We are more dependent on past decisions than we like to think. This is true of us as individuals, but it is also true of us as species, and it has ramifications on every supposedly “new” thing we create. When we set out to create the future, it is linked in ways we don’t always recognize to the past, often in ways that stretch back centuries. To give you an example of this, let me tell you a little story about how horses were used in space travel.

There are no horses in space, and yet you should expect that there are exactly two horses in space. And while we’re on the topic, you should expect those horses to be 4 feet, 8½ inches wide. Why? Because NASA’s Solid Rocket Boosters were designed using that exact width. Not coincidentally, but specifically because it’s the exact width of two horses.

If you truly want to understand NASA’s choice, you have to go back to the Roman Empire. The Romans controlled the most land because they were able to patrol it with their two-horse Roman war chariots. Those chariots would tear up the land, creating deep ruts. If you were a farmer driving your wagon, you might get caught in one of those ruts, resulting in a broken wheel.
If you were a clever farmer, however, you would measure the width of the ruts and realize that they were 4 feet, 8½ inches wide—the width of the axles on the two-horse Roman war chariot. You would then design your own wagon to match. Soon, all the wagons were made to be 4 feet, 8½ inches wide. When the first railways were built, they were created specifically for mining carts pulled by horses. So they made those railways 4 feet, 8½ inches wide. Naturally, the first European trains extended those best practices with tracks that were 4 feet, 8½ inches wide. Americans built their own trains, but by then the ideal width had already been determined: 4 feet, 8½ inches wide.

Soon, smart people replaced all the train tracks for modern trains that were bigger, better, and faster. The new tracks remained the same size. Even when high-speed trains started going over 200 miles an hour, many of them continued on tracks that were 4 feet, 8½ inches wide. Logically, when NASA began making and transporting the Solid Rocket Boosters from Utah to Florida, they took into account that they needed to fit on tracks that were—you guessed it—4 feet, 8½ inches wide.

The Solid Rocket Boosters are a bit wider, as they overlap the width of the track, and a few different widths of track have been tested over time. However, the astonishing reality is that we are using the same standard as the Romans and the Solid Rocket Booster widths were determined by the width of two horse butts.

Next time you see an image of the space shuttle, I want you to look closely. There are not two horses pulling it, yet we still rely on the width determined by the Roman war chariots, even in our pursuit of outer space exploration.
Today, this might seem ridiculous, but in each incremental decision, people probably weighed the alternatives and decided to simply stick with what was there before. They stayed caught in a groove.

The takeaway is that we are more dependent on our past decisions than we like to admit. Once a path is set, we often walk down it blindly, failing to question why it was put there to begin with and whether a better path might exist.

**TO BREAK FROM THE PATH, YOU MUST ESCAPE SEVEN TRAPS**

Over time, it seems that we find fixed paths to travel within, just like those grooved ruts carved by the chariot wagons of the Roman Empire. Long ago, it seemed easier to build a wagon to fit the grooves than to imagine a new vehicle that could chart its own path.

Once a path is set, we often walk down it blindly, failing to question why it was put there to begin with and whether a better path might exist.
One decision leads to another, and eventually we end up in a place that makes no sense. There are several factors that cause us to stay in those grooved paths, which I call the seven traps of path dependency.

THE 7 TRAPS OF PATH DEPENDENCY

1 | The Subtlety of Opportunity
2 | Neurological Shortcuts
3 | The Ease of Inaction
4 | Optionality
5 | The Traps of Success
6 | Linear Thinking
7 | Discomfort vs. Breakthrough

Escape the traps, and you will find new paths of opportunity.

I have been working on tactics for these traps with some of the brightest minds in the world, and by the end of my new book, Create the Future, you will be better equipped to break from the each of these path.

In this manifesto, however, I’d like to focus on one.
THE SUBTLETY OF OPPORTUNITY

You can develop the tools to engage your next big idea and make change a reality. If you’ve ever dreamed about what great ideas might be within your grasp, know that you can nurture those feelings and give them life with simple tactics and exercises to bring you closer to your full potential. I will work through some of those at the close of this piece. They will give you the push you need to overcome path dependencies, break free from the traps, and move toward something new.

