

Biennial Convention 2009

Go for Gold

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Institute of Actuaries of Australia



A few reflections of a “research-aware practitioner”

Greg Taylor



Question posed

“Suggest ways practising members can develop research interests and activities to good effect, and the benefits of doing so”



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Types of research

1. **Pure (or theoretical) research**
2. **Applied research**
3. **Empirical research**
4. **Survey research**



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1. Pure (or theoretical) research

Introduction of novel concepts or technique

Example: Black-Scholes pricing formula



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1. Pure (or theoretical) research

Introduction of novel concepts or technique

Example: Black-Scholes pricing formula

2. Applied research

Innovative application of concepts or technique from a foreign discipline

Example: Application of optimal control theory to employee benefit funding



Types of research

3. Empirical research

Application of well established concepts or technique to specific data sets to derive novel or interesting numerical conclusions

Example: Wilkie econometric model



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4. Survey research

Consists of the convenient assembly of knowledge from a foreign discipline with which members of the profession may be generally unfamiliar

Example: Paper on copulas



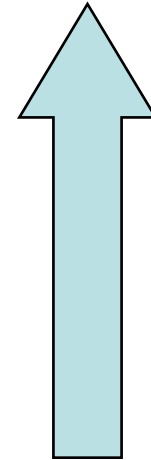
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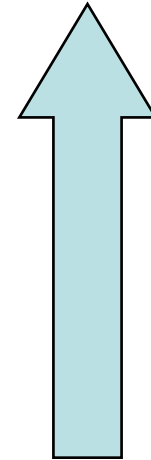
Increasing:

- Breadth of education
- Commitment of time and purpose
- Analytical depth
- Familiarity with associated literature



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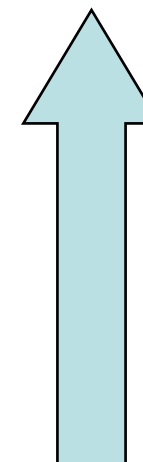
Increasing:

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- Distance to horizon of applicability**



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Increasing:

- Reliance on individual inspiration

Decreasing:

- Certainty of outcome
- Scope for direction from above

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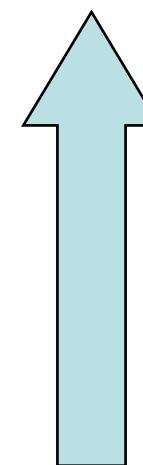
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Increasing suitability for:

- Group activity
- Direction by Institute