

Resilience through Consilience

Towards a Culture Change in Patient Safety

TNO | Knowledge for business



Raphaël Gallis

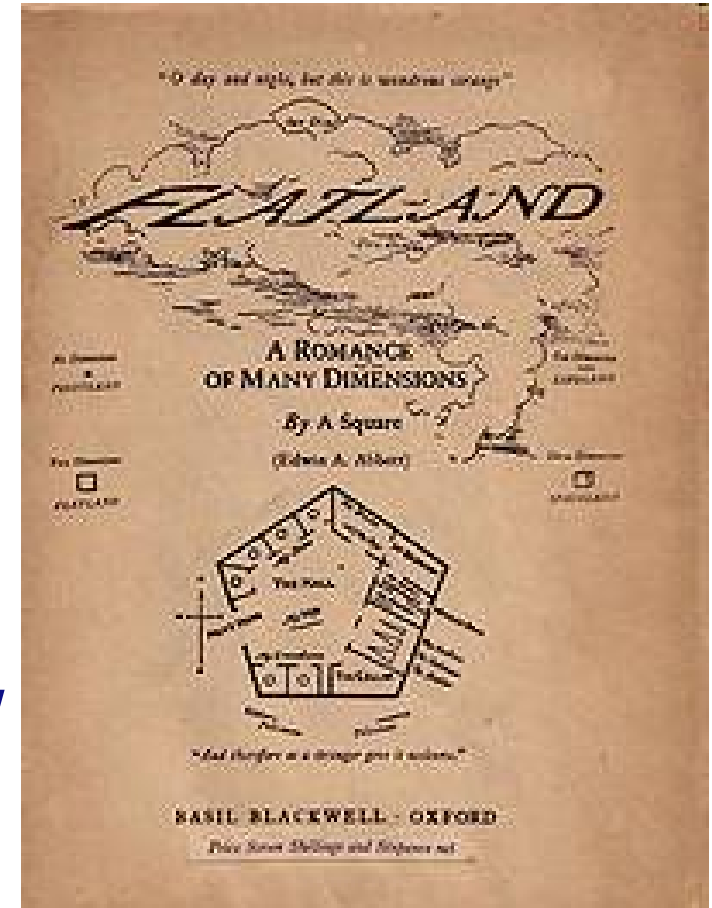
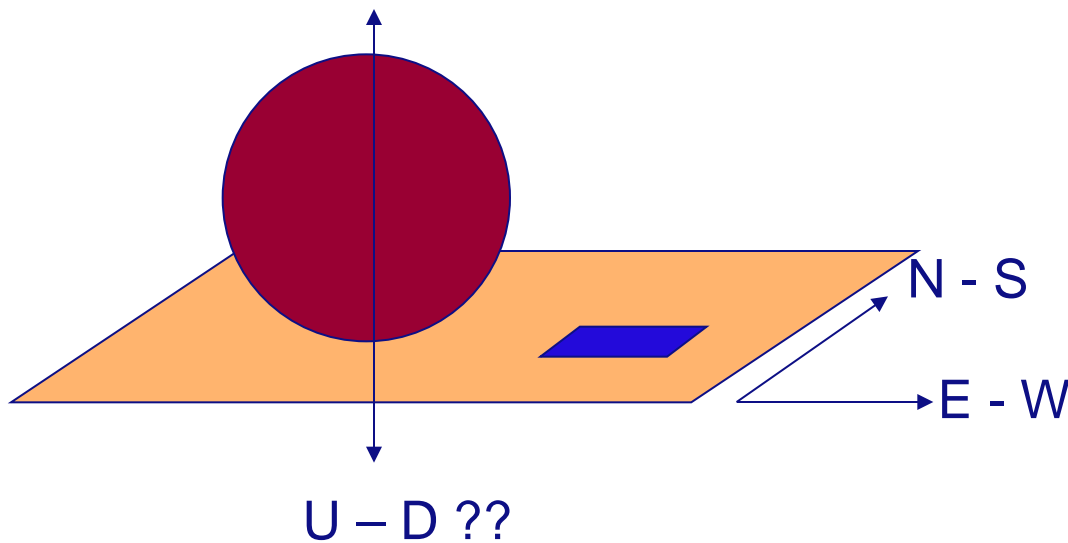


Heigh Ho...

