Mining the Minds of Multitaskers

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We multitask all the time — organizing to-do lists while answering emails, at the same time we're checking in with colleagues, for example. The emerging consensus from scientific research tells us that this multitasking is really an illusion, and that productivity decreases every time we switch tasks because our memory for task-related information fades.

But in almost all of this research, task switching has been forced — despite the fact that most multitasking in everyday life is self-initiated.

This raises the question of what prompts choices to multitask in everyday life.

Do people multitask to maximize efficiency — switching tasks in order to get more done in the least amount of time? Or do people switch tasks whenever they see an opportunity to apply cognitive resources that are not currently in use?

Ioanna Katidioti and Niels A. Taatgen of the University of Groningen recently sought to answer this question by designing a study in which participants freely chose when to interrupt their work on a task.

Results showed that delays tempted participants to switch even when the switch required that they retain specific information in memory. Unsurprisingly, this switching led to memory decay and increased the time spent on each item.

By switching quickly to the secondary task, participants completed it with more efficiency, but the productivity they sacrificed in switching away from the primary task offset these gains.

Furthermore, task-switchers showed no evidence of learning — that is, their multitasking efficiency didn't improve over time.

These results suggest that, despite what we may think, we don’t necessarily make optimal choices when it comes to multitasking: People will switch tasks simply because they have the resources to do so, and they will seek greater efficiency in a secondary task even if it worsens their overall performance the long run.

How can these findings be used to reduce time-wasting task switching in the workplace?

In their report of the study in the journal *Human Factors*, Katidioti and Taatgen note that eliminating delays at high-workload moments should discourage switching between tasks. Moreover, making secondary tasks less noticeable or salient may prevent them from drawing workers’ focus away from primary tasks.

By staying engaged with tasks even during delays, workers can prevent themselves from switching tasks and losing their productive momentum. And future research might uncover ways to train people in proper switching behavior — turning multitasking from a misguided impulse into a conscious, productivity-boosting strategy.