Managing Change: Insights from Neuropsychology

In this paper we translate insights from neuroscience and psychology into practical, actionable recommendations to help leaders achieve breakthroughs in the way that change is managed within their organisations.

By
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Introduction

Every article about change starts with the cliché that organisational change is notoriously difficult. Across different types of change, from mergers and acquisitions, to restructuring and culture change, on average only one in three is successful.¹ And poorly managed change is costly.

Employee productivity typically falls between 25-60% during large scale change, explaining why organisational ability to manage change is linked to financial performance.²

Employee resistance is the reason often cited for failed change, leading many managers to simply accept that change is hard and slow. But does it have to be? Not necessarily...

Armed with an understanding of the psychology of change, of the brain’s natural response to change, leaders and managers can learn how to avoid or minimise negative reactions, and more effectively engage employees with change.

By working with the brain to turn change resistance into change resilience, they create an environment in which change is achieved quickly and smoothly. Indeed, it’s argued that the ability to intentionally address the brain in order to optimise performance will be a distinguishing leadership capability in years to come.³

In this paper we translate insights from neuroscience and psychology into practical, actionable recommendations aimed at helping leaders achieve breakthroughs in the way that change is managed within their organisations.

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Employee productivity typically falls between 25-60% during large scale change.
How does the brain respond to change?

Evolution has wired our brains to be cautious about change. As soon as we encounter anything new or unexpected, the brain automatically assesses whether it presents a threat to our survival and wellbeing or a potential reward. This happens at an unconscious level, and in a split second. Therefore resistance to change isn’t necessarily a conscious act; it’s often a deeply rooted, evolutionary survival instinct.

When we feel threatened (physically or psychologically), the brain launches the well-known fight or flight response. A series of physiological changes are triggered: heart rate increases, breathing quickens, digestion slows, and tunnel vision and hearing loss can even occur if the threat is considered severe enough. The threat response is draining and often all-consuming. It diverts mental resources to the ‘emotion centre’ of the brain, the amygdala. Known as ‘amygdala hijack’, the brain prioritises the processing of emotions at the expense of more rational functions such as problem solving, creative thinking, and the ability to process new information and ideas – the very functions needed for people to engage with change. Ultimately, it can become impossible to focus on anything other than the short-term goal of self-preservation.

So how likely is it that organisational change initiates a threat response? Unfortunately, highly likely because organisational change almost always involves dabbling in areas that are known as common threat (or reward) response triggers. However, if managers know what these triggers are, they can try to manage change in ways that minimise threat and maximise reward. And the good news is that just as you don’t need to be an engineer to operate a car, you don’t need to be a brain scientist to manage change in a brain friendly way.

Psychological Triggers

Drawing on research in different fields including neuroscience, biology, and evolutionary psychology, two main theories can be used to help us understand the underlying triggers believed to drive behaviour at a deep-rooted level. First, David Rock’s (2009) SCARF model provides a useful summary of existing research, capturing the common factors that can activate threat or reward response in social situations: Status, Certainty, Autonomy, Relatedness, and Fairness.

Additional insights can be drawn from Harvard Professors Paul Lawrence and Nitin Nohria’s (2002) four basic drives theory. As shown in Table 1, three of the four drives overlap with elements of SCARF, plus the additional drive to comprehend.

Table 1: The SCARF Model and Basic Drives Theory

<table>
<thead>
<tr>
<th>SCARF Model (Rock, 2009)</th>
<th>Four Basic Drives Theory (Lawrence &amp; Nohria, 2002)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>The need to acquire (things and status)</td>
</tr>
<tr>
<td>Certainty</td>
<td></td>
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<tr>
<td>Autonomy</td>
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<tr>
<td>Relatedness</td>
<td>The need to bond with others</td>
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<tr>
<td>Fairness</td>
<td>The need to defend</td>
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<tr>
<td></td>
<td>The need to comprehend (to satisfy our curiosity and master the world around us)</td>
</tr>
</tbody>
</table>

Figure 1 - SCARF-U Model (Based on Rock, 2009; and Lawrence & Nohria, 2002)
Given the degree of similarity between the first three of Lawrence and Nohria’s drives and elements of SCARF, by adding the ‘comprehend’ element to Rock’s SCARF model, the essence of both theories is captured. Translating the ‘comprehend’ drive as the need to understand, a combined ‘SCARF-U’ acronym is created (see Figure 1), which will use to discuss the insights from both bodies of work and their implications for managing change.

