

The 100-Year Storm

IN NOVEMBER OF 2022, a software company in San Francisco quietly released a chatbot. They expected a few thousand researchers and curious developers to try it out. The team was nervous enough about how rough the product was that they almost did not ship it.

Five days later, it had a million users.

Two months later, it had a hundred million.

To put that in perspective: the telephone took seventy-five years to reach a hundred million users. Electricity, forty-six. Television, twenty-two. The cell phone, sixteen. Facebook, four and a half. TikTok, nine months.

ChatGPT did it in sixty days.

It is, by a wide margin, the fastest adoption of any technology in the history of human commerce. Faster than anything our grandfathers saw. Faster than anything our parents saw. Faster than anything that has happened in your working life, or mine.

If you are a contractor reading this, you probably noticed it happening. Maybe your kid showed you something funny it wrote. Maybe one of your office staff started using it to draft emails. Maybe a competitor's quote came back faster than it used to and you could not figure out why. You filed it away as

interesting. You went back to running your business.

You were not wrong to file it away. You were running a business. Filing things away is most of what an operator does.

But here is what I need you to understand before we go anywhere else in this book. What happened in November 2022 was not a product launch. It was the first visible bump of a wave that has been building underwater for forty years and is now starting to break on the shore.

The wave is not ChatGPT. ChatGPT is a piece of beach foam. The wave is the technology underneath it. The wave is going to remodel every service business in North America, including yours, on a timeline measured in months instead of decades.

This chapter is about why.

I am going to give you one framework. It is called the S-Curve Stack. If you remember nothing else from this chapter, remember the stack. It is the reason this wave is not like the last one. It is the reason you do not get the same amount of time to react.

Why "the next internet" undersells it

Every consultant and conference speaker since 2023 has reached for the same line. *AI is going to be as big as the internet.* You have heard it so many times you have stopped hearing it. It has become wallpaper.

The line is wrong, and it is wrong in a direction that is costing operators money right now.

AI is not as big as the internet. It is bigger. And the reason has nothing to do with how clever the technology is. It has to do with the structure of the change underneath it.

The internet was one wave. One S-curve. Networks got cheaper, faster, and more widely available. Over about twenty years the whole economy moved onto them. The curve looked like this: slow start in the late 1980s. Steep climb through the 1990s and 2000s. Leveling off in the 2010s once everyone had broadband and a smartphone. One technology. One adoption curve. One big readjustment.

That readjustment was huge. It killed Blockbuster. It gutted print newspapers. It rebuilt retail. It created industries that did not exist before. It remodeled how every small business found customers. If you owned a contracting business that thrived in the 1990s, you watched the lead-generation rules of your industry get rewritten in real time. Yellow Pages stopped working. Service Magic showed up. Then Angie's List. Then Google. Then Google reviews. Then Facebook ads. Then Nextdoor. Each rewrite came every three to five years. Each one required you to adjust your marketing, your reputation, and your sales process to keep up.

That was one wave.

What is hitting now is three waves at once.

The S-Curve Stack

Three exponential curves are climbing at the same time, and they are reinforcing each other. Imagine three ocean swells of different sizes arriving on the same shore at the same moment. They do not add together politely. They compound. The crest of one lifts the next. Sailors call this a rogue wave. They are rare in nature, and they sink ships that would have ridden any one of the swells just fine on its own.

The S-Curve Stack

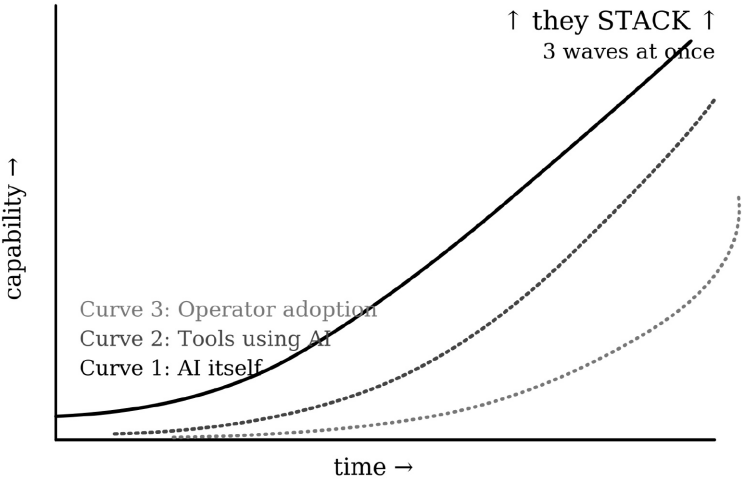


Figure 1.1 -- The S-Curve Stack

The three curves are:

Curve one: compute. The raw processing power available to run AI systems has been doubling roughly every six to ten months for the last decade. Not Moore's Law speed, which was a doubling every two years. Several times faster than that. The chips that train the current generation of AI models did not exist five years ago. The chips that will train the next generation are being designed right now.

