

The uptake of research and innovation

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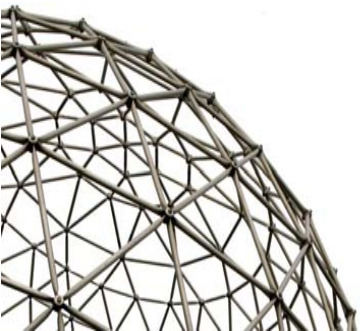


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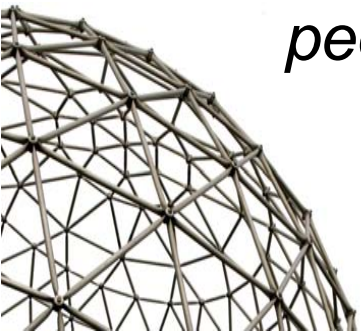
Introduction

- Aim:
 - To explore what makes it likely that research/innovation will get adopted in the work place
 - To identify work-based strategies to enhance adoption
- Innovation: “*anything that is seen as new*”



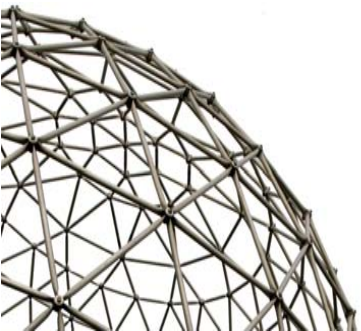
Innovation policy

- Many mechanisms:
 - Darzi
 - NHS Technology Adoption Centre
 - NHS Institute for Innovation and Improvement
 - NIHR Service Delivery and Organisation
 - Innovation funds
 - HIECs etc
- But this is not new (see for example the GRiP programme in Oxford in the 1980s/1990s)
- So why is it so difficult? *“If the NHS has so many clever people why hasn’t this been solved?”*



Innovations

- Relative advantage
- Low complexity
- Observability
- Trialability
- Compatibility
- *Potential for reinvention*



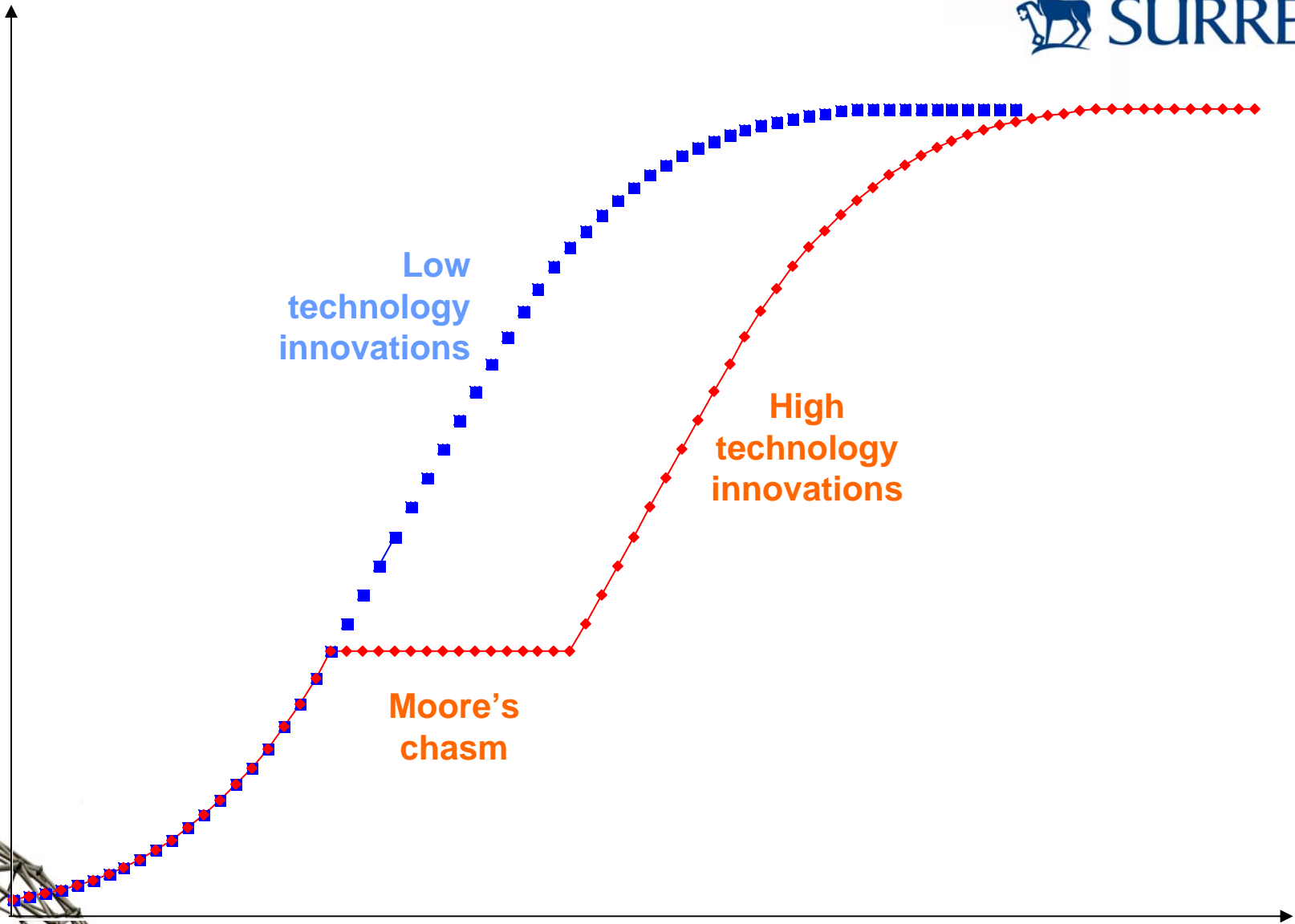
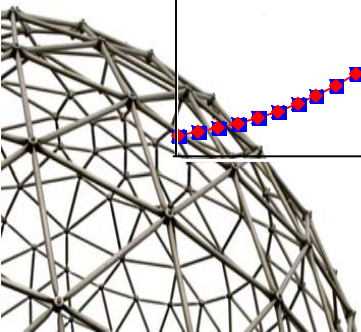
Adoption

