The Quantum Play Set to Become Tech's Next Winner With 25X Upside

GABE MARSHANK

Oct 29, 2025 | Market Maven | Special Reports

Imagine you're standing in a giant hallway with a million locked doors.

Behind one of them is a briefcase full of cash. Each door has a different lock, and you have a giant ring of keys... But only one of them actually works.

Now, normally, you'd have to go one by one:

- Try key No. 1... nope.
- Try key No. 2... nope.
- Try key No. 3... still nothing...

It could take hours (or centuries, depending on how unlucky you are) to find the right combination to get to the prize.

Now, imagine you could try every key at once.

The digital version of this technology – quantum computing – is doing just that.

Traditional ("classical") computers use regular "bits," or units of digital information, that represent the numbers 0 and 1. Bits act like on/off switches, combining in sequences to store data and perform calculations. Eight bits make a byte, which computers use to encode letters, numbers, and images.

Quantum computers use something called "qubits" (for "quantum bits") that

can represent both 0 and 1 *at the same time*. In other words, they can explore many possible solutions in parallel... like trying every key in the world simultaneously.

The result is that while a normal computer might take days, years, or even decades to break into a locked digital door... a quantum computer could do it in seconds. That has some troubling implications.

Nearly everything on the Internet today – your passwords, credit cards, bank information, text messages, even military secrets – is protected by locks that are only "safe" because they take too long to break with regular computers. That's not the case with quantum computing.

So, how much could this be worth? My back-of-the-napkin math suggests roughly $2.5 trillion... and I'll show you why in a moment.

Today, we'll invest in the company with the best shot at creating the "key" *and* the "lock."

Neither exists yet, but they soon will.

Industry experts call it "Q-Day" – the day when quantum computers will be able to unlock every "digital door" on the planet.

Quantum computing is exploding in its power.

Though quantum computers exist in limited production in laboratories today, Q-Day is inching nearer. It's not a matter of *if*, but *when*.

Earlier this year, Alphabet (GOOGL) CEO Sundar Pichai said that "practically useful" quantum computers are five to 10 years away, comparing it to where artificial intelligence ("AI") stood a decade ago.

Industry insiders believe Q-Day will come as soon as 2030... And tech visionary Bill Gates says it could happen even sooner.

In this month's issue, we'll discuss the implications of quantum computing...

show you how this technology could change life as we know it... and reveal which companies we think have the best chance to achieve quantum supremacy.

But before we get to that, we need to discuss a quirk of physics that even the late renowned physicist Albert Einstein found too "spooky" to believe...

The Letter That Haunted Einstein

Back in 1935, Einstein mailed a letter to Austrian physicist Erwin Schrödinger that would come to haunt him for the rest of his life.

At the time, physicists were debating the strange and unpredictable behavior of subatomic particles – the tiniest building blocks of the universe, like electrons and photons. One theory in particular made Einstein uneasy.

It claimed that two particles could become "entangled." That is, their properties bound together in such a way that if you changed one, the other would instantly change, too... even if they were separated by miles, or even light-years.

Einstein scoffed. He called it "spooky action at a distance" and insisted it had to be a mistake.

But Einstein was wrong.

Over the next several decades, scientists designed experiments to test this spooky phenomenon. And to their astonishment, results were consistent: Entangled particles really could communicate instantly, defying the classical rules of physics.

This bizarre concept is no longer theoretical. In fact, it's the foundation of quantum computing.

You see, quantum computers rely on entanglement to work their magic. By entangling quantum particles, engineers can dramatically increase the power of a quantum system. When one qubit flips, so does its partner. It's like

flipping one light switch and having a hundred lights turn on at once, all perfectly coordinated.

This entanglement allows quantum machines to perform calculations that would take today's fastest supercomputers millions of years to solve. And they do it in just seconds.

That's why the stakes are so high.

Banks, corporations, governments, and tech giants are all racing to harness this power first. Because whoever wins quantum supremacy will unlock unthinkable profits and control the next era of computing.

