The Neuroscience of Talent Management

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Progress is constant, and every now and then, it leapfrogs. When it does, everything changes. On July 3, 1977, in a small laboratory in Brooklyn, New York, Dr. Raymond Damadian conducted the first magnetic resonance imaging (MRI) scan using a machine he and his team had invented. He could see the living brain at work, without radiation or toxic chemicals. Modern neuroscience was born.

Today, neuroscience is providing powerful insights into cognitive and behavioral processes (how the mind and body interrelate) and is changing the way we think about thinking. This is now being extended to draw implications for how we tap into and nurture workplace talent. There's a new game in town, and even though we're only just learning the rules, leaders who adopt the new science will quickly benefit from these new insights into what really drives employee motivation, satisfaction, and performance.

WHAT IS NEUROSCIENCE?

The study of brain functioning encompasses everything from the brain's basic unit, the single neuron, to the complex neural networks or maps that represent every concept, thought, and action we experience. The explosion of knowledge in this field can be largely attributed to very recent scientific and technological advances, particularly functional magnetic resonance imaging (fMRI), which allows researchers to literally watch the brain in action. Scientists can now see what is physically happening in the brain when an individual tastes a strawberry, adds a formula to a spreadsheet, visualizes himself or herself on the next holiday, or steps up to a podium to give a presentation. With fMRI, it is now possible to see which brain regions are activated, how the connections are made, and how new memories are formed.

By 1982, there were still only a handful of MRI scanners and, at that time, all of them were located in the United States. Today, there are thousands of machines around the world, and their uses have gone far beyond clinical applications.

HOW WILL NEUROSCIENCE AFFECT TALENT MANAGEMENT?

How we organize ourselves, generate creative thoughts, process complex concepts, regulate our stress reactions, interact with others, learn, and develop are all the subject of neuroscience. Which of these activities would you like to tackle without your brain?

Neuroscience is new to talent management not because it was not previously relevant. Rather, it is only now that this science is being interpreted for organizational contexts rather than purely clinical ones. Because the brain is at the center of everything we do, it offers a new way to understand how people approach work and respond to everyday

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workplace situations. The team meeting where no one contributes, the buzz of winning a big sale, the colleague you always avoid, and that customer you can't seem to please are all familiar experiences that can be explained by brain science and, therefore, managed more effectively.

For more than the last half-century, organizational psychology and practices have been dominated by behaviorism: only what is observed in actual behavior has been validated. Behavioral approaches focus on *what* people are doing and *how* they do it. The problem is behaviorism doesn't always work. Neuroscience brings back the balance of cognition—understanding *why* people are doing what they are doing and whether it can be made more effective.

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So why would we want to know more about the brain?

For individuals, it helps answer questions like:

- Why can't I think clearly when I am in a job interview but can offer the perfect answers immediately afterward?
- Why do I crave feedback but loathe the idea of a performance review?
- Why am I exhausted after a full day of training and can't remember the bulk of the material?
- Why do I feel anxious when I am called in to discuss my future, even though I know I am a high performer?

For talent managers and leaders, it helps address:

- Why change initiatives are met with such skepticism when they are designed to improve the organization;
- Why it is so challenging to motivate and engage employees; and
- What high potentials are really looking for.

We all can learn a lot from the brain about why we are who we are. Talent managers and leaders in particular can learn about how to design and implement initiatives and programs for maximum effect, recall, and learning, as well as about tapping intrinsic motivation and releasing employee potential.

OUR CONSCIOUS MIND

The prefrontal cortex of the human brain represents the highest evolved cognitive functionality of all mammals. Frequently referred to as our *executive function*, the prefrontal cortex is literally the brain behind all complex reasoning and analytical problem solving and also houses our working memory. Thanks to this part of our brain, we can comprehend abstract concepts and elements not present in our sensory environment, as well as think in three dimensions: past, present, and future.

In addition to high-order reasoning, the prefrontal cortex also orchestrates and balances the functioning of most other parts of the brain. It is the only part of the brain that can inhibit other parts, such as our instincts and emotions. Through this, we are able to overlay the emotional with the rational, as well as balance our response to be appropriate to the situation.

One significant drawback of the prefrontal cortex is its limited capacity—it is quickly

exhausted by intense use, and this is the reason we often come home after a tough day at work feeling "brain-dead."

