



La ENVIPE 2013 permite conocer que entre los motivos que llevan a la población víctima de un delito a no denunciar, están las circunstancias atribuidas a la autoridad, como considerar la denuncia como un gasto de tiempo y la desconfianza en la autoridad, con 81.9%.



MYTHS OF ASSET MANAGEMENT

FINANCIAL MANAGEMENT

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Myths of Asset Management

Myth #3:

The management of assets has little to do with financial management!

Myth

Asset management is a stand-alone activity undertaken by technical professionals who shouldn't be influenced by or need to integrate with the financial management function and nor should they need to consider the impact of their decisions on the financial outcomes of the organisation – their primary concern is the optimum technical outcome.

Introduction

Financial management is considered by many to be a complex web of interrelationships created by the use of terms like debits and credits, the balance sheet, the profit and loss statement, cash flow statement and, to many, obscure business requirements like International Financial Reporting Standards (IFRS).

On the surface of it these financial requirements couldn't possibly be related to asset management. When broken down though, financial management is very simple as represented by the acronym REAL. The elements of REAL are closely linked to asset management in terms of the effect financial management can have on asset management and the effect asset management can have on financial management.

In this article we will define REAL, look at how the financial REALity is impacted by and impacts on asset management and provide a teaser on the relationship between more complex elements of

financial management and asset management. The article will then look at some key asset management processes that impact on financial management processes and provided some specific case studies that identify the relationship between asset management and financial management.



What is REAL

Put simply, finance is about four characteristics:

1. Revenue: The gross inflow of economic benefits during the period arising in the course of the ordinary activities of an entity when those inflows result in increases in equity, other than increases relating to contributions from equity participants
2. Expenses: Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

3. Assets: A resource that is controlled by an entity as a result of past events from which future economic benefits are expected to flow to the entity.
4. Liabilities: A present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits.

These are represented in financial statements such as an organisation's profit and loss statement, their cash flow statement and their balance sheet. The relationship between REAL and these statements, along with common terms like 'profit' are shown in Figure 1.

Outlook	REAL		Represented in...
Short term	Revenue	Expenses	Profit & Loss/Cash flow
Long term	Assets	Liabilities	Balance sheet

Figure 1: The relationship between REAL and the financial statements. The difference between cash flow and, profit and loss

Initial approaches to determine organisational profitability were commonly called the "cash accounting" method where the business recorded income and expenditure as the events occurred irrespective of the duration covered by the activity. For example the capital purchase of a new asset would be recorded in the year it was paid for, not the years in which it was delivering value. This approach distorted the short-term picture of organisational profitability.

Accrual accounting, and in particular the role of depreciation, was introduced to assure that the equity value of the organisation, and the determination of profitability represented by short term cash flows, was accurate.

Accrual accounting reports income when products are produced (not when they are sold) and reports expenses when inputs are used (not when they are purchased). The process uses the traditional cash method of accounting during the year but adds or subtracts inventories and production inputs on hand at the beginning and ending of the year.

The impact of accrual accounting on the management of large infrastructure assets was significant and now required greater accuracy in an understanding of future financial commitments such as the value of infrastructure consumed in producing the organisations income. In this role significant maintenance actions that add equity value such as overhauls or renewals can be considered as expenses in one year that add value in future years.

The role of maintenance expenses incurred in one year for the purpose of future benefits in subsequent years can be similarly recognised under IFRS and the maintenance event cost ‘depreciated’ over the maintenance cycle. This is in fact the role of depreciation to present an accurate assessment of the consumption of asset value in a particular year.

Table 1 outlines some common scenarios and the effect each of these would have on the cash flow, P&L and Balance sheet and answers the questions posed by Figure 4.

Asset management processes that affect financial management

As the Asset Management Council’s Organisational Management System Model at Figure 2 shows how asset management exists as one of a number of management systems within any organisation.