As the key drivers of human behaviour, underpinned by our evolutionary heritage, we should give careful consideration to how change initiatives might affect employees in relation to each of these areas. Since most change initiatives influence several if not all of these areas, managers may inadvertently trigger threat responses, rendering employees unable to adapt and respond to proposed changes. However, subtle adjustments to the way that changes are conceived, communicated and implemented can flip the neuropsychological response from a negative to a positive, turning change resistance into change resilience.

### Status

“We are biologically programmed to care about status because it favours our survival.” (Rock, 2009).

The notion that our status is compromised triggers a threat response in the brain. Because of the importance of status, we are constantly (and often unconsciously) assessing our standing in relation to others around us. As a result, status is a strong driver of behaviour, whether we like to admit it or not. This is particularly relevant in mergers, since the pre-merger organisations are rarely equal in terms of status.

Employees from the lower-status pre-merger organisation feel more threatened, report higher stress levels, poorer job adjustment, lower identification with the new merged organisation, and are more likely to perceive that the merger was implemented unfairly.5 The source of the problem is that when we feel that our status or identity is threatened, due to amygdala hijack and other goings on in the brain described earlier, we’re unable to process the changes needed to develop a new social identity.

What can we do about this? With organisational change, it’s important to remember that we judge our status in relation to the people around us.6 This means that during times of change and upheaval employees will be keenly assessing any impact on their status in comparison to others. Luckily for employers, an employee’s perceived status is influenced by more than just material assets like salary and bonuses; status is influenced by factors including level of influence, competence, social connectedness, and even generosity.7

During change, status threat can be avoided and indeed status boosted by offering employees opportunities to develop a new skill, demonstrate their skills, or take on additional responsibilities. In fact, research shows that the brain responds to praise in the same way that it does to financial rewards.7

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**How can we reduce status threat during times of change?**

1. **Strengths-Based Coaching** - during times of high threat, remind individuals of their strengths and core personal values. Try to broaden their focus beyond a current area of perceived threat. If a person’s role is changing, help them to identify ways in which the new role reflects their values and allows them to use their strengths.

2. **Affirming Performance Conversations** - at times of threat, remind people of their value. This helps them navigate difficulties and proceed positively, enhancing their confidence in their ability to overcome any difficulties. Even small affirmations have significant effects, because during times of threat people are naturally looking to find self-affirmative meanings.8 For example, in negotiations, when affirmed people become more open to compromises, they are less likely to become bound to ‘sides’, and leave negotiations with stronger trust of the advocate on the other side of the issue.

3. **Company Values** - give serious consideration to how your organisation creates its own status symbols through what and how it rewards in terms of good performance. For example, only rewarding superior performance with a pay rise or bonus will encourage others to hone in on material assets in their assessments of status. And other rewards can be just as motivating as money, if not more so.
How can we enhance certainty during times of change?

- **Clear and Courageous Change Communication** - since both quality and quantity of information enhances levels of employee trust, communicate early, don’t distort information to appear less negative, and use the most immediate channel available to deliver bad news. If you don’t know, say so - be certain about the unknowns but give an indication of when you hope to know by.

- **Visionary Leadership** - paint as vivid as possible a vision of the anticipated future, and if possible provide realistic previews of the ‘new normal’ to reduce uncertainty and overcome our inherent preference for things that are familiar.

- **Transparent Goal Setting and Planning** - create detailed plans, breaking down large changes into smaller, manageable steps with specific goals, share plans, goals and updates between teams, and ensure visible guidance from change sponsors.