Curve two: capability. What these systems can do, measured by any benchmark you want to pick, has been climbing on its own exponential. Three years ago AI could not reliably summarize a one-page document. Today it can read a hundred-page set of mechanical drawings and produce a takeoff. Two years from now it will do things we cannot describe, because the people building it cannot describe them either. This is not marketing language. The engineers will tell you the same thing if you catch them in a quiet moment.

Curve three: adoption. How fast businesses and consumers actually pick this stuff up. ChatGPT's user growth was the leading edge. Behind it, every major software company you already pay for is racing to embed AI features into their products. Your accounting platform. Your CRM. Your project management system. Your phone system. Whether you adopt AI or not, AI is being adopted *into the tools you already use*. You will end up running it. The only question is whether you are directing it or being dragged by it.

Each of these curves on its own would be a generational technology shift. The internet was a one-curve event and it remade the economy.

We have three curves stacked on top of each other right now. That is the storm.

A picture worth taping to your wall

If you want to draw the S-Curve Stack on a napkin (and I would encourage you to, because the act of drawing it makes it stick), here is what it looks like.

Bottom curve, labeled COMPUTE, climbs sharply from left to right. Above it, slightly delayed but climbing faster, the CAPABILITY curve. Above that, slightly delayed again but climbing fastest, ADOPTION. All three curves are still in their steep middle sections. None of them have leveled off. The point where any of them tops out is somewhere off the right edge of the page, beyond what anyone can see from here.

Now overlay one more line, dashed, running flat across the middle of the page. That is the INTERNET WAVE. That is the curve your competitors mostly survived. The one that brought websites and Google reviews and cloud software into your business over twenty years.

The dashed line sits well below the stack.

That is the picture. Three live curves, all rising, all feeding each other, all moving faster than the wave you barely got through the first time.

What this looks like in your business

Frameworks are useless if they live in the abstract. Let me make this concrete.

Three years ago, your estimator spent six hours on a mid-sized commercial quote. Today, a competent operator with a current AI tool can produce the same quote in ninety minutes, and the output is *better*. Not because the operator is smarter. Because the tool reads the specs. It cross-references your historical pricing. It flags the line items most likely to come back as questions. It drafts the cover letter while the

estimator reviews the takeoff.

Two years ago, that was not possible. Today it is table stakes for the shops that have moved. Two years from now, the operator who is not doing this will be quoting twice as slow as everyone else. He will burn two times the labor cost to compete for the same job. He will either make half the margin or lose the bid. Probably both.

Estimating is one example. Pick any function in your business. The same pattern is in motion.

Phone calls. AI is now better than the average new hire at answering routine service calls, booking the right time slot, and capturing the information your dispatch needs. You may not want this for every call. You will want it for the after-hours calls you currently miss, which is somewhere between fifteen and forty percent of inbound, depending on your trade.

Hiring. The screening your office manager does manually right now (reading resumes, sorting them, doing first-round phone calls) can be done by a system that runs while everyone is asleep. It surfaces only the candidates worth your office manager's attention. The shops doing this are filling positions in two weeks that used to take two months.

Service tickets. A field tech finishes a job. He dictates two sentences into his phone. The system generates the invoice, the warranty record, the follow-up email to the homeowner, and the next-service reminder on the calendar. The tech does not touch a keyboard. The office does not retype anything. The mistakes that used to happen in the handoff do not happen.

Project management. Drawing review. RFI tracking. Schedule updates. Change-order documentation. All of it is being remade right now, in real time, by tools that did not exist

when you read your last business book.

This is not the future. This is what early operators are doing this quarter. The gap between them and the operators still asking whether AI is hype is widening every month.

