

## **DO IT**

*Adapted from Mindtools.com*

It's not always easy to come up with good ideas, and you can fall into many thinking traps along the way. For instance, you might assume that your first idea is the best one, without having explored alternatives. Or you might generate so many potential solutions that you don't know which one to implement.

This is when it helps to use a problem-solving framework to guide you. The "DO IT" framework is one of many, but can be highly effective.

### **About the Model**

Robert Olson developed the DO IT model and published it in his 1986 book, "The Art of Creative Thinking." It's a simple but effective process that spurs innovative thinking and helps you overcome habits that can limit creativity.

The DO IT acronym stands for the four steps in Olson's process:

**Define the problem.**

**Open your mind and apply creative techniques.**

**Identify the best solution.**

**Transform.**

### **How to use the Technique**

#### 1. Define the Problem

Your first step is to identify and define the problem you want to solve.

It's often tempting to rush through this first step. However, if you work through it thoroughly, you can save a significant amount of time and effort later – particularly if you're trying to solve a difficult problem.

Once you understand your problem, summarize it as concisely as possible. Olson suggests that the best way to do this is to write down several two-word problem statements and choose the best one.

Keep in mind that if you focus on the wrong issue, you'll still have to fix the real one later. Take your time with this first step to ensure that you clearly understand what you are trying to do.

#### 2. Open Your Mind and Explore Solutions

Once you have defined the problem you want to solve, you can generate possible solutions.

It can be easy to accept the first good idea that you come up with. However, this means that you may miss out on even better solutions. Take plenty of time to generate ideas using normal, structured thinking, supported by brainstorming.

While you're doing this, remember that other people may have different but equally valuable perspectives, which can lead them to come up with other possible solutions. Involve your colleagues in the problem solving process.

Don't worry about evaluating ideas at this stage. Instead, try to generate as many different solutions as possible – even bad ideas can lead to better ones down the road.

### 3. Identify the Best Solution

Now it's time to choose the best idea.

This may be obvious, but don't jump to conclusions.

It's often better to examine and develop a number of ideas in detail before you select the final one.

### 4. Transform

Now that you've identified the problem and chosen the best solution, the final stage is to take action.

#### Examples of the DO IT Framework Being Used

From: <https://www.theatlantic.com/magazine/archive/2014/07/creative-solutions/372285/>

#### **MLB Instant Replay**

##### THE PROBLEM

Baseball fans want a fail-safe against umpire mistakes—but a drawn-out video-review system like the NFL's or the NBA's would bog down the already slow-paced game.

##### THE SOLUTION

Create a centralized, high-tech instant-replay center to make faster calls using home-viewing technology, without pulling officials off the field.

When major league baseball created MLB Advanced Media in 2000 to establish its presence online, the league was so late to the Internet that it had to obtain the domain name MLB.com from a Philadelphia law firm, Morgan, Lewis & Bockius. But the new company made rapid progress, with the insight that baseball fans—obsessive enough to follow a season with more than 2,000 games—would pay for the privilege to stream them, at ever higher speeds and definition. Soon, watching games from your desk at work gave you a better view than attending in person, and a decade later, MLB Advanced Media (a co-founder of Sports on Earth, with which I am affiliated) was bringing in more than \$600 million a year.

Meanwhile, baseball was confronting another challenge of the digital age: lower tolerance for human error. Major League Baseball was the last professional sports league to introduce an instant-replay system, in 2008, and used video review only for home runs. After some high-profile umpire mistakes, fans pleaded for improvement. But in a game that already has pacing issues, stopping every inning or so to let umpires duck into a closed-circuit-TV booth—the method used in the NFL—wasn't feasible.

Baseball executives formed a committee to come up with a better system, and discovered that, almost by accident, they already had. MLB Advanced Media “gave us everything we needed, in one room,” says Tony La Russa, a Hall of Fame manager who serves on the committee. Using the company's camera and streaming technologies, in 2014 the league created a replay center in MLB Advanced Media's Manhattan offices. Umpires now monitor ballparks across the country on dozens of high-definition screens, with technicians on hand to summon any angle at any speed. By the time a call is protested, the umpires have already started their review—and can make judgments more accurately, and minutes faster, than ever before. “When [an NFL] referee leaves and disappears under the hood, you lose a certain connection to the game,” La Russa says. With the replay center, nobody steps off the field.

The NFL has plans to replicate parts of the MLB's system. Baseball's idea for a new revenue stream that wouldn't fundamentally change the game is now revolutionizing it: for once, the other sports leagues are playing catch-up.

