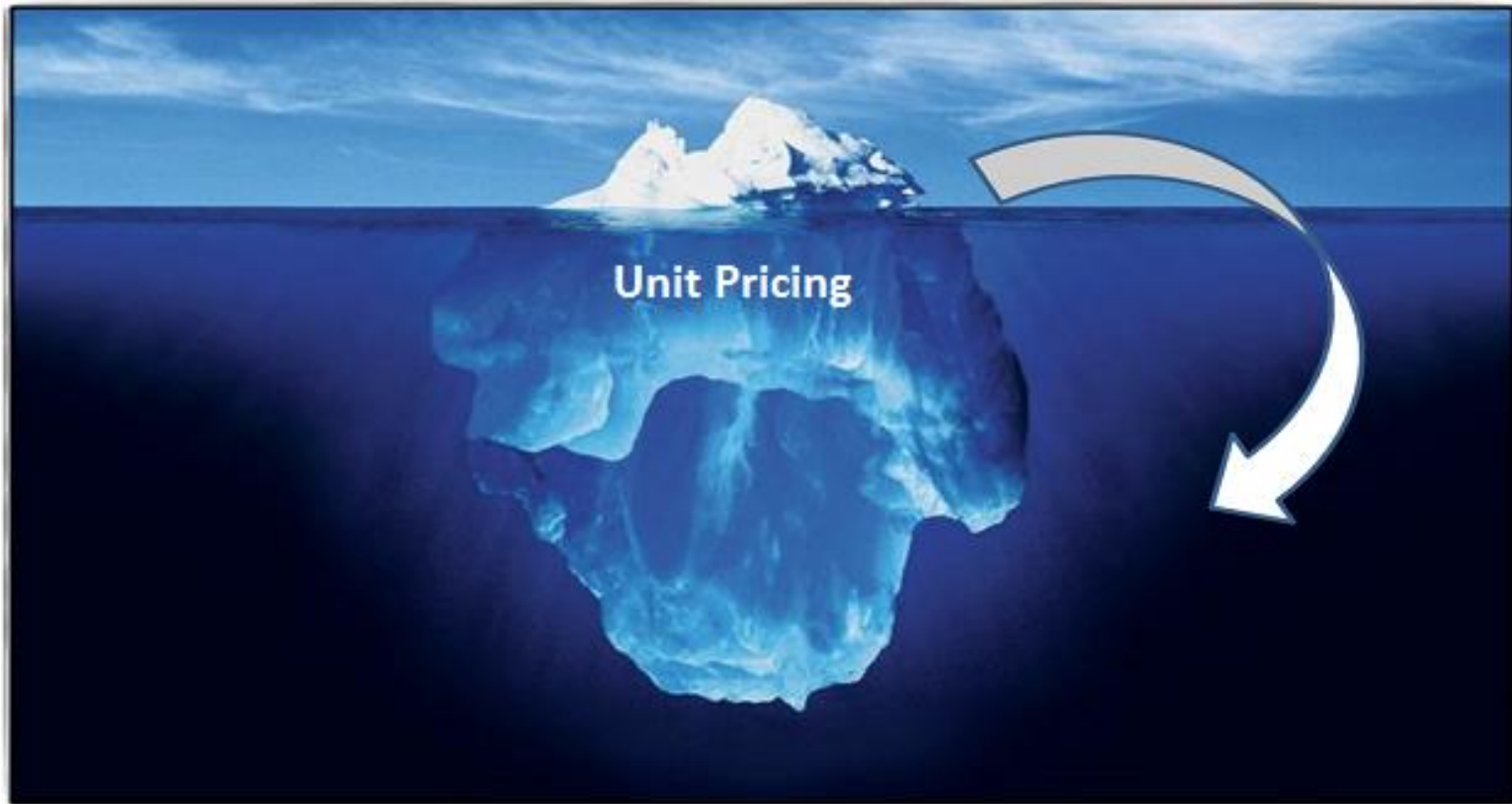


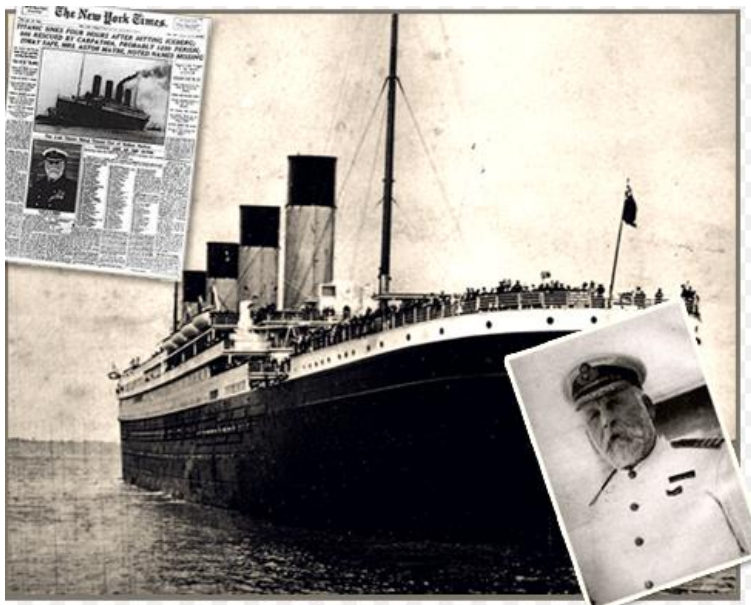


The Profile of Unit Pricing within an Entity

*Risk Awareness
& Risk Management*

Profile of Unit Pricing





“I cannot conceive of any vital disaster happening to this vessel. Modern shipbuilding has gone beyond that.” - Captain EJ Smith (Captain of the Titanic)



What we'll cover

1. Risks genuinely understood?
2. Enterprise-wide risk register appropriate?
3. How to raise awareness of risks?
4. Policies?



1. Risks genuinely understood?

- Mostly no.
- Yes - by a few
 - Specialists in unit pricing with experience
 - Executives or Directors who remember the pain of a major unit pricing error.
- Need to understand complexity of interplay of systems, processes and people
- Need to have “been there” to truly understand



2. Enterprise-wide risk register appropriate?

- Yes - Critical entry - but only as a first step.
- High to extreme risk consequence
- Use risk register standard monitoring
- Do deep dive from the single register entry
- Needs full understanding
- Controls need to be comprehensive
- Thorough review annually

3. How to raise awareness of risks?

- Mark Unit Pricing Risk as a top 10 risk
- Board UP Policy - genuine discussion on annual renewal/update
- Include UP error as a risk scenario exercise for Leadership or Board
- External independent (risk) review of unit pricing every 3 years
- CRO remind management and board of past industry failures and consequences



4. Policies

- Governance 101
 - Board sets policy
 - Management inputs and implements
- Must be fully understood to be addressed properly
- Reflects highest level of importance
 - Drives awareness, focus and action
- Sound risk management
- Sound operational management



