

David Peck

PhD - seminar 2

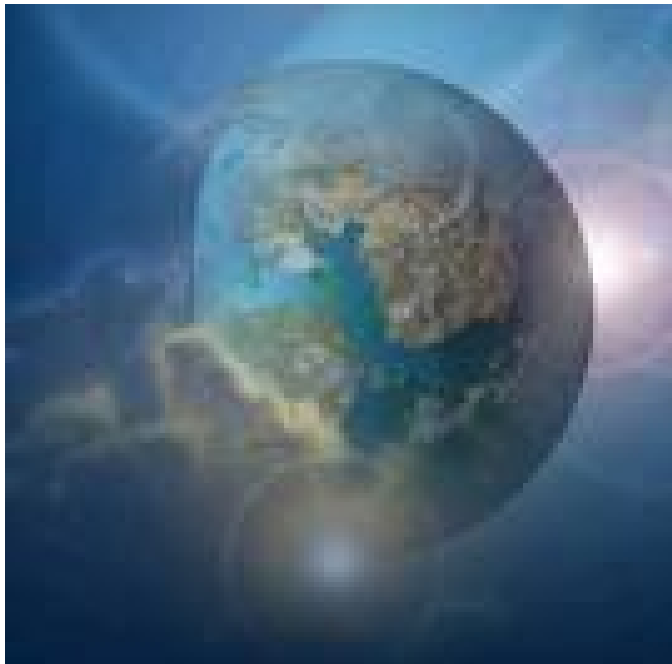


**The knowledge transfer of sustainable product design approaches –
Sustainable product innovation best practice.**

‘What has to change in organizations to allow all to embrace sustainability in design?’

Thought

“..... Ehrenfeld offers a radically new set of strategies to attain sustainability... he proposes a new definition: *‘sustainability is the possibility that humans and other life will flourish on Earth forever’.....*”



- *John Ehrenfeld, 2008*

Project proposal

Draft Title: **The knowledge transfer of sustainable product design approaches – Sustainable product innovation best practice.**

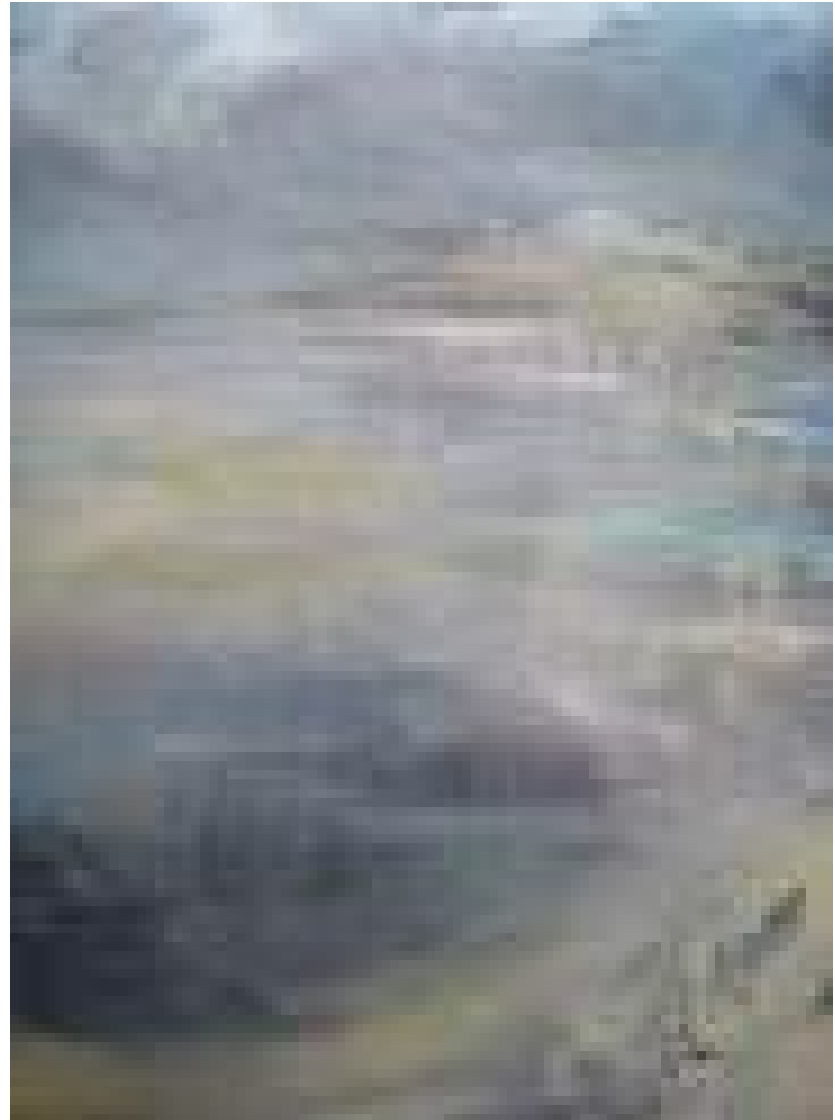
Definition of area:

