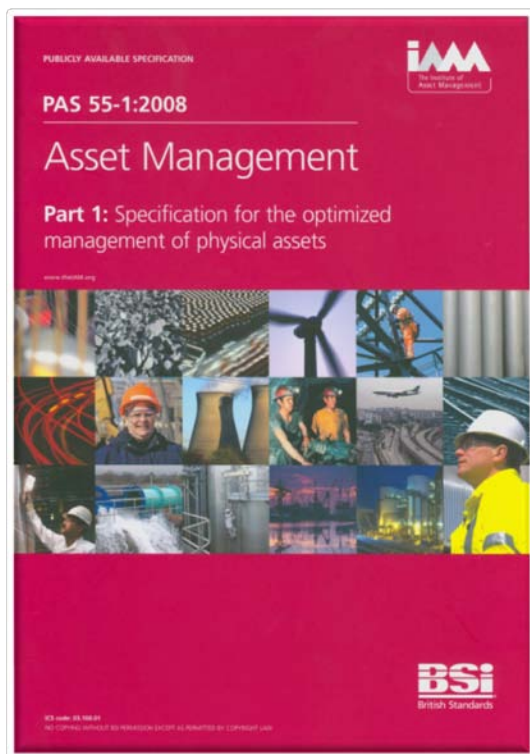


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What is PAS 55:2008?

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PAS = Publically Available Specification

Released by the British Standards Institution (BSI)

Led by the Institute of Asset Management (IAM)

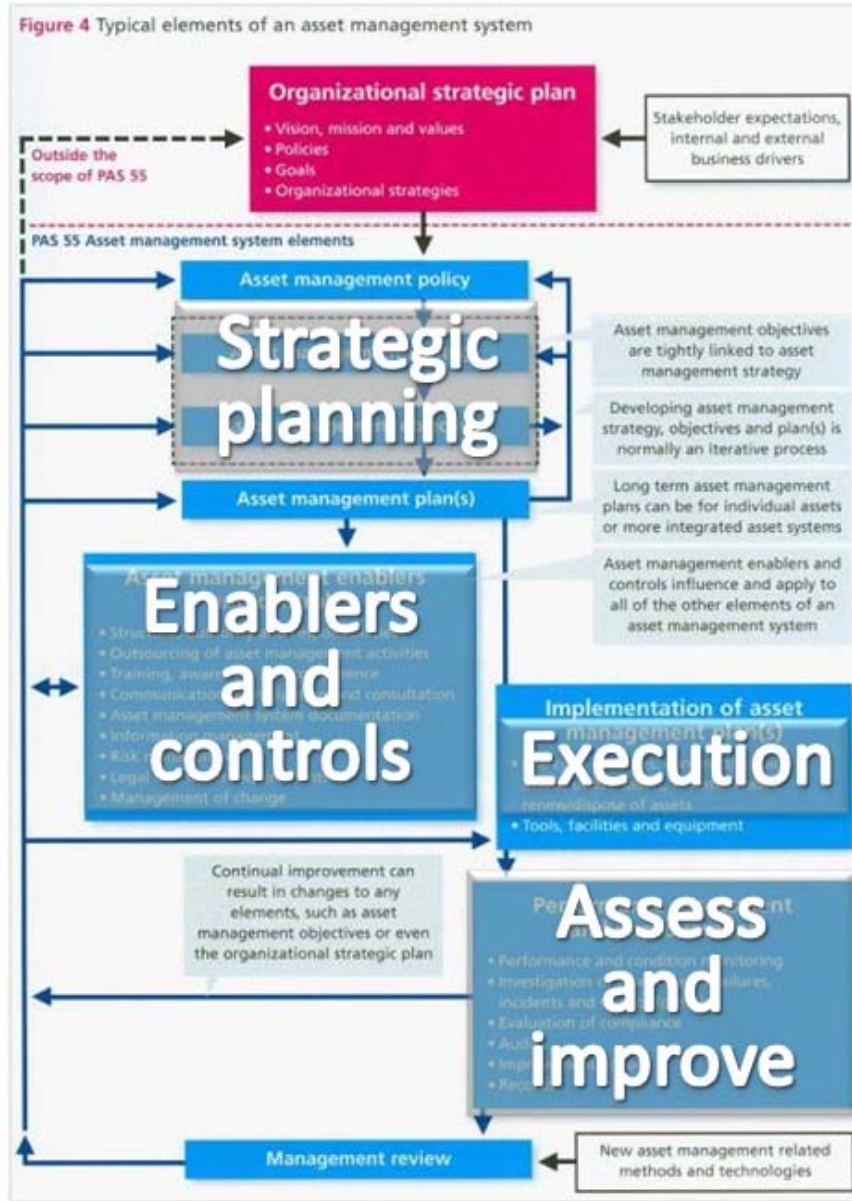
Used input from global experts

Released in 2004, revised in 2008

Applicable to any organisation where physical assets are critical for success



PAS 55-2:2008 Framework



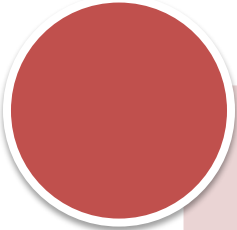
Why ISO 55000?