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**Certainty**

The brain likes certainty because we’re continuously (but largely unconsciously) searching the environment for information that will help us predict what will happen next as a matter of survival. As explained by David Rock, “not knowing what will happen next can be profoundly debilitating because it requires extra neural energy. This diminishes memory, undermines performance, and disengages people from the present.” A familiar route, for example, can be navigated easily because the brain can shift to autopilot, using well-trodden neural pathways to direct the way. In contrast, a divert from our familiar route demands more attention, concentration and conscious thought.

The problem with certainty during times of change is that change leaders don’t always know exactly what will unfold, or are reluctant to share this information because they fear their audience won’t like it. People generally dislike sharing bad news. As a result, sometimes leaders delay communicating or ‘spin’ the message to soften the blow but in doing so disguise the truth of the situation. Despite remaining commonplace in organisations, research shows that recipients dislike this approach, preferring open and honest communication. Even forewarning employees of the complexity of an impending change has been found to improve employees’ responses to change. In a multi-faceted merger, for instance, the key difference in how employees respond to the change is how implementers introduce and discuss it in the initial stages. A realistic announcement of a large, even risky change has a huge effect on what employees expect, and how they will respond to any surprises or disappointment further down the line.

Although leaders are acutely aware of the potential negative impact of bad news, they might not realise that the absence of any news at all is equally detrimental (if not more so) because of the threat response triggered by uncertainty. Clear, honest delivery of news at least provides clarity and enables people to begin making sense of that information, rather than expending time and energy attempting to generate their own predictions of what may or may not happen (which the brain is naturally inclined to do, due to the drive for certainty).

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Autonomy

Autonomy gives people greater control, an important quality of psychologically rewarding work. Control reduces the potentially negative impact work demands on physical and psychological wellbeing, and employees with little control at work tend to be at increased risk of heart disease, absence due to sickness, and mental illness. Therefore, it’s unsurprising that our brains are wired to seek autonomy and automatically launch into action when autonomy is threatened.

Change can threaten employees’ autonomy in a number of ways. First, change that is imposed rather than co-created threatens a person’s freedom to choose the path their life follows. Imposed changes that threaten a person’s autonomy can have “boomerang effects” - people experience ‘reactance’, a motivational state aimed at restoring the threatened freedom, and purposely behave in the ‘forbidden’ or ‘old’ way as a protest demonstration of their freedom.

Unsurprisingly therefore, employees will be more receptive and open to influence if the change doesn’t threaten important freedoms. Employees’ involvement in important change initiatives has long been acknowledged as a key success factor in change planning and implementation, and research reinforces the value of employee involvement, evidenced by the increased likelihood of changes being adopted and sustained. Second, change can also easily trigger a threat response if an employee’s role in the ‘new reality’ is perceived to afford them less scope or freedom. A multitude of factors can lead to this, including a new micromanaging boss, a reduced remit (actual or perceived), or new process to be complied with.

How can we enhance autonomy during times of change?

- **Co-create Change** - involve employees in shaping change from the start, but be clear on what can and can’t be influenced, and why (otherwise you risk triggering threats to Fairness and Understanding).
- **Support Leadership Transitions** - to avoid micromanagement, when promoted into new roles help leaders to acknowledge that success in their new role may mean letting go of some things, having greater confidence and trust in others to deliver on their behalf, and delivering results through others. New role transitions can be challenging, since often the old ways of working have become deeply ingrained habits.
- **Share Values** - if managers are aware of what their team members hold dear; which freedoms they particularly value; steps can be taken to shape change differently, or at least help the individual understand and accept the reasons for a necessary change.