- The transfer of sustainable product design approaches, within a range of organisations.
- The initial lit research considered the strategic themes in Cox and Stern and looked for links and contradictions. In summary this allows one to go back to a wider view of sustainability in product design – to establish how the debate has been informed (UK context).



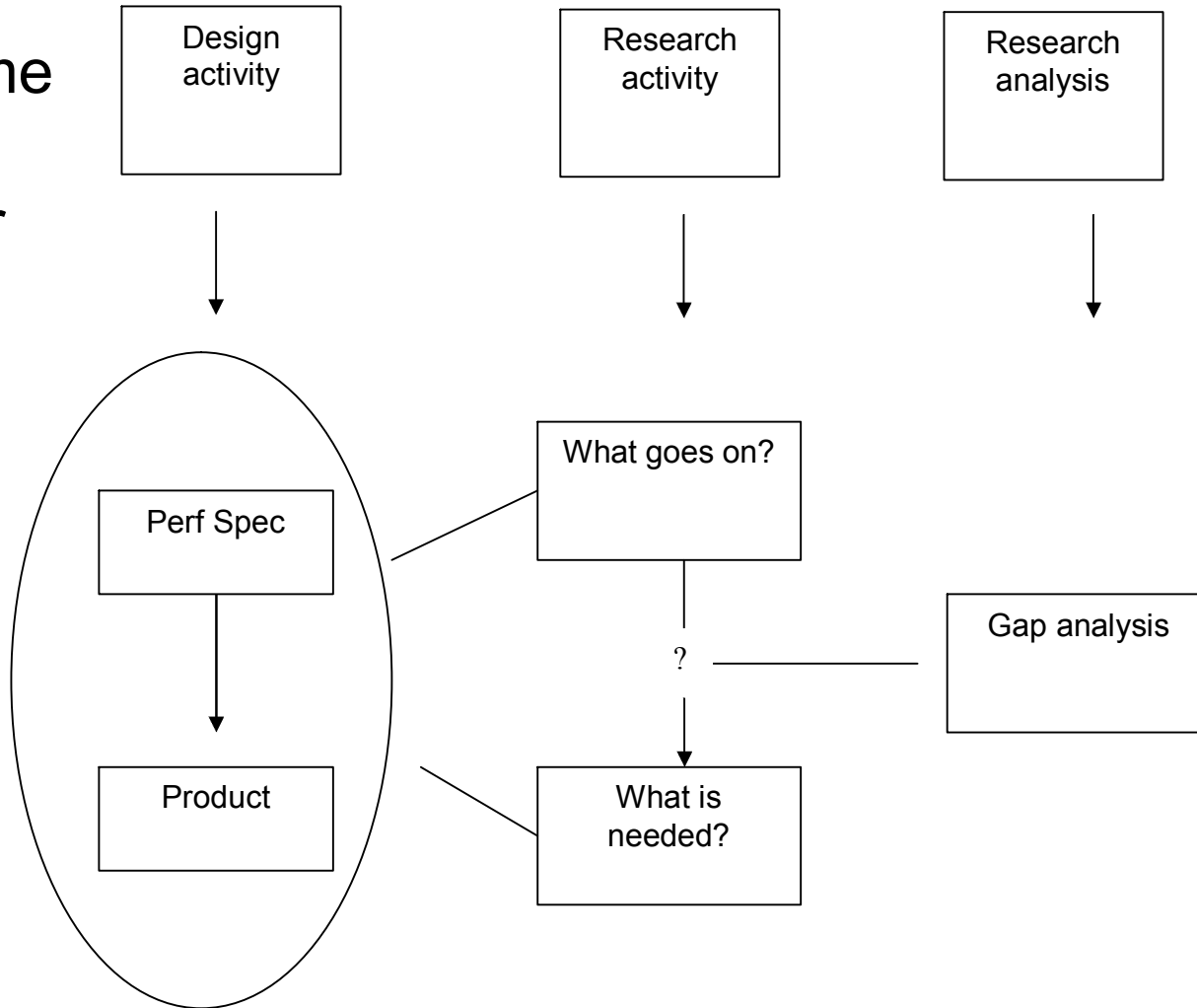
Project proposal

- This led to a proposal that the focus of the research is into the need, structure and implementation of the transfer of knowledge on sustainable design for use in industry and other organisations.
- But this did not have a clear focus.....



Project proposal

This came out - still not clear



Move to TU Delft Jan 09

Engagement with an excellent DfS team and quickly found 3 other PhD researchers all looking at similar concepts - so we formed a sub group.

This has helped greatly.

In the past few weeks we have worked together to come up with a model which helps us understand what we are all looking at....

The Model Mk1

Components of Sustainable Innovation



Hypothesis