As I'll explain, one small company you've likely never heard of before has quietly positioned itself at the heart of this revolution. It holds the patents, the partnerships, and the infrastructure to capitalize on what could be the most disruptive technology since the Internet itself.

If that sounds too incredible to believe, I wouldn't blame you. It's not the sort of thing you read every day. But behind this claim is a lesson I learned years ago from an investing legend...

The Botanist vs. the Geographer

Market Maven is built on the belief that the best investments present themselves when the rest of the market underestimates the power of disruptive change...

Much of this goes back to my experience having worked directly under hedge fund luminaries such as SAC Capital Advisors founder Steve Cohen and Greenlight Capital founder David Einhorn.

One day, I was sitting in David's office, shooting the breeze. We had been going through the numbers for a stock in some detail, and we broke for some chit-chat. But I wanted to pick his brain...

I asked, "What do you believe today that you didn't five years ago?"

He looked up, and looked me directly in the eye. "Great ideas are out here," he said, waving his arms around. "Not down here," he concluded, tapping the papers covered with numbers.

It has been more than a decade since that talk, and it has proved to be truthful time and again.

Wall Street analysts are good at what they do. They build out earnings models, talk to companies, and help investors understand the near-term dynamics of an industry. They can tell you if a business is getting better or worse.

They're like botanists who can tell you about the trees. But sometimes, you need to be a geographer to see the forest.

That's where we are with quantum computers.

Let me state the case quite simply: **Quantum computing will make current Internet security systems obsolete**. **The entire Internet will need to be resecured using quantum "locks**."

That's our opportunity, and it's one I believe to be worth trillions of dollars.

The key is that quantum computing allows certain calculations to be sped up exponentially. Problems that would take classical computers millions of years can be performed in just seconds, due to the unique nature of quantum.

When a quantum computer performs a task that classical computers cannot, at least in any feasible time frame, it's called quantum advantage ("QA"). That's the gold standard for what quantum computing firms are trying to achieve.

With QA come some tremendous areas of opportunity, but we're primarily focused on one application: cryptography.

Almost everything we do online – shopping, banking, sending messages – is protected by cryptography.

Cryptography is a form of encryption that relies on math problems too difficult for classical computers to solve. It's simply encoding – like what the U.S. Army used during World War II to ensure Germans couldn't understand key communication.

In this case, it's the system that makes Internet communication secure.

Right now, you're reading this on a website that starts with https://...

The "s" in https stands for "secure." You'll see it everywhere on the Internet. It keeps your data out of the hands of bad actors.