Murphy's Law

*Whatever can go wrong
will go wrong*

Corollary

Murphy was an optimist



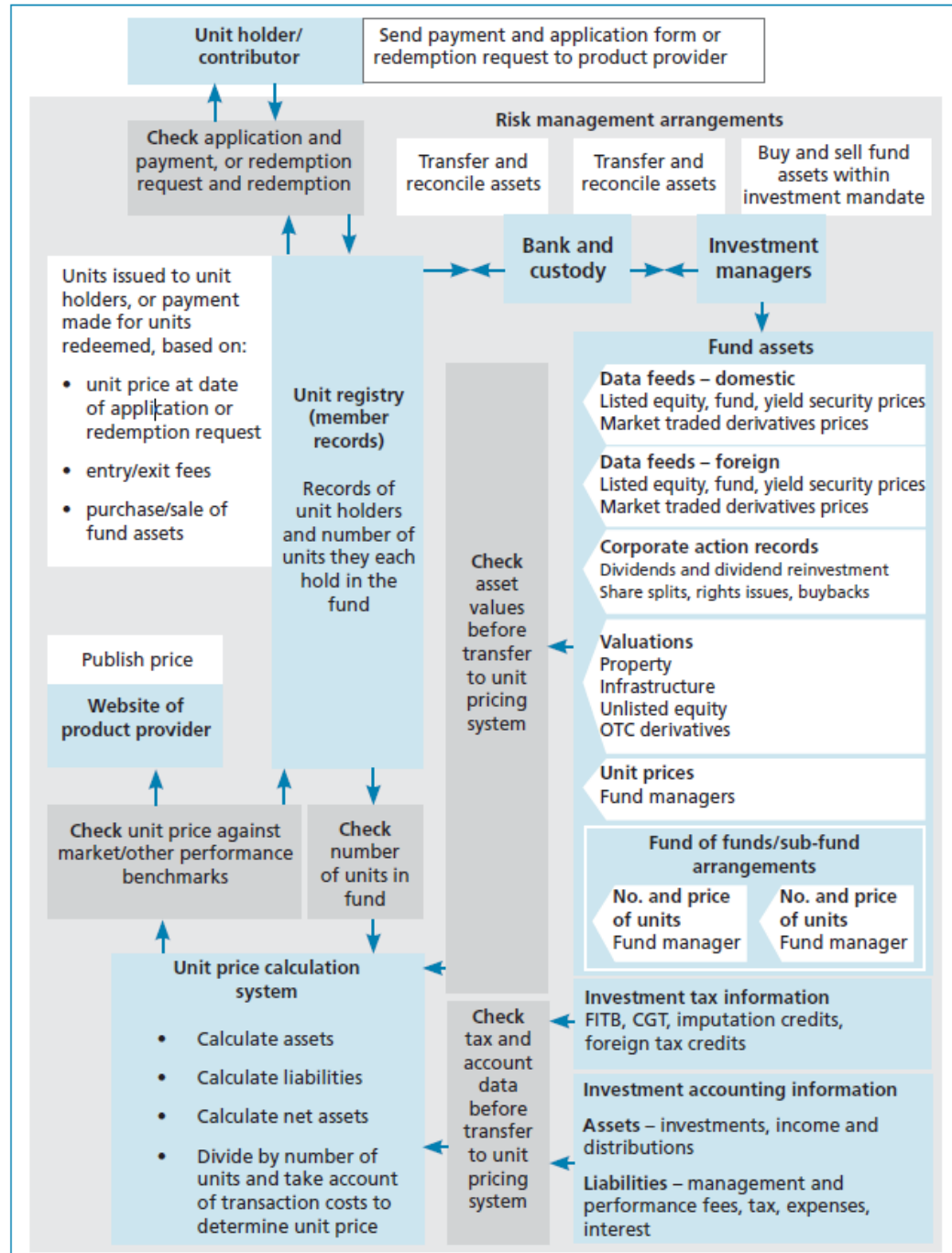
Unit Pricing Cycle

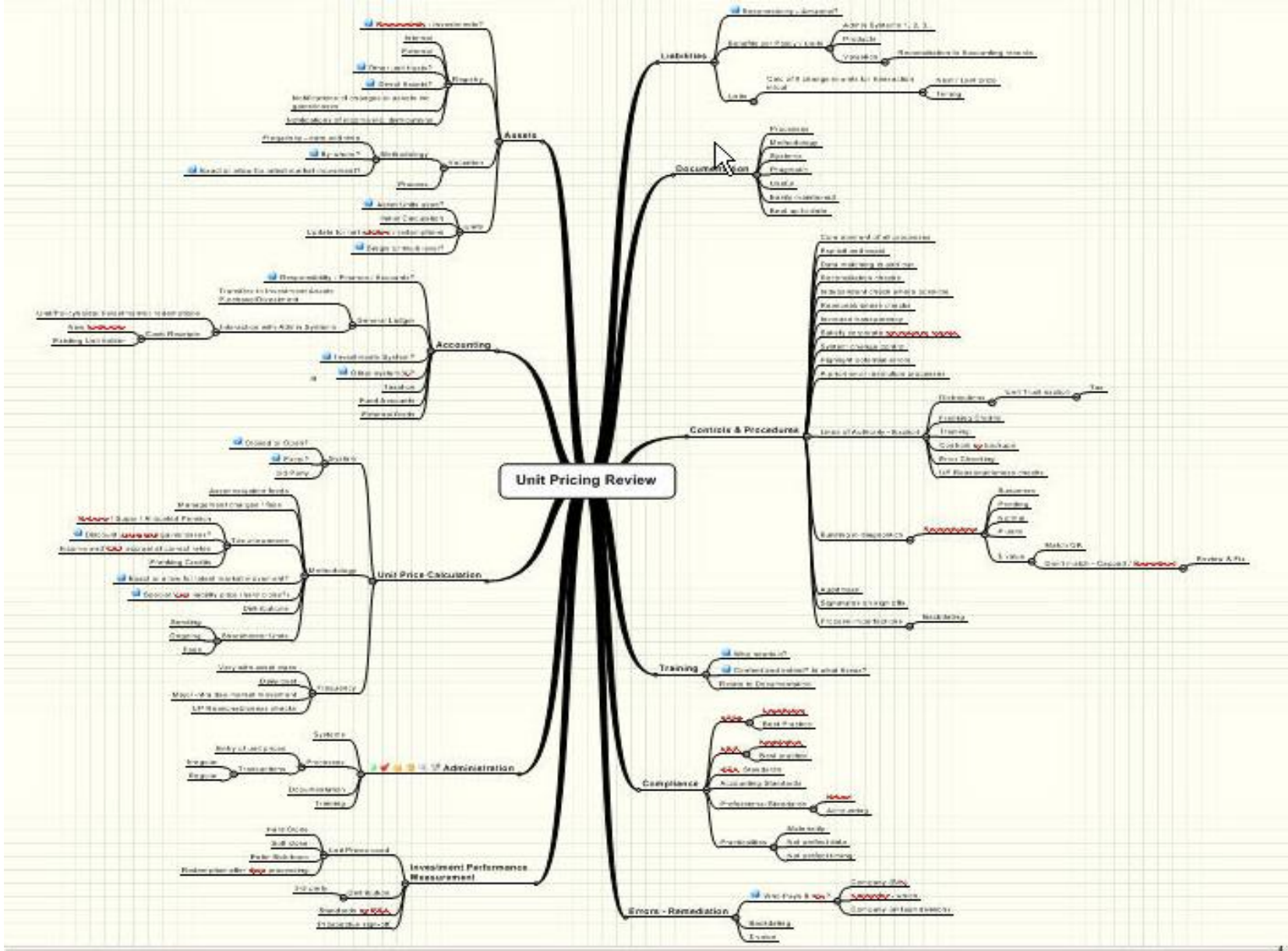
It's complex!

From APRA/ASIC RG 94
Unit pricing: Guide to good practice

'© Australian Prudential Regulation Authority and Australian Securities & Investments Commission. Reproduced with permission.'

Figure 2: Key elements of the unit pricing cycle







Past Unit Pricing Errors

Sydney Morning Herald

– article by Lisa Murray 21 September 2005

- “ING Australia to repay **\$24m** to investors for wrong pricing”
- “MLC was forced to pay more than **\$60 million** to over 200,000 customers in 2002”
- “AMP had to fork out **\$90 million** over its unit pricing mistakes last year.”



What are the Unit Pricing risks?

- ▼ Operational
- ▼ Financial
- ▼ Reputation
- ▼ Strategic
- ▼ Legal & Regulatory
- ▼ Other

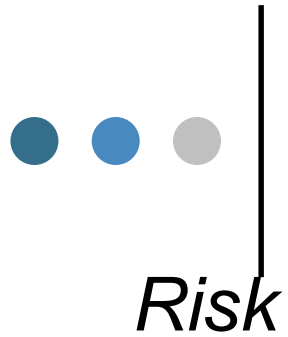
Operational risk definition

- ▼ The risk of loss resulting from inadequate or failed
 - internal processes,
 - people, and
 - systems,or from external events.

This definition includes legal risk but excludes strategic and reputational risk.

Source - APRA SPS114

Operational risk - People



Risk Management

➤ Board

- Unit Pricing Policy Framework
- Risk Management Framework & Culture
- Sufficient Resources, Understanding

➤ Management

- UP Policy & Procedures
- Robust systems & processes with controls
- Reporting

➤ UP team

- Recruitment
- Competencies - Skills, Experience, Training
- Clarity of Responsibilities & Accountability
- Key person dependency, Backup
- Succession planning