A story from forty miles south

A friend of mine runs a residential plumbing company about forty miles south of here. Two years ago he had eighteen guys. Four million in revenue. Working sixty hours a week. Trying to figure out why he was not making any money. Standard small contractor problem. You know the story.

He hired a new controller in late 2023. She was twenty-eight. Smart. She came in with the assumption that she would use AI tools to do her job, the same way she assumed she would use a laptop instead of a typewriter. She did not ask permission. She just did it. Within six months she had automated about forty percent of her own job. She freed up time to clean up his books for the first time in five years. She identified three customer segments where he was actually *losing money* on every call.

He killed those segments. Revenue dropped. Profit doubled.

She kept going. She built an AI workflow that drafts proposals from his estimator's notes. That cut his proposal time from three days to four hours. Then she built one that flags any incoming invoice that looks different from the historical pattern. It has already caught two supplier overcharges that paid for her whole salary for the year.

He is now at fourteen guys. Three million in revenue. Making more money than he ever did at four. He works forty-five hours a week. He is hiring another controller-tier person. Not because the first one is not enough, but because he realized this kind of person is the highest-leverage hire he can make.

That is one operator, one hire, eighteen months. The wave is already washing through his business. He did not catch it because he is a technology genius. He caught it because he hired one person who treated these tools as ordinary. And he had the sense to get out of her way.

Across town, his biggest competitor has roughly the same headcount, roughly the same revenue, and is doing it exactly the way he did it in 2018.

Guess which one is going to be standing in five years.

Doug and Jordan, week of November 4th

Doug got an email last week from his accounting software company. The subject line said something about "exciting new AI features." He deleted it. He gets a lot of emails. The phone was ringing.

Jordan got the same email. He forwarded it to Marcus, his general manager, with one line: *worth a look?* Marcus spent twenty minutes on it that afternoon and reported back at the next morning's huddle. Three of the new features were useful. Two were not. One could replace a manual task that costs them about four hours a week of bookkeeper time. They turned it on Thursday. By Friday it was working. By the following Monday it was invisible. Just part of how the business runs now.

That is the difference. Not genius. Not vision. Not a five-year strategic plan.

A twenty-minute look. A Thursday decision. A Friday rollout.

Multiply that by every email Jordan gets in a year. Multiply that by every email Doug deletes.

That is the gap, in motion, this week.

Why your gut is going to lie to you

Here is the trap. I want to name it plainly, because it is the trap that will take down most of the operators reading this book.

Your gut has been calibrated over thirty years of running a business. Your gut tells you, correctly, that most new technology is mostly hype. That most software salesmen are mostly lying. That the safe move is to wait until the dust settles and then pick the winner.

Your gut is right about ninety percent of the technology that has crossed your desk in your career. The fax machine. Then the pager. Then the cell phone. Then the website. Then the cloud. Then the CRM. Then the field service app. Then the next field service app. For every one that mattered, three were noise. The operators who chased every shiny thing burned out and went broke. The operators who waited, watched, and picked one or two tools every few years did fine.

That instinct served you. It is now actively dangerous.

The reason it is dangerous: it was calibrated against a world with one S-curve at a time. Waiting two years cost you very little, because the technology was not compounding fast enough to leave you behind. Wait two years on the iPhone in 2007, you missed nothing important. Wait two years on Google reviews in 2015, you could still catch up by next summer. Wait two years on cloud accounting in 2018, you signed up in 2020 and it worked out.

The S-Curve Stack does not behave that way. When three exponentials are stacking, two years of waiting is not two years. It is roughly four doublings of capability. That puts you somewhere between sixteen and sixty-four times behind the operator who started two years earlier. Those are not numbers I am inventing for effect. That is the arithmetic of

compounding curves.