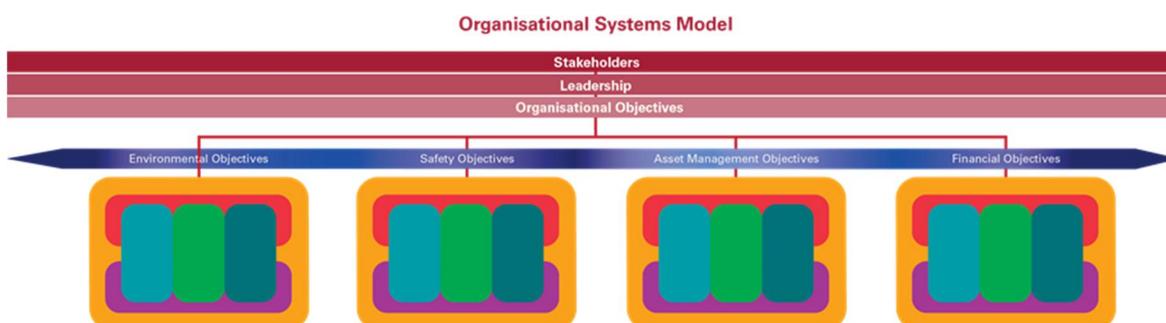
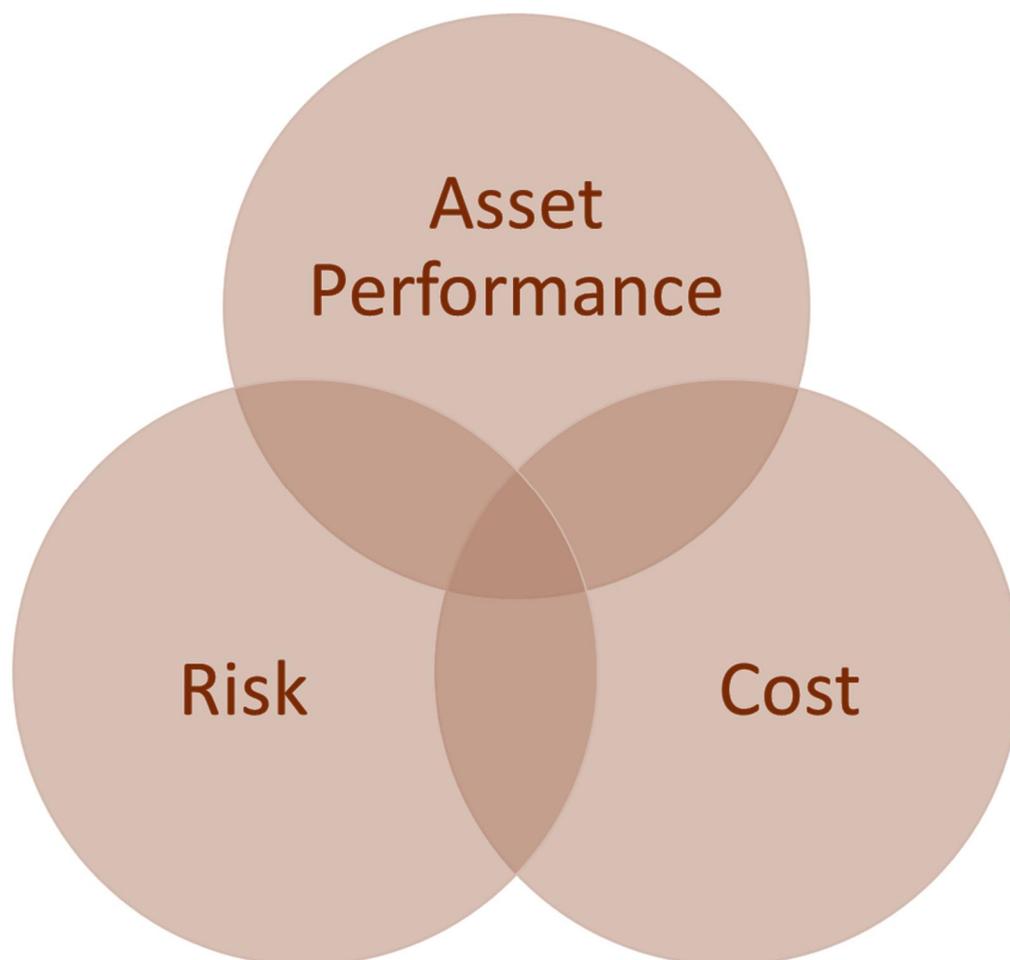


Figure 2: The Organisational Management System Model

One of these 'other' management systems is the financial management system and it is heavily influenced by the asset management system. Whilst the anecdotal evidence and the requirement of ISO 55000 to strike the balance between the:

- Asset performance;
- Cost of that performance;
- Risk (residual) resulting from the asset achieving that performance for that cost

...clearly support the contention that asset management and financial management are linked, the idea warrants further analysis.