But why is it so hard? Well, it is and it isn’t. When people miss an opportunity in their own industry, it’s not because they were blind to new ideas. Typically, smart people miss out because new ideas seem awkward and different. To find your breakthrough, you need to better spot the subtle clues that hint toward great ideas.

YOUR BREAKTHROUGH IS CLOSER THAN YOU THINK, BUT IT IS EASY TO MISS OUT

Let me tell you the story of Tony the Inventor. Tony was a relentless entrepreneur at heart, but he struggled to figure out his big idea. He knew only one thing, which was that his idea would be a gadget. He grew his career at a gadget company called Phillips and ascended to the role of VP of strategy and new ventures.

Eventually he came up with a mysterious idea for a hard drive gadget. He pitched the product numerous times, but nobody at Phillips bought into his vision. However, he was dedicated to turning his idea into a reality, so he quit his job and began pursuing his
own venture. The problem was that he couldn’t raise the money to make a prototype, which would have cost millions of dollars. After two years of trying, he felt his dream was almost at an end.

Before giving up entirely, he approached a CEO buddy and offered all of his intellectual property for his big idea. In exchange the CEO would give Tony the job of making the product. His CEO buddy accepted, despite the fact that the company was struggling. After a few months of innovation, the prototype was ready, and Tony hopped on a plane to take it to the eager CEO. Unfortunately, when he got off the plane, he realized the device had slipped out of his pocket! Luckily, the airline helped him form a search party, and two hours later they found the prototype, which had slipped between two seats. As it turned out, Tony’s buddy was Steve Jobs, the company was Apple, and the prototype was the historic first iPod. Tony became head of Apple’s new division, which later became the iPhone, and spearheaded a trajectory that changed the world.

When people miss an opportunity in their own industry, it’s not because they were blind to new ideas. Typically, smart people miss out because new ideas seem awkward and different.
EVEN IDEAS THAT CHANGE THE WORLD CAN BE DISCOUNTED BY MARKET LEADERS

Most people immediately understood the potential of Tony’s prototype, but the brightest people in the industry did not. Included in the list of notables who passed on the iPod are:

1 | PHILLIPS: Gave up on Tony, their VP of strategy and new ventures.

2 | MICROSOFT: Steve Ballmer, worth $41 billion—“There’s no chance!”

3 | MOTOROLA: Padmasree Warrior, CTO—“Nothing revolutionary about it…”

4 | PALM: Ed Colligan, CEO, worth $3.4 billion—“[They] are not going to figure it out.”

5 | NOKIA: (market leader with 1 billion customers), Anssi Vanjoki, Chief Strategist—“With Mac, Apple remained a niche [expect the same] in mobile phones” and switching to Android would be like the Finnish boys who “pee in their pants” for warmth in the winter.

6 | BLACKBERRY: Mike Lazaridis (worth $2 billion)—“[With Apple’s ads] customers are now coming to the store [and leaving with a Blackberry], and so what it’s actually done is increased our sales.”

Why did the market leaders dismiss the potential of such a revolutionary product when you and EVERYBODY else immediately realized the smartphone would be awesome? They were too comfortable and confident in their familiar paths.
For the record, Tony would eventually leave Apple to start a new gadget company that was positioned to make a better thermostat. The company was Nest, which he sold to Google for $3.2 billion.

**SMART PEOPLE OVERESTIMATE THEIR LEVEL OF CONTROL**

There was once a guy named Ferruccio who could fix anything. Following WWII, he could turn almost any deserted war machine into farming equipment. Eventually, he started his own tractor company.

When he first became successful, he bought a Ferrari and loved it, leading him to join the Ferrari racing club. It was there that Ferruccio met Enzo Ferrari and told him about an idea that would make the car’s clutch better. Enzo got upset. “You stick to making tractors, and I’ll make cars,” he told Ferruccio.

Turns out, Ferruccio’s last name was Lamborghini. The takeaway is that successful people and companies overestimate their own control and command of their market.