Linear vs Doubling — what your brain misses

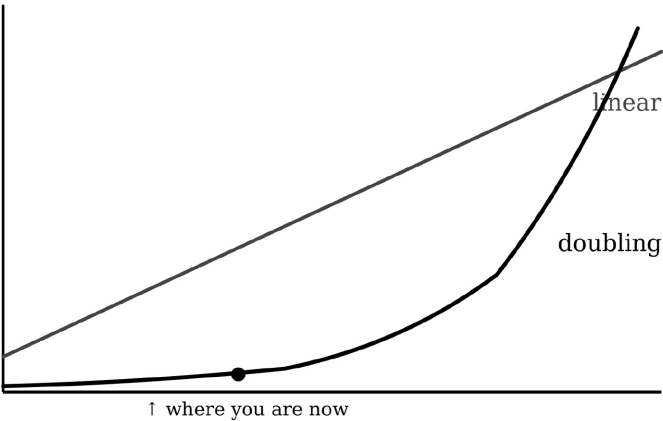


Figure 1.2 -- Linear vs. doubling: what your brain misses

The men who waited two years on the internet eventually caught up. It hurt, but they caught up. The men who wait two years on this are not going to catch up. The operators who moved early are not standing still. They are using their two-year head start to widen the gap. They are hiring better people. They are winning bids you should be winning. They are buying equipment you cannot afford anymore. By the time you start moving, they are already three doublings ahead. They will use the time you gave them to get four doublings ahead.

Adoption Speed Across Waves

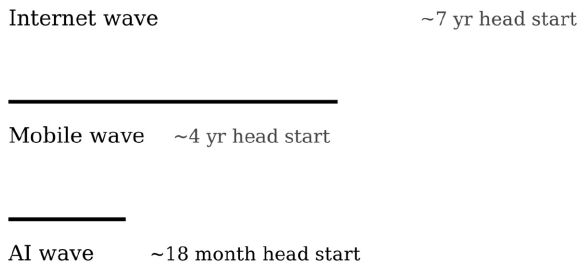


Figure 1.3 -- Adoption speed across waves

Pattern matching against the last wave is going to get you killed on this one.

That is a hard sentence to write and a harder sentence to read. But you did not pick up this book to be told you have plenty of time. You picked it up because somewhere in the back of your mind, you already suspect what I am telling you. The wave is real. It is already breaking. The only honest question is what you do this month.

What "that's how Brock did it" cost me

I want to tell you a story about myself. I made the exact mistake I am warning you about. It cost me a year and almost cost me the business.

I apprenticed at a second-generation home remodeling company. Good shop. Good people. Decent work. The owner was a guy named Brock. I told him on my first day that I was going to start my own company someday. He laughed and said most apprentices say that. When I finished my apprenticeship four years later and gave my notice, he was genuinely surprised. He thought I had forgotten about it. I had not. I had been planning the whole time.

What I had not planned was how I would actually run the business once I had it.

Here is what I did, more or less without thinking about it. I copied them. Paper timesheets, because that was how Brock did it. All the admin and calls and bookkeeping landed on my plate. Brock's shop had people for that and I did not, but I also did not think to question whether some of it could be handled differently. A mediocre website that I paid a guy four hundred bucks to throw together, because that was roughly what Brock's website was. Job costing done on a spreadsheet at the end of every job, sometimes, when I remembered.

I was not lazy. I was not dumb. I worked sixteen-hour days for the first eighteen months. I just had exactly one mental model of what a remodeling company looked like, and I built mine to match it.

My first full year on my own, I did eighty thousand dollars in revenue. Eighty thousand. After materials, subcontractors, and a part-time helper, I made less than I had made as a journeyman. My wife asked me, gently, whether this was going to work out. I told her it was. I was not sure.

The turn came, slowly at first, when I started asking different questions. Instead of "how did Brock do it," I started asking "what could be different?" I bought a job-tracking app I did not fully understand and forced myself to use it for one job. Then two. Then everything. I went through four CRMs in two years before I found one that fit how my business worked. The only reason I found it was that I was willing to be wrong three times in public, in front of my team, before I got it right.

Two years after the eighty-thousand-dollar year, I did a million.

It was not because I worked harder. I was already working harder than was sensible. It was because I stopped looking in the rear-view mirror.

The reason I am telling you this is not to brag. The numbers are not impressive at the scale most of you are operating. The reason I am telling you this is that I am guessing some of you are doing exactly what I was doing, for the same reason. You are running your business the way the shop you came up at ran their business. The way Brock ran it. The way your dad ran it, or your old boss, or the guy whose truck you sat in for ten years before going out on your own.

It is not your fault you do not have another frame of reference. Most of us came up exactly this way. The trade is

taught by apprenticeship, which is a thousand-year-old transmission system. It works beautifully for the craft, and not at all for the *business* of the craft. Brock could teach me to hang a door plumb and trim it clean. He could not teach me to run a company in 2026, because he does not run one in 2026.