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7 For further information on leadership transitions, see Lane4’s Leadership Transitions white paper.
Humans are social animals, because being socially connected to others is necessary for survival, particularly when we are young. However, our drive to feel connected to others doesn’t disappear as we get older. In fact, emerging research suggests that our need to socialise is as strong as our need for food or water, and that the brain responds to social separation in the same way that it does to physical pain. Lack of social interaction is literally bad for our health; low participation in social networks is linked to increased risk of a range of diseases and increased mortality rates. Social connections and memberships of social groups also play a key role in our identity.

All of this has important consequences for how employees are likely to respond if organisational changes involve disruptions to their social networks or potential for interaction. It means that new teams can’t be thrown together and immediately expected to perform effectively and harmoniously. It’s why you may see people bypassing new structural changes to revert back to their previous connections for information or advice. During organisational change, particularly mergers, employees need to let go of a defining and familiar social identity (i.e., their identification with the pre-merger organisation) and come to redefine themselves as members of the new merged organisation. This isn’t achieved overnight.

In addition, although we’re fundamentally social animals, we’re also wired to be cautious of outsiders. David Rock describes this as an evolutionary by-product of living in small communities for millions of years, where strangers were likely to be trouble and should be avoided. Therefore, meeting someone unknown tends to generate an automatic threat response. This presents a challenge for new leaders tasked with engaging employees with change, since employees might be cautious about their intentions and resist their call for change. Familiarity breeds trust; trust can’t simply be mandated. It requires time and repeated social interaction.

However, there are steps that can be taken to neutralise the threat response of an ‘outsider’. If new leaders identify and highlight the things they have in common with the employees they are communicating with, their perceived similarity will increase. When we perceive a newcomer as similar to ourselves, the threat response can be avoided since the person is considered less of an ‘outsider’ and more ‘one of us’. People have a natural tendency to like people that they perceive as similar to themselves, and as a result, interpret their actions more favourably, and minimise perceived differences of opinion. This might partly explain why change tends to be more effective when delivered by middle managers rather than senior managers, since middle managers are likely to have closer ties and have identified more in common with employees.

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### How can we enhance relatedness during times of change?

- **Accelerate Development of New Team Dynamics** - facilitated team development sessions can promote shared learning, harmonisation of goals, and speed the development of essential shared mental models - the common understanding of how the team must work together to perform at their best.

- **Encourage Informal Leadership Communication** - relatedness is developed through repeated face to face interaction, and so leaders need to find time to engage with employees on an informal level.

- **Create Change Agents** - delegate the design and implementation of change to employees at a range of levels and in diverse areas across the organisation, since we are more responsive to people that we see as similar to ourselves, and with whom we have closer ties.

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Fairness

We have a deep-rooted dislike of unfair treatment. The perception that something is unjust generates a strong emotional response in the brain, triggering a fight or flight response and creating feelings of hostility. Our “inequity aversion” is so strong that we’re willing to sacrifice personal gain to prevent another person from receiving an inequitably better outcome. Equally, the brain finds fairness rewarding. For instance we feel happier receiving $5 from a $10 split than we do when receiving $5 from a split of $30. The actual material amount (ranging from $1 to $30 in the study) didn’t have a significant impact on happiness. In other words, we place more value on fairness than on the material reward itself. In fact, the experience of fairness produces reward responses in the brain similar to those that occur from eating chocolate.

The “inequity aversion” is equally relevant to organisational change. When employees perceive that organisational change was implemented and handled fairly, they simply react more positively. The important thing to remember in relation to organisational change and fairness is that it’s not so much what individuals receive as a result of the change, but more about how these decisions were made and are implemented in practice. It’s not enough to ensure that written procedures are fair, you’ve got to ensure that this is upheld in practice.

How can we ensure fairness in times of change?

As highlighted by David Rock, fairness is ‘served by transparency’. In practice, this means ensuring that organisational resources are allocated fairly, that employees are aware of, were involved in, and agree with how this was achieved, and that what was agreed upon is what actually happens in reality. Specifically:

- **Ensure Distributive Justice** - fair allocation of organisational resources in outcomes such as promotions, bonuses or other performance related rewards allocations, and the outcomes of downsizing and restructures.

