### STEP #3

## YOUR WORLD

The Five Farming Bridges by Vincent Callebaut Architectures. Winning Project of the Rifat Chadirji Prize - Competition, Rebuilding Iraq's Liberated Areas: Mosul's Housing. "If you want to build a ship, do not drum up the men to gather wood, divide the work and give orders. Instead, teach them to yearn for the vast and endless sea." — Antoine de Saint-Exupéry, French aristocrat, writer, poet, and aviator

It's all too common for people who are trying to change the world to get bogged down on focusing on the problem. It's easy to think about the world in terms of what we want to stop, such as, "Everyone needs to stop littering plastic," or "Corporations really need to stop that dreadful mountaintop coal mining." It makes sense, considering the whole environmental and socialchange movement was more or less born out of reactionary measures to terrible things, such as sudden news that your local forest is going to be felled next week. A problem-focused way of thinking, however, can be detrimental. There's a common mistake people make when choosing their words that is reflective of this problem-oriented mindset. Messages that tell people how bad everything is, such as "72 percent of people waste water," or "Twelve thousand plastic bottles are thrown out every day" don't motivate people to change. They actually tell people it is normal. Because humans tend to imitate those around them, these kinds of statements can actually encourage the very behavior you are trying to stop. A sign at Arizona's Petrified Forest intended to stop people stealing the ancient rocks read, "Your heritage is being vandalized every day by thieves." This sign caused

people to steal *double* the amount of rocks compared to a message that simply said, "*Please don't remove the petrified wood from the park*."(1) The first sign unintentionally told people, "*Everyone else is doing it, so you should do it too.*"

I made some mock-up images that illustrate how silly it would look if major brands in their advertising, were to use negative images of what *not* to do. The art of advertising sells us the *aspiration* of the person we'd like to become, and it sells us an *association* to something we want to feel. Advertising campaigns rarely lambaste us with images of what we *don't* want to become, because advertising agencies know this approach doesn't work.

Being problem-focused keeps us trapped in an outdated way of thinking. Albert Einstein once said, "We can't solve problems with the same thinking we used to create them." Looking out for bad-things-to-stop keeps us in a mental loop of perpetually reacting to, or even being a victim of, the world around us. We still need to stop bad things happening in the world today, but we also need to design the destination that we are trying to get to



The creative mind: creative people are able to mentally visualize in great detail what they aspire to create, then they reverse engineer the mental model to bring their vision to life.







Be careful not to use negative images of what you don't want people to do. These mock-ups of popular advertisement show what it would look like if major brands used negative images to show people what \*not\* to become.

*tomorrow*—and that distinction requires an entirely different mind-space.

This is the foundation of why changing the world is an inherently creative process. Think of how an architect designs a spectacular new building, or a screenwriter illustrates a story in another universe, or a dressmaker designs an outrageously novel gown. The creator first *imagines* the thing he or she want to create, then draws it on paper (or computer), then reverse engineers it and figures out all the steps between *here* and *there* that need to happen to bring it into physical form. This is the core creative process: imagine; reverse engineer; create. It's a skill that creative people possess—they can imagine ideas in their mind as detailed, complex, and unique three-dimensional mental models *before* they bring them into existence in real life.(2) World-changers need to exercise this mental muscle by casting our imagination into the future and describing in detail a vision for the beautiful world we want to create.

A few years ago, I read that athletes commonly undertake an exercise in which they visualize winning a game or a race. This kind of mental rehearsal has a remarkably powerful effect on the body. An athlete sitting still in meditation, while mentally taking herself through her sport, activates the muscles, brain, and heart rate, having a similar effect on the body as if she were physically doing the activity. A Russian study found that basketball players who experienced *only* physical training performed worse than players who spent 75 percent of their time mentally visualizing themselves successfully getting the ball in the hoop and only 25 percent of their time actually doing the sport.(3)

When I learned about the phenomenal effect of mental visualization, I wondered why we never did this in the environmental movement. Savings forests isn't quite a game of basketball, however, I couldn't help but mull over what kind of equivalent muscle we'd build if we did the same thing when it came to changing the world. Maybe if I spent 30 minutes a day imagining us successfully reaching a 100 percent renewable powered

electricity grid, I'd get better at *something*, just like those athletes. What would the world look like if every social change activist, environmental advocate, teacher, and visionary had her dream for a better world come true? What is our "gold medal moment" going to look like?

I started imagining it. It's funny, I was already in my 30s and despite being devoted to environmental sustainability, I'd never consciously pulled back the curtain and stepped into this mental realm. I started meditating on questions like this, "What if landfills suddenly vanished? What kind of government system would protect all of the world's forests and endangered animals? What would cities feel like if buildings were designed to mimic a living ecosystem? How could the entire Earth run on 100 percent clean energy? How would a school manage to grow all its own food on campus for kids to eat? What would an entirely car-free city look like? How could cities be designed for small children and families to live together in modern urban villages? What would a day in the life of an ordinary person look like when disposable plastic doesn't exist?" I ruminated on these questions, and then something magical happened.

