DISCLAIMER: This report is for educational purposes only and does not constitute financial advice. It is not a recommendation to buy or sell any securities, currency or commodity. All investments involve risk, including the loss of principal. Past performance is not indicative of future results.

THE PREHN INSTITUTE | RESEARCH

Published August 14, 2026

Quantum Computing: The Second Wave

The best 3 months this industry has ever had. The stocks did nothing. Here's what that means.

FELIX PREHN

Economist and former investment banker
The Prehn Institute

REPORT SCOPE

Plain-English explanation of the video.

RATING

None

PRICE TARGET

None

BOTTOM LINE:

Since May 2026, quantum computing has had 4 catalysts that would normally send stocks vertical: Google's CEO compared quantum to AI 5 years ago, Oracle physically installed a quantum computer in its cloud, the US government took ownership stakes in 9 quantum companies, and IonQ posted record revenue of $80.1M (+287%). The stocks moved between -2% and +6%. This report explains why — and what it means for investors sitting in the boring middle of a technology adoption curve.

$850B

Forecast quantum computing market by 2040 — roughly 30% annual growth

About Felix Nikolas Prehn and The Prehn Institute

Felix Nikolas Prehn

Felix Nikolas Prehn is an economist and former investment banker. He writes and lectures on how the financial markets work, with a focus on how ordinary savers can protect what they have built.

The Prehn Institute

Felix Nikolas Prehn is the founder of The Prehn Institute. It publishes research on the financial markets and provides instruction in how they work. It gives no financial advice.

It takes no sponsorships and no endorsements, ever. So its work answers to its readers and to nobody else.

Our work online

youtube.com/@felixprehn

prehninstitute.com

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

Contents

The best 3 months this industry has ever had. The stocks did nothing. 4
What actually changed 5
The US government bought in 7
One of these companies started making actual money 8
What the sceptics say — and what's fair 9
Error correction: bigger now means 10
Moving onto normal factory lines 11
The news got better the entire way down 13
The boring bit is where the money gets 14
Alphabet (GOOGL) 16
The Honeywell callback 17
Rigetti (RGTI) 19
One speculative name. Your pick. 20
What Felix actually owns 21
5 questions before you buy another quantum stock 22
Sources & disclosures 23

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

BOTTOM LINE

The best 3 months this industry has ever had. The stocks did nothing.

BOTTOM LINE:

Between May and August 2026, quantum computing produced 4 landmark events. In any normal sector, each one alone would have moved share prices. Combined, they barely registered. IonQ: −2%. D-Wave: +2%. Rigetti: +6%. And every single one of them is still 45–70% below its October 2025 peak.

−2%	+2%	+6%
IonQ since May	D-Wave since May	Rigetti since May

WHAT HAPPENED

4 catalysts in 3 months. Google's CEO compared quantum to AI 5 years ago. Oracle installed a quantum computer inside a data centre. The US government took ownership stakes in 9 companies. IonQ hit $80.1M quarterly revenue, up 287%.

WHAT THE MARKET DID

Almost nothing. The pure-play quantum stocks moved in low single digits. The sector sits in the dull middle of the adoption curve — the part where the news is excellent and nobody cares.

WHY IT MATTERS

October 2025 was the mania. This is the build-out. Every major technology innovation in history has followed the same pattern: hype, crash, boredom, then a second wave that dwarfs the first. The video argues we are in the boredom phase right now.

THE CATCH

1,000% gains and most people still lost. The stocks went up enormously and then fell 45–70% from the peak. Almost everyone who owned them gave back most of the gain, because they didn't have a plan for when to sell.

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

4 CATALYSTS SINCE MAY

What actually changed

1. GOOGLE'S CEO SAID IT OUT LOUD



Source screenshot: Vivek Ramaswamy (@Vivek4real_) sharing Sundar Pichai's quote on X, July 2026.

"Quantum is where AI was 5 years ago." That is a direct quote from the CEO of the company whose chip, Willow, started this cycle. He is not a promoter or a startup founder. He runs one of the 4 companies on earth that could actually build a working quantum computer.