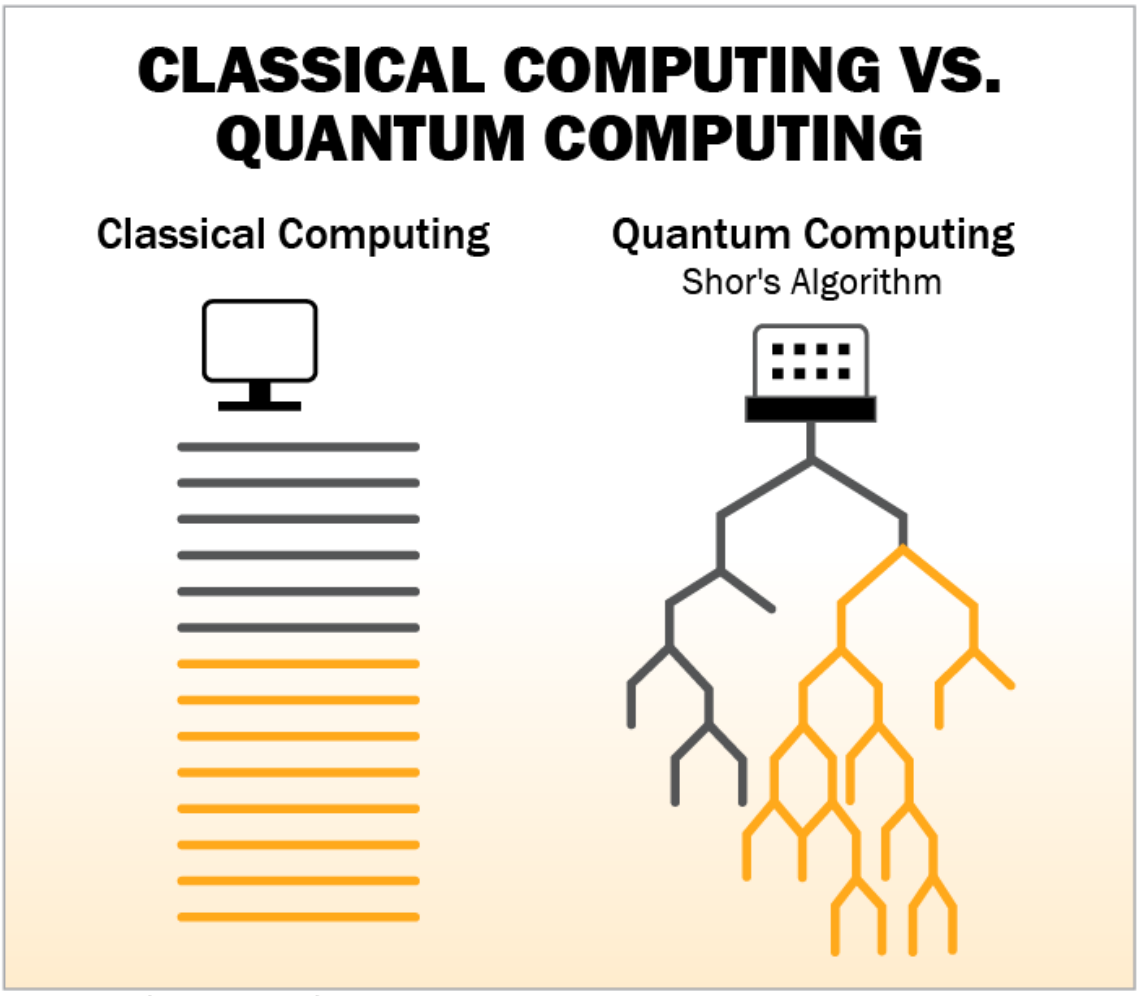
When you log into your Gmail account, that's secure. It's your personal data. Make an online order on Amazon? That needs to be secure – it is your credit card, after all. Social media apps like Instagram and Facebook are secured using cryptography.

But in 1994, American mathematician Peter Shor wrote an algorithm that could theoretically run on a powerful quantum computer to crack the encryption protocol used to secure things like passwords and credit-card numbers.

This algorithm exploited the fact that while it's simple to multiply two large prime numbers, no one has yet discovered an efficient way for a classical computer to perform the reverse calculation, called "factoring." But Shor showed how a quantum computer could do that with ease.

The key is that, unlike classical computers, quantum computers don't need to solve a problem one by one. Instead, they can look at many potential answers at one time. In other words, rather than working in parallel, a quantum computer can work exponentially, solving complex calculations in an

instant... just like our locked doors metaphor from earlier.



You Don't Need to Be a Mechanic to Drive a Car

To understand how it works, we're going to do a quick review of quantum physics.

Don't worry, this requires zero advanced science knowledge.

Think of it like a car...

You don't have to be a mechanic to drive a car. You just need to know how to steer, accelerate, and brake.

It's the same with quantum mechanics. You don't need to be an expert on particle physics. You just need to know three main concepts:

1. Particles can exist in multiple places at once.

This is a mind-bending concept, but one best illustrated by the physicist Erwin Schrödinger, the recipient of Einstein's famous 1935 letter.

Quantum physics tells us that a tiny particle (like an electron) can exist in more than one place or state at the same time. This strange idea is called "superposition."

To help people understand it, Schrödinger came up with a famous thought experiment in 1935, now known as Schrödinger's cat.