— Will Leitch, contributing editor, New York; senior writer, Sports on Earth

## **Los Angeles Public Library/ High School**

### **THE PROBLEM**

(1) In an age when hardly anybody checks out books anymore, libraries are struggling to stay relevant. (2) A quarter of adults in Los Angeles never earned a high-school diploma.

### **THE SOLUTION**

Turn the L.A. Public Library system into a high school.

In the digital age, no public library can afford to think of itself as a mere repository of material anymore, or even, for that matter, of information. That reality was at the front of John Szabo's mind two years ago when he took over as the chief librarian of the Los Angeles Public Library system. One of Szabo's biggest successes from his previous job, as the head of the Atlanta-Fulton Public Library system in Georgia, was convincing county commissioners that by expanding a GED prep program at the library from 100 graduates to 542, he had effectively created a new high school. He realized that elected officials love nothing more than quantifiable results they can brag about, and that they will heap funding on programs that produce such results.

This year, Szabo is taking that concept even further in L.A., with the launch of a library-based program that will confer accredited high-school diplomas on city residents. While Szabo calls the GED "a wonderful thing," many employers place more worth on a high-school diploma. Upwards of a quarter of adults ages 25 and over in Los Angeles never graduated from high school, and the rate can be as high as 60 or 70 percent in some neighborhoods served by the library system. Enrolled students will complete their courses through a certified online-education system, but will also be required to meet regularly with an academic coach and encouraged to take advantage of the library's resources.

Szabo expects that voters and elected officials in Los Angeles will value the graduation numbers he hopes to deliver once the program gets under way this year with its first 150 students, and eventually expands. Those results could help make any future cuts to the library's budget, like those imposed in 2010, at the height of the recession, unthinkable.

— Sommer Mathis, Editor, CityLab

## **Raspberry Pi**

### **THE PROBLEM**

Modern computers are too complex—and expensive—to get kids interested in programming.

### **THE SOLUTION**

Build a tiny, cheap circuit board (then watch as adult hackers use it for unexpected, and highly creative, solutions of their own).

As a schoolboy in the 1980s, Eben Upton was captivated by the BBC Micro, an 8-bit rudimentary computer. On it, he learned to write his first programs: 10 PRINT "I am the best" 20 GOTO 10, for example, sent i am the best shooting across the screen.

But as a computer-science lecturer at the University of Cambridge in 2006, Upton saw that his students lacked a gateway to hacking. Modern computers, he reckoned, had become too fancy, too expensive, and too automated to tinker with. "Maybe families have one PC, and there's a reluctance to allow a child to experiment with it," he told me. "You wouldn't let a child take apart a car."

So he and a few friends designed the Raspberry Pi—a tiny (three-inch-by-two-inch), cut-rate (\$25–\$35) uncased circuit board. A TV can serve as a screen. Plug in any old keyboard, and you're ready to program on an open-source operating system such as Linux.

Upton thought he might sell a few thousand. But after the Pi debuted in 2012, do-it-yourself enthusiasts began snatching up the computers, programming them to operate everything from garage-door openers to gesture-detecting gloves for playing air guitar. Even noncoders have managed to use the Pi, as a Netflix hub. Upton estimates that 3 million people have bought one so far.

Among them is Mathias Wasserthal, a German software engineer who built WeggUp, an alarm clock that tracks his movements overnight and wakes him with gentle light at just the right time in his sleep cycle. To make it, he stripped away the top layer of his mattress and inserted an accelerometer, which he then hooked up to a Pi. "I often have ideas of products that would be pretty cool that you cannot buy anywhere," Wasserthal told me.

Far from disappointed by the hacking of his creation, Upton says it's "wonderful." He was especially pleased when his Pi fame led to a meeting with the inventors of the BBC Micro. "For me, that was the nicest, geekiest thing."

— Olga Khazan, Atlantic associate editor

To submit your innovation complete the following questions and email the answers to Mr. Alberse at [KAlberse@richland2.org](mailto:KAlberse@richland2.org)

1. What was the problem or challenge you improved upon/ innovated for?
2. What creative ideas did you consider before settling on your final solution?
3. What was your final solution to the challenge or problem?
4. If you have a product as a result of your innovation, including documentation of your process, please include those in your emailed answers. If you have no documentation, product, or photos, please schedule a meeting with Mr. Alberse to discuss your innovation.
5. What is your tee shirt size?
6. Was the innovation you created done while you were enrolled at R2i2?
7. What are your social media handles?

Thank you!