

# Roadmaps

## A Guide for Intellectual Entrepreneurs



## *Working Smart*

John Tierney

Co-author of the best-selling book

*Willpower: Rediscovering the Greatest Human Strength*



# Working Smart

By John Tierney

Ed. Note

*This is a transcript from John Tierney's breakfast talk given at the 2014 Atlas Network Liberty Forum in New York City, Nov. 12, 2014. Traditionally, Roadmaps pieces cover topics related to think tank management and replicable products. This piece is different, in that it provides advice for improving your efficiency, either as a leader, an entrepreneur, or a staff member. We at the Atlas Network are constantly impressed by the dedication, time and energy of the individuals that make up the Atlas Network, and we hope this piece contributes to your increased impact and efficiency in your tireless fight for liberty.*

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Thanks to all of you for being here, and for coming to New York. Atlas Network's Freedom Dinner is one of the most inspiring nights of the year for those who live in New York and believe in free markets — all six of us.

I often despair at how this city built by capitalism has become a bastion of statism, but I feel a lot better when I see how Atlas Network is spreading the principles of freedom around the world.

I want to make one clarification to those very kind remarks of Gerry [Ohrstrom]'s. When he was quoting the review from Steven Pinker and got to the line about me offering “insightful reflections on the human condition,” I thought I detected fear in your eyes.

You're thinking: I haven't even had my coffee yet, and this guy's going to be reflecting on the human condition. This could be a long breakfast.

Have no fear: This will not be a philosophical discourse. It will be a practical guide to what I call “Working Smart,” which is based on scientific strategies for being more productive and happy. These strategies have been tested not just in the lab, but in the real world.

In fact, just last week, in a public Q&A session at Facebook headquarters, Mark Zuckerberg revealed that he practices one of these strategies every day.

I was really glad to hear that, because up until that point the highest-profile endorsement for our book had come from another chief executive with a rather different track record: Barack Obama. After President Obama read our work, he changed his daily routine so he could make better decisions.

I'm not going to try to persuade this audience that he has made all the right decisions since then. If this were a speech about the Obama administration, you would expect the title to be “Working Stupid.” But let me reassure you: this strategy was not used in designing the Obamacare Web site, and it was definitely not used on the Democratic campaign trail this fall.

To [furnish our story], I went back through the history of self-help books, all the way from Ben Franklin to the present day. I noticed a curious trend. Through the 19th century, the books preached hard work and perseverance. They offered maxims like, “Genius is patience.” But then modern self-help books started preaching quick fixes and self-esteem and a feel-good philosophy with a rhyming slogan: Believe it, achieve it.

Deepak Chopra offered something called the Law of Least Effort, and I'll quote it verbatim: “Ultimately you come to the state where you do nothing ... and accomplish everything.”

Well, I guess it worked for him. But to me it seemed there had been a strange backwards evolution: The old Victorian books seemed smarter than their descendants. I wasn't sure what to make of this until I started writing a science column for the New York Times and met the social psychologist Roy Baumeister.

Roy was an early leader in the research into self-esteem, which showed that people with more confidence tended to be happier and more successful. But then he realized that researchers had it backwards. Self-esteem did not lead to success — rather, success led to self-esteem.

When Roy looked at dozens of personality traits, he found that only one of them predicted how well a student would do in college. It was not self-esteem. It was self-control. Self-control predicted college grades even better than IQ or SAT scores. And it predicted lots more, as researchers found in studies looking at people throughout their lives.

I'll give you a quick summary of three decades of psychological research. However you define success — a happy family, a satisfying career, financial security, good friends — it correlates with two chief qualities: one is intelligence; the other is self-control.

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So far, researchers haven't figured out how to increase intelligence. But they have discovered how to improve self-control.

They've rediscovered the concept of willpower.

Scientists used to dismiss willpower as a quaint metaphor invented by uptight Victorians. When the Victorians faced some really dangerous temptation — like, say, the sight of a woman's ankle — they'd power up the internal engine and will themselves to take a bracing cold shower.

They sound weird to us today, but Roy Baumeister discovered that the Victorians were actually correct. Not about everything (Roy doesn't share their ankle fetish), but he did find that willpower really is more than a metaphor.

