



Interruptions:

How to Tame One of the Worst
Office Productivity Killers

BY SHAYNE C. KAVANAGH

In today's workplace,

technology has essentially reduced the cost of communication to zero. But while there are many benefits to more open communication, there is also a cost: We experience more interruptions during the workday. One inquiry into workplace interruptions found that:¹

- The average worker experiences seven interruptions per hour.
- They spend about five minutes dealing with the typical interruption.
- About 80 percent of these interruptions were described as adding little or no value.

This means that many people are spending up to three hours a day dealing with low-value or no-value interruptions. This seems to be true for GFOA members: a poll conducted by GFOA showed that more than a quarter of respondents rated interruptions as the most annoying source of lost time at work, making it the second greatest annoyance, after meetings.

Saying that people spend up to three hours a day on interruptions actually understates the problem. Because interruptions occur at unpredictable times, we are constantly forced to break concentration to deal with them. It can take up to 25 minutes to reach full concentration and get into the flow of a task,² which means that some people may be spending their entire workday in a chronically distracted state, never reaching full concentration. Studies in academia show the insidious implications of chronic distraction: Students who are regularly distracted have significantly lower GPAs and exam scores than more focused students.³

We can assume that chronic distraction will not produce better results in the office than it does in the classroom. This is a problem for public finance officers because a lot of public finance work—like preparing budgets, forecasts, and month- and year-end closings—requires concentration.

One might think that a solution to this problem could be to get better at multitasking, but the truth is that people are *not actually capable of true multitasking*—that is, working on more than one thing at the same time.

What we think of as multitasking is actually rapid switching of our attention between different tasks. As explained previously, it takes time to ramp up to full concentration, so rapid attention-shifting is little or no better than chronic distraction. In fact, research shows that multitasking could reduce productivity by up to 40 percent!⁴ In a particularly cruel twist, people who think they are

MULTITASKING IS NOT ALL BAD

Multitasking can work when the tasks involved do not require much cognitive effort, like folding laundry and watching television. Mundane office work could also be successfully multitasked.

good multitaskers and do it often are actually worse at it than people who spend more of their time in a focused state.⁵ People who focus have trained their brains to operate at peak efficiency. Multitaskers are training themselves to be constantly distracted, with its consequent effects on cognitive ability.

The solution, then, is to limit interruptions in order to provide more time for focused work. This will not be easy, but fortunately, research has provided us with insights on how to limit interruptions. But before we get into the strategies for limiting them, we need to recognize two distinct types of interruptions because the strategies dealing with each are distinct.

The first is interruption from people, such as when a coworker calls us or comes to our workspace for a spontaneous conversation. This is probably the most obvious source of interruption for many of us. The second is interruption by technology. This is when we are distracted by notifications from our computer or smartphone, or even when we



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spontaneously interrupt our own workflow to check messages or visit a favorite social media application. Now, let's see how to deal with these two types of interruptions.

INTERRUPTIONS BY PEOPLE

The healthcare field offers illuminating experience about interruptions. In a hospital, nurses are responsible for administering medications to patients. Nurses are regularly interrupted during this task by doctors or other nurses who want their attention. To illustrate, one study showed that almost all of the 56 medication events the researchers observed were interrupted, and there were almost two interruptions per event.⁶ These interruptions induce errors. The same study showed that a little more than one-third of the interrupted medication events had at least one procedural failure. This can be quite serious, as the patient could get the wrong dosage or even the wrong medication. Because these interruptions are literally a matter of life or death, the medical field has put a lot of thought into interventions to eliminate or mitigate interruptions, which are described below.⁷ The results have been impressive. One study

showed a single intervention reduced error rates by 20 percent to almost 50 percent.⁸ If these interventions work in a hectic hospital setting, it stands to reason that they could work in a public finance office as well.

Staff education. Many people simply may not be aware of the serious consequences interruptions and distractions have for productivity. For example, recall that effective multitasking is a myth, yet many people still try to do it, and some believe they are good at it. Consider sharing this article with your colleagues and having a conversation about what all of you can do together to reduce interruptions. Furthermore, if your colleagues are aware of the consequences of interruptions, they are more likely to see your attempts to avoid interruptions as a well-meaning attempt to be productive and not as anti-social!