Imagine placing a cat in a sealed box along with a tiny radioactive atom and a vial of poison. There's a 50% chance the atom will decay and trigger the poison, killing the cat, and a 50% chance nothing will happen and the cat will stay alive.

According to quantum theory, until someone opens the box to check, the cat isn't just alive *or* dead – *it's both at the same time*. It exists in a combination of states, just like a quantum particle in superposition.

Of course, the experiment isn't really about cats. It's a way to show how strange quantum physics is. On the smallest scales of the universe, particles don't behave like everyday objects.

Instead of being in a single place, they exist as probabilities spread across many possible positions. Only when we observe or measure them (i.e., opening the box) do they "choose" a definite state. That's the bizarre but honest reality behind quantum.

2. Quantum particles' positions become fixed when they are observed.

Under quantum physics, particles do not have a fixed position *until they are measured*. They exist in a superposition. Once they become observed, their position is fixed.

In the cat analogy, the cat starts by being both alive *and* dead until you open

the box. Then, it becomes obvious that the cat is either alive or dead, but not both.

3. Particles can be entangled.

This was the "spooky action" Einstein wrote about.

Sometimes, quantum particles act in concert. Most importantly, when we observe the state of one quantum particle, we will also fix the state of any other entangled quantum particle. No matter how far they are apart, these particles will behave in a correlated manner.

To use the cat analogy again, entanglement is like having two boxes, each with a cat inside. Their fates are linked due to entanglement. Until you open the box, each cat is both alive and dead, as we explained earlier. But with entanglement, when you open *one* box and confirm the cat is alive, entanglement instantly tells you the state of the other cat, even if the second box is located across the galaxy.

These three properties – superposition, observation, and entanglement – enable quantum computers to quickly perform unbelievably complex tasks that are beyond the scope of any computer before it.

For instance...

The Age of the Universe

We already know that classical computers use "bits." These are binary electronic gates that can simply be open or closed. In math terms, they stand for 0 or 1. When many are combined, they can compute.

And we also know that quantum computers use "qubits." These are slightly, but crucially, different. Because of "superposition," qubits can exist in *all states* between 0 and 1. Because of "entanglement," qubits can work together simultaneously on a problem.

When used in tandem, multiple qubits can test *many possibilities at the same*

time instead of one by one.

A classical computer would attempt to solve a maze one possible solution at a time. A quantum computer would test every possible solution at the same time.

In essence, this is factoring. Quantum computers tackle the problem of factoring by looking for repeating patterns in numbers. It can start to seek out correct patterns, and eliminate wrong ones, to find a pattern that leads to the correct prime numbers in a security key.

Applying this to Internet security...

Transport Layer Security ("TLS") depends on multiplying two huge prime numbers to create one even bigger number, which is publicly available. Each side using TLS knows one of the prime numbers, and can use it to calculate the other prime factor. Those two prime numbers together form the key to decrypt any data transmitted over TLS.

The public number is more than 600 digits long. For a third party who didn't have one of the "keys," using a classical computer to factor that number into primes one by one would take more time than the age of the universe.

But a quantum computer can sort buckets of solutions at a time. It can figure out which groups are likely to be correct, and which ones are definitely not.

Rather than one by one, it can essentially reject half the answers immediately... then reject half of the remaining ones, and so on...

This "exponential speedup" means a quantum computer can solve encryption in days or even hours.

You might be able to see the problem here...

Soon, a quantum computer will be able to break every single piece of code on the Internet.

Every e-mail... every banking transaction... every government secret... *everything*.

And so, we come back to the question I posed at the top: How much could this be worth?

And to answer *that* question, we'll have to ask one more.

How Much Is the Internet Worth?

The largest cybersecurity stocks, like CrowdStrike (CRWD), Palo Alto Networks (PANW), and Cloudflare (NET), have a combined market cap of around $700 billion. But those are just the publicly traded ones.

Internet giants like Amazon (AMZN) and Alphabet have massive divisions dedicated to protecting their (and your) data.

All told, the cybersecurity industry is estimated to generate roughly $200 billion worth of revenues per year.

