“The Benefits of Research Before a Professional Career”

David B. West
My Objective Today

• Identify what you can *gain* from a research degree that *benefits* you in industry.

• Persuade you that research skills and knowledge are *valuable* to *yourself, industry* and *society*. 
My experience
Pipeline steel and coating
Different perspectives

- BEng (Materials)
- Manufacturing Engineer
- PhD (Materials) UQ
- Pipeline Engineer
- Project Engineer (Australia Pacific LNG)

- Dr Nick McKenna
  - BEng (Civil) UWA
  - Structural Offshore
  - PhD (Systems) MIT
  - Management Consultant
  - Megaproject Mgmt (ConocoPhillips)

- Dr Warren Hogarth
  - BEng (Chemical) UQ
  - BComm
  - PhD (Chem Eng) UQ
  - MBA Harvard
  - Venture Capital (Sequoia Capital)
The benefits
Increases employability

- Employers want PhDs
- A PhD provides expertise that sets you apart
- Subject matter expert
Increases career options

- Engineering specialist
- Project engineering
- Industry research
- Management Consultant
- Megaproject Mgmt
- Venture Capital
- Varied portfolio including solar energy, cloud computing, bioinformatics
Improves analytical thinking

- First principles thinking
- Ask Why?
- Applied statistics

- Analytical thinking applied to business decisions

- Uses knowledge to assess entrepreneur's technology and strategy
Increases independence

- A PhD is your ideas and thinking
- Trust your judgement

- Time management
- Resourcefulness
- Planning
The consequences
Consequences of research before industry

- Time.
- Cynicism.
- Adjustment.
Final Thoughts

• A PhD doesn’t make you invincible.
• Industry is not for everybody.
• Your energy and attitude matter most.
• You will be more valuable to yourself, industry and society with a research degree.