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UNIVERSITI TEKNOLOGI MALAYSIA

OPENCOURSEWARE

CONSTRUCTION SAFETY: 6

COST OF CONSTRUCTION SAFETY

SBC 3363

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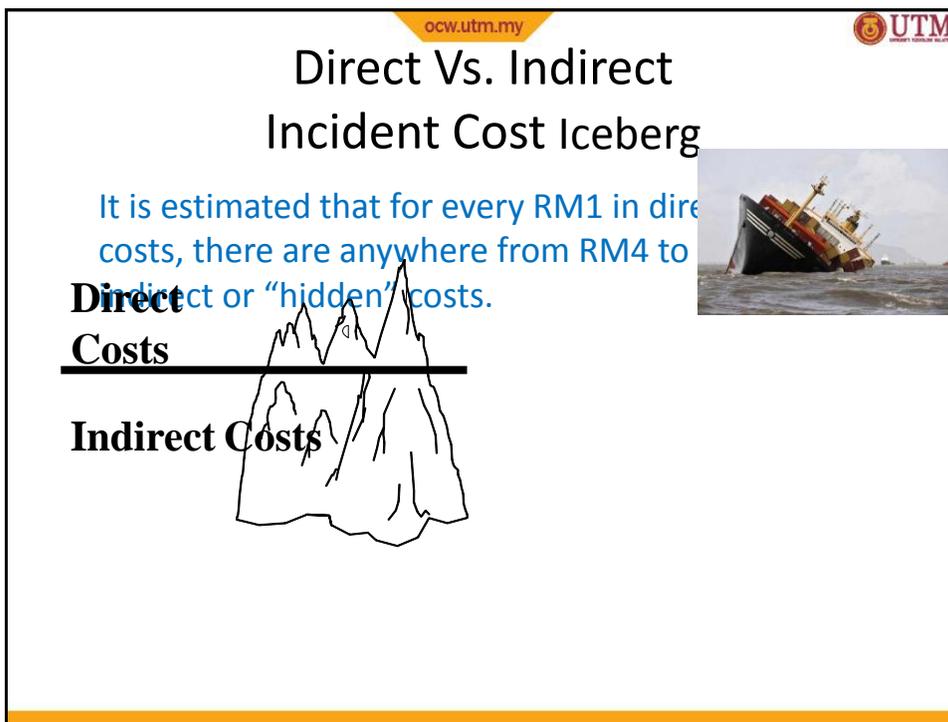
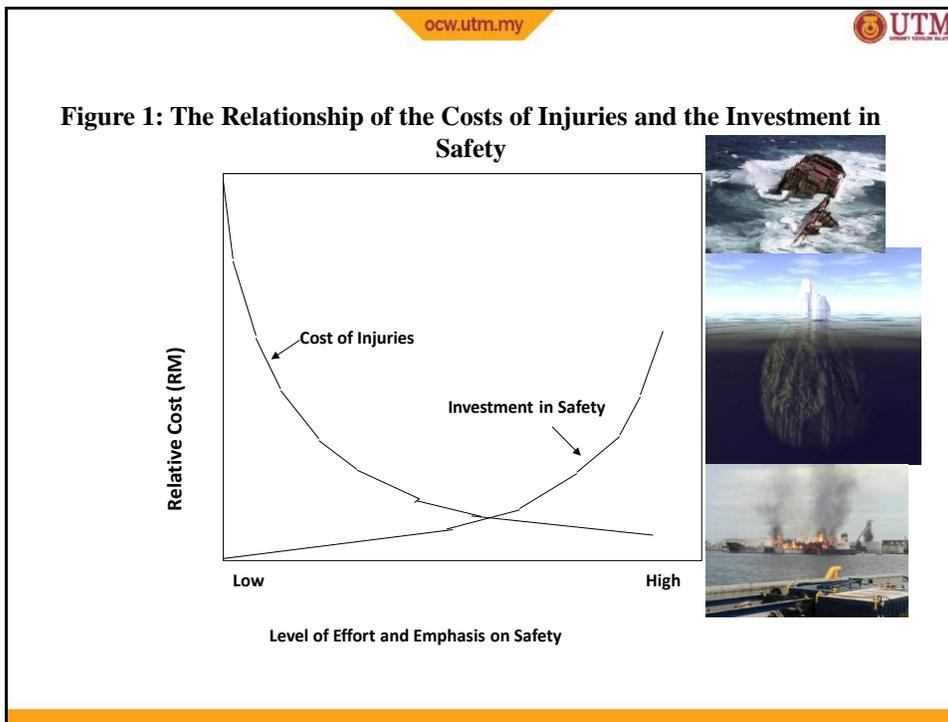