Physical spaces that are no-interruption zones. Designate a certain part of the office as a no-interruption zone and allow staff to relocate there whenever they need to concentrate on a critical task. Ideally, the no-interruption zone should be a private office, as people in cubicles tend to get nearly one-third more interruptions.⁹

If your office does not have the space for a no-interruption zone, consider an off-site location. For example, perhaps a space at the local library can be used when intense focus is needed, or a work-from-home option could be provided. Another option could be to create temporary no-interruption zones within your existing space. Staff could block out times on shared calendars for important tasks, just as they would block out time for a meeting. During this time, their workspace becomes a no-interruption zone.

There are a few pointers for making no-interruptions zones work at their best. First, beware the boy-who-cried-wolf problem. If someone regularly shows a large portion of their calendar as a no-interruption zone, the zone may lose credibility and people will interrupt it. People should therefore only use the zone when it is most needed. Second, be specific about your reasons for using a no-interruption zone. For example, if your calendar message describes the task you are working on, then your colleagues will understand why you can't be interrupted and will be more likely to respect the zone. Finally, combine the no-interruption

zone with the visual indicators intervention, described below.

Do-not-disturb visual indicators.

Establish visual signals for staff who are not to be interrupted and get everyone's commitment to respect these signals. These signals could be virtual, like a do-not-disturb status on a phone system. Signals could also be physical. For example, Gwen Pilo, the finance director for the City of SeaTac, Washington, turned her own office into a no-interruption zone simply by closing the door and putting up a simple sign (combined with blocking time on her calendar). For people who work in a cubicle, wearing noise-cancelling headphones could also serve as a do-not-disturb signal.

Systematic solutions. Identify common sources of interruptions and then design solutions around these particular problems. For example, a larger finance office had a staff person whom we'll call Mary. Mary was regularly interrupted by questions from other departments because she gave the most helpful answers of all the finance staff. A systematic solution could be to play to Mary's natural strengths and change her role so that helping other departments becomes a primary job responsibility and not just a distraction. After all, mistakes that other departments make often have to be fixed by the finance department at a later date. Further, if departments first call other finance staff and get unsatisfactory responses before turning to Mary, then the finance department is enduring no-value interruptions in addition to what Mary experiences. In exchange, tasks that Mary was doing that were most at-risk for critical errors due to interruption could be shifted to other staff members who were not as skilled at dealing with questions from other departments.

Systematic solutions can also take place within an individual's own work. For example, many people tend to have the greatest energy at the start of the workday and then lose energy

and ability to focus near the end.

A systematic solution would be to reserve mornings for important work that requires focus and open up the afternoon for meetings, urgent tasks that aren't important but are distracting, and other activities that have the potential to break your concentration.

Another simple systematic solution would be to practice a strategy of sticking with whatever task you are on until you complete it or at least reach a satisfying milestone that provides a natural break point. Unfinished tasks can elicit the "Zeigarnik effect." If you've ever started a household project, stopped partway through, and then felt strongly compelled to complete it, you've experienced the Zeigarnik effect. Once we start something, we feel more compelled to finish it, compared to when we hadn't started it at all. Thus, an unfinished task can cause us to essentially interrupt ourselves as our mind continues to go back to the unfinished task.

Finally, flextime could be used to avoid interruptions. The hours between 9 a.m. and 5 p.m. will always be the most prone to interruption. Flextime could allow employees to move some of their work time outside of traditional business hours. Trish Davidson, finance director for Rockingham County, Virginia, observed that when she sometimes comes to the office at 6 a.m., the couple of hours she spends working before regular business hours are more productive than the entire rest of her day!