He discovered this by conducting an experiment. He instructed some students to skip lunch and come to his laboratory later that afternoon. He told them it was an experiment about how they tasted food — which, as usual, was a lie. Psychologists never let the guinea pigs know what the experiment is.

Just before the students arrived, Roy baked chocolate chip cookies so these hungry students would be hit by that delicious aroma as soon as they entered the lab. They saw the warm cookies sitting on a table next to a bowl full of radishes.

The luckier students — the ones in the control group — were invited to eat the cookies. But others were told they they'd been assigned to "the radish condition." No cookies for you — but have all the radishes you want!

To maximize temptation, each student was left alone in the room, but the scientists observed through a small, hidden window. The ones in the radish condition clearly struggled. They'd gaze longingly at the cookies and pick one up just to savor the smell. But they did manage to restrain themselves.

Then everyone was given puzzles to do. The students thought it was a test of their cleverness, but in fact the puzzles were unsolvable. The real test was to see how long they would persevere. The students who'd been free to eat the cookies typically worked away for about 20 minutes. But the radish-eaters gave up after just eight minutes — less than half the time — which, by research standards, is a huge difference.

They'd successfully resisted the temptation of the cookies, but the effort left them with less energy to tackle the puzzles. So the old Victorian metaphor was right. Willpower really is a form of mental energy — and it can be depleted.

This depletion effect has been confirmed in dozens of other studies involving all kinds of temptations and tasks. It's even been demonstrated in dogs. When a dog is forced to exert self-control, by obeying commands to sit and stay for 10 minutes, afterwards he gives up sooner on the doggie version of puzzles and has a harder time controlling his impulses. He becomes more likely to irritate other dogs and get into a dumb fight he can't win, basically the same thing I do at the end of a long meeting with my editor.

This sort of depletion happens to all of us all day long. By tracking people from morning to night, researchers have found we typically spend between three and four hours a day resisting desires — the desire to eat, the desire to goof off, the desire to give your true opinion of your boss' latest brainstorm.

And that's not the only way you deplete your willpower. After Roy's cookie experiment, a young colleague in his lab came in one day after spending hours with her fiancé deciding what to put in their wedding registry.

The decision process left her utterly exhausted, and it gave the researchers an idea. They did experiments with shoppers in a suburban mall and at the online site of Dell computers. Sure enough, the more decisions that shoppers made, the less willpower they had to solve puzzles and do other tasks.

Making decisions depleted the same source of mental energy as resisting temptations. We call this decision fatigue. Once decision fatigue sets in, your brain looks for shortcuts in two different ways.

One shortcut is to become reckless: to act impulsively instead of expending the energy. Sure, tweet that photo of yourself in your underwear! The other shortcut is the ultimate energy saver: do nothing. Duck the decision. That eases the mental strain at the moment, but it can be costly in the long run.

Suppose you're ordering a new car and start going down the list of options. You choose from 13 different wheel rims and 25 configurations of the engine. You look through dozens of colors for the interior — will it be tan or taupe, or copper or camel — who knew there were so many shades of brown?

What happens to you? Psychologists found out by going to a car dealership and watching real customers make these choices. At first, the car buyers would carefully weigh the options. But, at some point, they'd give up and start taking whatever the default option was.

The researchers played around with the order of the decisions. Sometimes they put the most expensive decisions early in the process, and sometimes near the end. The ordering made a huge difference — about \$2,000 per car.

**Making decisions depleted the same source of mental energy as resisting temptations.**

Today, we all face the same problem as those car buyers. The decisions keep coming at you all day: which emails to open, which ones to answer, which web sites to visit, which phone calls to return. You can't deal with them all at once.

So here's another bit of science to keep you focused. It's based on something called the Zeigarnik Effect, which is named after a psychology student at the University of Berlin named Bluma Zeigarnik. She went to lunch one day with a large group from the university. Their waiter took all their orders without writing anything down. He remembered each one's meal and served it perfectly.

After they left the restaurant, one of the psychologists went back to retrieve something and asked the waiter for help, hoping to benefit from his excellent memory. But the waiter just looked back at him blankly. He had no idea who the patron was, much less where the person had sat. He explained that as soon as he finished delivering an order, it vanished from his mind.