The problem is not that Brock was wrong. Brock was right for Brock's time. The problem is that "that's how Brock did it" is the silent operating system running underneath most contracting businesses in North America. Brock's operating system was calibrated for a world without three S-curves stacking on top of each other.

If you want to know what is keeping you stuck, ask yourself how many of your business systems exist because you actively chose them. And how many exist because they are what you saw at the shop where you came up. Be honest. The number is going to be uncomfortable.

The good news is that once you see it, you can change it. That is most of what this book is about.

The next 24 months

Here is what I expect, without putting a date stamp on it that will age badly.

Inside two years, the operators in your trade who have moved on AI will be running businesses that are between two and five times more efficient on their office functions than the operators who have not. Estimating. Scheduling. Dispatch. Customer communication. Hiring. AP and AR. Reporting. All of it. They will quote faster. Close faster. Schedule tighter. Collect faster. Run leaner office overhead. Some will pass the savings to customers and win on price. Some will keep the margin and win on profit. Most will do some of both.

Inside two years, the labor market for the office roles in your business (estimator, project manager, controller, dispatcher) will have split in half. The candidates who are fluent in these tools will command higher salaries and will only want to work for shops that let them use them. The candidates who are not will be available for hire, but they will be a slower drag on your business than they are today. The wage gap between the two groups will be larger than you currently think possible.

Inside two years, your customers will have changed too. The homeowner expects an instant quote because the competitor's website gave them one yesterday. The general contractor expects RFI responses inside the hour because his other subs are responding inside the hour. Expectation creep is going to be steep. The operators setting the new expectation will be the ones using the tools you are still thinking about.

Inside two years, the regulatory environment, the insurance environment, the warranty environment, the safety environment, will all have been touched by AI in ways that change paperwork and compliance and reporting. You will be doing this stuff one way or the other. The choice is whether you are doing it cleanly inside a system, or scrambling to keep up with new requirements using the same binder you have been using since 2014.

Two years. That is not a long time. The last two years went by quickly. The next two will go by faster.

The Stack changes the math

If you take one thing from this chapter, take this.

Every previous wave gave you time. This one does not. Not because AI is so much more powerful than the internet (although it is). Because three curves are climbing at the same

time. The math of three stacked exponentials is not the math your gut is running.

The S-Curve Stack is why "I'll wait and see" used to be a viable strategy and is now the fastest way to hand your business to a competitor. It is why operators who would have been fine waiting five years on previous technologies will not be fine waiting eighteen months on this one. It is why the small moves you make in the next ninety days matter more than the big moves you made over the last decade.

I am not asking you to panic. Panic is a bad operator's strategy. I am asking you to update your gut.

The rest of this book is about how.

Exercise: The S-Curve Self-Check

Before you turn to Chapter 2, take ten minutes and answer four questions. Write them down. Do not do them in your head. The act of writing locks something in that thinking does not.

The Email Test. How many emails have you received in the last thirty days from a vendor, software provider, or industry publication mentioning AI features, AI tools, or AI capabilities? Roughly. Did you read any of them, or did you delete them?

The Office Test. Is there a single person in your office (not on the tools) who is currently using any AI tool, in any capacity, to do their job? If yes, name them and what they are using. If no, write "nobody."

The Competitor Test. Name your three biggest competitors. For each one, mark whether you believe they are moving on AI faster than you, slower than you, or you honestly have no idea. Be honest. "No idea" is a real answer and a common one.

The Gut Test. On a scale of one to ten, where one is "I think this is hype and I'm going to wait it out" and ten is "I think this is the most important thing happening in my industry right now," where is your gut sitting today, before you read the rest of this book?

There are no right answers. There is just a starting point. Fold the page corner over, or write your answers on the worksheet at the companion site, and come back to them in ninety days.

Most of you will discover something uncomfortable on question two. Most of you will discover something even more uncomfortable on question three.

That is the chapter.

What comes next

The Stack is the *what*. It is the structural reason this wave is different from the last one.

The next chapter is about the *why your brain can't see it*. It is about a glitch in human cognition that has been documented for thousands of years, that every operator suffers from, and that is the single biggest reason smart, experienced contractors are going to make the wrong call on this technology over the next twenty-four months.

It is called the Doubling Gap. Once you see it, you cannot unsee it. And once you cannot unsee it, you can start making decisions that your unaided gut would never make on its own.

Turn the page.