My imagination lit up with new ideas of what could be possible. I had so many ideas, I could hardly write them down fast enough. It was like a vibrant forest of concepts had suddenly sprung up in my mind. I was no longer thinking the heavy and frustrated thoughts I was familiar with, about how to put out fires and stop nasty problems in the world I knew. Instead, I was mentally building an incredible new world: a world where I wanted to live, a world that I would be profoundly proud to be a part of.

I was filled with a feeling of lightness and joy, and an enthusiasm for the future that *could be*. Something in my own universe shifted once I could see a path to an ever-improving world. I had an exciting part to play in bringing this world to life, and in some way, this changed me forever.

The first time I saw something like this was at the Skoll World Forum



Artistic rendition of a future city layered in vegetation and urban farming, by Terreform New York.

social-entrepreneur summit. The founder, Jeff Skoll, mocked up the kind of headlines he would *like to see* in the world as if they were happening today. He called it "*Imagine the News of the Future*." The three-day forum culminated on a lofty crest of future-aspiration when he unveiled his striking headlines that declared "*Last Nuclear Weapons Destroyed*," "*U.S. Imports Last Barrel of Oil*," and "10 Years of Peace in the Middle East." I don't know exactly why, but these images of a profoundly better future touch us in a uniquely sensitive way. Maybe it's because hope is stronger than fear.

A similar project was done by the comic protest duo, *The Yes Men*, when they created a real hard copy "good news" imitation of *The New York Times* newspaper. The mock paper was adorned with bombastically positive



Mock newspapers: "News of the future" by Jeff Skoll and The Good News New York Times by the Yes Men, each showing imaginary positive news they would like to see come true.

headlines that The Yes Men would *like to see* and distributed one morning throughout Manhattan.

There's a good reason that people need a positive vision of the future. Our brains are wired to have what is called *optimism bias*. It means that each of us believes that we are *less* at risk of experiencing a negative event compared to other people. For example, imagine you read in a medical brochure that you have a 50 percent chance of getting cancer. You would most likely think, "*That's ok because I'm obviously in the half that isn't going to get cancer.*"(4) Now imagine you are told that the housing market is going up. You'll most likely think, "*That's great! I'll be able to sell my house for the highest price!*" Basically, we all think we have a good shot at becoming millionaires, but we'll never suffer a dreaded car accident. We can leverage the optimism bias. When we tell an optimistic story about a future world, quite simply, everyone will be more likely to believe it is going to happen to them and want to learn more about it and engage more deeply with anything related to this future scenario.

Inspirational tales of a future world are important because the anticipation of a future positive event makes us happy. People feel most happy on Fridays because they experience a sense of positive anticipation for the weekend. People are not as happy on Sundays, because they experience negative anticipation of the dreaded soon-to-be Monday.(4) Imagine we extrapolated this finding, and instead of looking at the weekend, we look forward a few decades. It makes sense that the positive anticipation of a wonderful world unfolding might also bring this kind of anticipation-laden happiness that we experience every Friday, but over a lifetime.

The anticipation of a future event *is* the very fabric of optimism—and optimists get a better deal. Optimists are more creative. Optimists are more successful. Optimists are healthier. Optimists are more productive. Optimism feeds a person's personal agency to affect change and work hard to achieve goals. It makes sense that if you believe that your dream world will one day come true, that you'd be more motivated to chip in your time, money, heart and soul for the winning team. People who are prone to pessimistic thinking are more likely to give up on challenges sooner.(5)

Let's look closer at the need for happiness. If you're trying to save polar bears, does it really matter if your world-changing ventures help people feel happy or not, as long as the polar bears get saved in the end? Happiness matters for more reasons than because it feels nice. To come up with creative solutions, we need to be in a reasonably happy state. A Harvard University study asked 280 people working in various industries to record their daily emotions and discovered that people experiencing joy and love were *more creative* than people experiencing anger, fear, and anxiety.(6) Creativity researcher, Dr. Shelley Carson, describes it like this, *"Increases in positive mood broaden attention and allow us to see more possible solutions to solve* 

### "You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete."

-Bucky Fuller, Futurist and Inventor

*creative problems.*" Creativity is the act of doing, making or thinking something that has not been done, made, or thought before, and that's why creativity is the backbone skill in changing the world.