Operational risk – Systems

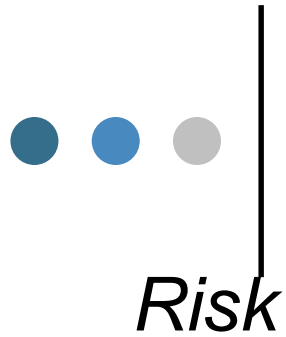
Risk

- In house. 3rd party.
Outsourced. Combinations.
- Multiple - Administration.
General ledger. Fund
accounting. Custody.
- Unit pricing calculation –
input, calcs, outputs.
- Reporting incl. attribution

Risk Management

- System development standards
- Change controls
- Internal audit
- Periodic independent, external audit &
review of systems & processes,
controls, calculations
- Relevant APRA standards as
minimum incl S/CPS 231
- Vendor due diligence
- Close partnership relationships with
strong oversight

Operational risk – Process #1



Risk Management

Errors arising from:

- Unit pricing policy inadequate
- Lack of clarity on process and data flow
- Poor workflow systems
- Dependency on IT Systems

- Board approved policy and review thoroughly annually
- Document process and data flow end to end. Training. Target full understanding.
- Automate via change control process to minimise human error
- Procedures have warnings on potential errors with clear steps for staff to take through increasingly senior management.
- Well qualified and experienced unit pricing staff.
- Contingency procedures on failure of system(s)

Operational risk – Process #2

Risk

- Errors from manual or intervention prone systems
- Inconsistency or loss of data integrity between systems
- Insufficient or poor communication
 - External
 - Internal

Risk Management

- Automate where possible – for accuracy and time savings
- Reconciliations, Timely checks, Escalations, Decision making.
- Develop strong, open relationships
 - Externally with Members / Investors, Regulators, Service providers, ATO
 - Across internal departments



Financial risks

Risk

- Cost of remediation
 - Insufficient value in current investor pool of assets to meet investor entitlement, due to effective asset – liability mismatch over error period.
 - Cost of internal and external resources including legal and expert fees for investigations and fixing
 - Insufficient insurance – own or 3rd party's
 - Insufficient capital and/or reserves, especially if “profit for member” not shareholder

Risk Management

- Have capital/reserves including operational risk reserves put aside to meet such losses
- Ability to raise further capital if shareholder owned
- Insurance - own and 3rd party, with multiple reinstatements



Strategic risks

Risk

- Perception and reality of unfairness of UP process and calculation
- Fund merger lack of readiness
- Extent or limits on choice of funds or transactions

Risk Management

- Full disclosure via UP Discretions Policy and website descriptions
- Balancing frequency of unit pricing vs accuracy, reliability and robustness
- Balancing choice of funds and transactions range against cost and capability
- Full documentation enabling quick comparison of merger readiness



Reputation risks

Risk

Damaged reputation in eyes of:

- Members / policyholders
- Regulators
- Industry
- Capital Markets – rating

Risk Management

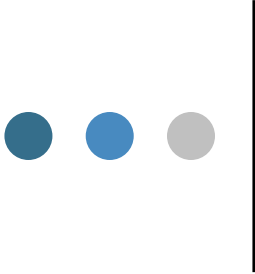
- Avoid errors via prevention strategies
- When error occurs
 - identify asap via checks in place
 - cap / avoid worsening, via best analysis identifying repercussions
 - escalate and manage / fix in accordance with pre determined processes
 - communicate clearly and as early as practical with relevant parties



Legal & regulatory risks

- Contract risks
 - Policy documents
- Regulators
 - Compliance with legislation
 - Consistent with guidance

Apply all the previous unit pricing risk management elements



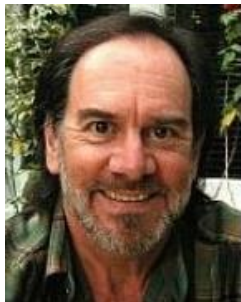
Reducing risk by learning and improving

- Have a culture of being open to learn from others
- Be open minded and curious about complaints – where there's smoke there's often fire
- Learn from others' mistakes rather than your own!
- Adopt an expectation of continuous improvement and innovation in your unit pricing processes
- Get external, independent reviews of existing unit pricing processes and calculations periodically

● ● ● | And don't forget ...

Gilbertson's Law

"Nothing is foolproof to a sufficiently talented fool."



Arthur Bloch

(Author of Murphy's Law books)



Questions

Q & A

Contact details



Sean McGing

0411 229 641

sean.mcging@mcging.com.au