Why it matters more than another lab result. 5 years before he said this, if someone had told you what AI was about to do to stock markets, most people would have laughed. Some did laugh — Felix has the comments to prove it.

2. ORACLE PUT A QUANTUM COMPUTER IN ITS CLOUD



Press Release

Quantinuum and Oracle Partner to Accelerate Hybrid Quantum Compute Adoption on Oracle Cloud Infrastructure

Quantinuum's most advanced quantum computer, Helios, will be deployed in a US-based OCI AI data center to enable hybrid quantum-AI workloads as an OCI service.

Quantinuum and Oracle aim to support enterprise, AI lab, academic, and research applications spanning drug discovery, materials science, financial modeling, and large-scale optimization, including AI workloads.

Broomfield, Colorado and Austin, Texas—Aug 11, 2026

Quantinuum (NASDAQ: QNT), a leading quantum computing company, and Oracle today announced a multi-year strategic partnership to bring quantum computing to Oracle Cloud

Source screenshot: Oracle newsroom, August 11, 2026.

Not a simulator, not a partnership — hardware in the

building. On August 11, Oracle and Quantinuum announced a multi-year deal. A machine called Helios — 98 trapped-ion qubits, 3rd generation — is being physically installed inside a US Oracle Cloud data centre. Developer preview goes out in the coming months.

The power number. Helios draws about 60 kW. A leading supercomputer draws 16–39 MW. That is a factor of several hundred. The single biggest constraint on the AI buildout right now is electricity. If quantum can do meaningful work at a fraction of the power draw, that changes the economics of everything.

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

CATALYST 3

The US government bought in

BOTTOM LINE:

$2 billion, 9 companies, and in exchange the government took a minority ownership stake. Not a grant. The same structure used for the chip companies, for rare earths, and for some of the nuclear programme. Governments don't buy into science projects. They buy into things they've decided are strategic.

Company Amount Notes

IBM $1 billion Plus $1B of IBM's own money. New standalone 300mm quantum wafer fab in Albany, NY

GlobalFoundries $375 million Semiconductor manufacturing partner

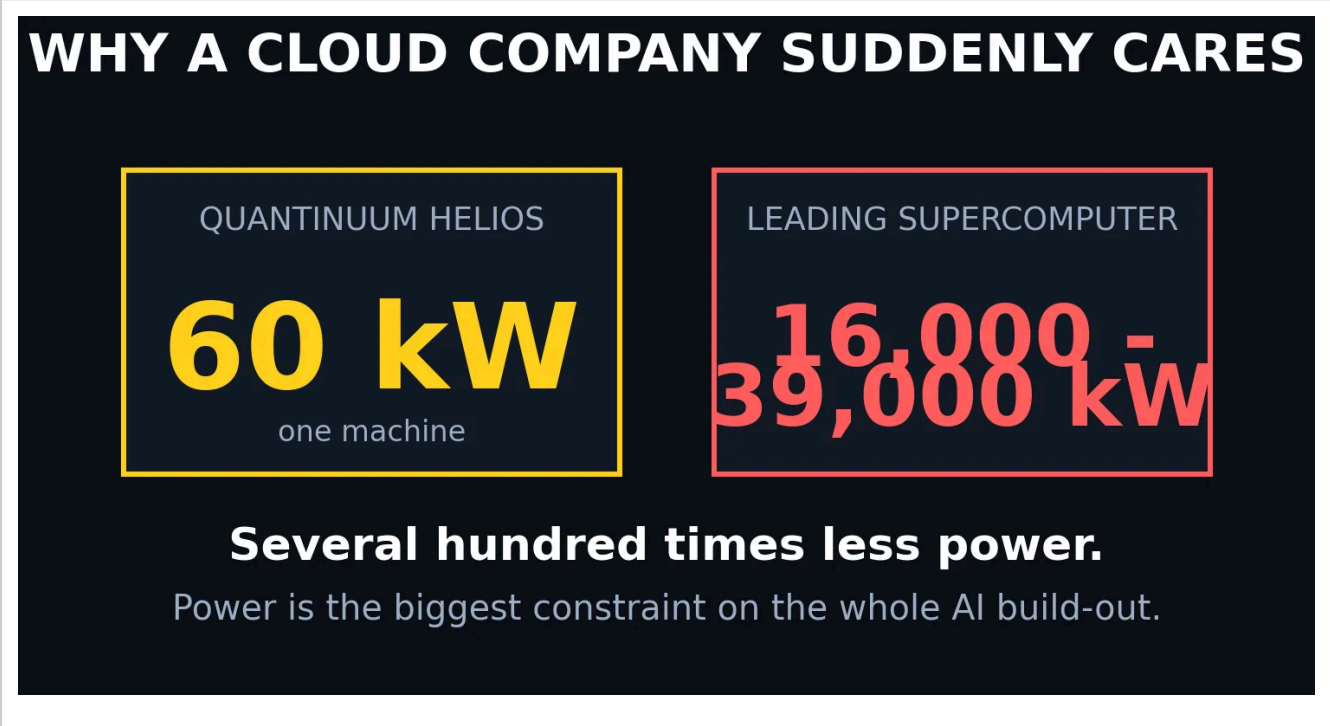
D-Wave (QBTS) ~$100 million Quantum annealing, only commercial production system