It's hard for people to think creatively when they are burdened by feelings of stress and fear. Here's why messages of fear and doom such as a picture of a burning Earth, stories of climate armageddon, and videos of tortured animals can be a terrible strategy to save the world. You might need to use them *occasionally*, but be careful with the dose. When the body releases stress chemicals, the brain shuts down the hippocampus region and you lose about thirty percent of your cerebral brain function—that includes the creative thinking faculties.(7,8) When we calm down, and that part of our brain reactivates, creativity and innovative thinking increase substantially. Psychologist Adam Anderson described it as, *"With a positive mood, you actually get more access to things you would normally ignore. Instead of looking through a porthole, you have a landscape or panoramic view of the world."* To simplify: fear and doom shut down your brain's capacity for creative thinking. Vision and optimism super-boost it.

Don't underestimate the power of a rich vision to inspire the people around you. This vision will be at the heart of your brand. It will be embedded in your copywriting and make up your tagline. This is the vision you or your CEO describes when giving a talk on stage or an interview on "Optimists exert more continuous effort and tend not to give up . . . Pessimists, on the other hand, are far more likely to anticipate disaster – and, as a result, are more likely to give up."

- Ilona Boniwell, Positive Psychologist

the radio. It's the hook that makes people care, and it's this vision that will not only keep everyone around you motivated, but also become an adventure. This is the psychology behind Dr. Martin Luther King Jr.'s famous "*I have a dream*" speech. We all need our own version of the phrase, "*I have a dream that* ...." If you are optimistic and believe your vision will come true, other people will believe it, too.

Now it's your turn. Your next task is to visualize what the world will look like when your quantitative goal from Chapter Two is reached. Get a giant piece of paper and start drawing your future world. You can also mind map it. Start by drawing a circle in the middle of the paper and write your data goal inside the circle. Then keep adding branches to the circle of your vision in words or drawings of what the world will look like when this number is a reality.

This is where it gets fun. Close your eyes and imagine this world. How does it work? What technology does it use? What does a day in the life of a regular person look like? What products do people use? How does the government operate? How is this world visually beautiful? What emotions do people feel? What does it smell like? Look at your visualization and work out the specific technical requirements needed to get there. This exercise can light the path for technology breakthroughs. Who knows what million-

### The creative circle

Visualizing your beautiful future world as an interdependent cycle of optimism and happiness that feeds the creative productivity you need to build a movement.



# Central Executive Network Default Mode Network

Networks of thought: cognitively demanding tasks use a different brain network than the network in the brain that helps to come up with new ideas and creative solutions.

dollar startup is nestled in the sketches of your visualization.

Imagining this destination is a powerful exercise. It beckons you to dig into your creative genius zone and invent something wonderful. If there is a parallel with the visualization done by athletes, it might also catalyze your consciousness into doing what it takes to make this dream come true. Dare to dream big and let your imagination unfurl. Draw pictures of what these ideas look like. Write poetry or a short story. Have a creative workshop or art day with your team.

Take your time with it. This kind of work requires that your mind steps off the hurried, stressed-out, lots-of-things-to-do mental treadmill and invokes a slower, thoughtful kind of modulation. There's a system in the brain called the default mode network. Ph.D. psychologist Scott-Barry Kaufman, who studies creativity, is trying to re-brand it as *the imagination network* because it helps us come up with new ideas. It gets activated when the rest of the brain chills out by day-dreaming, relaxing, and letting the mind's attention wander. It gets turned *off* when we are doing stressful or cognitively demanding tasks that require active focus.(9) Even the practice of mindfulness turns off the default mode network.(10) MRI scans show that creative people have a more easily activated default mode network.(11) Activating the imagination requires a gentle and slower kind of thinking, and that's why you need to devote a generous chunk of un-hurried time and space to it.

Stressing out about an imagined future apocalypse uses what's called the *neurotic imagination*—that's the bad kind of imagination that narrows the mind in on a single projected terrible event—an event that might not even happen. The opposite, and better, approach is to use the *creative* or *positive constructive imagination*—a term coined by research psychologist Jerome Singer in the 1960s. You could call the ecological version of it *the environmental design imagination*. It's the healthy kind of imagination that thinks up new ideas and solves problems, and it needs to do some pretty crazy cerebral feats. It needs to make intricate mental models of the future—like imagining what it would take to cover a whole city in vegetation. It needs to unravel big, complex problems, like how carbon emissions affect the economy. It needs to electric cargo bikes to new taxation systems—and then it needs to figure out how to reverse engineer all these ideas into reality.

You need to switch back and forth between *imagination* (from the default mode network) and *engineering* (that happens in the prefrontal cortex). This dance between *imagining* and *making* is the guts of the creative process of bringing an idea and a vision of a future world to life. To do this, your brain needs to relax, to feel happy, to be optimistic, and to have a dream. It's in that space where great discoveries, inventions, and works of art are born. It's where you'll find the kind of creativity it takes to save the world.

