

The Multitasking Mirage

More Is Not Always Better

By Scott Blades

Are you doing more than one thing right now — maybe reading this article while also checking your email, texting a colleague, surfing the web on your phone, working on a report or playing a computer game? Do you feel like you're more productive when you're working on two or more assignments at the same time? Is simultaneously juggling multiple tasks a necessary evil in our fast-paced, modern workplaces where our responsibilities are numerous and our connection to technology is constant?

If you answered yes to any of these questions, you're probably a multitasker. You may even think of your ability to multitask as a key strength or a special talent. But before you congratulate yourself for your amazing ability to multitask and get things done, be warned. There is a growing body of research that shows that multitasking actually decreases productivity, impairs your cognitive ability, increases your stress and diminishes your creativity.

Multitasking Defined

Focusing on more than one assignment at a time, repeatedly switching back and forth between two or more activities, or performing a number of unrelated tasks in rapid succession can all be considered multitasking. The problem is that our minds are not wired for this type of overload.

The performance of the human brain breaks down when it attempts to engage in two tasks that require conscious thought at the same time. Granted, there are some things you can do simultaneously without a difference in performance. You can walk and chew gum at the same time. You can fold laundry and sing along to your favorite songs on the radio. You can do chores around the house while carrying on a conversation.

The reason we can pair these types of activities is because one or both don't require much thinking. Walking, eating and cleaning are examples of motor skills you have learned to put on autopilot. However, if you pair two activities that require conscious thought — like responding to emails

while attempting to pay attention during a meeting — your performance on both tasks will suffer.

In a 2001 issue of *Journal of Experimental Psychology*, researchers David E. Meyer, Jeffrey E. Evans and Joshua Rubinstein published an account of what happens in your brain when you try to engage in two cognitive tasks at once. Your cerebral cortex manages what are called “executive controls.” These controls organize the way your brain processes tasks. There are two stages. Stage one is called goal shifting. This is what happens when you shift your focus from one activity to another. The second stage is rule activation. When your brain shifts to the new activity, it has to deactivate the rules of the previous activity and then turn on the rules for the new task.

Therefore, the researchers found, when you engage in multitasking, you're not actually thinking about both tasks at the same time. Instead, you're engaging in “switch-tasking.” You're switching back and forth between two activities and forcing your brain to shift focus repeatedly and turn rules on and off in a rapid-fire fashion. Constantly having to focus and re-focus ultimately drains your time and energy, which impacts your overall performance.

Put Your Brain to the Test

Here's an interesting experiment to try. Grab a stopwatch and open Microsoft Word. Start the timer and then type your first and last name. Beneath your name, type a number for each letter in your name (1, 2, 3, 4, etc.) Stop the timer and record your time. In my case, this means I would type “Scott Blades” on the first line, and then type “1234567891011” beneath it. My time for this activity? Nine seconds.

Now, rather than type your name first and the numbers second, try to do both at the same time. On the first line, type the first letter of your name. Then type 1 on the second line. Next, type the second letter of your name on the first line and 2 beneath it, and so forth. When I tried doing both of these simple cognitive tasks simultaneously,

it took me 51 seconds! That's more than five times longer than when I did the tasks separately and back to back.

What the Research Tells Us

The literature on multitasking is loaded with case studies and startling statistics demonstrating how this type of workstyle makes you less effective. According to the research, decreased productivity, impaired cognitive ability, increased stress and diminished creativity are all side effects of multitasking.

Decreased Productivity

The 2001 study mentioned above found that productivity can decrease by as much as 40 percent when individuals repeatedly switch tasks. The study subjects lost significant amounts of time as they switched between multiple activities, and lost even more time as the tasks became increasingly complex.

Impaired Cognitive Ability

In his 2008 book *Brain Rules*, John Medina reports that multitaskers not only take 50 percent longer to accomplish a single task, but they also make up to 50 percent more errors. In a 2009 study, Stanford researcher Clifford Nass challenged 262 college students to complete experiments that involved switching among tasks, filtering irrelevant information and using working memory. Nass and his colleagues were convinced that the frequent multitaskers would outperform their non-multitasking peers in at least some of the categories.

