



knowsquare .

ERNESTO COSTA

18 DE SEPTIEMBRE DE 2012

“YOUR BRAIN AT WORK”

RESEÑA DEL LIBRO DE DAVID ROCK

knowsquare .

Privado y Confidencial

Prohibida su Distribución sin Autorización Expresa del Autor
y Know Square S.L.

Imagine the power of consciously harnessing the workings of your mind to improve your thinking, control emotions and better interact with others at work. This is what this book is all about.

The book is structured like a story, with two characters facing work challenges in 4 Acts. Act 1 is about the fundamentals of thinking. Acts 2 and 3 build on the model on which the book is based, the SCARF model, the five primary rewards or threats that are important to the brain (Status, Certainty, Autonomy, Relatedness and Fairness). The author provides tools to manage them for controlling our emotions, collaborating with others or facilitating change. Act 4 is about facilitating change.

Increasing the elements of the SCARF model is a powerful tool to improve performance. Think about someone who makes you notice what is good about you (raising your status), who is clear with his expectations of you (increasing certainty), who lets you make decisions (increasing autonomy), who connects with you at a personal level (increasing relatedness) and who treats you fairly.

Act 1: Fundamentals of thinking

You were born with the capacity to create internal representations of the outside world in your brain: maps. Conscious thoughts take place in a part of the brain called the prefrontal cortex and involve 5 basic activities:

- Understanding: creating maps.
- Deciding: activating and choosing maps.
- Memorizing: holding map in attention long enough.
- Recalling: searching a map and bringing it to prefrontal cortex.
- Inhibiting: trying not to activate a map.

Conscious thoughts consume high levels of glucose and oxygen and therefore the brain has a limited capacity to carry them.

Routine activities (those repeated at least 3 times and automatic), on the other hand, are located in the basal ganglia and consume low levels of glucose and oxygen.

Tools

- Use visuals. They are highly information-efficient constructs.
- Get things out of your head: write them down or use physical objects to represent concepts (for example, a stapler represents project 1, a ruler project 2, etc.).
- Divide the day into blocks of time for deep thinking and others for routine activities.
- Do conscious thought activities first, like prioritizing.
- Don't think when you don't have to and delegate.

Manipulating info

The brain can only hold in mind and manipulate 1 representation of a visual object, 1 new idea, 3 to 4 ideas, 2 variables to make a decision.

Tools

- Simplify the problem to one sentence. Reduce complex ideas to few concepts.
- Group information and ideas into 3 to 4 chunks at maximum.
- Choose carefully what to think about.

Doing tasks

You can focus on only 1 conscious task at a time and switching between tasks uses energy. Multi-tasking is however possible with embedded routines.

Tools

- Choose carefully the order of processes and decisions.
- Decide how much time to spend in a task.
- Do only one task at a time.
- Develop routines (repeat 3 times, create patterns).

Avoiding distractions

Maintaining a good focus on a thought occurs not so much how you focus, but rather how you inhibit the wrong things from coming into focus. Half a second before a “voluntary” movement, the brain sends a signal called an action potential. 0.3 seconds before you are aware of it, the brain takes the decision. After this point, there are 0.2 seconds during which you are aware of being about to move, but have not moved yet. It is during this time that you can inhibit the action. Once the action has started, stopping it is very hard.

Tools

- Remove all external distractions
- Clear your mind before embarking on difficult tasks
- Practice inhibiting distractions before they take on momentum

Reaching peak performance

Peak mental performance requires just the right level of stress, that is, when you have intermediate levels of two important neurotransmitters, adrenaline and dopamine, which relate to alertness and interest. You can consciously manipulate the level of both.

Tools

- Practice being aware of your levels of alertness and interest throughout the day.
- Adrenaline: bring your level up by visualizing the activity to be done or imagining something going wrong.
- Dopamine: bring your level up by using novelty in any form (making small changes like changing place or speaking out loud, humor or expect something positive).
- Bring down your level of arousal by writing down the ideas to get them out of your head, doing physical activity or focusing on the sounds around you (thereby activating other regions of the brain).

Problem solving

Sometimes you reach an impasse, a connection you want to make but can't. In these cases, to be more creative requires switching off your linear processes and recombining the maps in your brain in a different way (having an insight, characterized by the lack of logical progression to the solution, but instead a sudden "knowing" regarding the answer).

Tools

- Stop thinking.
- Reduce your anxiety by doing something light and different, even for a few seconds.
- Simplify the problem. Don't focus too much on it.
- Reflect on your own thinking to allow new strategies to emerge.

Act 2: Staying cool under pressure

Controlling emotions

The brain is much more than a logic-processing machine. Its purpose is to keep you alive. For that, a part of the brain called the limbic system classifies the world around you into things that will either hurt you or help you stay alive and accordingly is constantly making toward decisions (curiosity, happiness, contentment) or away decisions (anxiety, sadness, fear), driving your behavior, often quite unconsciously. Emotions are automatic responses to dangers or rewards.