- The hypothesis to be tested is that all individuals (and this number may need to be widened to additional functions and even into the stakeholder realm) involved in innovation activity within organisations often lack the skills and knowledge to fully realise the sustainability potential of a sustainability strategy.

Hypothesis

- To take this hypothesis further, if an innovation organization decides to develop a sustainability strategy that is core to the overall organizational strategy, without the pre-requisite sustainability skills and knowledge of individuals in a variety of functions, the strategy may fail. This sustainability strategy failure may even endanger the organizational strategy and the survival of the organization.

So back to the Model Mk1

Components of Sustainable Innovation



The following slides explore this model in more detail....

The 'why'

Why we do what we do and why we do it this way

'sustainability is the possibility that humans and other life will flourish on Earth forever'

Cox

Stern

Change

The 'why'
Friedmann
organisational
strategy

Culture
Behaviours

The 'why'.
Sustainable
organisational
strategy

Culture
Behaviours

The 'who'.

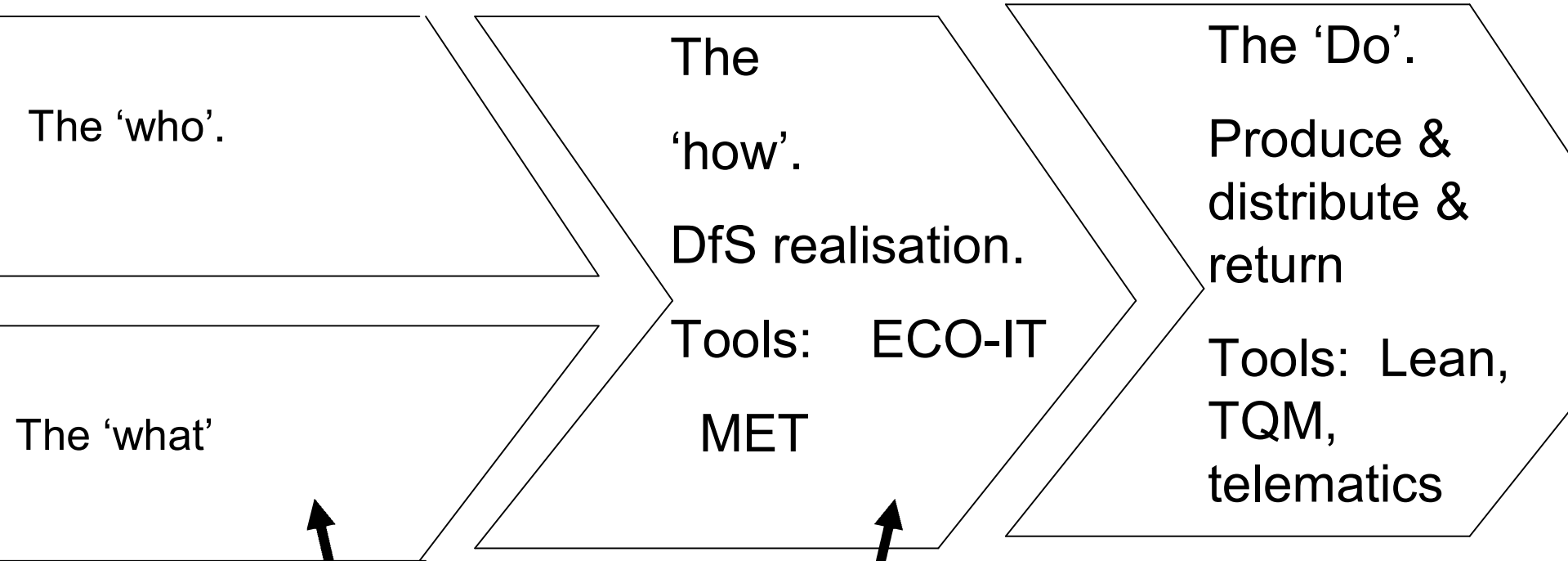
The 'what'.