Much to their surprise, they found the opposite. Chronic multitaskers were dreadful at all three activities. Nass and his team discovered that people who frequently multitask — and perceive this as a strength — were actually worse at multitasking than those who like to do one thing at a time. Their inferior performance was because they had more trouble organizing their thinking and filtering out irrelevant information. They were also slower at switching from one task to another.

According to a 2009 study from Western Washington University, people who are busy doing two things at once often don't even see noticeable things right in front of them. In this case, the researchers asked a clown to ride around on a unicycle in a campus square. Seventy-five percent of college students who walked across this square while talking on their cell phones did not even notice the clown. The researchers call this "inattention blindness."

In other words, the cell phone talkers were technically looking at their surroundings, but their brains weren't processing the information around them.

And a study from the University of London suggests that multitasking affects your brain much like smoking marijuana or going without sleep for a night. Participants who multitasked during cognitive tasks dropped as many as 15 IQ points and fell to the average range of an 8-year-old child.

Increased Stress

Multitasking has also been tied to higher stress levels. Gloria Mark and Stephen Vaida of the University of California measured the heart rates of employees with and without continuous access to work-related email. They found that employees who were constantly connected to email stayed in a perpetual "high alert" mode and experienced higher heart rates. Those without the constant stream of emails did less multitasking and were less stressed as a result.

Diminished Creativity

According to a 2010 study from the University of Chicago, multitasking requires a lot of "working memory," or temporary brain storage. If our brains are on overload, we diminish our capacity to daydream and generate imaginative ideas. This in turn degrades our performance as creative problem solvers.

Five Ways to Avoid Multitasking

As modern-day professionals, we can easily fall into the trap of a multitasking work style. We have numerous responsibilities. Our calendars are packed. The phone calls keep coming and emails flow into our inboxes in a steady stream. In this type of environment, where making progress on several fronts is a reality, steering clear of multitasking requires us to implement deliberate systems and habits to increase our productivity and effectiveness. Here are a few strategies for avoiding multitasking:

Set Clear Priorities

A guaranteed way to become overwhelmed and ineffective is to take on too much work and view all of your tasks as equal priorities. Work with your supervisor or a trusted colleague to help you determine what needs your focus now, what can wait and what you can release altogether. Do you have any activities that drain your time and energy and offer little return on your investment? What are some

obligations that you could set free without any long-term, negative consequences? By responsibly reducing the number of things you need to do in a day, you can decrease your need to multitask and, as a result, accomplish more. Stephen Covey refers to this type of prioritizing as learning to say “no” in order to protect the time you’ll need for your bigger burning “yes.”

Chunk Your Time

Rather than constantly switching back and forth between multiple activities every few seconds or every other minute, set aside chunks of time to focus on a specific task or a

According to the research, decreased productivity, impaired cognitive ability, increased stress and diminished creativity are all side effects of multitasking.

group of related tasks. Clifford Nass suggests following a 20-minute rule at minimum. An example of this would be to set aside 20 minutes to pay all of your bills at once rather than pay each one separately as you receive it. Or maybe you set aside an hour to work on that report you need to present at next week’s meeting.

Focusing on a task for 20 minutes at a time or longer will allow you to get into the zone of whatever you’re doing and make progress. Focused effort during chunks of time also eliminates the extra energy it takes to shuffle back and forth between too many things. Consider your responsibilities and identify the types of things you can “batch process.” Block off these chunks of time on your calendar and hold yourself accountable for getting focused and getting finished.

Enter a Lockdown State

When necessary, give yourself permission to focus on a single task for a more extended period of time, like a full morning, an afternoon or even most of a day. Be sure to have your bases covered before doing this. For example, you may need to discuss your strategy with your supervisor and colleagues to work out phone and email coverage.

Entering this type of temporary lockdown state will allow you to get laser-beam focused on a single task and make significant headway. If you can’t go the whole day without checking your email and phone messages, consider doing these activities in two to four batches throughout the day. As discussed in the previous section, chunking these types of tasks is a more effective way to work.

Minimize Distractions in Your Workspace

Does your email client issue sound alerts when you receive messages? You might consider muting your computer to avoid these distractions. Another strategy is to customize your sound alerts for leadership and key customers who might demand a more immediate response. Does your email client tempt you to click on every message by displaying a popup window on your screen? This feature can be disabled so you’re not distracted by a constant stream of emails (many of which you probably don’t need to read right away anyway).