The publicly traded cybersecurity stocks trade for a price-to-sales ratio of between 12.5 and 25 times, reflecting their high profitability and growth potential.

If we apply that multiple to all $200 billion in cybersecurity revenues, that would get us a total industry value of between $2.5 trillion and $5 trillion.

Let's use the more "conservative" figure of $2.5 trillion as our starting point for what quantum computing – and quantum security, more specifically – could be worth one day.

So now we have a picture of the potential market. Quantum computing gives us the ability to decode all encrypted data... and the ability to securely encode it.

In short, quantum can be the universal key *and* the unpickable lock.

Now, before we get to this month's recommendation, I want to make one

more important point.

Often, when it comes to cutting-edge technology investments, folks like to get ahead of themselves.

Remember the "information superhighway"?

It was a hope that all of the world's work and communication would be done over the Internet.

While that technically came true, that didn't lead to profitable investments in the early leaders like AOL and Netscape.

Instead, it was the companies that were narrowly focused on doing one thing very well that flourished. Google dominated search. Amazon dominated e-commerce and cloud hosting. And Meta Platforms (META) – formerly Facebook – became the king of social media.

Similarly, we are focusing on the best-in-class encryption company out there. But before we get to that, let me be clear about something.

How We'll Structure This Investment

Quantum computing has no real-world applications today. It is not a commercially viable technology at this moment.

And that's OK. In fact, *that's our opportunity*.

The quantum computing stocks are more like publicly traded venture capital ("VC") companies.

If one of them achieves quantum supremacy, it will capture the lion's share of a multitrillion-dollar opportunity.

That leads us to an interesting approach to investing in the industry's players...

For a private VC investor, the approach is simple: Pick a bunch of companies

you think have a shot at being huge winners. Most of those investments will go to zero, but a few big winners will dramatically outweigh all of the losers.

In public markets, however, we can take a modified – and improved – version of that same approach.

1. We can cut bait at any time.

When we're talking about the potential to return 25 times or more on our initial investment, we have to be willing to lose all of our capital. (That means we need to keep the position size tiny... more on this in a moment.) Fortunately, because these stocks are plenty liquid, we'll be able to cut bait without issue if needed.

2. The markets are a "probability mechanism."

There are just a few publicly traded quantum stocks, and a multitrillion-dollar opportunity.

At some point, the stock market will start to price in a probability that one of these stocks might ultimately succeed.

Even a 10% shot at achieving quantum supremacy on a $2.5 trillion opportunity would be worth $250 billion.

Today, the four "pure play" quantum companies have a combined market cap of around $50 billion. Said another way, even a tiny sliver of success could easily send any one of these companies up 10 times to 25 times from here.

That means we don't even need to be correct about which stock will end up the victor to make a lot of money here. (In the same vein, AOL shareholders printed money for a long time, even though the company wound up an also-ran.)

This might sound counterintuitive, but in a market with so much upside, we have to spread our capital around with a "basket approach." This will help make sure we have exposure to whichever horse ultimately wins the race.

With that said, we do have a favorite...

Who's the Most Likely Winner?

We think Berkeley, California-based **Rigetti Computing (Nasdaq: RGTI)** has the best shot at achieving quantum supremacy.

The company was founded in 2013 by physicist Chad Rigetti, with backing from the legendary tech incubator Y Combinator.