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PAS 55 is a
“Specification”, not a
standard

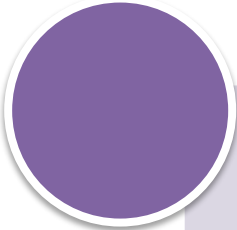
One of many specifications / standards being
incorporated into ISO 55000



ISO 55000
Asset
management –
Overview,
principles and
terminology



ISO 55001
Asset
management –
Management
systems:
Requirements



ISO 55002
Asset
management –
Management
systems:
Guidelines
on the
application of
ISO 55001



Where does PAS 55 fit in?



Evolution of asset management

Maintenance

Country specific asset management



Aligned international AM standard





Is SA part of the global AM picture?



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Vision:
“To be the AM institute for Africa”

<http://www.saama.org.za/>





Purpose

- To uplift the professional status of the asset management practitioner by raising the professional standards of asset management in industry.
- To facilitate the establishment, maintenance and improvement of common specifications for maintenance / asset management
- To encourage, promote, aid and affect the voluntary interchange of data, information, experience, ideas and knowledge on methods, processes, techniques and technology relating to the asset management field among members of SAAMA.
- To stimulate and promote education, training and original research in the maintenance / asset management field. To build synergistic rapport between companies on maintenance issues.
- To create liaison with similar associations abroad and to promote asset management as a means to long-term asset health



ISO55000 Feedback

- Next/final workshops – end April in Calgary, Canada
- SA delegation
 - Rob Childs – I@Consulting
 - Dean Griffin (lead) - Pragma
 - Louw Kannemeyer - SANRAL
 - Logan Reddy - Eskom
 - Pierre Swart – Sasol
 - Krige Visser - SAAMA
- Final release April 2014



Vision:

To be a worldwide community of organizations providing leadership for maintenance & asset management communities

<http://gfmam.org>



Why does GFMAM exist?

www.pragmaworld.net



Objectives:

To bring together, promote and strengthen the Maintenance and Asset Management community worldwide

To support the establishment and development of associations or institutions whose aims are maintenance and asset management focused

To facilitate the exchange and alignment of maintenance and asset management knowledge and practices

To raise the credibility of member organizations by raising the profile of the Global Forum



GFMAM members

Brazilian Maintenance
and Asset
Management Society
(ABRAMAN), Brazil

Asset Management
Council (AMC),
Australia

European Federation
of National
Maintenance Societies
(EFNMS), Europe

Federación
Iberoamericana de
Mantenimiento (FIM),
Latin Americas,
Portugal & Spain