- **Ensure Procedural Justice** - fairness in the procedures used to arrive at such decisions, by consulting with people who will be affected by the outcomes to ensure that differing interests are represented during the formulation of organisational procedures. Also make certain that information used to inform procedural decisions is accurate and reliable.

- **Ensure Interactional Justice** - fairness in the way decisions are applied in practice, through consistent application and treatment of different individuals and groups, and taking steps to remove or at least minimise bias in implementation. Evaluation and feedback are essential components in this.

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How can we promote understanding during times of change?

- **Effective transition management** - Whilst some people will fall into Quadrant A (Figure 2) from the start, the majority will need to be encouraged, assisted and enabled to move there from other quadrants. This is achieved by helping as many people as possible to assume a positive attitude towards the change, and actively engage in making it happen.
Conclusion

Our evolutionary heritage makes us cautious of change, since something new and unknown could house a potential threat to our survival. Our brains are constantly assessing new information, people and situations to determine whether they present a threat or a potential reward.

When judged as a threat, the well-known fight or flight response is activated. ‘Amygdala hijack’ takes place: the brain prioritises the processing of emotions at the expense of more rational functions such as problem solving, creative thinking, and the ability to process new information and ideas, making it difficult to focus on anything other than the short-term goal of self-preservation. Since this happens at an unconscious level, in a split second, resistance to change isn’t necessarily a conscious act: it’s often a deeply rooted survival instinct.

What’s more, organisational change often involves stepping on the most common triggers of threat response, making it an inadvertent minefield. But the good news is that there’s a great deal of scope for leaders and managers to influence employees’ perceptions of change. By shaping change to avoid the perceived threats that can commonly accompany it, neural pathways in the brain are opened up to allow for rational thinking, problem solving and acceptance of new ideas. This turns change resistance into change resilience.

Leaders and managers should pay careful consideration to the impact of change on the key drivers of behaviour, areas that contain potential threat triggers: Status, Certainty, Autonomy, Relatedness, Fairness, and Understanding. They should also get to know which areas are most salient for each of their team members. We all differ in our sensitivity to each of the five domains, influenced by personality preferences, but also by the situation. For example, a person who is highly anxious in uncertain situations will likely need more clarity and concrete detail than a person who is more tolerant of uncertainty. People who are high in ‘openness to experience’ tend to respond more positively to new and changing job demands, while more conscientious individuals tend to perform better under more routine conditions with stable job demands.

Considering the key components of effective change management (reflected in the Lane4 Change Framework shown in Figure 3), insights about the brain’s response to change shared in this report can be consolidated into three broad categories of recommendations:

**Communicating the Drivers for Change** - Think twice before communicating the driver for change as to rescue the organisation from a “burning platform”. Attempts to motivate employees via an expressed or implied threat is likely to grab attention but won’t necessarily make people receptive or responsive to change. Instilling a climate of fear is also self-perpetuating – emphasising fear can focus people’s attention on threats. Instead paint a positive picture of the future, making the vision as detailed and realistic as possible to provide some certainty about what’s to come. If possible break change down into manageable phases with concrete goals, again to enhance certainty and control. When communicating about the change be open and honest. If you don’t know, say so, but say by when you hope to know. Even this provides some certainty.

**Enabling the People** - Minimise threat responses by helping people to identify ways of using and demonstrating their strengths in their new roles, teams or structure. Facilitate and allow time for new teams to get to know each other and to speed up development of effective ways of working together. Equip individuals with the skills to recognise and manage their threat responses, to release themselves from ‘amygdala hijack’ and allow more rational processing to return.

**Shaping the Process** - Provide numerous opportunities for employees to influence and make sense of proposed changes, helping to shift the dominant perception to one of an opportunity rather than a threat. Allow time for people to adjust to new ways of working, remembering that having overcome or avoided any perceived threat responses, organisational change also tends to require individuals to modify their habits. And as many of us know, habits tend to be hard to alter due to their deeply ingrained nature.

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