

Keeping Everyone Safe

Human Factors

Trevor Dale FRAeS, MRCPS(Glas), MCIEHF

Atrainability



@Atrainability

www.etrainability.co.uk

To Keep Up With The Pace Of Technology...

“A Reskilling Imperative: By 2022, no less than 54% of all employees will require significant re- and upskilling. Of these,

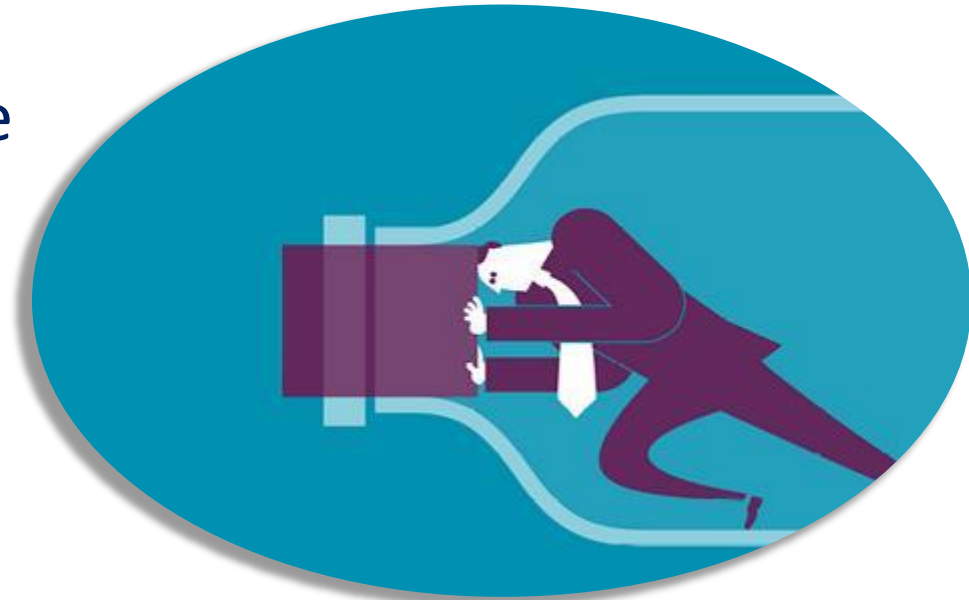
- 35% are expected to require additional training of up to 6 months,
- 9% will require reskilling lasting six to 12 months,
- while 10% will require additional skills training of more than a year.”



World Economic Forum: *Future Of Jobs 2018*

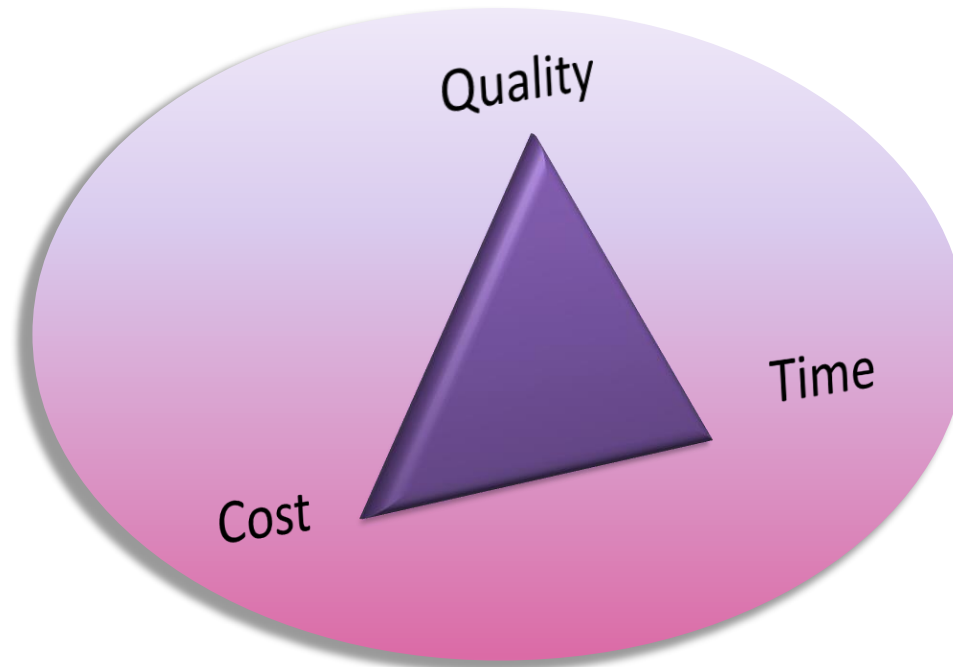
Training is the Bottleneck

- Training dictates rate of adoption of technology
- Adoption = competitive advantage
- Failure risks obsolescence



The Future Need

- Better quality training
- At scale
- Quicker
- On a budget!



Is Digital The Answer?