Checklists. Not all interruptions can be eliminated. Therefore, an anti-interruption strategy should also consider how to mitigate the negative impacts of an interruption when one does occur. A good checklist can help. A good checklist is not an exhaustive listing of everything that must be done to complete a task. Instead, a good checklist fits on one page and skips the obvious



Interruptions by People

Questions and Conversation Starters

- Are your colleagues aware of the potential for lost productivity from interruptions and chronic distractions? How can you get them on board with combating distractions?
- Can you designate a no-interruption zone that staff can use for tasks that demand focus?
- Can your office agree on signals staff can display to indicate they should not be disturbed?
- What are your important sources of interruption? How can you mitigate those?
- Do you have checklists and a good organizational system to help you pick critical tasks back up after being interrupted?

or unimportant steps. It focuses on the critical steps in a process that are most likely to be overlooked and that are not adequately checked by other mechanisms.¹⁰ These are the biggest points of potential failure. Thus, the checklist helps the user reorient themselves to the task if an interruption throws them off.

Preparation. Another way to mitigate the effects of interruption is to prepare the workspace so it is optimally organized, making it easier to pick the task back up after an interruption. “5S” is a popular tool from Lean process improvement¹¹ that guides workplace organization. As shown in Exhibit 1, each of the five Ss represents a different step in the organizing process. 5S has been widely used by governments that practice Lean. There are many Internet resources on how to use 5S, and you don’t have to be a full-fledged Lean organization to benefit from it. Also, 5S is useful beyond just mitigating the impact of interruptions. For example, the municipal finance department at the City of Chula Vista, California, did an officewide 5S project and was able to improve productivity so much that they were able to eliminate two vacant half-time administrative positions.

INTERRUPTIONS FROM TECHNOLOGY

Interruptions from technology are different than those from people. They are generated automatically by software or by people who aren’t usually expecting an immediate response (e.g., text messages, email). This is fundamentally different from a phone call and especially an in-person interruption, where the other person is expecting you to respond right away.

One might think this would mean that interruptions from technology would be easily tamed. Of course, this is not the case. In fact, email is one of the top sources of distraction in the workplace. The reason interruptions from technology are challenging is that excessively checking text messages, emails, etc. has developed into a habit for many of us. Much of what we do is driven by habit. For example, researchers found that a little more than half of the tasks performed at work were habitual.¹² Habits proceed without much conscious thought. We have habits because they relieve us of the need to spend energy thinking about routine tasks.

Sometimes we make habits of undesirable behaviors. Recognizing



Mitigating technology interruptions requires counteracting the habit-forming features of our devices and applications.

excessive or unproductive use of technology as a bad habit is important for two reasons. First, it reveals that we are unlikely to be successful at curtailing this problem simply through force of will. Attempting to override a habit simply by resolving to do things differently is very difficult. Conscious, intentional thought requires substantial effort, while habits require little effort. Good intentions are at a considerable disadvantage against habit—ask anyone who has tried to quit smoking.

Exhibit 1: The 5S System



Sort the necessary from the unnecessary



Set in order, so the most important work tools are easy to find and accessible



Shine, or keep the workspace clean and free of distracting clutter



Standardize the approach so it can be replicated



Sustain the process over time.

The second reason why recognizing “device-checking” as a habit is important is that it allows us to take advantage of research on how to change habits. In *Good Habits, Bad Habits: The Science of Making Positive Changes that Stick*, Wendy Wood of the University of Southern California identifies four levers for habit change:¹³

- **Friction.** Make it easier to do the right thing and make it harder to do the wrong thing. This may be the single most important lever for habit change.
- **Context.** Our environment provides cues that prompt us to engage in our habits. Change the environment to increase constructive cues and decrease unhelpful cues.
- **Rewards.** Provide an incentive to engage in desirable behavior. The reward needs to be received as soon as possible after engaging in the desired activity.
- **Repetition.** Keep doing the right thing until the behavior becomes automatic.

In many cases, the creators of our devices and applications have designed them to become habitual. The interfaces are easy to use, or “frictionless.” They cue us with audio tones or visual displays to open the application. We are rewarded by the novelty associated with seeing the latest post on social media, what is happening in the news, etc., so we repeatedly access the technology, and it becomes a habit.