2d – 3D



- 1884: Flatland, a Romance Of Many Dimensions





Heigh Ho...

Structure

- Intro:
 - Consilience
 - Resilience
 - Safety culture

- Body
 - What do we see
 - And where to improve?

- Dream



Heigh Ho...

Consilience

- Unity of knowledge
- Advance through combinations of existing knowledge e.g.: psychology with biology, neurology
- Look for surprising combinations: safety and music? (composition, orchestra's)
- There is a lot of knowledge out therefind it & use it

EDWARD O. WILSON



CONSILIENCE

'There's a new Darwin. His name is Edward O. Wilson'
Tom Wolfe



THE UNITY OF KNOWLEDGE



Heigh Ho...

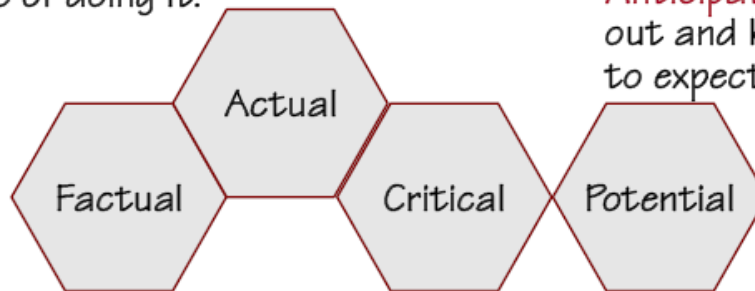
Resilience

”Resilience is the intrinsic ability of a system to adjust its functioning prior to, during, or following changes and disturbances, so that it can sustain required operations even after a major mishap (or in the presence of continuous stress)”



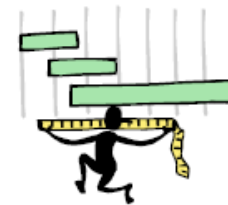
Responding: Knowing what to do, being capable of doing it.