OUR SUBCONSCIOUS MIND

Beneath the layers of the cortex are the subcortical regions, and a principal area here is a combination of structures known as the limbic system. One such structure is the basal ganglia, known for their role in automating our daily functions—writing, storing, and retrieving the code of neural networks that allow us to complete so many tasks, mental and physical, with minimal conscious effort. The basal ganglia are a vast storehouse of repeatable thoughts and behaviors, integrating all our past experience with the events that present themselves each day. They apply this experience to simplify and expedite our responses to what we hear, see, and sense in our world.

The limbic system is also home to another structure that is the seat of our emotions and emotional responses: the amygdala. Here reside the neural networks that associate *how we feel* about what we do, what we think, and who that involves. The amygdala is like a spice rack of emotions: lots of flavors to choose from—happy, sad, angry, frustrated, fearful, and so on. Adding a little spice brings color and meaning to our world of thoughts and interactions. Of course, too much spice can ruin a recipe.

Our conscious and subconscious minds are intricately interconnected—they do not operate in isolation from one another. For example, the prefrontal cortex provides the inhibitory function that helps put our raw emotions into perspective, and modulates our responses accordingly. There is a constant balance occurring between these prefrontal and limbic functions—a yin and yang—and sometimes that balance can be thrown out of order.

APPLYING NEUROSCIENCE TO TALENT MANAGEMENT

A core function of any leader is the attraction and development of talent. From the coach who seeks athletic excellence and the mental discipline necessary for success at elite levels to the business manager who seeks the analytical and strategic thinking skills combined with the interpersonal abilities necessary to collaborate across teams, we are all looking to find and build talent.

All of the skills mentioned above require mental and physical functioning created and stored in our brains. Our prefrontal cortex is critical to the conscious mental efforts necessary to execute new, complex, or challenging mental processing. Our limbic system provides the stored knowledge and behaviors associated with every conscious activity, putting it into the context of our prior experience and assisting with its interpretation. Our combined conscious and subconscious minds allow us to produce the thoughts and actions that make up our talent. Coaches and business managers have the task of identifying talent, aligning it with their requirements, and nurturing it to achieve its optimal levels.

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THREAT VERSUS REWARD

Throughout evolution we have mastered the skills essential for our survival, and this is still the number-one priority of our brains. Threats to our existence rarely manifest

themselves in the forms of predatory animals on the savannah any longer; however, our sensitivity to a survival threat is much more heightened than that. We can spot even subtle threats in the behavior of others and induce the same threat response we used to escape a saber-toothed tiger.

Our world is full of both potentially threatening and rewarding situations, events, activities, and people that we encounter every day. At a limbic level, our brain completes an instantaneous assessment of our circumstance and sends rudimentary signals to our prefrontal cortex: this is good or bad, a threat or reward opportunity. What follows are the thoughts and behaviors your brain has developed to deal with this situation.

For example, imagine a situation in which you enter a meeting and know none of the other attendees. As the discussion commences and each attendee contributes, your prefrontal cortex is focused on the content of the conversation, while your limbic system assesses each speaker. You may consider one speaker to be aggressive and dominant but engaging and you like him; you may consider another to be more reserved and critical, and that makes you feel uncomfortable. You quickly tag each speaker as a potential friend or foe, and how you interact with each is a function of this assessment.

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This conscious and subconscious interplay repeats itself all day, throughout every conversation and scenario you enter. New neural networks are formed, others are reinforced, and you are one day wiser.

Neuroscience is helping talent managers understand what drives talent throughout the employee life cycle. How do the daily experiences presented at work enhance or detract from the goal of effectively managing talent? Do the organizational culture, the policies and practices, and the leadership create a threat or reward state? We review this by looking at four key stages in the employee life cycle: acquisition, performance, development, and succession.

Talent Acquisition

The recruitment of talent immediately confronts both candidate and recruiter with the threat versus reward dynamic. Unknown to each other, the limbic system will be on high alert for first impressions and quick signals that assist with a "gut feel" assessment of like or dislike, trust or distrust. In many such scenarios, the recruiter will hold the balance of power, having the job to offer and making a decision on numerous interested candidates. However, in today's tight market for top talent, this may in fact swing to the candidate.

Recruitment policies are already introducing practices that support what neuroscience suggests about managing the threat state: use equitable, merit-based selection methods; recognize that assessment is a two-way process, with the candidate assessing the organization just as the recruiter assesses the candidate; and utilize modern technologies available to facilitate onboarding and engagement.

