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Australian Nuclear Science & Technology Organisation

LESANZ Weighing the Gold

VC Guide to Valuing Early Stage Technology

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Good Science is Good Business @ ANSTO

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Valuing Emerging Companies

- Valuation is more art, than science
- Methodology based on investment stage

Valuation Increases

Early Stage	Middle Stage	Late Stage
✓Industry shape uncertain ✓Many new entrants ✓Difficult to differentiate winners from losers ✓Future performance drivers uncertain	✓Industry structures emerging ✓Emerging winners consolidating position ✓Drivers of future earnings and cash flows well understood	✓Industry shake-out has occurred ✓Winners survive. Losers drop-out. ✓Future earnings and cash flows relatively predictable

Uncertainties Reduced

Operating Metrics

Early Stage	Developing	Mature
Established Barriers to Entry	Revenues	Cash Flows
Confirmed Market Interest	Market Share	Experienced Management
Scaleable Business	Sequential Growth	Market Dominance
First customers	Improving Gross Margins	Profitable Business Lines
Expansion of product lines	Stable Management	Improving Net Margins

Three Basic Valuation Approaches

- Cost Approach – Investment Recovery
- Market Approach – Capital Market Driven
- Income Approach – Liquidity Event
    - ➢ Basic Discounted Cash Flow (DCF)
    - ➢ Probability Adjusted DCF
    - ➢ Foregone Royalty DCF

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Stages & Valuation Methods

Stage of Development	Financing	Valuation Method
Concept/Start-Up	Rolodex (FFF), Seed	Cost, Income
Early Stage	Venture Capital – First Rounds	Cost, Market (Venture Capital, Comparables)
Later Stage	Venture Capital – Later Rounds	Market (Venture Capital, Comparables), Income
Pre-IPO	Venture Capital, Private Equity	Income, Market (Comparable Sales)
Public	Capital Markets	Income, Market

Early Stage Fraught with Risk

- Market Risk
  - Does Market exist?
  - Route to Market?
- Competitive Risk
  - Faster, cheaper, better
  - Dominating IP
  - Marketing strength
- Technology Risk
  - Will it work?
  - Will it be economical, manufacturable, safe environment friendly
- Resource risk
  - Sufficient funding
  - Talent
- Execution Risk
  - Business model
  - Revenue model
  - Can the Players Execute
  - Incentives in place
  - Market timing
  - ‘Soft factors’
  - Exits

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Early Stage: 3 Ps of Evaluation

- People: Market size – demand, volume timelines, geography, sectors.
- People: Venture team.
- Strength of IP protection – patents, trade secrets, copyrights, trademarks, know-how, etc. (unique, tested, enforceable, IP life).
- Breadth of IP protection – “freedom to operate”, grow, expand, develop, design around.
- Pricing and overall profit margins.

❖ People, Protection, Pricing

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Early Stage: Managing Tech Risk

- Stage of Development:
  - time until market launch
  - additional investment needed to commercialize
  - overall development risk
  - FDA & regulatory approval if required
- Degree of innovation
- Platform or single product

❖ Defined and sustainable market advantage

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Early Stage: Managing Tech Risk

- Market environment:
  - ➢ Growing, crowded or open market
  - ➢ Competition
  - ➢ Delivery / distribution
  - ➢ Top dog or first mover
- Expected product life & sustainable competitive advantage
- Ease of adoption - within a standard, costs, training

❖ Defined and sustainable market advantage

Early Stage Valuation: Final Word

- Early investors look for exit strategy
  - Build to enough size to attract larger VC funds/partners
  - IPO
  - M&A, accounts for 90% or more of exits
- VCs will look for potential payoff large enough to justify risk AND offset portfolio losses

❖ As a starting point, DCF income approach most relevant for early stage because of focus on upside – although historical costs and time invested can serve as benchmarks on value.

Be prepared to 'Negotiate'

Top Ten Mistakes

Most entrepreneurs UNDERESTIMATE:

- The competition
- *Gaps in business and revenue models – avoiding the 'tough questions"*
- The money needed
- *Time required to raise the funds, and*

Most entrepreneurs OVERESTIMATE

- The 'added-value' by the VC or partner -- 'smart money wanted'

Top Ten Mistakes

Most entrepreneurs FAIL TO

- Do their homework on VCs' expertise & previous investments – diligence is 2-way street
- *Understand the limited attention spans and motivations of angels and VCs*
- Present realistic forecasts (and valuations) - "hockey stick" projections and unreal timelines
- *Target their funding markets – typically "broadcast email" business plans*
- Create sufficient competition for funding