Anticipating: Finding out and knowing what to expect



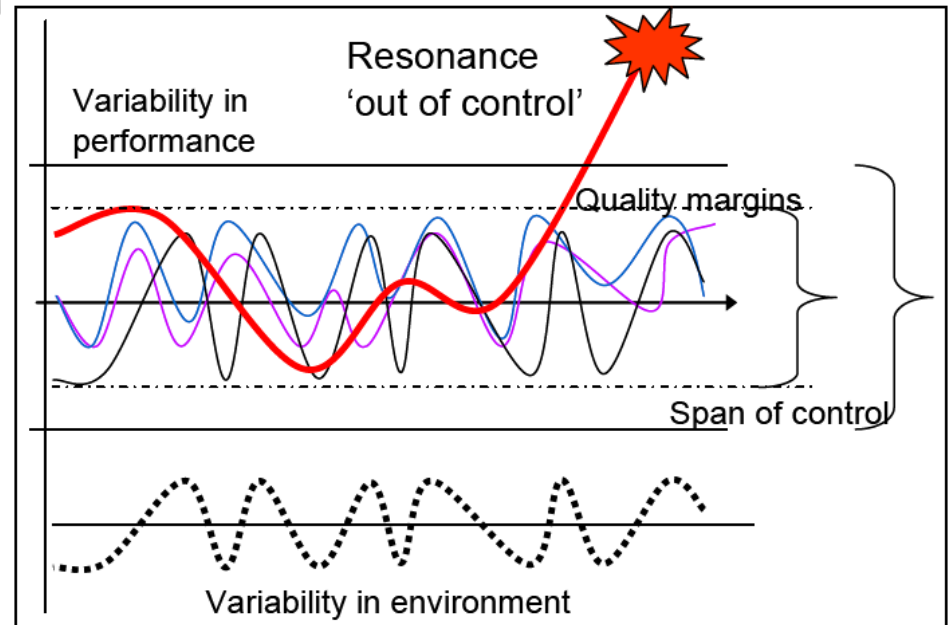
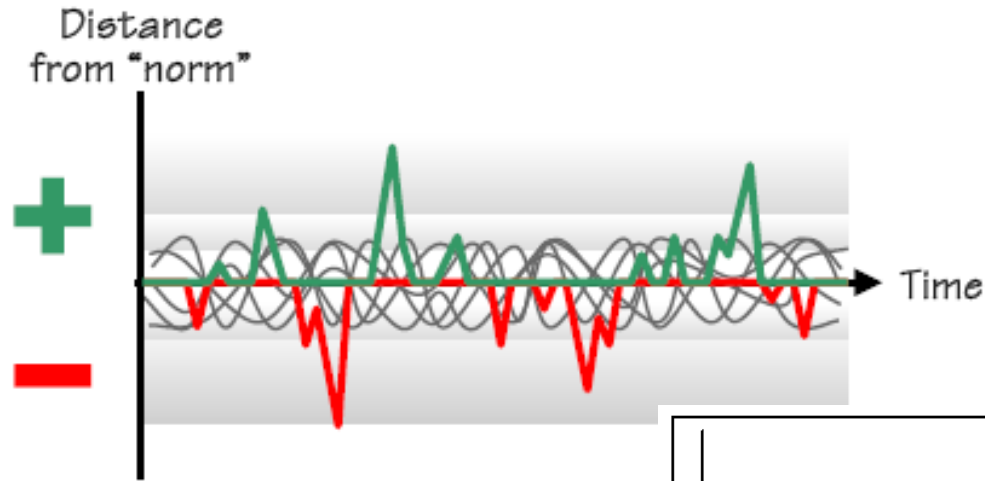
Learning: Knowing what has happened

Monitoring: Knowing what to look for (attention)



Resilience engineering measures how safe a system is by what it is able to do, hence measures of the positive rather than the negative.

Resilience





Heigh Ho...

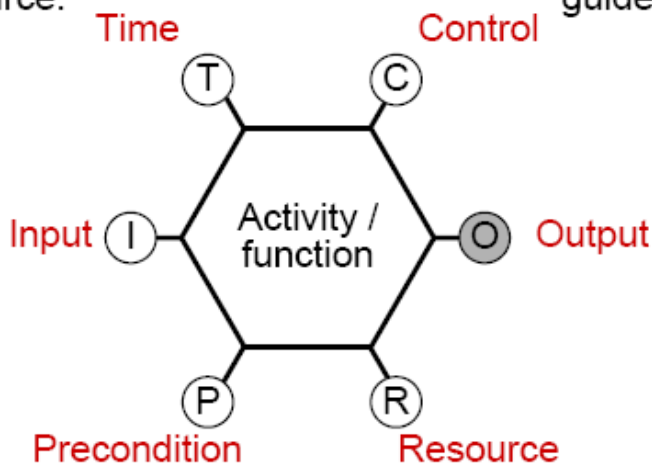
FRAM

functional resonance analysis model

Time available: This can be a constraint but can also be considered as a special kind of resource.

That which supervises or adjusts a function. Can be plans, procedures, guidelines or other functions.

That which is used or transformed to produce the output. Constitutes the link to previous functions.



That which is produced by function. Constitute links to subsequent functions.

System conditions that must be fulfilled before a function can be carried out.