Ehrenfeld
Braungard

New Paradigm, subversive strategies for transformation, challenge consuming

The 'how'

- Brezet
- Roy, *et al*

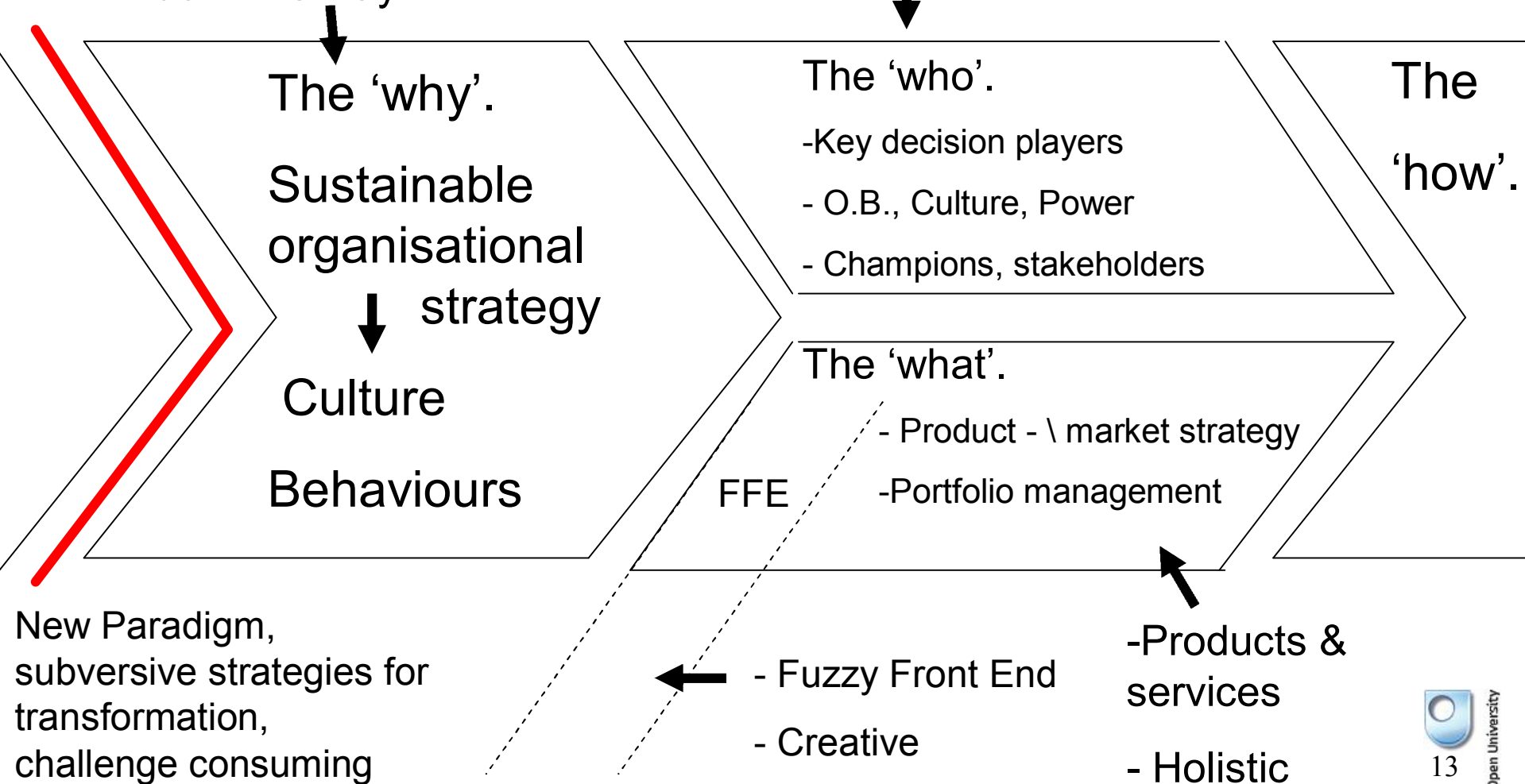


- End of Life,
- Cradle to Cradle,
- D.f.Dissassembly

The who & what

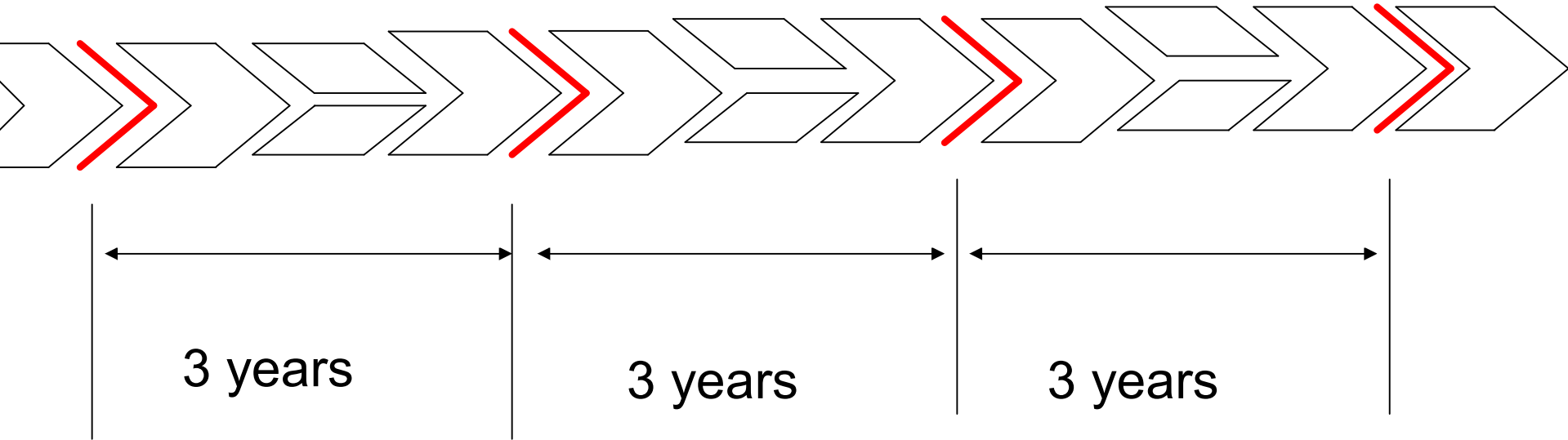
Why we do what we do and why we do it this way

- How these people be identified in this context?
- How do organisations recruit, select, develop & support these people?
- How can the development of 'creative networks' be facilitated?



New Paradigm, subversive strategies for transformation, challenge consuming

How long do we have?



Focus

- How these people be identified in this context?
- How do organisations recruit, select, develop & support these people?
- How can the development of 'creative networks' be facilitated?

Establish the 'who'

Step 1. Identify organisation that demonstrate 'Ehrenfeld' characteristics (culture, leadership, ethos, etc.)

Step 2. 'Distill' a set of generic approaches and outcomes.

Step 3. Attempt to apply this to an organisation?



Uncertainty

- Sectoral?
- No of organisations?
- Am I going to find 'standard' business approaches and not something new?

My time line?

- Mar Apl 09 Deliver Probationary report
- June 09 present this in a paper in Denmark
- Apl – Dec 09 conduct in organisation research
- Jan – Aug 10 ananalyse data
- Aug 10 – Jun 11 write up and submit

Closing thought

“.....is our competitiveness imperilled by developing countries catching up with us? My answer is no. Because in so called developing or emerging countries the rules of competition are changing profoundly and irrevocably. We are all emerging economies now. We are in a transition from mindless development which has characterised most of our careers to design mindfulness.....”

- *John Thackara, 2006*