Consider the elements of the APQC (www.apqc.org) process taxonomy for finance and their relationship to the asset management system elements shown in Table 1. Clearly there is a strong process link between asset management and financial management.

Table 1: The relationship between financial and asset management processes

	APQC financial management process category	Strength of relationship	Associated asset management process
1	Perform planning and management accounting	High	The asset management plan is the creation of a defensible budgetary request for funds necessary to achieve organisational outputs over the duration of the plan and informs the financial forecasting process. The categorisation of work as major periodic maintenance, minor maintenance and capital will strongly influence the budgeting process and financial outlook.
2	Perform revenue accounting	Medium	Asset management planning. Outages for major periodic maintenance/shutdowns will directly affect revenue
3	Perform general accounting and reporting	High	<ul style="list-style-type: none"> • Cost tracking and control directly affects P&L and balance sheet outcomes as discussed below. • Stores and rotatable and repairable management directly affects both the P&L and balance sheet
4	Manage Fixed Assets	High	<ul style="list-style-type: none"> • Cost tracking and control directly affects P&L and balance sheet outcomes, • Managing the life of assets, when and how they come on line and are subsequently capitalised • Ensuring the condition of assets remains appropriately aligned to the book value and there is no impairment (refer to the note below)
5	Process payroll	Low	<ul style="list-style-type: none"> • Labour management
6	Process accounts payable and expense reimbursements	High	<ul style="list-style-type: none"> • Supplier and purchase order management • Commitment accounting is informed by asset management plans and purchase order creation
7	Manage treasury operations	Low	Long term cashflow and funding requirements, particularly for capital expenditure items with major foreign exchange exposure is Informed by the asset management and strategic asset management plans.
8	Manage internal controls	Low	Adherence to internal spend controls including financial delegation
9	Manage taxes	Very low	

Depreciation and Renewals

The model for replacing an aging asset with a new or overhauled (as good as new) asset is shown in Figure 3.

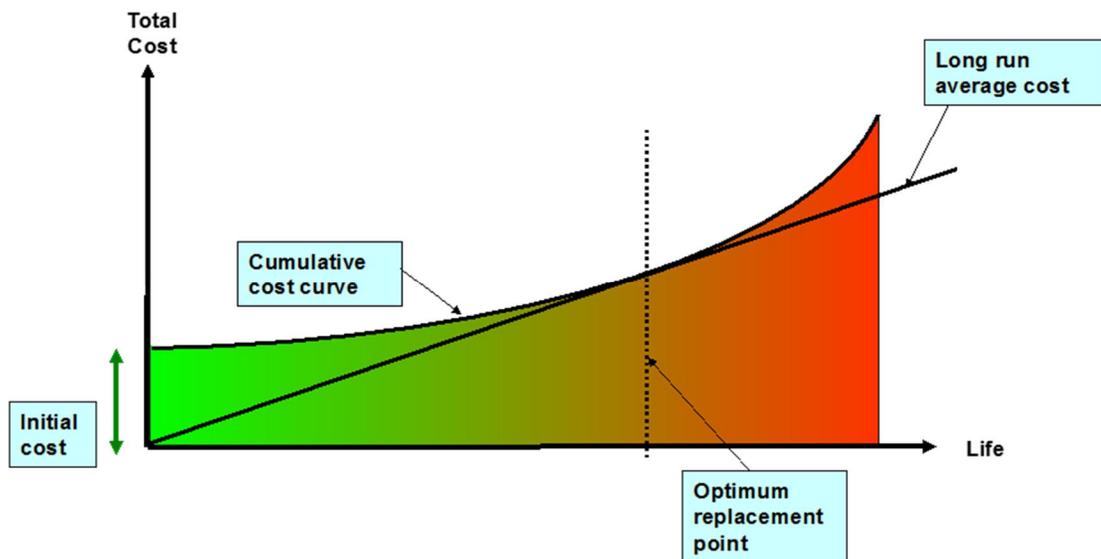


Figure 3: Optimal replacement point for aging asset

As can be seen, the outcome is determined by the ability of the organisation to collect all costs necessary for the continued operation of the asset of interest. In accounting terms, the asset replacement will occur when the marginal cost of ownership becomes greater than the average cost to that point. The average cost per year to that specific point on the curve is now exceeded by the next year's annual cost (assuming continuous growth as represented by the curve).