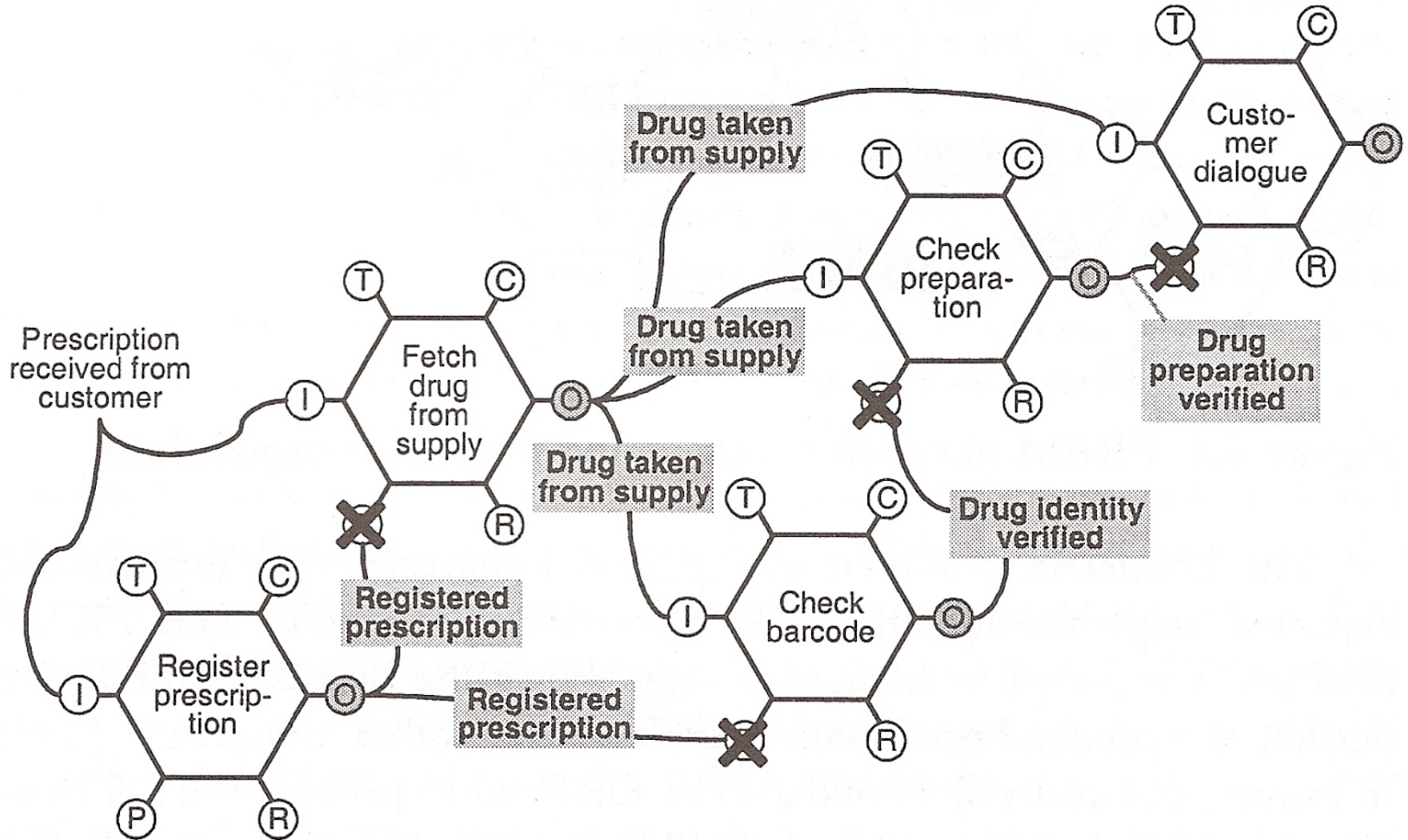
That which is needed or consumed by function to process input (e.g., matter, energy, hardware, software, manpower).



FRAM



Heigh Ho...