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COSTS OF CONSTRUCTION SAFETY





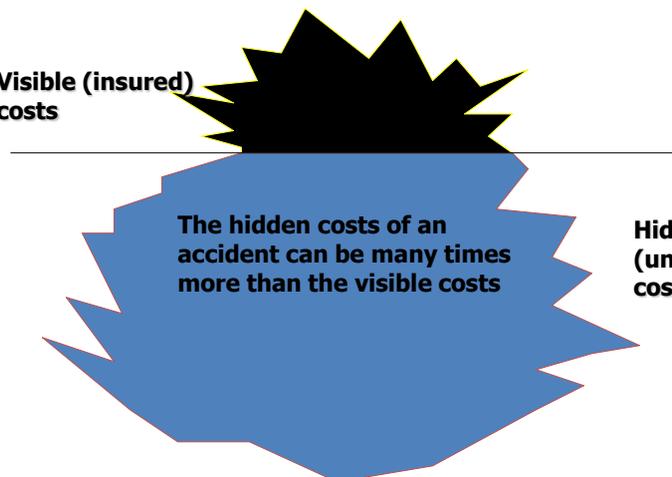


Costs of construction safety

- Annual accidents cost in the construction industry is very high.
- The cost can be characterised as 'accident iceberg'.
- The tip of the iceberg reveals visible and tangible costs.
- The submerged bulk of the iceberg harbours a great many hidden and often indeterminate financial implications.

Costs of construction safety

**Visible (insured)
costs**



**Hidden
(uninsured)
costs**

Costs of construction safety

- Accidents cost
 - One organisation as much as 37% of its annual profits
 - The equivalent of 8.5% of the project's tender price
 - 5% of its annual running cost
- Irrespective of how accident cost might be quantified the simple fact is that accidents cost a lot to the economy and most importance is the cost in human terms that cannot and should not put a price on a life

Costs of construction safety

- **Visible cost** (insured costs)
- The costs which an organisation is normally insures
- Include:
 - Employer's liability
 - Public (third party) liability
 - Damage to property

Costs of construction safety

- **Hidden cost** (uninsured costs)
- The costs which far exceed the cost which are insured
- Include:
 - Investigation costs
 - Legal cost
 - Fines
 - Loss of reputation and image
 - Loss of business and goodwill

Costs of construction safety

- Sick pay
- Loss due to damage of materials, plant and equipment
- Replacement and repairs
- Production schedule disruption and delays
- Additional resourcing

“MOST ACCIDENTS WERE AVOIDABLE”

The Hidden Costs

**Insured Costs -- covering injury, ill health, damage.
Hidden Uninsured – 8-36 times as much as insured costs**

- | | |
|--------------------------------|---|
| 1. Product and material damage | 7. Investigation time |
| 2. Plant and building damage | 8. Supervisors time diverted |
| 3. Tool and equipment damage | 9. Clerical Effort |
| 4. Expenditure on emergency | 10. Overtime working |
| 5. Fines | 11. Temporary labour |
| 6. Legal costs | 12. Loss of expertise / experience supplies |
| | 13. Clearing site |
| | 14. Production delays |



Incident Prevention Costs

- **DESIGN COSTS** (e.g to install machine guards)
- **OPERATIONAL COSTS** (training costs, PPE, etc.)
- **SAFE GUARDING THE FUTURE COSTS** (health surveillance, audits etc)

Cost- Benefit Analysis Of Control Measures

- **Compare** specific incident costs with cost of specific improvement being suggested.



THANK YOU