This got Zeigarnik and the psychologists wondering: Did the brain make a strong distinction between finished and unfinished tasks? They went back to the lab and found there was indeed a special place in the memory for an unfinished task. Even when you try to focus on something else, that unfinished task remains there to nag at you. That's why when you turn off the radio mid-song, the song can keep playing in your head all day long.

That's the Zeigarnik Effect. Your unconscious keeps track of any unfinished task — a song, an unanswered email, a report sitting in your inbox. It's sapping your mental energy until you finish it — or until you use another strategy demonstrated in Roy Baumeister's lab.

The lab took some students worried about an upcoming exam and had them read a few pages of a novel that had nothing to do with the exam. As predicted, they kept getting distracted by thoughts of that exam. Another group of students went through this same exercise, but first they were instructed to make a specific plan for dealing with the exam, like going to the library Sunday afternoon to study.

Once they made that plan, they were able to concentrate on the novel and score much better on a comprehension test. They still had that exam ahead, but just making a plan had cleared their minds.

Now I'm going to try to clear your minds by giving you eight specific strategies for applying all this research.

## STRATEGY NUMBER ONE: KNOW YOUR LIMITS

Watch for signs that your willpower is low. There's no single telltale symptom. It's not like getting winded or hitting the wall during a marathon. What happens is that you start to experience everything more strongly than usual because you've lost power to regulate your reactions. Doughnuts look really tempting. Minor things upset you.

Remember that every little act of self-control and every decision deplete your willpower. So pick your battles. Don't make more than one New Year's resolution.

Don't use up all your willpower at the office. If you're having troubles at home, you may be tempted to stay later at the office, but that will just make things worse when you do get home.

Don't schedule back-to-back meetings all day. You might do what the editors of the New York Times Magazine did after I turned in my article on decision fatigue. They promptly resolved not to hold any more meetings after 3:00 in the afternoon. They recognized their limits.

You can think of willpower as a muscle that gets fatigued as you use it during the day — that's the bad news. The good news is that over the long haul you can gradually strengthen that muscle.

## STRATEGY NUMBER TWO: BUILD YOUR WILLPOWER

In one experiment, some people were sent home with instructions to work on their posture — whenever they caught themselves slouching, they should sit up straight. A couple of weeks later, when they returned to the lab, they had more willpower for doing all kinds of tasks that had nothing to do with posture.

**Any repeated exercise in self-control can gradually build up your stamina.**

Other experiments showed that when people worked on one aspect of self-control, like keeping closer track of their spending, they eventually had better self-control in how they worked and what they ate. The research shows that any repeated exercise in self-control can gradually build up your stamina.

This effect helps explain why religious people, on average, have repeatedly been found to have better self-control than non-religious people. Religions have always encouraged prayers and meditations and other exercises that gradually strengthen the willpower muscle.

There's also a much quicker and easier way to strengthen your willpower, and that's . . .

## STRATEGY NUMBER THREE: EAT

I love giving this advice when there's food in the room. Experiments have shown that simply drinking a glass of lemonade will provide a temporary boost in willpower. But it doesn't work if the lemonade is made with a no-calorie sweetener like Splenda. The lemonade has to contain sugar, because sugar provides the glucose that fuels the brain's willpower.

Experimenters use sugar because it produces quick effects in the lab, but I'm not recommending you try that at home. All foods provide glucose, and you're better off eating healthier ones that release it more slowly. But make sure you eat something, because here's what happens when you don't.

This is another real-world example, from a study of a parole board in Israel. If a prisoner appeared before the board first thing in the morning, the odds were in his favor — he had a 70 percent chance of being approved for parole. But if he appeared late in the afternoon, his chance of being freed was only 10 percent.

By then decision fatigue had set in, and the parole board judges went for the easy default option — keep the status quo and leave him in prison. The prisoners' chances declined pretty steadily as the day wore on, but researchers noticed there were a couple of brief upward spikes in mid-morning and early afternoon.