Insights into the brain suggest that the strong behavioral-assessment focus of the past 20 years needs to be modulated to allow for both cognition and instinct to play a role. Observable behaviors, while predictable, provide little intelligence into the real drivers behind behavior, and these are at least as, if not more, important.

Talent Performance

The brain loves goals to focus on, whether it's winning a game or completing a project. Goal setting and planning are excellent ways to motivate performance and set achievement criteria. We are also feedback addicts: our social brain wants to know where it stands and how it is perceived by others, see its achievements recognized, and learn and grow. So the performance-management process is something toward which our brains would naturally gravitate—if it weren't so consistently badly managed, producing an experience that deflates and undermines talented employees.

Part of the reason performance management so often creates a negative experience is our strong sensitivity to social threats: to our status in a team or community, to our relationships with others. This high sensitivity predisposes us to look first for the negative—the criticism or our areas of weakness—and to over-weight this compared with the positive. No wonder then that feedback is such a double-edged sword. We know we want it and need it to improve but we fear the criticism and associated rejection we feel.

In this context, a performance appraisal or feedback conversation requires highly tuned management and communication skills, which are often underdeveloped, particularly in inexperienced managers. The skill of holding constructive and empowering performance conversations is one that organizations still need to harness in their current and future leaders.

Talent Development

Neuroscience is clarifying how to create optimal learning conditions, in both children and adults. Adult learning models already point to the necessity for relevant, experiential content that is acquired through 70–20–10 methods (a simple model that attributes learning to the way in which it is acquired—70 percent of learning occurs informally and on the job, 20 percent by observation of others, and 10 percent through direct formal training and education).

Less emphasized, but equally important, is the need to work with the brain's capacity limits, rather than against them. With limited prefrontal cortex capacity each day, can we really expect programs laden with heavy content that stretch participants for 8 to 12 hours per day to result in real learning or knowledge uptake? Designers of learning and development initiatives should work with the needs of the brain to refresh and optimize cognitive resources rather than deplete them.

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The optimal arousal curve reminds us that too much or too little mental stimulation results in underperformance, whereas the right amount of stimulation allows us to be highly functioning, achieving our best. Overstimulation induces a stress state, and a stress state shuts down prefrontal activity in favor of the survival instinct this invokes in the limbic system. In this state, we are unable to learn new information. Managers should understand that performance is at its highest (therefore optimized) when there is a good balance of stimulation (i.e., the individual is neither under- nor overaroused by the challenges of a task). Managers also should be

aware that stress is an individually subjective factor affected by individual perceptions.

Real learning takes time and reinforcement. Neural pathways require repetition to strengthen and for the basal ganglia to "automate" the function. The need for time relates to both the immediate need to digest and consolidate new information and the longer-term need to revisit and reinforce the learning. The best learning models, therefore, involve not only learning events such as one- or two-day programs, but also those that are followed up with coaching, on-the-job application, or intermittent learning experiences.

Talent Succession

Like recruitment, the process of promotions and succession are points in the employee life cycle rife for the threat-and-reward dynamic to be in play. The opportunity for promotion and progression is usually a motivator, and being successful triggers a high reward state.

The management of the succession process can itself, though, create a threatening environment, particularly if closed-door approaches are used. In this environment, little or no information is provided to potential successors, and decisions can be perceived to be unfair, personally biased, or preferential.

The brain dislikes uncertainty as well as low levels of autonomy. In the above scenario, both would be prevalent, once again inducing a threat/stress state, with the corresponding negative behaviors resulting. Succession practices need to appear transparent, objective, and fair in order to reflect a culture of open opportunities.

THE FUTURE OF TALENT MANAGEMENT

Talented employees are in high demand and short supply. The more challenging our world becomes, the more this will be true. Leaders and talent managers in organizations manage both the risks and opportunities that come with resourcing their businesses with the people who can deliver their goals.

Insights from neuroscience that will assist are only beginning to emerge and will continue to shape our understanding of what makes top talent tick and how organizational practices need to change to both accommodate and leverage this new information. Rather than being concerned about what changes this may bring, leaders and talent managers should welcome and grasp this new information, for the insights and advantages it can create for the optimization of workplace performance and the unleashing of human potential.

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