Rigetti (RGTI) ~$100 million Superconducting qubits, owns its own fab

Infleqtion (INFQ) ~$100 million Neutral atom technology, quantum sensing

PsiQuantum ~$100 million Photonic approach (not publicly traded)

Others Remainder Across 3 additional companies

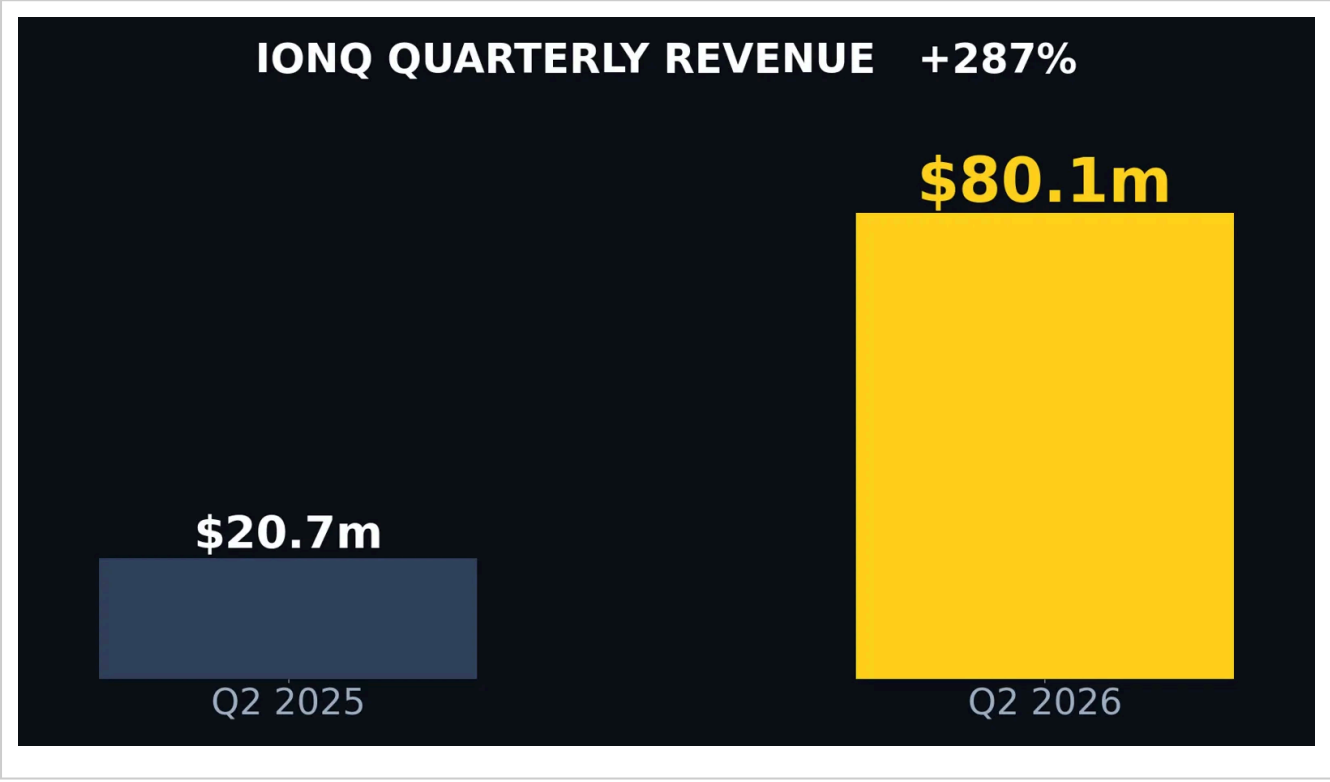


Comparison of typical power draw: quantum systems vs conventional supercomputing. Source: company announcements.

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

CATALYST 4

One of these companies started making actual money



IonQ quarterly revenue. Source: company earnings reports.

Metric Q2 2026 Change

Revenue $80.1 million +287% YoY, 20% above guidance

Full-year guidance (raised) $280–$290 million Up from prior range

Remaining performance obligations (RPO) $485 million +297%

GAAP net loss $1.87 billion Of which $1.58B is non-cash warrant accounting

Adjusted operating loss (actual cash burn) ~$120 million Normal for this stage

