Neuroscience and the four enablers: what helps our brains think and perform at their best?

Article for Engage for Success
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Still trying to persuade senior colleagues that employee engagement can make a real impact on performance and productivity? Neuroscience helps us to understand what enables our brains to perform at their best and provides a scientific lens through which to see engagement. It is proving very persuasive with even the most sceptical leaders.

David Macleod and Nita Clarke’s 2009 report, *Engaging for Success*, identified four factors that help to create an environment in which employees can work at their best:

1. Leadership/strategic narrative
2. Engaging managers
3. Employee voice
4. Integrity – behaviour consistent with values.

As the report stated, there are many differing definitions of employee engagement but research suggests that these four factors need to be present for employees to feel positive about the employer and their work.

Sustained success depends on employees’ ability to think at their best, collaborate and innovate. The Engage for Success movement has gathered data that make the link between employee engagement and business performance, and there are compelling correlations between employees who feel positive about their workplace and reduced absenteeism, customer service and employee advocacy.

Neuroscience, the study of the nervous system including the brain, is still in its infancy. However, the growth in the number of fMRI scanners over the last two decades is increasing our understanding of the brain. What is particularly interesting for organisational leaders is that we can now apply learning from neuroscience to the workplace. It provides the insights into what helps our brains to focus and think optimally.

This article evaluates the four enablers of employee engagement through the lens of neuroscience, identifying why and how the four enablers help our brains perform at their best. It also demonstrates that improving employee engagement doesn’t have to be laborious – often it is many little things that put our brains into a positive state.

**Neuroscience**

Before exploring each of the enablers, it’s useful to set out a few facts about the brain. This will help make sense of some of the points discussed in this article.

1. **The fundamental organising principle of the brain: avoid threat and find reward**

Although our brains have evolved (especially the prefrontal cortex - the area we use for considered thinking, planning and decision-making), we still fundamentally have the same
brain as our prehistoric ancestors. Our ancestors’ brains were wired to help them survive: if they had not been structured that way, none of us would be here today. The brain is wired to do two key things: avoid threats (the sabre-tooth tiger) and seek out rewards (shelter, food, warmth). Of these two, from the perspective of survival, it is much more important to avoid threats. Our 21st century brains continue to be on the look-out for things that might harm us. This is both useful and problematic as we will explore further on.

2 Our brains like to predict

Our brains are prediction machines – they want to be able to predict and make sense of what is going on around us. If they can predict, they can keep us safe and conserve energy (the brain uses about 30% of our calorie intake). In addition, because ‘thinking’ using the prefrontal cortex uses a huge amount of energy and the brain wants to conserve energy, we often rely on past experiences and make assumptions – and these might not always be correct. Change, by its very nature, prevents our brains from predicting and ambiguity is even worse: our brains really don’t know what to make of it.

3 Toward and away states in the brain

Throughout this article, I will be referring to away/threat states and toward/reward states. The diagram below summarises the impact of these. When we are in a threat state, we can’t think or perform well, we’re not open to listening or to new ideas and we see the workplace as a more hostile environment than it really is. But take a look at the toward/reward state: to me, this looks like the mindset of an engaged employee: positive, focused and open to change. Neuroscience provides insights into what achieves this mindset and I’ll be exploring these in this article.

![Diagram of away and toward states](image-url)

- Distracted
- Anxious
- Think less clearly
- See the workplace & colleagues as more hostile
- Reduced memory
- Poorer performance
- Weakened immune system
- Cortisol/stress (destroys brain cells)
- Positive
- More focused
- Willing to collaborate
- More able to learn
- Innovative
- Creative
- Willing to get involved
- Increased resilience
1. Leadership/strategic narrative

The first of the four enablers focuses on leaders and the need for them to create a narrative that provides line of sight between the employee and the organisation’s goals. Organisations that have a clear story, and that have spent time communicating this narrative, have more engaged employees.

This makes sense from a neuroscience perspective. As we know, our brains are prediction machines; although they like a little bit of novelty, they are more comfortable when they have a sense of what to expect. Having a clear story about where the organisation is headed enables our brains to predict. Linked to this need to predict, our brains crave certainty. Think about a time when a restructure was announced or your likeable and competent boss announces she is leaving, or you were told that you need to start hot-desking. This sets off our brains – ‘What does that restructure mean for me? Will I have a job?’ ‘Who is going to be my new boss? I really hope X doesn’t get the job.’ Hot-desking? But I like being by the window. Can I still sit with the people I like?’ Uncertainty puts our brains into an away state where we become anxious and distracted.

Neuroscience also supports the need for a clear line of sight between us and the purpose of the company. Not only does line of sight give us clarity, it also provides a sense of being valued and of status because our work matters and makes a difference. Feeling valued puts our brains into a positive mindset.