It turned out those spikes happened just after the judges returned from a mid-morning snack break, and just after they came back from lunch. The food gave them a shot of glucose and willpower that briefly reversed decision fatigue. Keep those judges in mind before you make any big decisions on an empty stomach — or before you beat yourself up for wanting a late-afternoon snack.

Above all, remember this: Scientists have finally discovered a solid justification for the expense-account lunch. Now, when you're scheduling those lunches, keep in mind our next strategy ...

## STRATEGY NUMBER FOUR: AVOID THE PLANNING FALLACY

Just about everyone suffers from what psychologists call the planning fallacy: we underestimate how long a job will take. Studies show that a project typically takes twice as long as predicted, and often longer. That's why people will set more goals for the week than they could possibly accomplish all month.

**A project typically takes twice as long as predicted.**

A better approach is the one used by Aaron Patzer in creating Mint.com, the financial management website now used by millions of consumers. From his early days as a startup, he asked each of his managers to list their top goals for each week, in order. They could list one goal, or two goals, or three goals — but no more than three. And they had to complete the first goal before they could start on the second. Of course, even when you set realistic goals, you still have to

figure out all the little steps to get there.

## STRATEGY NUMBER FIVE: MAKE A TO-DO LIST THAT'S ACTUALLY DOABLE

You won't avoid the Zeigarnik Effect if you put vague items on your to-do list like "Hire web designer." That task will keep nagging at you because you haven't really figured out what to do about it.

You need to make a specific plan — something you know precisely how to accomplish, like "Call Jennifer to ask for recommendations for web designer" or "Read applicants' resumes." You need to write down the very next action, as David Allen calls it in his book, *Getting Things Done*, which is the one modern self-help book I recommend (besides my own).

David Allen was a corporate trainer who realized that executives were missing the big picture because they were overwhelmed by all the small stuff. So he worked out a system to deal with the Zeigarnik Effect. I saw it when I visited him at his California office. He was sitting at a large L-shaped desk, about six feet long on each side. There were three stacked wooden trays, his inbox, with absolutely nothing in them. There was not a piece of paper on the desk — just 12 feet of gloriously naked wood. I immediately had a severe case of desk envy.

David Allen kept his desk uncluttered by making a specific plan to deal with every little thing that crossed it. If there was a memo for a meeting next Tuesday, it would go into a file that he'd consult Tuesday morning. If he couldn't answer an email right away, he would remove it from the inbox and make a plan to deal with it at a specific later time.

This may sound difficult, but it actually makes life easier. David Allen was one of the most cheerful and relaxed guys I've ever interviewed. That's what happens when you conquer the Zeigarnik Effect. And, once your desk and your mind are clear, you can use the next strategy...

## STRATEGY NUMBER SIX: KEEP TRACK

Monitoring your progress toward a goal is just as important as setting the goal. It's essential to any kind of self-control. If you want to cut your spending, keep track of it every week. If you want to lose weight, get on a scale every day — that's one of the few clinically proven methods for taking off pounds.

Keeping track will keep you motivated to meet goals, and it will also help you set goals that are realistic. The best way to avoid the planning fallacy is to look back on your past performance. If you can see it took you two days to write your last report, you won't plan to knock off the next one in a morning.

You can use gadgets and apps and software to do the grunt work by automatically keeping a record of your progress toward just about any goal, from how much exercise and sleep you get to how you spend time on your computer. There's a great list of these electronic tools at a website called the **Quantified Self** (quantifiedself.com). I've used a lot of them and find them quite useful.

But I've found that the most effective tool is a simple old-fashioned one: just write down what you've done. At the end of every work day, I force myself to make a note of how many words I've written. It can be a depressing exercise — on some days, the number is negative.

But, even on those days, I can look back at all the previous numbers and console myself that I've made progress over the long haul. That may be the biggest advantage of monitoring. It not only keeps you on track, it keeps the big picture in perspective.

## STRATEGY NUMBER SEVEN: THE NOTHING ALTERNATIVE

This strategy was inspired by Raymond Chandler, the detective novelist and screenwriter. He turned out masterpieces like *The Big Sleep* by going into his office and following two simple rules:

- a. You don't have to write.
- b. You can't do anything else.