Low
technology
innovations

High
technology
innovations

Moore's
chasm

Time



Adopters and adoption

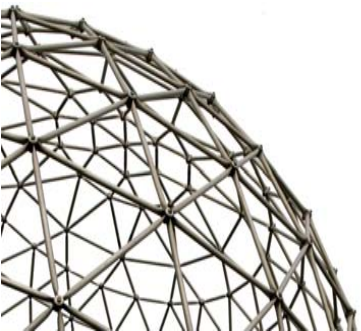
- “Early adopters”, “laggards” etc are mathematical descriptions not personality traits!
- Key concept is *need*
- Concerns based adoption model
- Organisational adoption often *contingent on organisational factors* (see later)



Adopters (the marketing approach)



- Concerns in pre-adoption phase
 - Does it meet my needs?
- Concerns during adoption phase
 - How do I make it work?
- Concerns in established users
 - I want to adapt/improve this innovation



Low tech innovation – thermocool incubator

**Dr Daga, paediatrician
Cama and Albess Hospital
Dhobi Talao**

**Polystyrene box which
previously carried
vaccines**



Why was this adopted?

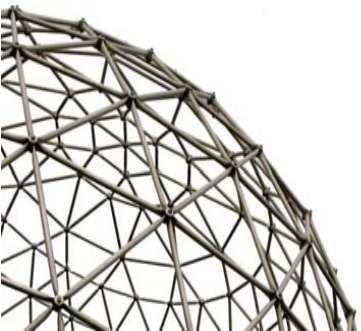


- It works
- It's cheaper – relative advantage (150 rupees vs 50,000 for a normal incubator)
- It's readily available
- Word of mouth (adopted by paediatricians who previously worked with Dr Daga)
- It fits with current systems
- But.....it doesn't have that high-tech look!!

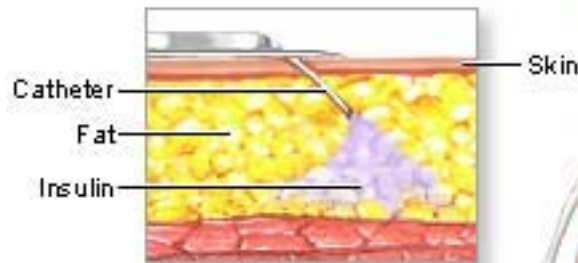


To get change: need for effective communication and influence

- Social networks (“cosmopolitanism”)
- Homophily (“people like me”)
- Opinion leaders (“I follow X”)
- Champions (“backing the idea”)
- Boundary spanners (in two camps)



Insulin pump



Dosage instructions are entered into the pump's small computer and the appropriate amount of insulin is then injected into the body in a calculated, controlled manner

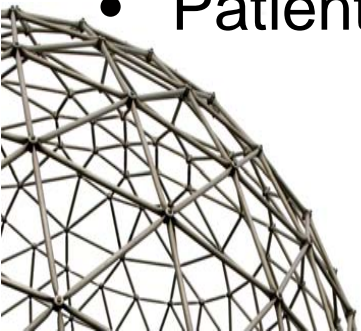
Insulin pump



Why was this adopted?