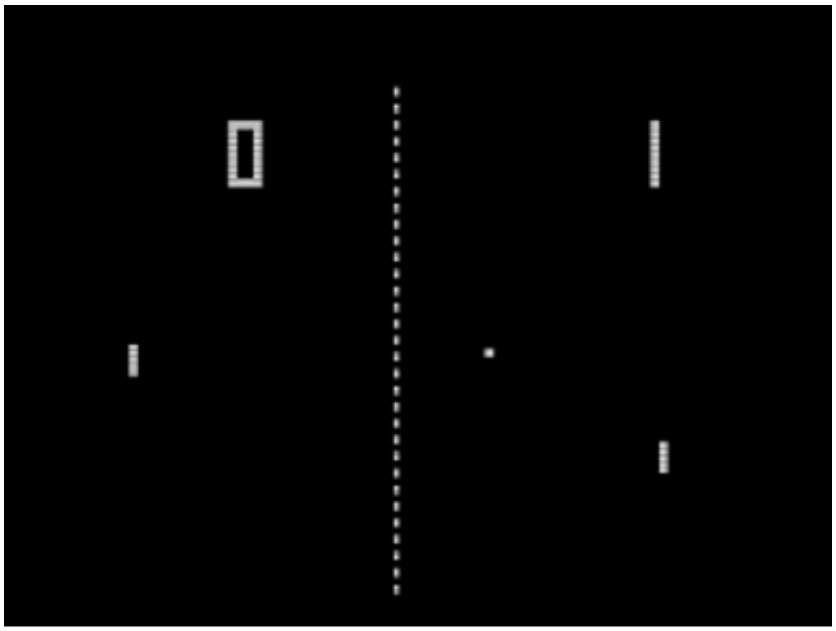
Within three years, Rigetti had created its first quantum processor using three qubits.

The company used that success to help raise $24 million from Andreessen Horowitz, the spectacularly successful VC fund. It used that capital to build out its processors to use more and more qubits.

Since then the company has gone through multiple funding rounds, culminating in its 2021 public debut.

Rigetti has been singularly focused on improving the processing power of its quantum computers. In a nutshell, this means adding qubits.

Think back to the rudimentary graphics on the first-generation Atari 2600 video-game console, released in 1977:



Source: Internet Archive

Now, compare that to today's lush, immersive graphics on the Microsoft Xbox and Sony PlayStation 5 consoles.

Source: Reddit

That's the difference between an 8-bit chip and today's 64-bit chip. And it's taken nearly five decades to get there.

To put that into perspective, consider that Rigetti has moved from just three qubits in 2016 to a 36-qubit chip available today... and an expected 100-plus qubit chip by the end of this year.

The pace of innovation here is breathtaking.

Rigetti has the technical bona fides. It's also taking a proven, winning approach of integrating hardware and software into its ecosystem. That's the same proven playbook that made Nvidia (NVDA) a $4 trillion company.

To start, Rigetti fabricates its chips in its own foundry, or chip factory. It builds its own product. For something so cutting-edge, we like to see the company keep it in-house.

These chips are used on a superconducting platform to create qubits, the basic units of quantum computing.

Not every company uses the superconducting method. Some use other ways to make qubits, and those could work too. But superconducting technology has caught the eye of big players like Google, Amazon, and even the Chinese government, suggesting it might be the most promising approach.

Rigetti designs its chips so they can connect and work together. Linking them forms a larger quantum processing unit ("QPU") that avoids some of the limits of single chips. The company's long-term goal is to scale this system up to 1,000 qubits.

Beyond its hardware, Rigetti has also built its own quantum operating system ("OS") – software that helps run quantum programs. Customers can access it through cloud services like Amazon Web Services ("AWS") and Microsoft Azure.

In short, Rigetti isn't trying to do everything at once. Its main focus is improving the performance and reliability of its QPU system to make quantum computing faster and more dependable.

That's why it's already working with high-tech customers, including NASA and the Defense Advanced Research Projects Agency ("DARPA") – the Department of Defense agency that literally invented the Internet.

At this point, Rigetti is essentially a science experiment.

Yes, the company is generating limited revenues... But they're irrelevant to our analysis. We aren't interested in whether it can earn a little extra money doing research for the U.S. government. We want to know what it's worth if it achieves quantum supremacy.

With a current market cap of around $13 billion versus a potential market opportunity of about $2.5 trillion, Mr. Market is telling us that Rigetti has a 0.5% chance of success.

That's way too low.

The company has been heads-down focused on quantum development for more than a decade. If the market ultimately gives Rigetti even a 10% chance of success, the stock could be nearly a 25-bagger from here.