Mitigating technology interruptions therefore requires counteracting the habit-forming features of our devices and applications. The easiest place to start is with context and cues. Wood points out that the most effective way to eliminate cues that would prompt you to put down the task at hand and pick up your smartphone (or other device) is to leave your phone behind. For example, if you are meeting with



a colleague, leave your phone in your office. You will be more focused in the meeting, and your colleague will likely appreciate your undivided attention. Of course, it will not always be possible to escape your devices, but most of them have options that allow you to customize notifications. Look for any cues your devices are giving you to engage in low- or no-value activity and turn them off. Examples include:

- **Audio or visual notifications of new email messages.** Today, very few people use email for truly urgent communications, so it isn't necessary to drop what you're doing to check messages.
- **News notifications on your smartphone.** Many applications push news alerts to our phones, and these messages are seldom so important that they can't wait.
- **Set up temporary blocks for low-priority contacts.** Smartphones can have customizable do-not-disturb settings, where the phone only notifies you of calls and messages from certain people. For example, you could create a setting that only notifies you of calls or messages from key elected officials.¹⁴

Friction may be the most important lever. The objective is to make it just hard enough to access the distraction that doing so would require conscious

effort, which takes you out of the realm of habit. There are many ways to do this. For example, you can place your phone charger on the other side of the room and plug the phone in when you start work. The phone is thus out of easy reach for the day, but not so far away that it couldn't be accessed if really needed. When traveling, keep the phone in a closed bag instead of in your pocket, making it slightly more difficult to get to. There are innumerable other ways you can add helpful friction to your technology. Here are some examples that other finance professionals are using successfully:

- Michele Cassaro, deputy director of finance and administration for the Greater Rockford Airport Authority, deleted distracting apps entirely from her mobile device. This way she can't be cued to use the apps when using her device for productive purposes. Also, removing these apps forces the user to access them via a personal computer, which might be enough additional friction to stop a habit.
- Remove the ability to access distracting applications quickly, such as taking them off shortcut menus, etc. This might be especially useful for PCs, and email in particular. For instance, Gwen Pilo of SeaTac removed the email shortcut from her desktop and now



Interruptions by Technology

Questions and Conversation Starters

- Are you bringing your devices with you to places where they do more harm by creating interruptions than they add in productivity? Can you stop bringing your device?
- What cues to engage in low- or no-value activity are your devices giving you? Can you eliminate those cues?
- What device or applications are your biggest source of distraction? How can you make using that device or app more difficult?
- What cues prompt you to pick up your device (e.g., wanting to know the time)? Can you find a lower friction, less distracting way to accomplish the desired result (e.g., wearing a wristwatch)?
- Is there a more positive habit (e.g., calling people personally) that you can associate with your device use that also adds to the friction of using the device?
- What immediate reward can you set up for engaging in more constructive behaviors?

only opens and checks email at the start of the day, once in the middle of the day, and at the end.

- Sarah Rathlisberger, finance manager for the City of Monticello, Minnesota, has taken to storing her cell phone in a desk drawer. She can hear the phone ring (which is more likely to indicate something urgent) but can't as easily hear (or see) the numerous less-important notifications. Also, she can't see the phone, so the mere sight of it isn't cueing her to pick it up and use distracting apps.
- Develop complex passwords for social media sites, and don't set up auto-fill. Besides reducing the chances your profile will be hacked, this step ensures that you will have to look up the password every time you want to use social media, likely cutting down on how much you use it.
- Simply turn off devices that aren't in use. This will save battery life, and having to turn your device back on just to get a quick look at it is often enough friction to stop a habit.

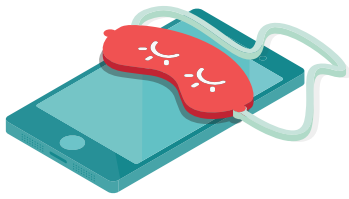
Dr. Wood shows that you can also use friction more creatively. For example, perhaps you pick up your phone to check the time and then end up wasting time on a social media app. Get a wristwatch that you like. Wearing it reduces the friction associated with checking the time (just lift your wrist), and you've removed the cue for getting into social media. You might also build a new habit of making personal phone calls. Dr. Wood suggests making a phone call every time you access your phone. Family members or friends will often appreciate a quick call just to say hello, and work matters are often better resolved over the phone than by email. Besides strengthening your personal relationships, these calls add a new source of friction to

using your phone. Phone calls are more time-consuming than texts or email, so if you make it a habit to make a call every time you pick up your phone, you are less likely to pick up your phone in the first place!