Gulf Society of
Maintenance
Professionals (GSMP),
Arabian Gulf Region

Institute of Asset
Management
(IAM), UK

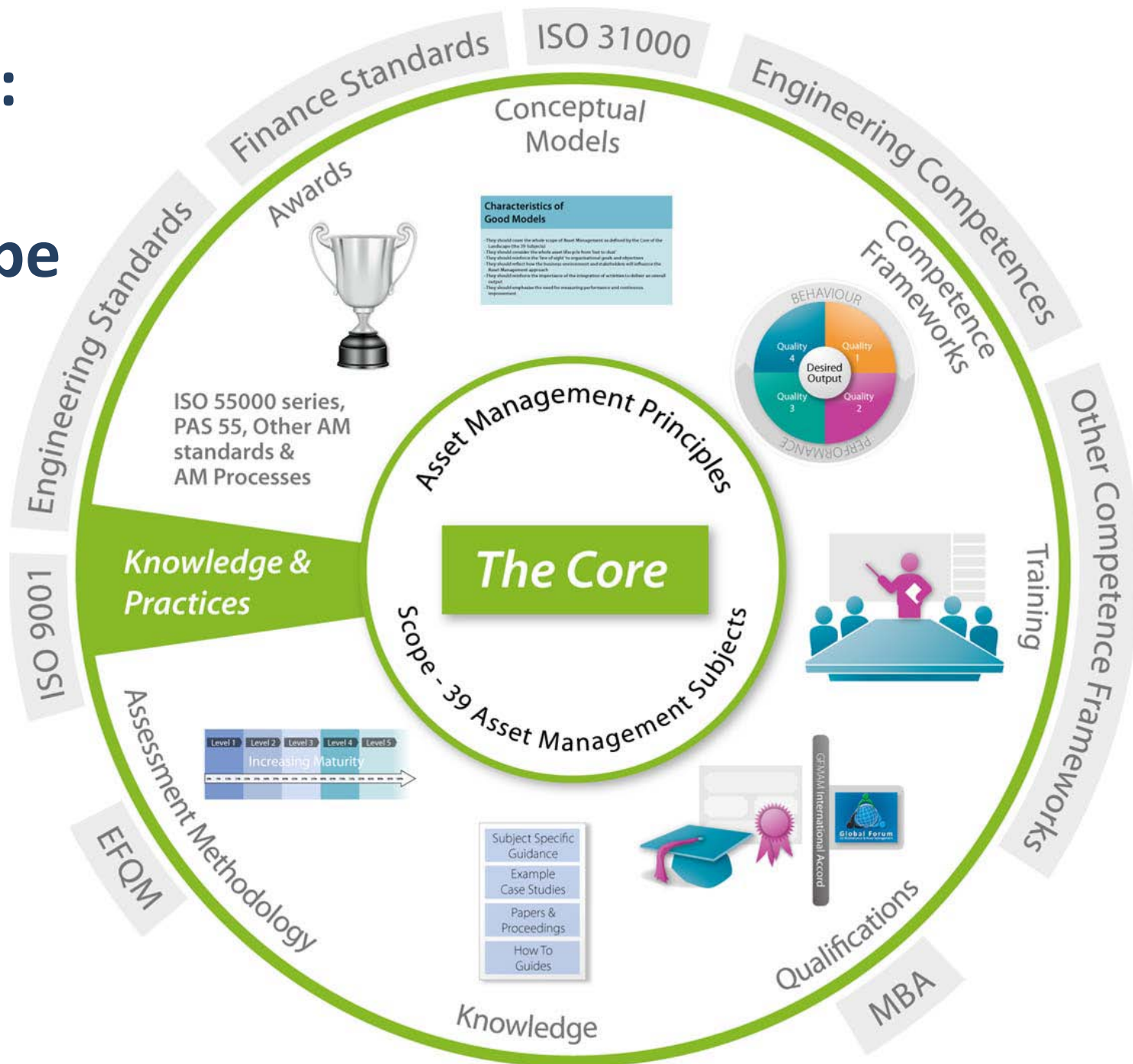
Plant Engineering and
Maintenance
Association of Canada
(PEMAC), Canada

The Society for
Maintenance and
Reliability Professionals
(SMRP), USA

The Southern African
Asset Management
Association (SAAMA),
South Africa



GFMAM: The AM Landscape



Landscape Subjects

The following 39 Asset Managements Subjects have been identified:

Subject Group	Asset Management Subject
Asset Management Strategy and Planning	Asset Management Policy
	Asset Management Strategy
	Demand Analysis
	Strategic Planning
	Asset Management Plan
Asset Management Decision-Making	Whole-life Cost & Value Optimisation
	Operations & Maintenance Decision-Making
	Capital Investment Decision-Making
	Resourcing Strategy & Optimisation
	Shutdowns & Outage Strategy & Optimisation
	Ageing Assets Strategy



Subject Group	Asset Management Subject
Lifecycle Delivery Activities	Technical Standards & Legislation
	Asset Acquisition & Commissioning
	Systems Engineering
	Configuration Management
	Maintenance Delivery
	Reliability Engineering
	Asset Operations
	Resource Management
	Shutdown & Outage Management
	Fault & Incident Response
	Asset Rationalisation and Disposal
	Asset Knowledge Enablers
Asset Knowledge Standards	
Asset Information Systems	
Asset Data and Knowledge	
Organization and People Enablers	Contract & Supplier Management
	Asset Management Leadership
	Organizational Structure & Culture
	Competence & Behaviour
Risk & Review	Criticality, Risk Assessment and Management
	Contingency Planning & Resilience Analysis
	Sustainable Development
	Weather and Climate Change
	Asset & Systems Change Management
	Assets & Systems Performance & Health Monitoring
	Management Review, Audit & Assurance
	Accounting Practices
	Stakeholder Relations



GFMAM Feedback

- Next meetings – June (Australia) and November (Canada)
- 8 regions represented, also on ISO teams
- Landscape document drives the GFMAM position on AM
- Certification project – SAAMA will be developing a new certificate
- Benefits to members is that SAAMA benchmarks and makes decisions in line with international practices



Closing Remarks

Explore Life Cycle Management and in particular
Life Cycle Cost optimisation

Get involved with the various Asset Management
platforms and forums

You have the opportunity to get a good head
start before ISO 55000 is formally implemented





THANK YOU

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