Cash position (pro-forma, post SkyWater) ~$2.0 billion After $1.8B SkyWater acquisition

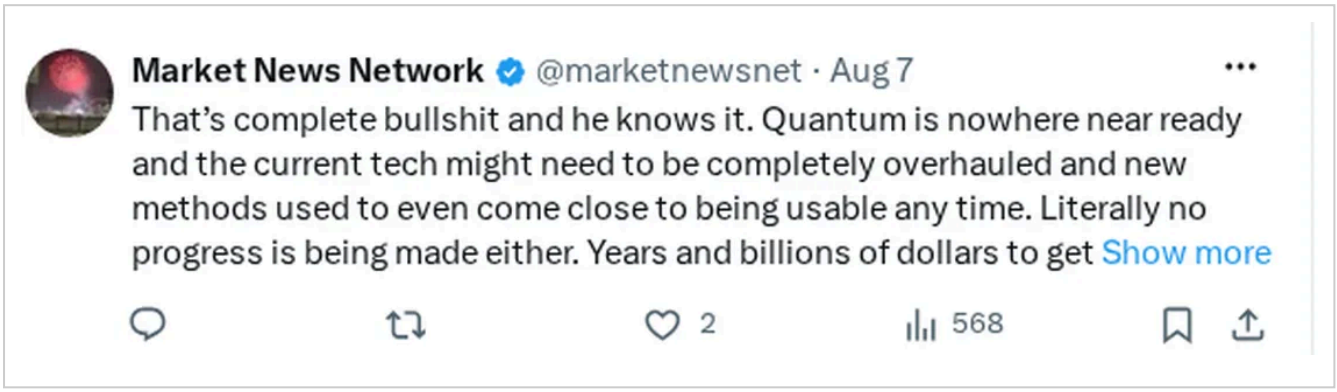
The bear case that expired.

A year ago, the honest bear case on the entire quantum industry was: lovely story, no revenue. IonQ's 5th consecutive record quarter — growing at triple digits with a $485M backlog — means that sentence no longer works.

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

THE HONEST COUNTERARGUMENT

What the sceptics say — and what's fair



Top reply under the Google CEO clip on X. The video addresses this directly.

THE SCEPTIC'S CASE

"Quantum has made no progress. It's all narrative." For a long time, this was basically true. The sector ran on press releases, qubit counts that meant nothing, and announcements timed to share offerings. Companies with $5B market caps and revenue you could fit in a dental practice.