Finally, we come to rewards and repetition. Repetition is self-explanatory, but reward is a bit more complicated. The reward needs to be immediate in order to work. Dr. Wood suggests that because we use devices as a distraction and distractions are occasionally necessary, a more constructive distraction could be a viable reward. For instance, keeping a good book or magazine nearby to reach for instead of your device would likely do more for your wellbeing than the latest news alert or social media post. Furthermore, a physical book or magazine can't bombard you with personalized advertisements that are optimized to grab at your attention or present links to lead you down rabbit holes you are better off staying out of. And, of course, if you enjoy the book or the magazine, it is a good reward for staying off your devices. Rewards could also be intrinsic. For example, there are many proven health risks associated with multitasking, including decreased cognitive ability, reduced memory, greater stress, and increased anxiety and susceptibility to depression.¹⁵ Knowing that you are improving your health and wellbeing by avoiding chronic distraction could be its own reward.

PUTTING A PLAN INTO ACTION

Interruptions are a serious threat to productivity. Recognizing the two types of interruptions—those from people and those from technology—allows us to develop strategies to deal with each. Share this article with your colleagues and develop



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your plan for your office to reduce the consequences of interruptions. Here is a simple meeting format you could use:

- The first ten minutes or so is spent silently reading the article. This way, everyone starts with the same information. Often, you can't count on people reading ahead of time, so you can schedule the reading time as part of the meeting itself.
- Next, participants spend a few minutes, on their own, making notes about their top ideas for reducing the impact of interruptions in the office. These could be ideas from the article that they liked or ideas they come up with on their own. Research shows that a bit of quiet reflection time greatly improves the number and quality of ideas you get from a meeting.
- If you have a lot of participants in this meeting, you could break into groups of four and have people discuss what is on their lists. They can look for commonalities among all the lists. These commonalities would be the most obvious ideas to commit to. The group could also agree to things that weren't on everyone's list. This group discussion should not take more

than 10 minutes. You can then compare notes between the groups. Ideas that were on all the groups' lists would be top candidates, but it would be fine for the meeting participants to agree to ideas that not every group came up with. If you have a smaller number of total participants, you can follow essentially the same process but without multiple groups.

- Wrap up the meeting by writing down the new behaviors you and your colleagues will commit to in the future, perhaps on a flip chart. If the group discussion generates too many ideas, making them too overwhelming to implement, write all the ideas on the flip chart and use "dotmocracy" or some other method of prioritizing. (For dotmocracy, every person gets a small number of sticky dots. The number of ideas on the flip chart divided by three is usually a good rule of thumb for the number of dots. Everyone then puts their dots by their favorite ideas, and the ideas with more dots win.)

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- ¹⁰ Atul Gawande, *The Checklist Manifesto: How to Get Things Done Right*, Picador, 2009.
- ¹¹ Lean process improvement is a method of managing and organizing work that seeks to eliminate sources of waste in work. Many local governments have used Lean to great effect, including some finance offices. For example, see: Shayne C. Kavanagh and Harry Kenworthy, "Building a Culture of Engagement with Lean Continuous Improvement," *Government Finance Review*, June 2016.
- ¹² Wendy Wood, Jeffrey M. Quinn, and Deborah A. Kashy, "Habits in Everyday Life: Thought, Emotion, and Action," *Journal of Personality and Social Psychology* 83, 2002.
- ¹³ Wendy Wood. *Good Habits, Bad Habits: The Science of Making Positive Changes that Stick*, Farrar, Straus, and Giroux. 2019.
- ¹⁴ For example, on iPhone, use Do Not Disturb, but "star" contacts whose calls you want to let through. Go to Settings, Do Not Disturb; select Allow Calls From; and select Favorites. On an Android, use Do Not Disturb; More Settings; Priority Only Allows; and then select Calls.
- ¹⁵ Guy Winch, "10 Real Risks of Multitasking, to Mind and Body," *Psychology Today*, June 22, 2016.