The financial assessments assume that the asset has been fully depreciated at the point of replacement or allow for the undepreciated amount to be 'written off'. Failure to accurately determine average life and properly depreciate against that future life may result in residual costs that must be written off at the time of replacement. This will change the cost dynamics of the optimising equation. Figure 4 demonstrates the potential impact of depreciation arrangements that do not reflect the potential economic life of the asset.

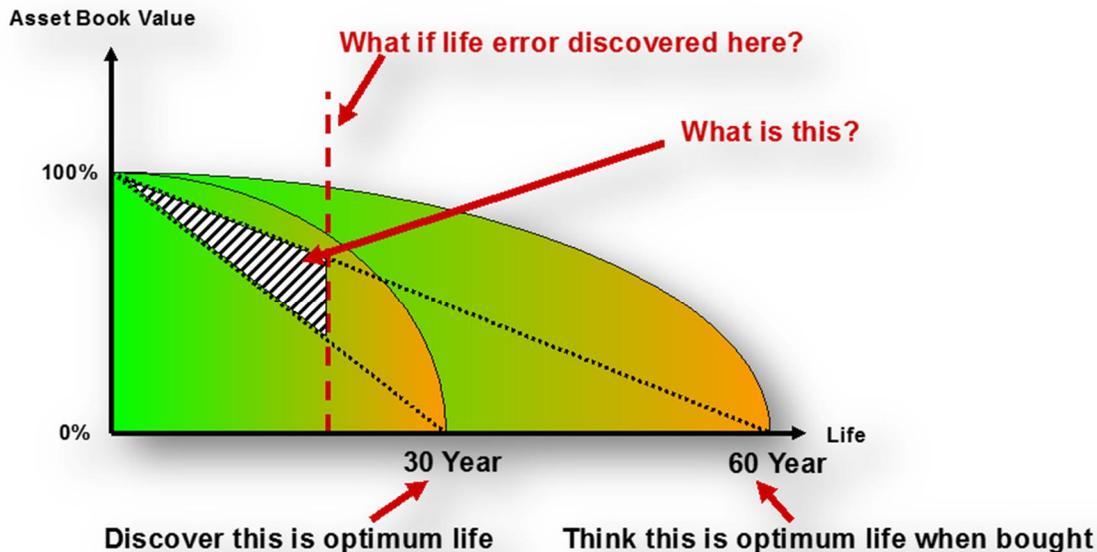


Figure 4: The effect of depreciable life error

Case studies on the impact of failing to integrate asset and financial management

There are many public domain case studies of significant adverse events caused by a failure of large organisations to connect the implications of financial management decisions and the resultant adverse organisational impact. A well-documented example is the Texas City Explosion of 2005 at the BP Refinery where global corporate budget cuts of 25% of fixed costs were mandated without an assessment of potential impacts. The focus on production and short-term profit discouraged expenditure on non-productive effort such as preventive maintenance, reliable safety systems and investment with paybacks greater than a year. Business unit managers (e.g. Texas City) rarely stayed beyond 15 months before departing for another facility and leaving the consequence of their asset related financial decisions to those that followed.