This “Nothing Alternative” is ideal for all the distractions of the Internet age. Try to set aside a chunk of time — say, 90 minutes, ideally first thing in the morning — to work exclusively on your primary project. Open the stopwatch app on your phone, and until it hits 90 minutes don't do anything unrelated to the project — no phone calls, no emails, no web surfing.

This strategy works because it's what self-control researchers call a bright line: a simple, clear, unambiguous rule that's effective because there's no doubt when you've crossed the line. You can draw up a few other bright-line rules, too, like no Twitter or Facebook before noon.

Of course, it takes willpower to start following these rules. But if you draw up just a few and follow them, before long they can become habits that you do automatically without conscious effort. And, once something becomes a habit, you're benefitting from the final and most important strategy...

## STRATEGY NUMBER EIGHT: CONSERVE YOUR WILLPOWER

This strategy comes out of a scientific study that didn't turn out the way it was supposed to. The researchers wanted to understand why some people have better self-control than others, so they tracked people all day long. The scientists expected to see the most disciplined people frequently using their strong willpower to conquer temptations.

But it turned out these disciplined people actually used willpower less often than average. The researchers were puzzled until they figured out these people's secret:

They structured their lives to minimize temptations. They stayed away from all-you-can-eat buffets. They didn't keep bowls of candy on their desks. If they wanted to focus on a project, they turned off their email notifications. They played offense, not defense. They conserved their willpower so that it was available for emergencies and important decisions.

That's the lesson that Mark Zuckerberg took away from our book. When he was asked why he wore a gray T-shirt to work every single day at Facebook, he cited our book's research on decision fatigue. He said, “I really

want to clear my life to make it so that I have to make as few decisions as possible about anything except how best to serve the Facebook community.”

President Obama reacted to our book the same way, by resolving to wear the same thing every day — not a gray T-shirt, but a dark suit. He also eliminated any decisions about what to eat at meals, and left that up to the White House chef. He was outsourcing decisions, and you can do the same thing even if you don’t have a staff like his.

Instead of deciding every morning whether to make yourself exercise, you can set regular appointments to work out with a friend so you have no choice. You can outsource self-control to social media groups and apps that will prod you to meet your goals. You can install software on your computer that locks you off the web for a certain period of the day. You can even get software that will send daily reports to your boss revealing precisely how much time you spent on YouTube or Instagram. I don’t necessarily recommend that software. I haven’t been brave enough to try it myself. But I can tell you that I’ve used all eight of these strategies — and that they work.

**People with stronger willpower use it to help other people.**

I’ve had a bad problem with procrastination all my life. I never turned in a college paper or a New York Times column until the absolute deadline — or later. But when Roy and I wrote our book on willpower, I tried out these self-control strategies.

I watched for signs my willpower was low and made allowances for it. I didn’t try dealing with big problems on an empty stomach. I set just a few goals and kept track of my progress. I made specific to-do lists and cleared my inboxes. I blocked out time to do nothing but write. I conserved willpower by eliminating little temptations and decisions. The result: We finished the book two months ahead of the deadline. Our editor has still not recovered from the shock of a manuscript arriving early.

We ended up working not just smarter, but also happier. Improving your self-control doesn’t just boost your productivity. It frees you to enjoy work and the rest of life, because you’ve got the time and energy for the things that matter — your family, your friends, your passions. Ultimately, self-control is about much more than self-help.

Of all the benefits that have been demonstrated in Roy Baumeister’s studies, the most heartening is this: People with stronger willpower use it to help other people. They’re more likely to donate to charity. They do more volunteer work. Their inner discipline leads to outer kindness.

So I guess in the end I’m promising you the same thing that those self-help gurus do: spiritual AND financial growth. It makes me nervous to sound like them in any way, but I’m so confident of the science behind these strategies that I’m willing to offer this guarantee:

If you try them and they don’t work, I’ll come back here next year and deliver another speech filled with insightful reflections on the human condition.

Thank you.



*John Tierney is a best-selling author and writes the Findings science column for the New York Times. His latest book, **Willpower: Rediscovering the Greatest Human Strength** (Penguin Press, 2011), was a New York Times best-seller and has been translated into 20 languages. He appears frequently on *The Independents*, *CBS This Morning* and other television programs.*

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