Research Risk Assessment in a University

Dr Ian Carter
Director of Research

June 2007
Outline

- Institutional risk management

- Project-level risk assessment
Institutional Risk Management

- Often linked to institutional objectives
- Requirement to embed in institutional processes
- Development of policies to deal with range of issues, e.g.:
  - Financial Handbook
  - Research Good Practice
  - Research Misconduct
  - Conflicts of Interest
- Range of research risk areas
Range of Research Risks

- Policy / Strategy
- Academic
- Physical
- Financial
- Ethical
- Humans and Animals
- Legal
- Commercial
- Staff-related
- Collaborative
- PR & Perceptions
- IT
Examples (1)

<table>
<thead>
<tr>
<th>Hazard Type (Strategy &amp; Policy)</th>
<th>Market &amp; portfolio imbalance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associated Risks &amp; Effects</td>
<td>Exposure to single source of funding; inability to respond</td>
</tr>
<tr>
<td>Those Affected</td>
<td>All, but action primarily by policy makers</td>
</tr>
<tr>
<td>Countermeasures</td>
<td>Develop research strategy and implementation plan; replanning</td>
</tr>
</tbody>
</table>
## Examples (2)

<table>
<thead>
<tr>
<th>Hazard Type (Academic)</th>
<th>Investing a great deal in writing a proposal with low odds of success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associated Risks &amp; Effects</td>
<td>Loss of opportunity; damage to career status</td>
</tr>
<tr>
<td>Those Affected</td>
<td>Project leaders; researchers</td>
</tr>
<tr>
<td>Countermeasures</td>
<td>Replanning; seek info on other funders</td>
</tr>
</tbody>
</table>
### Examples (3)

<table>
<thead>
<tr>
<th>Hazard Type (Physical)</th>
<th>Dangerous environments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associated Risks &amp; Effects</td>
<td>Working in dangerous environments; violent people</td>
</tr>
<tr>
<td>Those Affected</td>
<td>Those in relevant fields of research: project leaders, HoDs</td>
</tr>
<tr>
<td>Countermeasures</td>
<td>Seek advice from safety professionals; carry insurance</td>
</tr>
</tbody>
</table>
### Examples (4)

<table>
<thead>
<tr>
<th>Hazard Type (Commercial)</th>
<th>Over-ambitious plans for work scheduling or funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associated Risks &amp; Effects</td>
<td>Inability to deliver to plan; damaged reputation; liabilities</td>
</tr>
<tr>
<td>Those Affected</td>
<td>Researchers, project leaders, departments</td>
</tr>
<tr>
<td>Countermeasures</td>
<td>Effective project management; training / mentoring; insurance</td>
</tr>
</tbody>
</table>
### Examples (5)

<table>
<thead>
<tr>
<th>Hazard Type (Collaborative)</th>
<th>Incompatibility between partners once under way</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associated Risks &amp; Effects</td>
<td>Divergence of targets; not successful outcome</td>
</tr>
<tr>
<td>Those Affected</td>
<td>Researchers, project leaders</td>
</tr>
<tr>
<td>Countermeasures</td>
<td>Work on relationships; terminate ineffective partnerships</td>
</tr>
</tbody>
</table>
Range of Research Risks

- Policy / Strategy
- Academic
- Physical
- Financial
- Ethical
- Humans and Animals
- Legal
- Commercial
- Staff-related
- Collaborative
- PR & Perceptions
- IT
Project Risk Assessment

- To assess viability of a proposal
- To identify areas for attention
- To determine level of authorisation required
How the Process Works

- Assessment against nine factors
- Two or three options for each factor
- Some are derived from information captured about the project
- Scoring of each option for each factor
  - Could be weighted
- Summation of “risk score”
- Use of total score to determine approval workflow
  - Effectively, Low, Medium, High categorisation
Project Risk Assessment Factors

- Desirability
- Capability
- Public Good
- Involvement of Human Subjects or Animals
- Customer
- Type and Terms
- Cost
- Price
- Requirement for permanency of research staff
Example
Potential Issues

- HoD may score highly, regardless of reality
  - Regular reporting of assessments, and outcomes
  - Implies the need to capture output / outcome adequately
- Balance between systematic approach and human judgement
- Accumulating risks
  - Each high risk project may be acceptable on its own
  - What proportion of a profile is acceptable as high risk?
Accumulating Risks

- What profile of risk is acceptable?
  - e.g. 50% Low, 30% Medium, 20% High
  - Depends on the level of aggregation (dept or institution)
  - Depends on the risk factors that make it high
  - High risk maybe more acceptable if the researcher is very experienced, i.e. a good capability rating, or the cost is low

- So, perhaps risk needs to be accumulated at the factor level?
  - Level of total financial exposure
  - Balance across customers
Further Use of the Risk Score

- To direct monitoring / intervention during project life
  - If capability score is high risk, someone (e.g. HoD) should be checking progress regularly
  - If financial risk is high because the customer is an SME, debt monitoring should be frequent
  - Use score to affect criteria for exception reporting
Summary

- Use of strategic risk management across a range of areas, embedded in normal processes
- Introduction of project risk assessment as part of the approval process
- Consideration of accumulation of risk
- Possible use of assessment in later stages