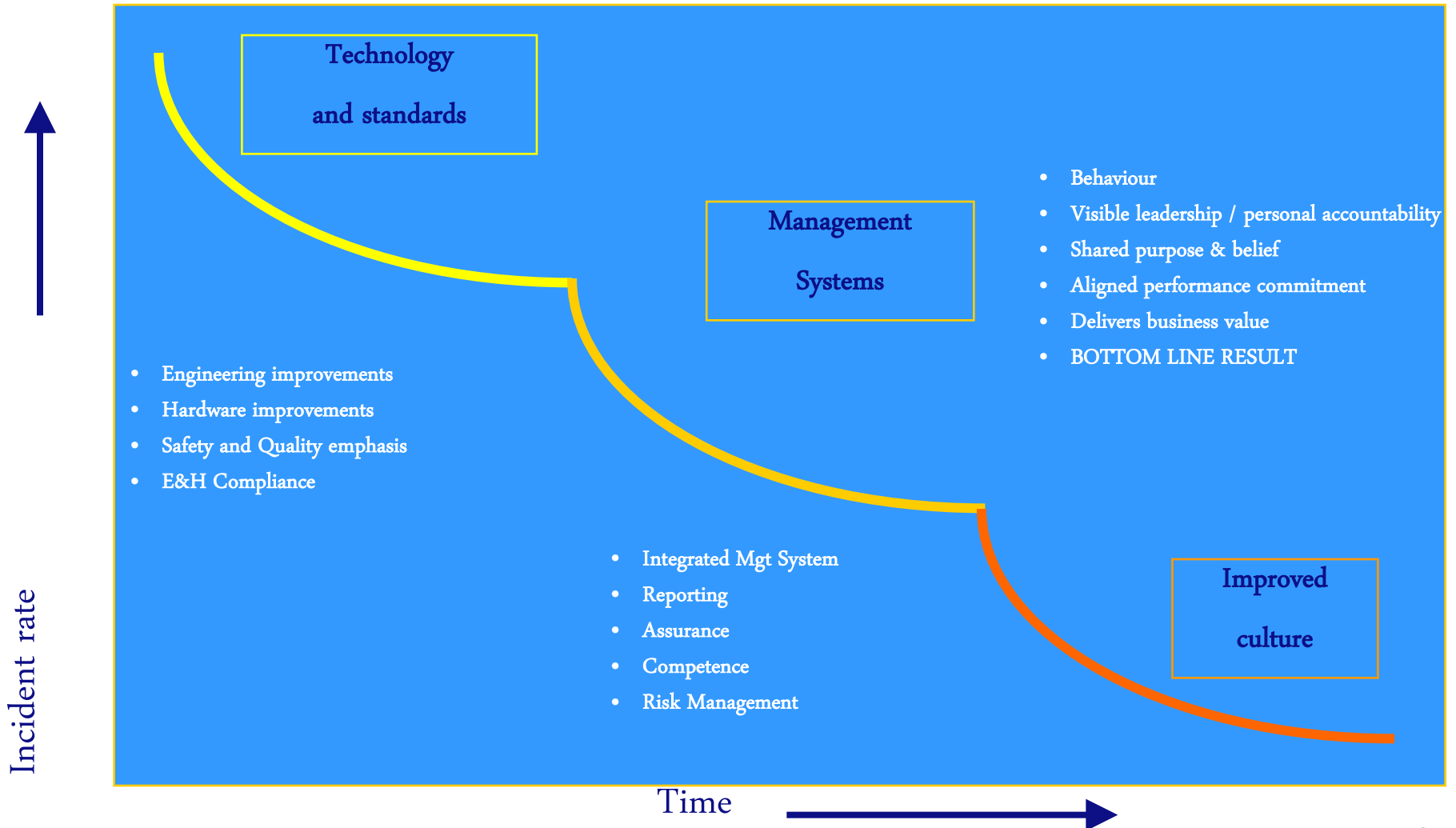
Safety culture, history:

- 1930 accident prone theory
- 1950/60 focus on technology
- 1970/80 focus on organisation
- 1990- now focus on safety culture
- 2010- resilience?



