Using science, technology and analysis to cut costs, not capability

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Many examples of science and technology efficiencies

News story

Porton Down scientists on brink of titanium revolution

The Defence Science and Technology Laboratory (Dstl) in Porton Down has revolutionised the production of titanium by reducing the 40 stage process down to just two steps and potentially halving the cost.

Defence & Security Analysis Division

Behavioural science to maximize MOD's energy efficiency behaviours

[dstl]

But much more potential…

To realise some of this potential, a study was formed led by analysts with a simple task:

1. Find Science and Technology (S&T) ideas which can save defence money

2. Get those ideas exploited!

Ideas: where to look?

- Extant research
- Customers / stakeholders
- Organisation-wide call for ideas
- Workshops drawing on different communities
  - Sci-Fi
  - Data Science
  - Futures
- Horizon scanning / technology watch
- Workshops to look for money-saving applications of extant research / technologies
- High spend = high savings potential?

Ideas: how to prioritise?

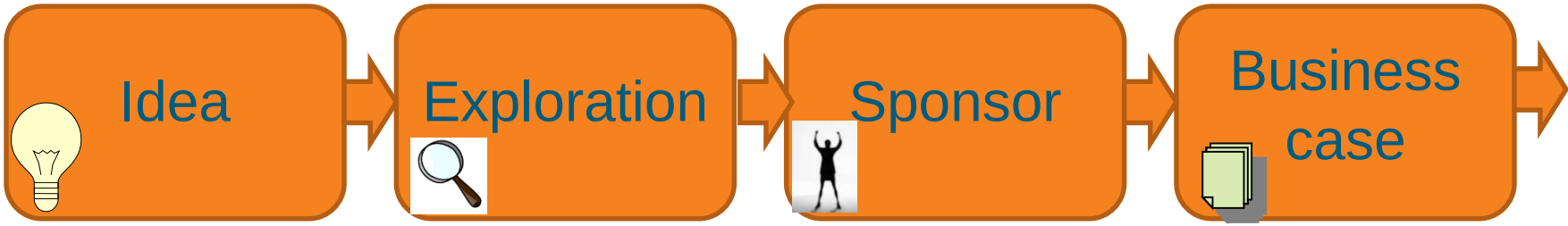
Pre-requisites:

- Could save MOD money through efficiency
- Uses S&T (including analysis)
- Wouldn't otherwise be done

For prioritisation:

- Size of potential saving
- Level of additional benefits
- Likelihood of success
- Likelihood of exploitation
- Is it pan-defence by nature?
- Does it build relationships needed?

Why isn't it happening already?