- An NTAC project
 - strong evidence base, bridges gaps between both 1° & 2° care
- It is trialable, relative advantage, results are observable and there is a clear mechanism (improved clinical outcomes and patient experience and quality of life)
- Patient pathways redesigned (addressing fuzzy boundaries)
- Clinical champions and boundary spanners (diabetes nurses)
- Patient ownership



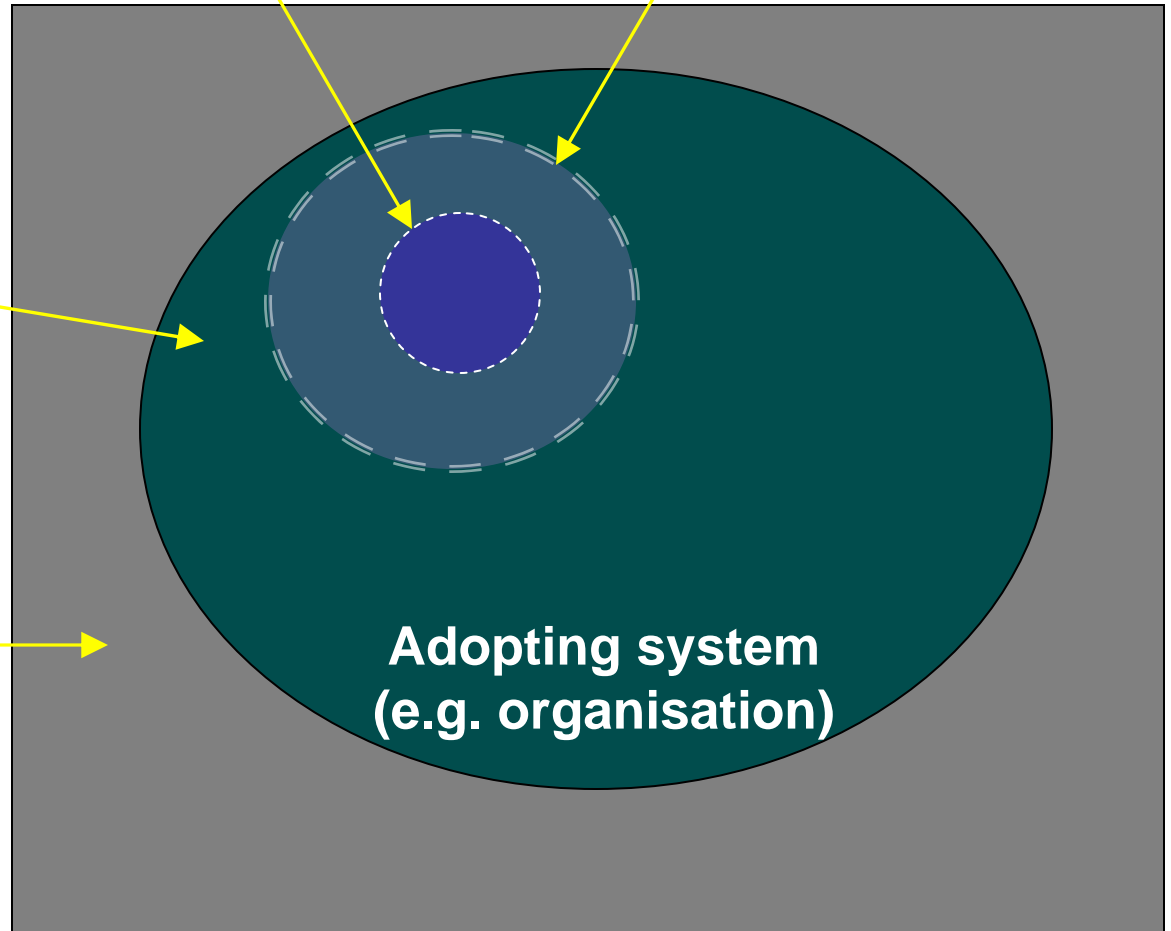
Fuzzy boundaries

**‘Hard core’
(irreducible features
of the change)**

**‘Soft periphery’
(supporting structures
and systems that vary
in different settings)**

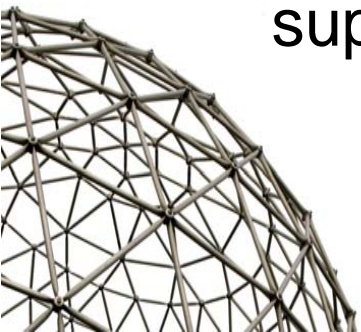
**‘Inner context’
(organis-ational
characteristics)**

**‘Outer context’
(wider
environment)**



The inner context

- Structural determinants of organisational innovativeness
 - Slack resources, decentralisation
- Absorptive capacity for new knowledge
 - Existing knowledge, ‘learning organisation’, facilitation for knowledge sharing, boundary spanning roles
- Receptive context for change
 - Risk taking climate, data capture systems
- System readiness for a specific innovation
 - Innovation-system fit, top and middle management support, tension for change



The outer context

- Socio-political climate
- Incentives and mandates
- Inter-organisational norm setting and knowledge exchange (“fads and fashions”)





Pro-innovation
bias?

“Back in 1954, one of the Iowa farmers that I interviewed for my PhD rejected all of the chemical innovations that I was then studying. He insisted that his neighbours, who has adopted these chemicals, were killing their songbirds and the earthworms in the soil. I had selected the new farm ideas in my innovativeness scale on the advice of agricultural experts at Iowa State University; I was measuring the best recommended farming practice of that day. The organic farmer in my sample earned the lowest score on my innovativeness scale, and was categorised as a laggard.”

Everett Rogers, 1995

Thank you for your attention

Any questions?