WHAT'S DIFFERENT NOW

Revenue. $80M in a quarter from IonQ, growing at triple digits, with a $485M backlog. Real customers, real invoices.

Ownership. The government didn't write a cheque and walk away — it took a stake. If this were vapour, that is an odd thing to do with taxpayers' money.

Distribution. Oracle. Amazon. Microsoft. IBM. These are the companies that decide what shows up on enterprise price lists. Once it's on the list, IT departments put it in their budgets. That is a different conversation from a research paper.

WHAT'S STILL FAIR

"Priced ahead of itself" is a legitimate position. These stocks are expensive. They are lossmaking. You could lose half your money in 8 weeks — it has happened. But "no progress" is expired. The honest bear case now is about sizing and timing, not "run away."

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

2 IDEAS, NO CAT IN A BOX

Error correction: bigger now means

BETTER

IDEA 1:

Qubits are fragile and get things wrong constantly. Historically, adding more qubits made the whole system worse. Google's Willow chip changed that: as the chip gets bigger, the error rate goes down. Each time they scaled up the grid, the logical error rate fell by a factor of about 2.14x.

More qubits (old world)

→

More errors

→

System gets worse

More qubits (Willow)

→

Error rate falls 2.14x

→

Engineering challenge, not physics miracle

Why this matters for investors.

If bigger means better, quantum isn't stuck in a lab waiting for a breakthrough. It becomes an engineering problem. Engineering problems get solved when enough money shows up. There is a lot of money showing up.

Source: Google Quantum AI, Willow chip results. Also referenced: HRL Labs, 18 spin qubits at 0.02% error rate.

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

IDEA 2

Moving onto normal factory lines

HRL LABS: 18 SPIN QUBITS AT 0.02% ERROR

Almost no coverage, massive implications. Spin qubits are made on ordinary semiconductor equipment — the same machines that produce the chip in your phone. Everything else in quantum needs exotic hardware in a fridge colder than deep space, hand-built, one at a time.

IBM BOUGHT HRL

The manufacturing route meets the manufacturer. IBM now has the spin-qubit technology and a new $1B wafer factory in Albany to produce it. That changes quantum from a one-off science project into something you can actually scale.

THE INVESTMENT TAKEAWAY

"You don't need to understand quantum. You need to understand who owns the pipes." That's from Felix's original thread, and it's the lens this video uses for every pick. Who controls the supply chain — the chips, the fabs, the cloud distribution — matters more than who has the cleverest physics.



Source: Felix Prehn's quantum thread on X, July 2025.

$10,000 → $115,000 → $51,000



Two-year charts: IonQ, D-Wave (QBTS) and Rigetti (RGTI). All 3 peaked within 72 hours of each other in October 2025.