Recent research brings additional insights on what makes a strategic narrative all the more compelling. Adam Grant, professor at the Wharton School at the University of Pennsylvania, has done some fascinating work in this area. His research has demonstrated that for most people, in most organisations and most lines of work, doing something meaningful means doing something meaningful for others. He describes an experiment amongst fund raisers. He divided the group into two. One group had a short five-minute visit from one of the beneficiaries of the fund-raising. The group that had not met the beneficiary continued at the same level of fund-raising. However, the group that had met the beneficiary increased their fund raising by 171% and this continued not just in the week following the visit, when you might expect some uplift, but even a month later. So, the strategic narrative is important to employee engagement but one that is about how employees are helping others and is backed up by meeting those beneficiaries, is all the more powerful.

2 Engaging managers

Engaged employees have managers who facilitate, empower, recognise and respect them. Neuroscience backs this up and explains why having a manager who respects, stretches and supports you creates a mindset where you can work at your best.

In his book Social – why are brains are wired to connect, Matthew Lieberman, Director of the Social Cognitive Neuroscience Laboratory at UCLA, sets out the case for why social connections matter so much. Again, it goes back to survival. As mammals we would not survive if we did not have someone to care for us when we are born. So, from our first few moments out of the womb, we are wired to check that there is someone to look out for us.

This need to connect stays with us throughout our lives and this includes in the workplace. Our brains are constantly checking whether we are accepted or rejected, whether we are
part of the ingroup or outgroup. When we are accepted, our brains are in the toward state and are able to do all the good things that the state enables, but if we feel part of the ‘outgroup’, we are in an away state. Neuroscience has revealed that we process thoughts about people in different parts of our brain, depending on whether we consider them ingroup or outgroup and not surprisingly, our brains are far less empathetic to those who are in our outgroups. Social rejection has been shown to have a significant impact on our ability to think – managers need to keep this in mind.

It is in the interest of every manager to make sure members of the team feel part of the ingroup. I recently worked with leaders in a large UK bank, getting them to think about how they could get their teams to feel part of their ingroup. It does not have to be time-consuming and it doesn’t have to cost money, but if managers want their team to be able to think and perform at their best, this is essential. Often small actions and gestures can make a real difference - making eye contact, greeting people in the morning, listening to people, focusing on shared goals, buying them a coffee and taking some time to get to know the individual.

As Matthew Lieberman argues in his book, organisations pay far too little attention to the fact that our brains are wired to be social. To perform well at work, these needs must be met. Collaboration, particularly amongst a diverse group of people, has also been shown to be a key ingredient of innovation and the creation of new ideas.

3  Employee voice

The third enabler focuses on the employee’s ability to speak out and on the organisation’s being interested in what the employee has to say and responding to those views.

Neuroscience provides evidence as to why having a voice matters and again this is rooted in survival. Employee voice is in part about feeling respected and is also about influence. One of our deep needs is to have some control, or at least a perception of control, over our environment. If we have no control, we are helpless and, in prehistoric times, unlikely to survive. In our 21st century brains, lack of autonomy leads to higher levels of stress and cortisol. Cortisol is physically damaging and kills brain cells, especially in the hippocampus which plays an important role in memory. There are many studies that show that we have better health and live longer when we have some influence.

Leaders need to know that when we feel we have no control, we see the same situation as much more stressful. Even a subtle perception of autonomy can make a very significant positive impact on our brain’s perception of events: a sense of control is fundamental to how our brain interprets the world. Working with managers in one of the government departments who were closing down offices, we explored where they could give share decision-making in an environment where most decisions were out of the hands of employees. Managers suggested a range of ideas: asking employees to plan what to keep and what to throw away, allowing them to plan leaving parties, encouraging them to facilitate sessions on what they had learned.

4  Integrity: espoused and actual values match

The fourth enabler is all about values and honesty: what an organisation says it values must match up with what actually gets recognised and promoted. As mentioned earlier, neuroscience identifies the negative impact of uncertainty on our brain. If we are told one
thing, but see actions supporting a contrary value, this creates uncertainty which leads to a
threat state.

This enabler is also about fairness which is an intrinsic motivator. Again this stems back to
survival: for our prehistoric ancestors, in order to survive they needed to have their fair share
of food, and of warmth from the fire. We see this need today: what child hasn’t at some point
said, ‘But that’s not fair!’ In the last decade we have seen people prepared to die for
fairness: the Arab Spring was an example of people’s desire for democracy and the right to
be treated fairly and transparently. Neuroscience reveals that fairness is important to all of
us and becomes all the more important when we are going through change: if there is
transition in the organisation then we want to know that we will have our fair chance at
keeping our jobs or at influencing some of the outcomes.

Neuroscience underpins the enablers of engagement and helps to explain why they create
an engaged mindset. An organisation where employees felt unsure of their direction and
how their contribution made a difference, where managers were distant, uninterested and
disrespectful, and where employees felt they had no influence and could not trust what the
organisation said it valued, would be an organisation where employees would be in a very
strong threat state and their brains would be unable to think or perform well.

Neuroscience brings some additional insights to employee engagement: the brain needs to
be able to focus to work at its best. This raises lots of questions about the working
environment and whether open-plan offices with emails constantly popping up, lengthy
meetings, mobile devices always on are actually getting in the way of working at our best.
Our drive for efficiency in the workplace has a price and all too often that price is poorer
quality thinking and decision-making as well as negative effects on employee wellbeing and
health.