**IRONICALLY, MARKET LEADERS ARE AT A GREATER RISK OF MISSING OUT**

Enzo Ferrari wasn’t the first market leader to dismiss an innovative idea presented to him. History is littered with instances where a market leader couldn’t see the potential in a rivaling idea.
MARKET LEADERS WHO OVERLOOKED GREAT IDEAS

- **England** rejected Thomas Edison’s light bulb and said it was “unworthy of the attention of practical or scientific men."

- **Western Union** rejected Alexander Graham Bell’s telephone, saying it was “idiotic. Why would any person want to use this ungainly and impractical device?”

- **The Kansas City Star** fired Walt Disney, saying he “lacked imagination and had no good ideas.”

- **Kodak** invented digital photography in 1975 but didn’t adapt and went bankrupt.

- **HP** rejected Steve Wozniak’s computer ideas three times.

- **Atari** could have owned 33% of Apple for $50,000.

- **EDS** could have bought Microsoft ($60 million).

- **Excite** could have bought Google ($1 million).

- **Myspace** could have owned Facebook ($75 million).

- **Yahoo** could have owned Facebook ($1 billion).

- **Britannica** could have been Encarta, but they rejected Bill Gates.

- **Encarta** could have been Wikipedia.

- **Blockbuster** had three chances to buy Netflix ($50 million).

- **You and I** could have been a lot wealthier if we put all our money into Amazon.
ALMOST EVERY TALE OF DISRUPTION INVOLVES SMART PEOPLE DISMISSING A SUBTLE NEW IDEA

Let me paint you a picture of an iconic innovator. This is a game of GUESS THE COMPANY. Here are a few facts:

- Invented “the most successful single product of all time”
- Invented the mouse
- Invented the graphic user interface
- Invented the concept of email
- Invented networked computers
- Built the foundation for the internet

Did you guess Apple? Microsoft? Or did you know that the correct answer is Xerox? These days, it seems like a trick question, but in 1973, researchers at the Xerox Parc Research Lab launched the Xerox Altos and changed the course of history.

The Altos had a mouse, graphic user interface, email, and everything you needed to copy, paste, and print your documents. The Altos could remind you of upcoming appointments and even had image processing reminiscent of the animated GIFs you see today.
This Xerox model was more than a decade ahead of its time. Xerox had more than 1,000 of the Altos stations built, but the product was never sold because the company was too busy harvesting the market for its profitable photocopiers.

In 1979, about a decade after the Altos project began, Steve Jobs and Bill Gates took tours of the facility. Those on the project, including Larry Tesler, were more than delighted to see someone take an interest in the project. Tesler explained, “During that demo, Steve again got very excited. He was pacing around the room and occasionally looking at the screen. . . . Jobs was there going, ‘What is going on here? You’re sitting on a gold mine. Why aren’t you doing anything with this?’”

Ironically, Tesler notes that they only showed Jobs 1% of what Xerox was up to. Five years later, Apple and Microsoft would launch their own Altos-inspired devices. In the words of Steve Jobs, “Within 10 minutes, it was obvious to me that all computers would work like this someday. Basically, they were copier-heads that just had no clue about what a computer could do. … Xerox could have owned the entire computer industry today.”

**IT CAN BE DIFFICULT TO SEE POTENTIAL IN SOMETHING NEW**

A friend of mine, Todd Henry, introduced me to the tale of a struggling musician named James. James had talent, but there are millions of talented musicians who never get their music out there. What they need is a big break.

One day, James was approached with the opportunity of a lifetime. One of the biggest bands in the world heard his tracks and invited him to be their opening act. The offer was to be part of a 27-city world tour. It was any musician’s dream.
Eager and excited, he walked into his first stadium and faced a crowd of people who were going to hear his songs. He was about to be famous, and he could feel it. He began strumming his guitar and rocking out to his first songs. But the audience was silent. They didn’t cheer when he expected them to cheer. No worries—he moved on to the second song. Still more silence. Then he started to play his third song, and the audience started to react—with booing.