Stock Peak Date Gain to Peak Fall from Peak

D-Wave (QBTS) Oct 15, 2025 ~1,150% −53%

Rigetti (RGTI) Oct 15, 2025 ~827% −67%

IonQ Oct 13, 2025 ~180% −45%

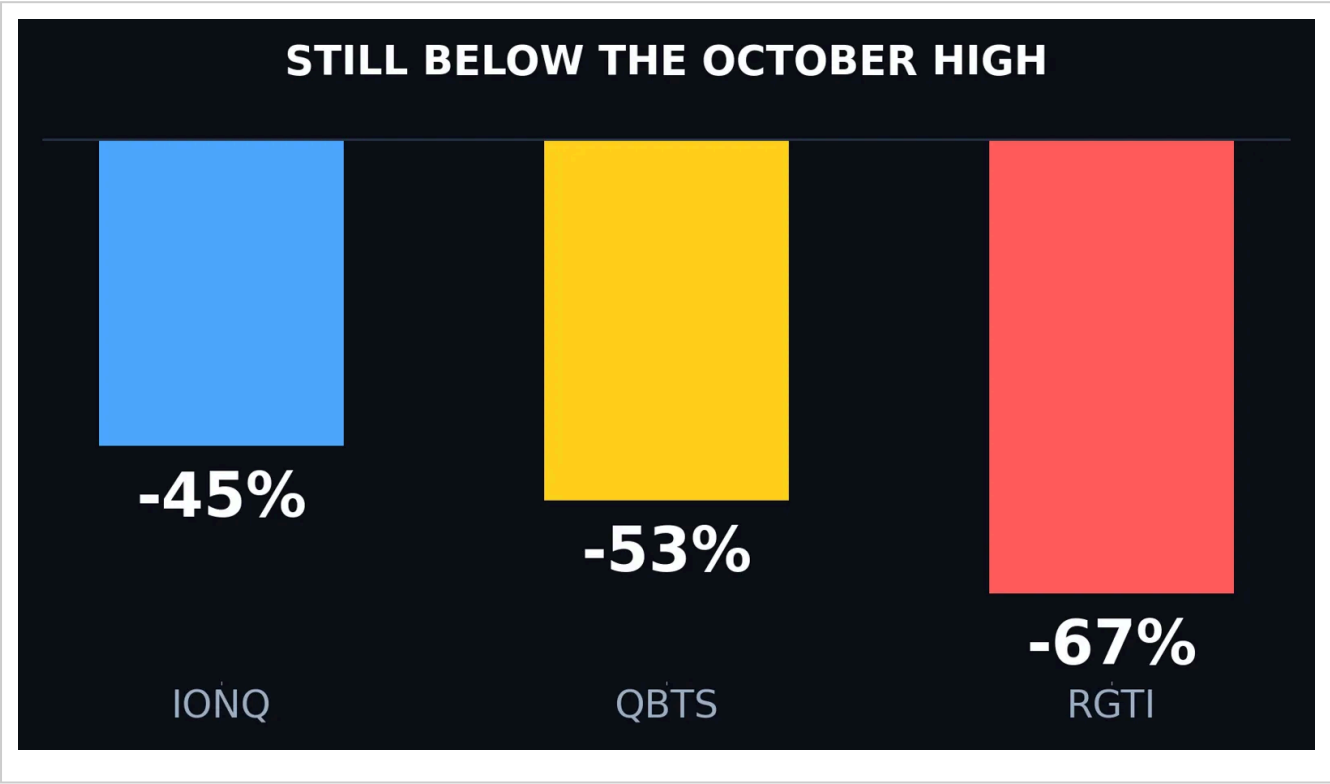
3 companies. Different technologies. Different customers. Different financials. All peaked within 72 hours.

That's not 3 companies having 3 separate bad weeks. Somebody flipped a kill switch across the whole sector at once.

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

THE PART THAT COSTS PEOPLE MONEY

The news got better the entire way down



EVERYTHING HAPPENED AFTER THE CRASH

Google CEO quote. Oracle deal. Government money. IonQ's

record quarter. All of it happened after October 2025. Every month brought better news. Every month, prices went lower. If you were holding and thinking "the technology is real, the story is good, I'll hold" — you were right about all of it. And you still gave back 60%.

WHAT WENT WRONG

They didn't have an exit plan. They didn't know when to

sell. They watched life-changing money appear on their screen. Instead of locking it in, they held. Not because they were stupid. Because nobody ever taught them when to get out.