When overly aroused, the limbic system impairs your brain functioning: it reduces your ability to understand, decide, memorize, recall or inhibit, makes it harder to think about your thinking, make you more defensive and mistakenly class certain situations as threats. This is why controlling emotions is key.

Tools

- Observe your emotional state. When you sense a strong emotion coming, refocus quickly your attention on another stimulus. Practice **labeling** (describe the emotion in one or two words) and **reappraisal** (change the interpretation of the situation).
- Do not try to suppress the emotion.

Managing uncertainty and lack of autonomy

Making predictions is a fundamental brain function and the foundation of intelligence. This is why a sense of uncertainty about the future and feeling out of control both generate strong limbic system responses.

Tools

- Watch for uncertainty and feelings of reduced autonomy that create a sense of threat.
- Find ways to create choice, even the perception of choice however small in any situation. The one thing you can always do is control your interpretation of the meaning of the situation, which is called reappraisal.
- Reappraise early and do it by reinterpreting an event, or reordering your values, or normalizing an event (explaining an experience by describing the emotions and stages that occur during changes, such as anger or denial, to help people reduce the threat response), or repositioning your perspective (taking someone else's perspective).

Managing expectations

Expectations are the experience of the brain paying attention to a possible reward or threat. Expectations alter the data your brain perceives, fitting incoming data into expectations and ignoring data that don't fit. Expectations activate the dopamine circuitry, central for thinking and learning. Met expectations generate a slight increase in dopamine, exceeded expectations a strong increase but unmet expectations generate a strong threat response.

Tools

- Practice noticing what your expectations are in any given situation.
- Practice setting expectations a little bit lower and find ways to keep coming out ahead of your expectations over and over again, even in small ways.
- When a positive expectation is not being met, reappraise.

Act 3: Collaborating with others

Relatedness

The brain automatically classifies people, determining unconsciously whether each person is either friend or foe. People you don't know tend to be classified as foe until proven otherwise. Being connected to others in a positive way, a sense of relatedness is a basic need for human beings. This is why you need to work hard at creating connections to create good collaboration.

Tools

- Anytime you meet someone new, make an effort to connect on a human level as early as possible to reduce the threat response.
- Become friends with people you work with by sharing personal experiences.
- Actively encourage people around you to connect on a human level to create better collaboration.

Fairness

Fairness is a primary need for the brain. A sense of fairness in and of itself can create a strong reward response, and a sense of unfairness can generate a threat response that lasts for days and impairs your perception and your ability to think.

Tools

- When confronting unfairness, use labeling and reappraisal.
- Be open and transparent with people.
- Find ways to sense increasing fairness around you, by volunteering or donating regularly.
- Don't let unfairness go unpunished.

Status

Status is another primary reward or threat. Status is relative and a sense of reward from an increase in status can come anytime you feel "better than" another person (or your former self when you improve your golf handicap). Status explains why people stay away from any activity there are not confident in, or why people don't like to be wrong. Many arguments at work and in life have status issues at their core. A feeling of high status help you process more information with less effort.

Tools

- Watch out for people's status being threatened.
- Reduce status threat by sharing your own humanity or mistakes and giving people positive feedback.
- Find ways to play against yourself to experience feelings of improvement.

Act 4: facilitating change

Changing behavior

Traditional ways of trying to manage change and improve performance do not work:

- Performance reviews and feedback in general creates an intense threat response.
- The problem solving approach focuses on problems and is not effective for finding solutions.

- Providing suggestions may threaten the status of the person receiving them.

The most effective way of getting people back on track is bringing them to their own insight.

Tools

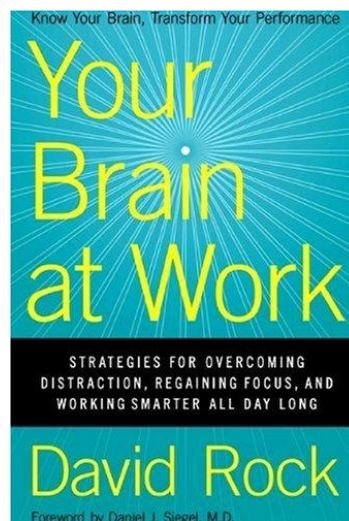
- Catch yourself when you go to give feedback, problem solve or provide solutions.
- Help people think about their own thinking without going into too much detail. Ask questions like: Tell me what your goal is here in one sentence. How many strategies have you tried? What other directions might be worth trying?
- Reward people for giving themselves feedback.

Changing culture

Change is hard. But the brain changes all the time. What changes the brain is attention. When you pay close attention, many brain circuits become connected up in a larger circuit to complete a specific task. All you need to change culture is focus other people's attention in new ways long enough.

Tools

- Create a safe environment by improving the elements of the SCARF model.
- Focus their attention: tell stories, ask solution-focused questions, establish goals (or better, create a framework for them to establish their goals).
- Get them to pay regular attention, get them to collaborate (for example, create processes that require people to talk about a project regularly).



© Ernesto Costa
© Know Square S.L.