Why did the market leaders dismiss the potential of such a revolutionary product when you and EVERYBODY else immediately realized the smartphone would be awesome? They were too comfortable and confident in their familiar paths.
It was a terrible beginning, but he persisted. At the second concert, things were different. They started to boo on the first song. By the sixth concert, they booed before he even strummed his guitar. He gave the audience the middle finger, threw his guitar, and quit the tour.

It would be easy to give up when experiencing such rejection. But he didn’t. And that’s the tale of James Marshall “Jimi” Hendrix opening for the Monkees. Hendrix was playing new, innovative music, and the Monkees’ fans weren’t ready for it.

**MOST BILLION DOLLAR START-UPS EXPERIENCED AT LEAST SOME LEVEL OF REJECTION**

The internet dates back to 1952, but it didn’t experience full traction for almost 40 years. The internet’s “big break,” if you will, happened when the concept of email was haphazardly introduced in the 1970s. By the 1980s, the majority of all internet traffic was email communication.

With that context in mind, Jack Smith and Sabeer Bhatia set out to pitch investors on the concept of Hotmail. Imagine: a service where anyone in the world could get their own email address, absolutely free! It was a relatively simple business model, which could be funded by advertising.

This didn’t seem as complicated as you might think, but investors hated it. Smith and Bhatia’s idea was rejected 100 times. Eventually, the private equity firm Draper Fisher Jurvetson cut them a check for $300,000. A year and a half after their launch, Hotmail was sold to Microsoft for $400 million. Not a bad return.
WORKSHOP QUESTIONS

• How might you change your weekly routines to ensure you are open to disruptive thinking and subtle ideas?

• What are the most recent ideas that have been suggested and dismissed?

• If you involved 10 people unrelated to your market, what ideas would they suggest for your industry?

The takeaway is that successful people and companies overestimate their own control and command of their market.
TACTICS

1 | Assume you are incorrect.
2 | Be more open to new ideas.
3 | Reward and encourage dissent.
4 | Designate a Devil’s Advocate.
5 | Discuss the competing alternative to your decisions.
6 | Perform case studies about emerging trends.
7 | Embrace diversity.
8 | Actively hunt trends.
9 | Study other markets.
10 | Push yourself to see potential in awkward ideas.
11 | Learn about similar companies that missed key opportunities.
12 | Get outsiders to suggest ideas you might be missing.
13 | Hire leaders from different markets.
14 | Host idea competitions.
15 | Invite junior hires, outsiders, and customers to a workshop.

You need to force yourself to explore new ideas if you don’t want to miss out. Track innovation related to your market and set aside time to reflect on what has changed.
LOOKING FOR MORE?

If you would like to dive deeper into trends or opportunities, join millions of people who get free inspiration at Trend Hunter, the world’s largest collection of new ideas.

When I started Trend Hunter, I was effectively trying to automate a process to collect insights from around the world in the hope that I’d discover an idea that could become my own. Today, it has become a tremendous resource that could simplify your own efforts to track trends in the consumer markets you care about most.

We enable anyone in the world to contribute ideas, and more than 200,000 people have signed up so far. We publish the best ideas and use our audience of 150 million people to filter out the most popular concepts; to date, we have analyzed several billion onsite choices. Finally, we use a combination of human research and artificial intelligence to identify core patterns and insights.

The next step, of course, is yours. Uncover the trends and insights that are meaningful to you, and channel them into action!
ABOUT THE AUTHOR

Jeremy Gutsche, MBA, CFA, is a New York Times bestselling author, an award-winning innovation expert and the CEO of Trend Hunter, the world’s largest trend firm with 3 billion views, 200,000 idea hunters from 150 million visitors. He even got to help NASA prototype the journey to Mars! Jeremy has been interviewed by media ranging from The Economist and The New York Times to CNN, Bloomberg, and WIRED. He is the winner of the Canadian Young Entrepreneur Award and Canada’s Top 40 Under 40 Award.

“Jeremy Gutsche is an intellectual can of Red Bull.”
-CEO of Omnicom.

You can find more info about Jeremy and his full bio at www.jeremygutsche.com and www.createthefuturebook.com.