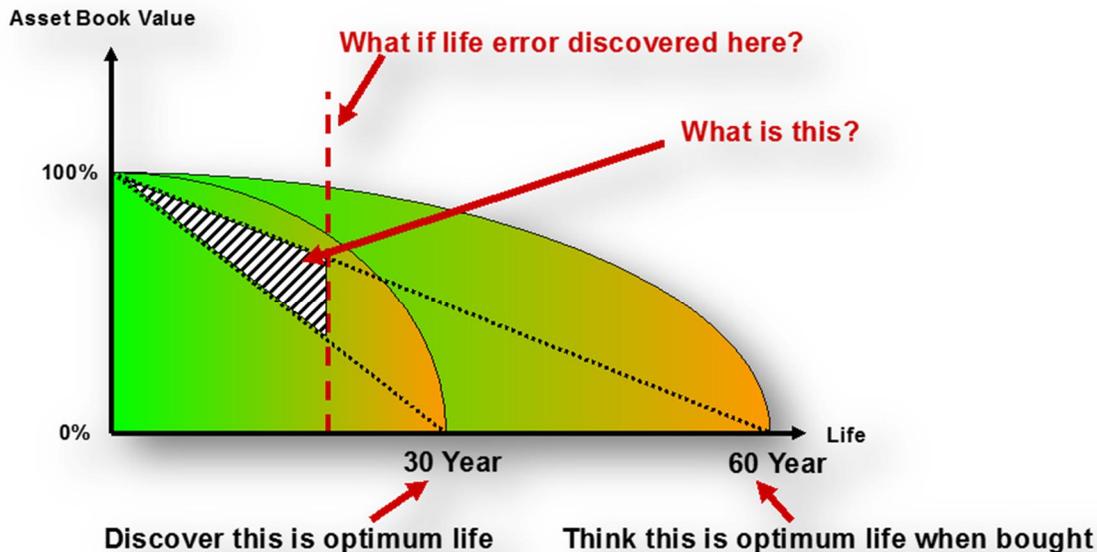


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The explosion and its outcome of 15 deaths, 180 injured, and billions of dollars in corporate losses was clearly linked to local decision-making that increased (invisible) risk in a bid to achieve (visible) reductions in expenditure and hence corporate profit.

Closer to home, Wolff and Aubury, in their article, Crack Attack documents how the failure of key asset management processes lead Ansett to be grounded in key operating periods such as Christmas and Easter – periods of peak revenue for airlines – which ultimately resulted in the erosion of public confidence and their entry into receivership.

Summary

This article sets out to establish the relationship between financial management and asset management, thereby testing (de-bunking) the myth that:

“Asset management is a stand-alone activity undertaken by technical professionals who shouldn’t be influenced by or need to integrate with the financial management function and nor should they need to consider the impact of their decisions on the financial outcomes of the organisation – their primary concern is the optimum technical outcome”.

Financial management revolves around four measures, revenue, expenses, assets and liabilities (REAL). The treatment of some transactions is different between pure cash (seen in cash flow statements) and an accrual accounting view (seen in P&L statements). The accrual accounting method recognises the period in which the expenditure is adding value, rather than the period in which the transaction was acquitted.

Not only do asset management activities affect financial outcomes but there is a strong interdependency between asset management and financial management processes. Of the nine process categories of financial management shown in Table 1, asset management processes impact at least five of them to a medium degree or greater. These two management systems are intrinsically linked and the myth is clearly debunked.

ANNEX A: Profit and Loss Table

Acquisition of a new asset assuming 10% depreciation over a ten year period ignoring maintenance and operate costs

	Year	0	1	2	3	4	5	6	7	8	9	10
Cashflow	Acquisition cost	-\$5,000,000										
P&L	Depreciation		-\$500,000	-\$500,000	-\$500,000	-\$500,000	-\$500,000	-\$500,000	-\$500,000	-\$500,000	-\$500,000	-\$500,000
Balance	Written down value	-\$5,000,000	-\$4,500,000	-\$4,000,000	-\$3,500,000	-\$3,000,000	-\$2,500,000	-\$2,000,000	-\$1,500,000	-\$1,000,000	-\$500,000	\$0

Major periodic maintenance with a five year interval post IFRS and assuming 3% inflation

	Year	0	1	2	3	4	5	6	7	8	9	10
Cashflow	Acquisition cost	-\$2,000,000										
P&L	Depreciation		-\$400,000	-\$400,000	-\$400,000	-\$400,000	-\$400,000		-\$477,621	-\$400,000	-\$400,000	-\$400,000
Balance sheet	Written down value	-\$2,000,000	-\$1,600,000	-\$1,200,000	-\$800,000	-\$400,000	\$0	-\$2,000,000	-\$1,522,379	-\$1,122,379	-\$722,379	-\$322,379

i. AASB_Glossary_30_September_2012.pdf <http://www.aasb.gov.au/admin/file/content102/c3/>

ii. Wolff and Aubury, Flight Safety Australia, March – April 2004



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