Heigh Ho...

History



Organisational maturity Ladder



Heigh Ho...





Heigh Ho...

What do I see?

- Not enough diligence
- 'Not invented here' syndrome
- Safety standards lagging 20 years behind industry
- Technology based on stand alone, not platform philosophy
- Incompatibilities built into the system
- Attitude: 'I know best' versus constant unease
- Outside pressure: guilt, blame
- Drift to 'private gain, public pain'

Result: 10 years after 'to err' no real improvement

Diligence



- No diligence for what is agreed upon
 - Hand hygiene
 - OR infection prevention
- Sluggish compliance of established routines / guidelines
- Find ways to help organize and design HC in such a way that HC professionals can be diligent



Not invented here

- Only doctors are allowed to comment / critique
- No consensus on 'best practises'
- The urge to feel unique, different
- The wish to adjust all standard solutions
- Individuals allowed to follow their own routines

Find out where this need for uniqueness comes from, if safety culture/organisations mature this need will dissapear?

Systems integration



Heigh Ho...





Heigh Ho...

Systems integration



Lets start from scratch and work together to establish new platforms





Heigh Ho...

Safety lags behind

- Rudimentary incident investigations
- From blame to 'fair blame' not 'blame free'
- SHE management systems still not into place
- Immature safety culture
- Safety has a low standing
- Now that pressure is on: copy without intelligence
- Patchwork:
 - surpass welcomed
 - OR team no compliance



Heigh Ho...

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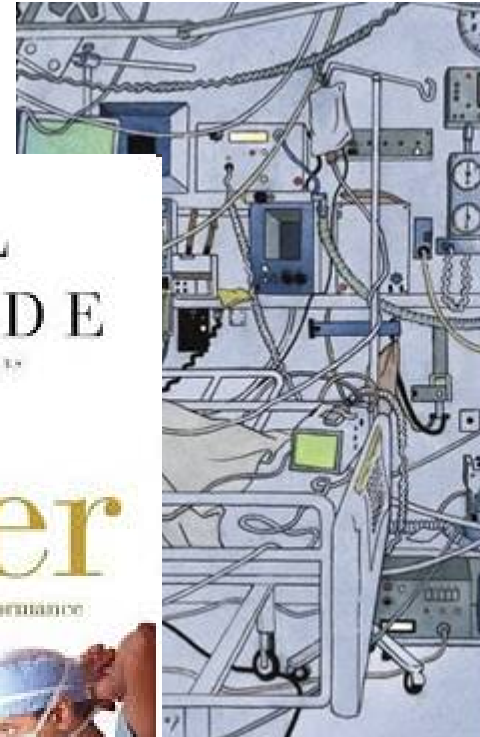
Is it just me?



Heigh Ho...

- Diligence
- Change!

ATUL
GAWANDE
AUTHOR OF COMPLICATIONS
better
A Surgeon's Notes on Performance





Heigh Ho...

Is it all that bad?

- A lot of things do go well
- Intrinsically, motivated people
- A high degree of technical sophistication
- Emerging resilience (OR teams)
- Mostly a not for profit setting, competition is on quality

Only: **why do things go well?** We do not know... (exnovation needed)



Heigh Ho...