- Scalable
- Operationally efficient
- Anytime, anywhere
- Cost effective



Digital Limitations

- Speed
- Quality of learning outcome
- Delivery channel

The True Bottleneck

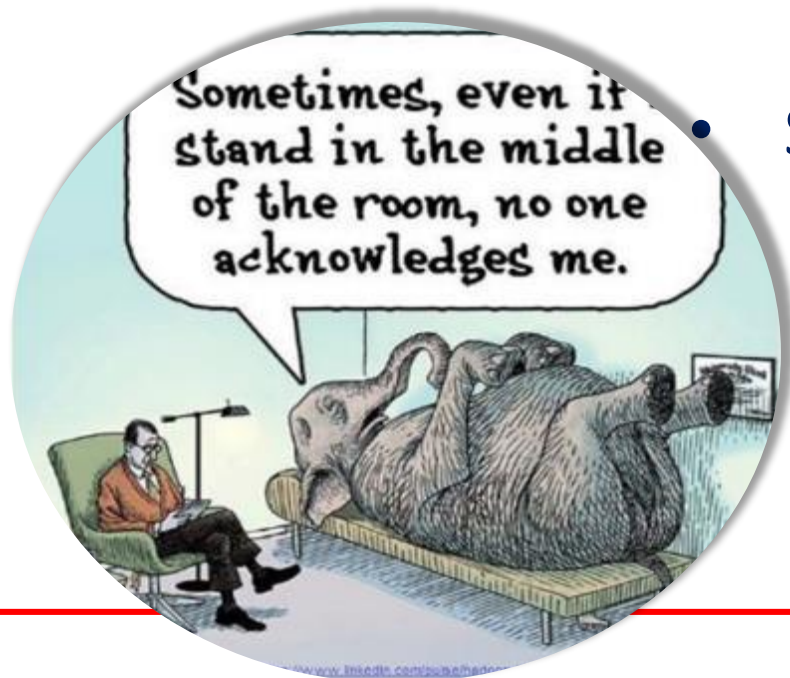


Digital Is Not The Key



The Current Paradigm

- Teaching to the short-term memory
- 79% knowledge degradation in 31 days
- Poor application
- Slow



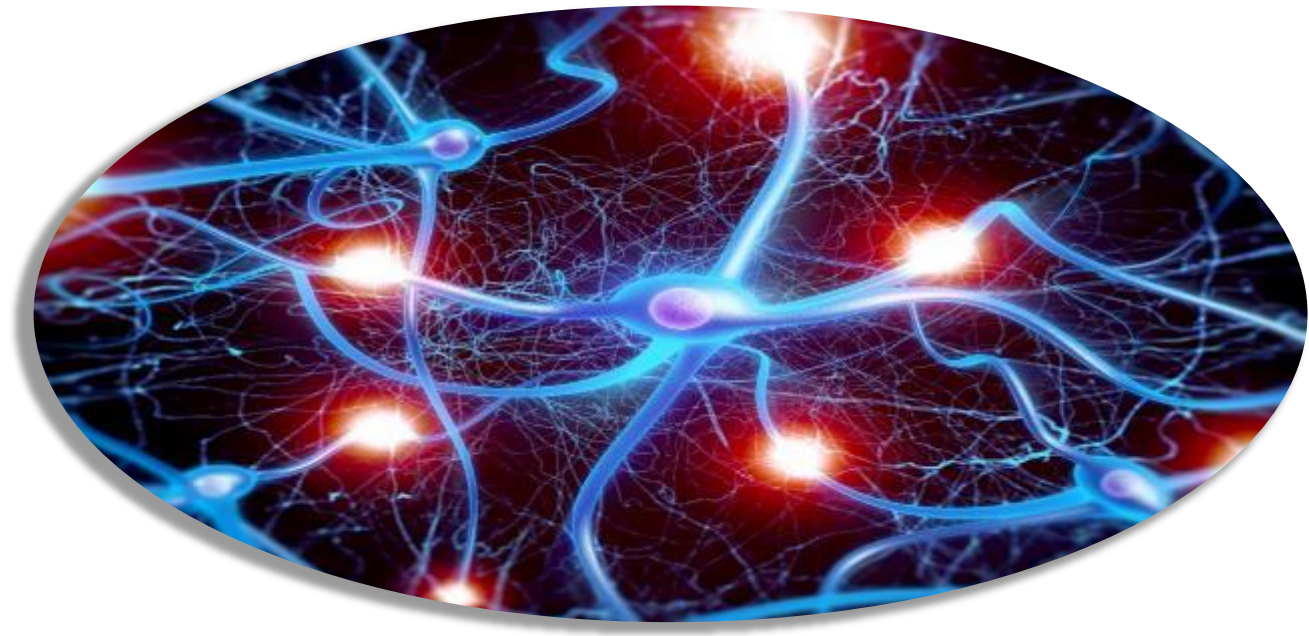
The New Paradigm

- Neuroscience
- Physiology



Long Term Memory

- 300,000 times faster
- Retention
- Application



The Neuroscience

- Different synapses
- Different reset rates
- Time sequencing
- Repetition



Dr Douglas Fields

Applied Neuroscience

- One learning period
- Three repetitions
- Time sequencing
- Learn-rest-learn-rest-learn
- 23 hours into 1



Dr Paul Kelley

Digital + Neuroscience = Download

- Embeds knowledge directly
- Faster
- More effective
- At scale
- Independently validated



Download

- Video based modules
 - Three learning inputs
 - Two distraction activities
- Time sequenced



Download In Action: Stop & Search

- 5000 staff (across two forces)
- Critical/mandatory training
- Two day classroom - One hour eLearning
- Download training;
- One, one hour module
- 10,000 man days saved
- 75% reduction in training budget



Digital + Physiology: Circadian Rhythms

- Measured
- Digital integration
- Optimum times to
 - - learn
 - - work
 - - rest
 - - exercise



Digital + Physiology: Exercise

- Increased concentration
- Kinesthetics
- Integration with VR



Download + VR

- Better Learning Outcomes
- Quicker



Download + AR

- Contextual training
- In situ



Thank You

Any Questions?