ACTION TO TAKE

Buy Rigetti Computing (Nasdaq: RGTI) up to $55 per share.

Rigetti Is the Best, but What About the Rest?

Our research suggests that of the publicly traded stocks, Rigetti has the best chance at success.

But it's one of several companies chasing quantum supremacy, so we're going to take a "basket" approach to investing in this nascent technology.

For one thing, we think Rigetti will be the winner... But we have no way to know for certain. It's too early, and technology moves too fast. We absolutely

love the risk/reward setup of the stock, but we don't want to put our whole bet on the wrong horse.

Second, *Market Maven* is built on these two principles:

1. History doesn't repeat, but it rhymes.

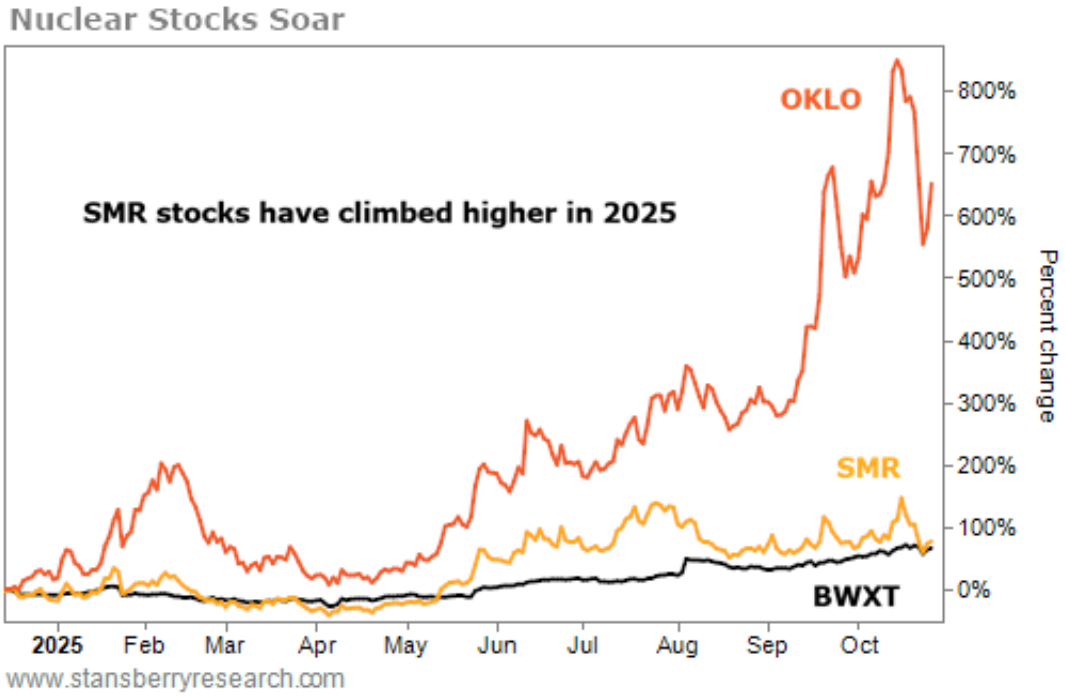
2. We look for movies where we know how the story is going to end.

The market has recently started to pay attention to these companies' potential, and every stock in the sector is surging.

We saw this recently with nuclear stocks, specifically small modular reactors ("SMRs"). I helped the *Commodity Supercycles* team with this research. Last December, we recommended shares of SMR producer BWX Technologies (BWXT) and told readers to keep an eye on NuScale Power (SMR) and Sam Altman's Oklo (OKLO).

We didn't know which company would be the ultimate winner, just that we had a tremendous investment opportunity.

Less than a year later, we still don't know the ultimate winners... But this basket of stocks is up an *average* of nearly 250%...



It will take a while for us to get ultimate visibility on which technology wins... But by the time we know, the stocks may have doubled (or more).

We want to take advantage of the opportunity today...

Remember, these are extremely volatile stocks. **Only invest money that you are willing to risk in its entirety**.