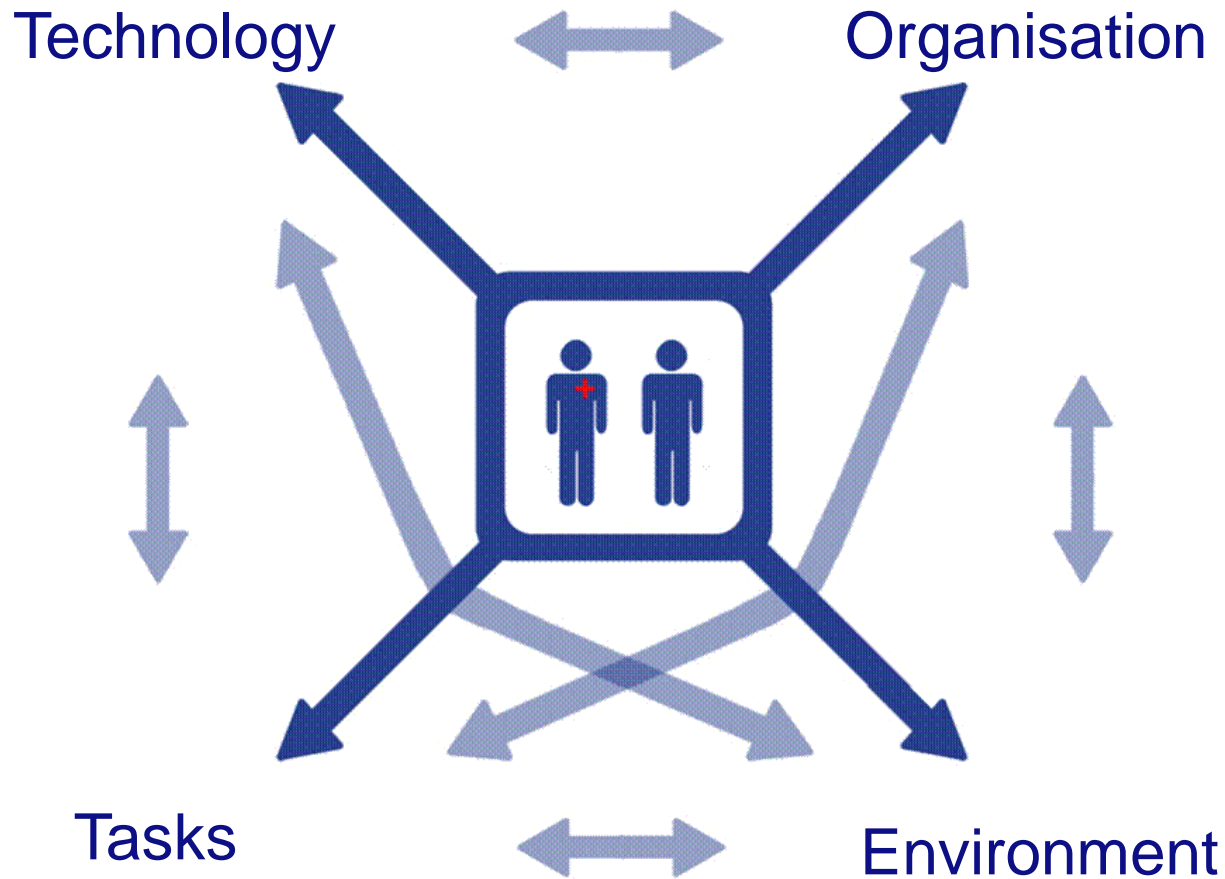
Wrap up...

- Education (skills, cooperation, safety knowledge)
- Attitude (unease, empathy, learn)
- Technology (platforms)
- Finance (insurance, payments)
- Organisation (structure, leadership, responsibility, accountability, governance)
- Surroundings (healing environment)
- Find a solution for private clinics (spill)
- Adjust the legal framework (no blame)



Heigh Ho...

In other words: Integrate





Heigh Ho...

The road ahead: Parallel tracks

- Bridge the gap: Rapid evolution (Hegel)
 - Education
 - Technology
 - Culture
 - Diligence
 - Compliance
 - Legal framework

- Incorporate the new: Resilience

Meanwhile: cultivate and improve on that what is good! (exnovate)



Heigh Ho...

Result: Healthcare as a HRO

- Preoccupation with failure
- Reluctance to simplify
- Sensitive to operations
- Commitment to resilience
- Deference to expertise

Dream



Heigh Ho...