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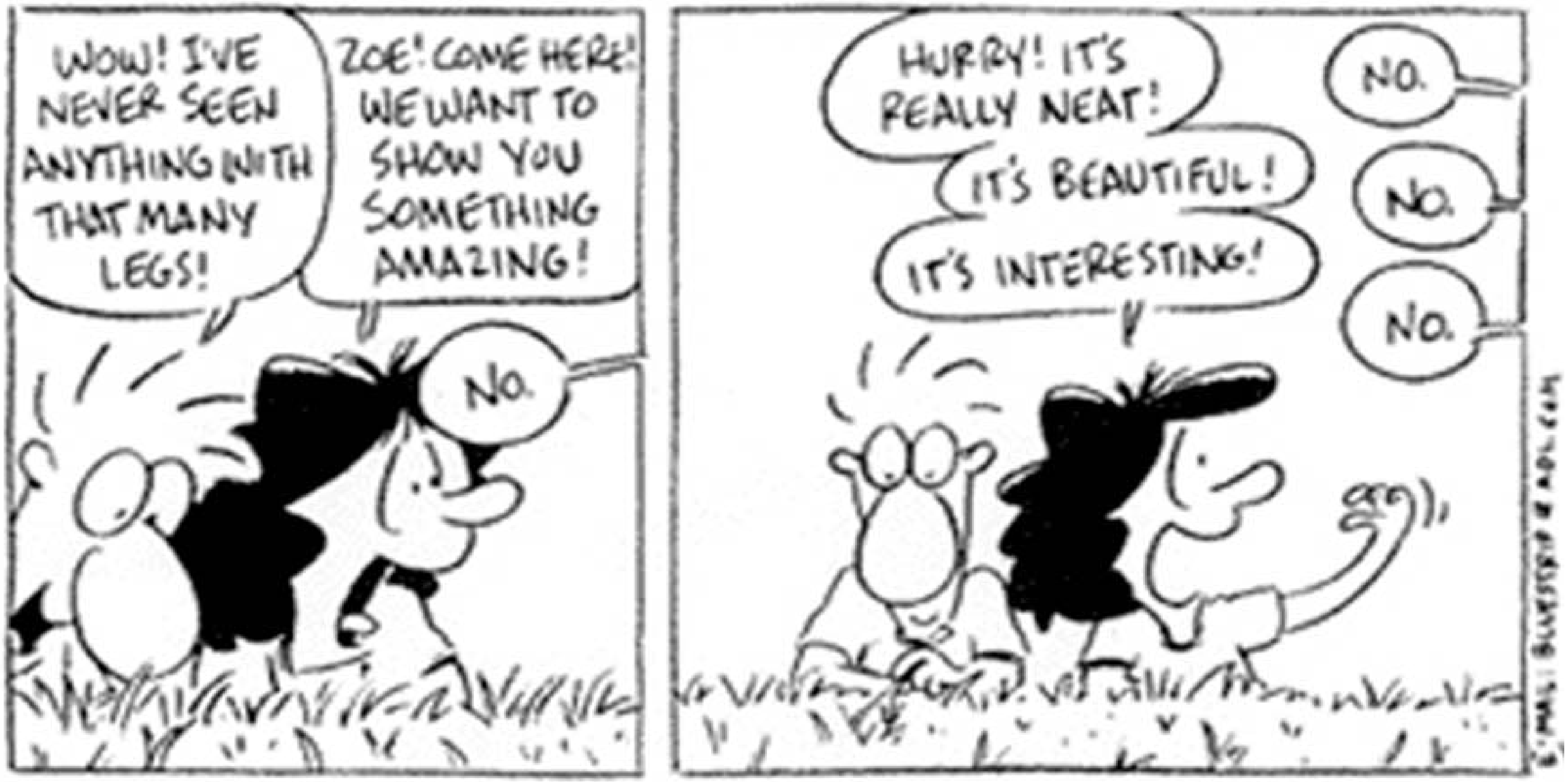

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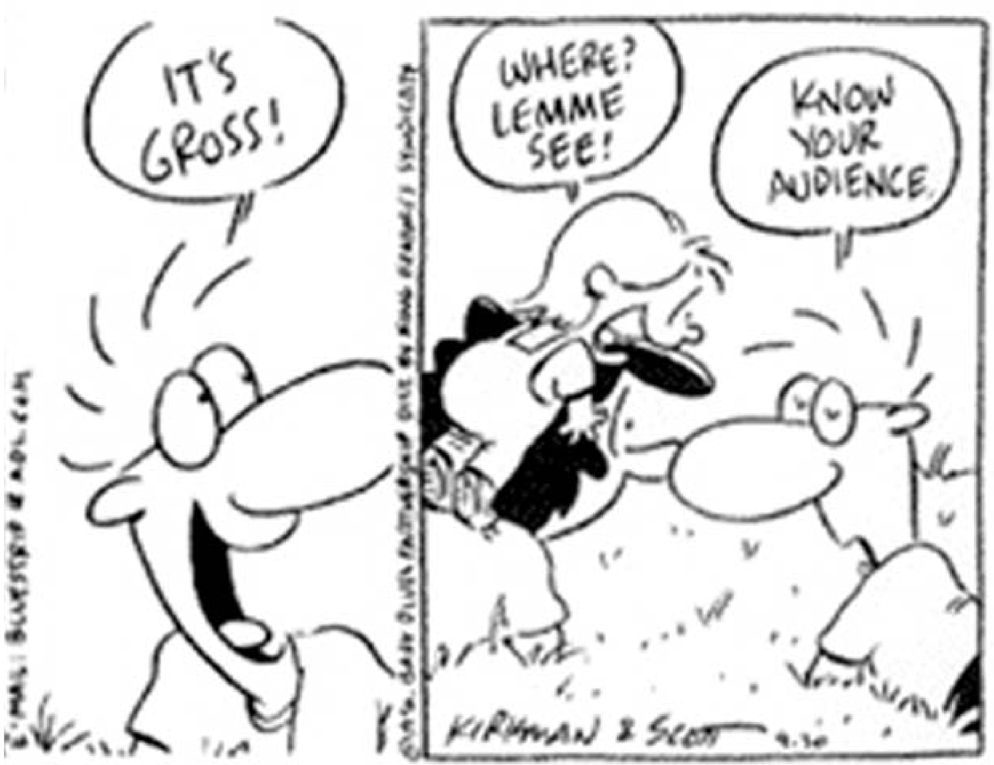

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Questions

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