Over the past month or so, these stocks have had massive moves higher. This is a good thing. It means the market is starting to wake up to the opportunity.

But big shifts in market sentiment come with big volatility in both directions. A big move higher can be followed by a big move lower, often for no apparent reason.

That's why, if you'd normally invest $10,000 into a typical *Market Maven* recommendation, I recommend putting just half of that ($5,000 total) into this basket of stocks today.

Because we believe Rigetti has the best chance of succeeding, put 40% of your quantum investment into it (in this hypothetical case, $2,000) and just

$1,000 into each of the other three stocks listed below.

In other words, today I want you to make Rigetti a one-fifth position and the other three stocks a one-tenth position. Remember, if one of these stocks goes up 10 times and the rest go to $0, you will still have more than doubled your money.

If the basket continues to rise, great, you're making money, and we'll look to add to our position down the road. If they take a "breather" and pull back some, you'll be able to buy the second half-position and lower your cost basis.

Make no mistake, the potential here is exceptional. But reward comes with risk. Following this advice will put you in the best position to succeed, no matter what the stocks do next.

With that said, here are the other three stocks we're adding to our quantum basket, alongside Rigetti.

D-Wave Quantum (NYSE: QBTS) takes a different path toward quantum computing.

Unlike most players aiming for chip-based quantum, D-Wave focuses on something called "quantum annealing." Instead of testing every route one by one, quantum annealing uses quantum physics tricks like superposition and tunneling (jumping through barriers).

D-Wave's chips are specifically hard-coded to sacrifice flexibility for efficiency. If normal quantum chips are a Swiss Army knife, D-Wave's chips are a chef's knife.

This technique is specifically designed to solve optimization problems – like finding the fastest delivery route or minimizing energy use in a factory.

The market opportunity might be smaller, but its specificity is its advantage. Its technology is already being used commercially with Volkswagen

(VWAGY), Mastercard (MA), and Lockheed Martin (LMT). We're buying shares of D-Wave as it's the first quantum company being used for enterprise applications.

ACTION TO TAKE

Buy D-Wave Quantum (NYSE: QBTS) up to $50 per share.

IonQ (NYSE: IONQ) uses a different kind of technology to generate qubits. So far, its "trapped ion" approach appears to produce qubits more easily, which has great potential for scalability.

However, it's currently lacking in reliability – a measure of its consistency and accuracy in performing calculations. Reliability is as important as scalability. If IonQ can get its chips to succeed, it could become the dominant platform in quantum computing.

Beyond hardware, IonQ also has a cloud-first strategy. Its quantum computers are already accessible through AWS, Microsoft Azure, and Google Cloud. This helps developers and researchers test quantum algorithms today, even before Q-Day arrives.

IonQ's strategy is to scale its qubits for use on more complex problems, from materials science to financial modeling. The opportunity adds new applications beyond encryption and increases the potential market size.

ACTION TO TAKE

Buy IonQ (NYSE: IONQ) up to $80 per share.

Unlike the other quantum computing companies, **Quantum Computing (Nasdaq: QUBT)** is taking a different path.

Instead of using atoms or electrical circuits to create its quantum bits, it uses photons, or tiny particles of light.

Photons can carry huge amounts of information and move quickly with little loss. That's the same reason the Internet works through fiberoptic cables, which send light signals around the world.

One big advantage is that photons can be controlled at room temperature. Most other quantum computers need freezing cold environments to work, which makes them complicated and expensive. If photons can do the same job without needing all that cooling, building a quantum computer could become much easier.

The company is still in the early stages. It's developing special, thin-film chips that can direct and process light in ways needed for quantum computing. By designing both the chips and the computer itself, it's trying to build a new kind of system from the ground up.

It's a bold approach, and one that may take longer to prove out. But if it succeeds, a room-temperature photonic quantum computer would be a major breakthrough.

ACTION TO TAKE

Buy Quantum Computing (Nasdaq: QUBT) up to $25 per share.