Does your smartphone have a bunch of chirps, chimes and ringtones for every notification you receive from your apps? Research shows that the average person checks his or her phone 150 times a day. Unless you need to rely on your smartphone to do your job, you should consider minimizing or disabling the distracting notifications you receive or keeping your phone on mute.

Watch That Open-Door Policy

To maintain professional relationships, it’s important to be available to others. Having an open-door policy is a great way to establish that you’re approachable and collaborative. But be careful what that open door communicates. Are you really 100 percent available to everyone all of the time? A poorly managed open-door policy can lead to constant interruptions and pull you into a switch-tasking mode. Business research suggests that the average interruption takes anywhere from two to 15 minutes of recovery time, meaning this is about how long it takes you to reorient yourself to what you were working on before the interruption.


If you need to avoid any interruptions for a stretch, shoot an email to your team or put up a friendly “do not disturb”

sign on your office door or cubicle entryway. Scheduling regular check-ins with your supervisor, direct reports and key customers is also a great way to prevent interruptions. By having regular meetings on your calendar, your colleagues will be more likely to hold off on engaging you until your scheduled time together. They'll have less of a need to interrupt you throughout the week and instead bring a list of questions or agenda items to your meeting.

Multitasking Is a Myth

The next time you find yourself multitasking, remember what the research shows:

- You're slowing yourself down.
- You're hurting your brain in a way that is similar to smoking marijuana or going without sleep for a night.
- You're more likely to make errors.
- You're stressing yourself out.
- You're diminishing your chances of coming up with creative ideas.

Multitasking is a myth — a mirage of productivity in the modern-day workplace. There is a better way to work. By setting priorities, chunking your time, engaging in focused work sessions, avoiding distractions and minimizing interruptions, you can elevate your performance and put yourself on the path to greater productivity. 

Scott Blades is assistant director of training and organizational development at University of Florida. He can be reached at sblades1@ufl.edu.

References:

Adams, C. Can People Really Multitask? Retrieved from http://ergonomics.about.com/od/ergonomicbasics/f/can_people_multitask.htm

Bradberry, T. (2014). "Multitasking Damages Your Brain And Career, New Studies Suggest." *Forbes*. Retrieved from <http://www.forbes.com/sites/travisbradberry/2014/10/08/multitasking-damages-your-brain-and-career-new-studies-suggest/>

Cherry, K. Multitasking: The Cognitive Costs of Multitasking. Retrieved from <http://psychology.about.com/od/cognitivepsychology/a/costs-of-multitasking.htm>

Covey, S. (1989). *The Seven Habits of Highly Effective People*. Free Press.

Egan, T. & Lahl, S. (2014). "Distracted and Overwhelmed Employees Are Costing You Big. Try These 3 Fixes." *Entrepreneur*. Retrieved from <http://www.entrepreneur.com/article/235968>

Gorlick, A. (August 24, 2009). Media Multitaskers Pay Mental Price, Stanford Study Shows. Retrieved from <http://news.stanford.edu/news/2009/august24/multitask-research-study-082409.html>

Lapowsky, I. (April 17, 2013). "Don't Multitask: Your Brain Will Thank You." *Time*. Retrieved from <http://business.time.com/2013/04/17/dont-multitask-your-brain-will-thank-you/>

Medina, J. (2008). *Brain Rules: 12 Principles for Surviving and Thriving at Work, Home and School*. Pear Press.

MacMillan, A. (June 18, 2013). 12 Reasons to Stop Multitasking Now! Retrieved from <http://www.foxnews.com/health/2013/06/18/12-reasons-to-stop-multitasking-now/>

Scott, E. (September 26, 2016). Single-Tasking for Productivity and Stress Management. Retrieved from <http://stress.about.com/od/managetimeorganize/fl/Single-Tasking-For-Productivity-and-Stress-Management.htm>

Tains, Laurence Roy. "Focus, Dammit!" *Men's Health*. May 2003: 118.

Read more about how multitasking and workplace distractions can negatively impact your work, your focus and your productivity in the feature article "Defending Your Galaxy Against the Supervillains of Distraction" on pp. 18-22