Neuroscience also provides us with insights into how we think, solve problems and make
decisions, and is challenging much of the conventional wisdom in this regard. Conventional
problem-solving approaches have been shown in many cases to reinforce the neural
networks in the brain that gave rise to the problem in the first place whereas the adoption of
solution-focused, ‘learning’ mindsets and approaches frequently result in ‘breakthrough’
thinking.

Neuroscience also recognises that although certainty, autonomy, connectedness etc are all
important to all of us, we each have different preferences and leaders and managers need to
be aware of differing personal intrinsic motivators.

One of the other benefits that neuroscience brings to the movement is the language of
science. I have worked with many financial services sector organisations and whereas the
language of communication or employee engagement is seen as ‘soft’, the language of
neuroscience is much more appealing. As one leader said, ‘I like this. This is science, not
the usual psychofluff Communications and HR people bring.’

Can neuroscience teach us about how to spread the work on employee engagement? I
believe it can. We are receptive to new ideas when we are in a toward/reward state so we
need to make sure that the people we are speaking to do not feeling criticised, threatened or
Wrong. Key to all this is that people have to reach their own insight: insight in itself is rewarding, more memorable and lasts longer. We need to help leaders reach their own insights about employee engagement, by giving them some space to think about moments when they have felt really excited by work or times when they have seen their teams fired up. Neuroscience also shows us that small actions, conscious or subconscious, can make a big impact on our sense of engagement. Creating a more engaging workplace does not have to be difficult but it does need awareness of what helps the brain and what hinders. Neuroscience provides the evidence to support the instinctive beliefs of good leaders and managers. Sometimes leaders and managers just need more encouragement in their good practices, for example, that taking time to talk to a team member is not just a ‘nice’ thing to do, it is actually helping to get the brain into a positive state where it can think, innovate and work better.

Creating a brain-friendly workplace – questions to ask yourself and leaders

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<th>We know that:</th>
<th>So:</th>
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<tr>
<td>The brain craves certainty</td>
<td>• What more can you tell people?</td>
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<td></td>
<td>• Do you have regular communication times and processes in place to help the brain predict?</td>
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<td>• Do you explain the rationale behind important decisions that affect people, wherever possible?</td>
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<td>• Most performance management, reward and talent management processes create unwanted and unintended states of uncertainty. How can we change them to create a ‘toward’ state?</td>
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<td>A sense of some control has a major impact on reducing stress</td>
<td>• What are you already doing to involve people? Can you do more?</td>
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<td>• Where else can you pass down responsibility?</td>
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<td>• What happens when you are under pressure – is there a tendency to micro-manage? How can you better manage your emotions and continue to delegate?</td>
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<td>Our brains are wired to be social and social rejection has an impact on our IQ</td>
<td>• Would all your team members say they feel part of your ‘in-group’?</td>
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<td>• When did you last speak to each team member?</td>
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<td>• What can you do to remove any barriers to people feeling part of your in-group? What steps can you take to connect with each one?</td>
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<td>• Are you trusted and do team members trust each other?</td>
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<td>• Do you know what matters to each member of your team, what motivates (and what frustrates) them?</td>
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<td>Having a sense of purpose and doing good</td>
<td>• When did you last communicate the</td>
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for others is hugely motivating to our brains  | direction and purpose of the organisation?
  - Have you connected employees to the beneficiaries of their work in the last few months?
  - Does everyone recognise the value of the contribution they make and feel appreciated?
  - Do you reward the activities and behaviours that really matter?

Fairness is fundamentally important  | • Would people say that they are fairly treated in comparison with others?
  • Fairness is not about treating everyone the same way – do people understand and accept the rationale for why some groups might be treated differently from others (eg home working, flexitime etc)?
  • Are people held accountable for their actions and behaviours, irrespective of position in the organisation?
  • What assumptions do you make about others? How justified are they and how might things differ if you adopted a different frame of reference?

Status matters – we all compare ourselves with others whether we recognise it or not  | • Do people feel listened to and are their views and opinions genuinely valued?
  • Do individuals receive full credit for their ideas and contributions, irrespective of who they are?
  • Could you do anything more to reduce status barriers in your organisation?

Competitive advantage often depends on speed of action and quality of thought  | • Are decisions delegated to the lowest appropriate level and are employees trusted to use their judgement?
  • Do your organisational practices (multi-tasking, back-to-back meetings, infrequent breaks, mobile expected to be always on etc) prevent good quality thinking and decision-making?
  • Is your default position about solving problems as opposed to finding solutions?

Contact Hilary Scarlett [www.scarlettassoc.com](http://www.scarlettassoc.com)
Hilary will be speaking about neuroscience and employee engagement
- on the Engage for Success Radio Show on 17 March
- at IoIC Live in Brighton on 2 May
- and at the IABC World Conference in Toronto 8-11 June 2014