Barriers

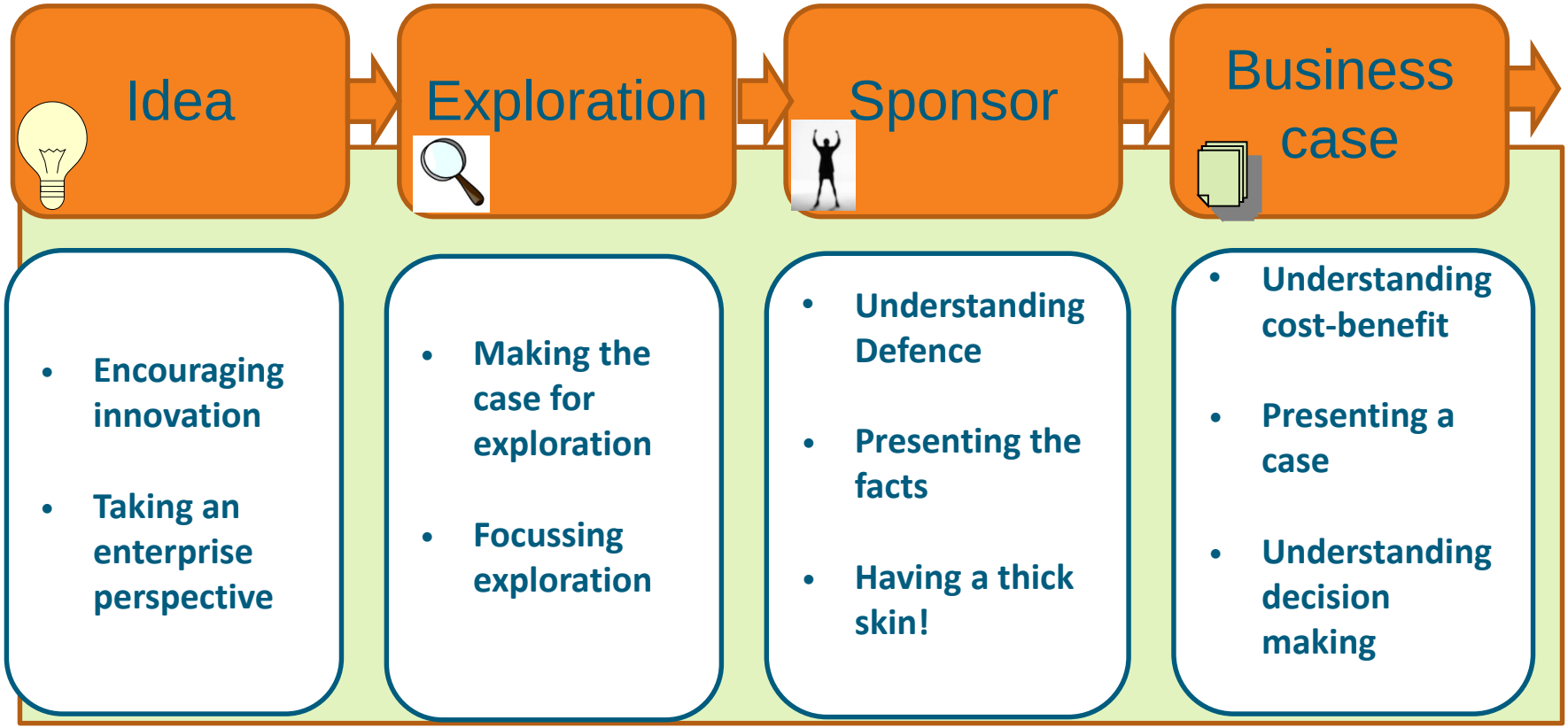
- Focus of S&T community
- Less exciting ideas
- Head-space

- Time, resources and priorities
- Fear of failure

- Knowing who to talk to
- Explaining the idea
- The tenacity required!

- Time, resources and priorities
- Building the evidence base

Analysts have been helping to overcome barriers



Examples

Idea → Exploration → Sponsor → Business case

Liquid Glass

Reducing cost of Corrosion

Behaviours

Navy consumables tracking

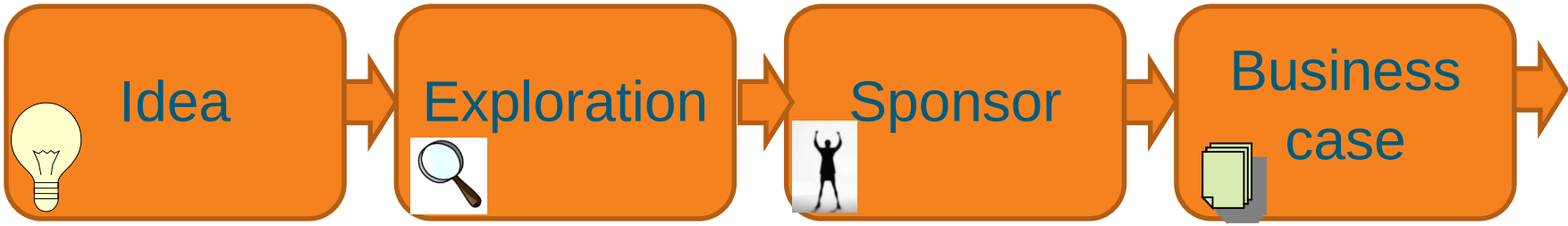
Erosion of helicopter blades

So what have we learnt so far?

- On the quest for efficiencies it is really helpful to…
  - cast the net very wide
  - be prepared to accept failure
  - focus on exploitation

- Analysts can add real value to bring both analytical skills and expertise gained from being close to decision-making

And where do we want to go next?



More from horizon-scanning

Working with technology experimenters

Broadening stakeholder community

Science areas of potential

Making this part of business as usual

Questions