The future Leadership brain: implications of neuroscience for learning in business

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Overview

- Brain integration & learning new habits
- Empathy, neuroplasticity & trust
- Maintaining brain resilience in tough economic times
- Neuro-chemicals, risk-taking and decision making
- Leadership
Planes through the body

- Across
- Vertical
- Horizontal
Planes through the brain
Vertical: brain-body

- Limbic system
- Cortex
- Brainstem
Horizontal integration

Left Brain:
- Logical
- Sequential
- Rational
- Analytical
- Objective
- Looks at parts

Right Brain:
- Random
- Intuitive
- Holistic
- Synthesizing
- Subjective
- Looks at wholes
Corpus callosum
Across: gender, culture, generations
Additional change and novelty
The integrated brain
The brain and learning
What is the 6 letter word?

Bmusic

When you’ve got it, raise your hand rather than calling out please!
Empathy
8 basic emotions

SURVIVAL

fear
anger
disgust
shame
sadness
surprise
excitement
trust

ATTACHMENT
The future belongs to ambiguity surfers and adaptive learners

‘The illiterate of the 21st century will not be those who can't read and write, but those who cannot learn, unlearn and relearn’

Alvin Toffler
A business’s long-term survival and success depends on its ability to build and sustain trust.

September 2010
Embedding a culture of doing the right thing.

October 2010
Performance Indicator

- Stuck
- Engaged, empowered people; High performing organisation
- Survival mode
- Scared

Performance Indicator Chart:

- High trust, high excitement: 
- High trust, low excitement: 
- Low trust, high excitement: 
- Low trust, low excitement:
A 10% improvement in performance is the equivalent to an extra 23 working days annually.

AXA PPP
Effort - Reward imbalance model

Reward can be provided by:

- Appreciation from others
- Occupational status
- Job satisfaction
- Esteem
- Security
- Promotion
- Opportunity
- Money

Graph showing the likelihood of CHD with high effort and low reward compared to low effort and high reward.
The RVLPFC and performance
Signs of stress

• Sleep – difficulty falling asleep, lying awake early, and/or not feeling refreshed after 6-8 hours sleep
• Heartburn, acid indigestion
• Headaches, muscle aches, fatigue
• Irritability, anxiety
What to do

• See your GP about physical symptoms
• Do at least 30 minutes of aerobic exercise, at least 3 times a week
• Talk to an executive coach or psychologist
• Yoga and/or meditation
• Keep a journal of your feelings
• Anything that expels negative emotions from your system
Your brain at its best

IN
- Oxygen
- Glucose
- Simplicity
  - Rest
- Humour
- Hydration

OUT
- Emotional regulation
- Bias suppression
  - Multi-tasking
- Problem solving
  - Flexible thinking
    - Creativity
What happens in the brain when conditions are optimised?

- PFC regulates the emotional processes that are interacting with decision making
- Multiple information is processed quickly
- Unwanted information is suppressed
- What is important is seen
- The best choice or decision is made
- 3 principles or questions for yourself
The brain is a constant scanner

• Generally the brain likes to know what is coming next…

• Trust uses more resources than the default mode of mistrust
(Un) Fairness
Threats to the brain at work

- Novelty
- Uncertainty
- Uncontrollability
- Learning
- Physicality
- Power stress: too much to do, dealing with uncertainty, being watched by others
What happens in the brain during uncertainty or when “things go wrong”?

- PFC mis-regulation leads to human error
- Neurochemicals adapt trust, risk-taking ability and stress management
- Freeze
- Perception blurs
Neurochemicals & insight

- DA - reward
- 5HT - happiness
- Oxytocin - trust
- Testosterone - risk
- Cortisol - stress
- Adrenaline - freeze
- NA - intensity
Emotions and decision making

- Emotions bias all decisions
- Stress/fear biases decisions to the emotional system through the *cortisol* pathways
- **Oxytocin** shapes the neural circuitry of trust adaptation
Implicit and explicit learning

Left: learning by instruction
Right: learning by experience
People use two decision-making systems

“Cortical” - reflective, rational

1. Gather facts and data
2. Create and evaluate options
3. Select option to maximise objectives

“How do we know it’s right?”

“Limbic” - intuitive, automatic

1. Gather experience
2. Recognise situation
3. Match to experience and decide

“It just feels right”

Potential for misalignment, delay, resistance
Read out the colour that the words are written in
Read out the colour that the words are written in

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A distillation of Leadership essentials

Connect

Be courageous

Be clever enough

Walk own talk

Inspire others into action

Be worth following

Social neurosciences
Distributed leadership

- Only tries to change two behaviours at a time
- Uses “we” instead of “I”
- Promotes intelligent risk-taking
- Gives praise
- Trusts others judgement and expertise
- Leaves decisions to those responsible
- Encourages alignment
Mr. Norén

Excellent
Superior. 2 SD over mean
Considerably Above Average. 1 SD over mean
Mean Normal Population
Considerably Below Average
Function Deficit? Further assessment should be done

The fundamental conditions to manage a role as CEO. Cover as much area as possible inside the red dashed circle.

To be successful in the role as CEO. Cover as much area as possible between the red and the blue dashed circle.
Key conclusions

• Integration or synthesis of brain structure and function is key to maximising personal impact

• Integrated Leaders and high performing organisations flourish through the effect of trust on brain reward systems

• New knowledge about neuroplasticity means that interventions such as brain-based coaching can make a profound difference
Recommended reading

‘Mindsight’ by Daniel Siegel

‘The Brain that Changes Itself’ by Norman Doidge

‘An Attitude for Acting’ by Andrew Tidmarsh and Dr. Tara Swart

‘Thinking Fast and Slow’ by Daniel Kahneman

‘Nudge’ by Richard Thayler

‘Predictably Irrational’ by Dan Ariely

‘The hour between dog and wolf’ by John Coates

‘How to be interesting’ by David Gillespie & Mark Warren
Thank you

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