

Insights from Your Brain at Work by David Rock

How well do you know your brain?

Can you explain what your brain is doing when you open up your laptop to work, open a textbook to study, or conduct a meeting?

In the book “Your Brain at Work” author David Rock uses the latest neuroscience to explain what your brain is doing while you work.

Rock says your mind is like a theater. The stage in your mental theater represents your short-term working memory, and it's controlled by your prefrontal cortex (the brain region just behind your forehead).

During the workday you can use your stage to perform five functions: **understanding, recalling, memorizing, inhibiting, and deciding**. To remember these five functions, think of the acronym: **U.R. M.In.D.**

To perform these five functions, you need actors, audience members, and a stage director. Actors on stage represent objects, tasks, and pieces of information you're focused on at any one moment. This sentence is currently an actor on your stage.

Audience members are maps of information in your long-term memory. The audience is constantly trying to make sense of and associate with actors on stage. Understanding, recalling, memorizing and deciding are made possible by the audience making associations to the actors on stage.

The stage director is responsible for inhibiting unwanted actors from coming onto the stage and ruining a performance. These unwanted actors are external distractions, like nearby conversations, and internal distractions, like afternoon food cravings.

3 Things You Must Know About Your Theater

Your Stage is Tiny

Recent research shows that the short-term working memory of the human brain (your mental stage) can only fit four actors (four units of information). Focusing on more than four units of information at a time is impossible, unless you can find a way to simply and chunk the information (ex: create mental models or acronyms for multiple units of information).

Although you can fit up to four actors on your stage at one time, "a study by Brian McElree at New York University found that the number of chunks of information you can remember accurately with no memory degradation is, remarkably, only one."

Your Stage Has One Spotlight

Your stage is illuminated by a single spotlight, and that spotlight can only focus on one actor at a time. If two or more actors are trying to get your attention, the light needs to rapidly switch between those actors. Imagine watching a performance where two actors are talking at that same time, and a spotlight is rapidly switching between those actors... That would be a terrible performance to watch!

Author David Rock describes a study from the University of California at San Diego that "showed when people do two cognitive tasks at once, their cognitive capacity can drop from that of a Harvard MBA to that of an eight-year-old. It's a phenomenon called dual-task interference."

Your Director is Less Effective Later in the Day

Over the course of a workday, hundreds of unwanted actors are trying to get on stage and steal attention away from important actors on stage.

Each time your director has to step in and hold back an unwanted actor, he/she loses a bit of energy.

Eventually, your stage director becomes too weak to stop unwanted actors from walking on stage and ruining the performance.

3 Ways to Deal with the Limitations of Your Mental Stage

When deciding among multiple options, **limit the number of actors on stage by isolating two options at a time**.

If you're deciding between five or more colors for a design, arrange head-to-head battles starting with the first two colors. Isolate color one and color two on the list and ask yourself, "Which of these two colors improves the design?" Whichever color wins goes on to face the third color on the list.

Instead of rapidly switching your spotlight between two or more sources of information (text messages, email messages, work project, etc.), **process the information in a serial manner. Take a few moments to schedule tasks so you can give each task your undivided attention**.

If you want to complete three tasks in the next hour, set up a sequence of three 20-minute time blocks and assign each task to a separate time block.

When your stage director is having a hard time keeping unwanted actors off the stage, start **pushing cognitively demanding tasks on your to-do list to the next morning** (if possible).

If you need to plan a big project, understand a complex subject, or make a major decision, do it in the first half of the day when your stage director can do a better job of keeping actors off stage.