It's all an interconnected loop of creativity. The anticipation of positive future events makes us happy. Optimists are happier. Happy people do better at creative tasks. People are happier when they are creative. Happiness and optimism allow the mind to be at peace, a state in which it can imagine. Starting with a vision of a better world and making it come true in the real world is an inherently creative process. That's the upward spiral. This is *the creative process of saving the world* in action.

There's a Buddhist teaching that says "What you think, you become. What you feel, you attract. What you imagine, you create." Let's move out of an obsession with the world we don't want and start a revolution dreaming up the world we do want. You will shake many ideas from your visualization like fruit dropping from a tree. Now let's move into the next chapter where you will harvest your ideas.

### Step #3: Visualization Exercise

**1. Paper and your goal:** Get a large piece of paper and colored markers and draw a circle in the middle and write your data goal from Chapter Two inside the circle.

2. Mind map: Start with a mind map to get your visionary creative juices flowing. Draw bubbles branching ideas off of this circle for how this world would work, with pictures of your ideas inside the bubbles. This is a great exercise to do as a team or group. Go through a day in the life of a person in this world and where applicable, start writing out the answers to the questions below.

**3. Functions:** How will it work? What products do people use in their daily life? What will the machines do? What will the political structure be? What will the financial structure be? What are the people like? What will the parties and social gatherings be like? What will the art look like? How will the roads, food, schools, and shopping malls be different in your new world?

4. Senses: What does it visually look like? What will make it beautiful? What will it feel like? What will it smell like? What does it sound like when you walk down the street?

**5. Emotions:** What emotions do you get when you think of this world? What kind of energy does it have? What meaning does it have? How will people treat each other and relate to each other?

6. You: Who would *you* be in this world? How will your life improve? Remember, you are the one creating this new world, so the person *you become* in this world can be a motivating force for you.

7. Written phrases: Write down five or more phrases that convey what this world is like.

8. Decorate your space: Put pictures of your mind maps, mood boards, illustrations, and vision phrases around your work space to make this vision feel possible.

TIP: You can meditate before doing this exercise to create the mental space for the ideas and vision to germinate. You can hire an illustrator to capture your vision and use the artwork in your branding and marketing material. "An urgent and useful guide for anyone who seeks to make a difference. It will change your work for the better." — Seth Godin, Author, This Is Marketing

*"If you want to change the world, not just talk about it, but actually change it, read this book."* 

 Jesse Schell, Distinguished Professor of Entertainment Technology, Carnegie Mellon University; Author, The Art of Game Design

"This book is full of so many gems! Thank you for putting this out in the world." — Erin Rhoads, Author, Waste Not: Make a Big Difference by Throwing Away Less

You want to change the world. You want your work to have meaning. Maybe you're even audacious enough to want saving the world *to be fun*. What if saving the Earth were a game? Not just any game, but *the greatest game we've ever played*. This workbook helps social and environmental change professionals learn how to implement powerful techniques from the fields of game design, behavioral psychology, design, data science, and storytelling, that are not only proven to have impact, but also can make your project *fun*.

In a 10-step framework of exercises, tutorials, and case studies, *How to Save the World* will teach you the art of changing the world—and it's often not what you think. Did you know that just by putting a sign above a recycling bin that showed people the number of cans inside increased the recycling rate by 67 percent? Or when people standing in line at a café were told that other customers before them had ordered a vegetarian meal, that this simple intervention *doubled* the total rate of vegetarian meal orders? As you implement these academically researched and measurement-driven techniques, *How to Save the World* will drive you to dig into your creativity and unearth your greatest ideas that *shift the numbers* on the causes you most care about, so you can experience the joy and satisfaction of seeing your work really, actually change the world every single day.



Katie Patrick is an Australian-American environmental engineer and a designer. She helps sustainability professionals, entrepreneurs, and civic innovators apply powerful techniques from the fields of data science, game design and behavioral psychology mey can make epic wins in environmental and social change. Sl mey can Francisco with her young daughter Anastasia. Sign up katiepatrick.com for free resources to help you change rld.

### Get the full book!

"An urgent and useful guide for anyone who seeks to make a difference. It will change your work for the better." – Seth Godin, Author, This is Marketing

"If you want to change the world, not just talk about it, but actually change it, read this book." — Jesse Schell, Distinguished Professor of Entertainment Technology, Carnegie Mellon University; Author, The Art of Game Design

"How to Save the World is invaluable for changemakers looking to make real impact in communities through the use of government data. One cannot go through any of the steps in this book without figuring out how to use civic data for doing good, and that's a frontier all innovators, journalists and startup founders should be very excited about."

Jay Nath, Co-Executive Director, City Innovate;
former Chief Innovation Officer, City of San Francisco
@Jay\_Nath



#### Click here to get the book on