THE HONEST REFRAME

"Greedy is the wrong word. They just didn't know what to

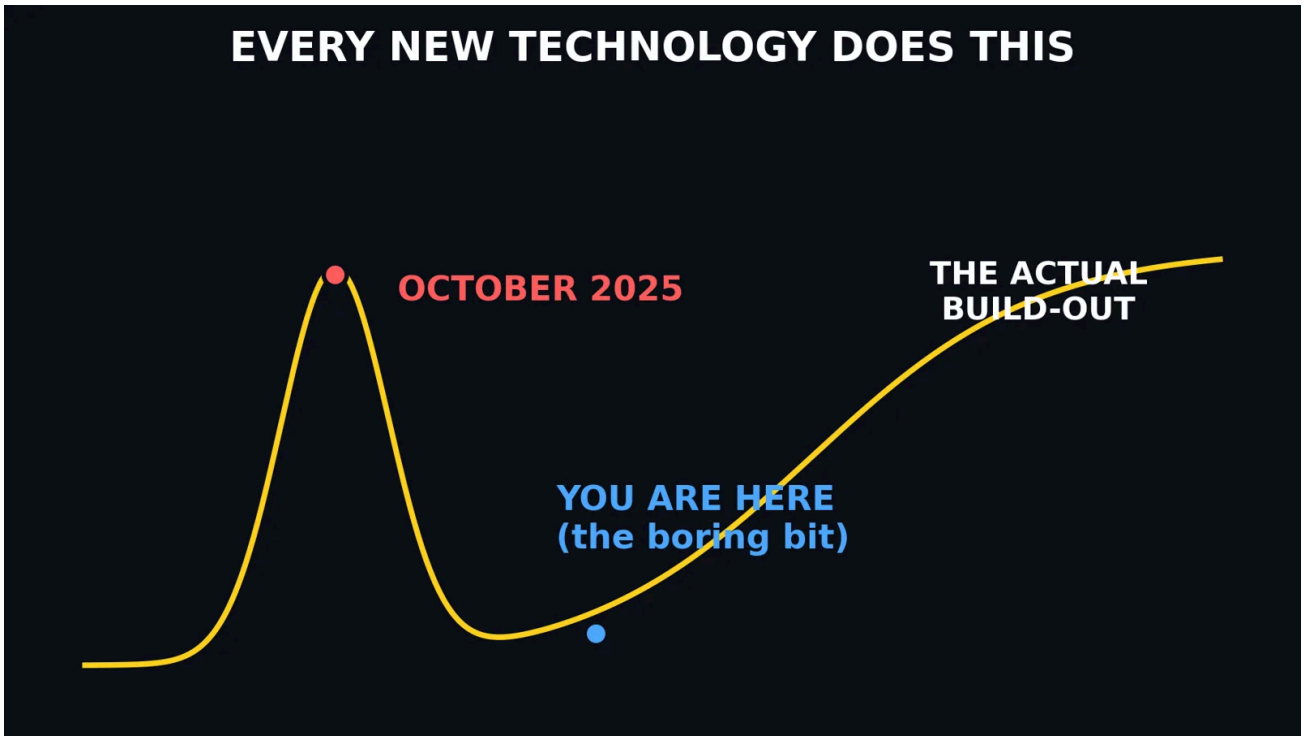
do." There are 10,000 videos on what to buy. An entire industry of courses and newsletters. And almost nothing, anywhere, about when to sell.

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

WHERE WE ARE NOW

The boring bit is where the money gets

MADE



The technology adoption pattern. Same picture Felix showed in May.

THE PATTERN

Every major technology does this. New tech arrives. Everyone gets wildly overexcited. Prices go vertical. Then it crashes — 70%, 80% — and everyone declares it dead. Then, quietly, while nobody's watching, the actual thing gets built, and it ends up far bigger than the mania ever suggested.

HISTORICAL PRECEDENT

Railways did this. The internet did this. The internet crash was 90%. The internet still ate the world. Everyone always points to the crash and says "it was a bubble." Everyone always forgets the second half.

RIGHT NOW

October 2025 was the top of the mania. Today we are in the boring bit — excellent news, flat charts, genuinely dull to own. And it's brutal to sit through, because nothing's happening and you start thinking you should sell and go buy something exciting. That's exactly when you shouldn't.

TIER 1 — PICKS AND SHOVELS

IBM

THE THESIS:

Biggest government cheque ($1B) plus $1B of its own money. Building a brand-new standalone 300mm quantum wafer factory in Albany, NY. Bought HRL (spin qubits). Targeting Starling — the first large-scale error-corrected quantum computer — by 2029. Currently ~28% below its June high.

Detail Data

Government investment $1 billion

IBM's own matched investment $1 billion

Factory New standalone 300mm quantum wafer fab, Albany NY

Acquisition HRL Labs (spin qubits — semiconductor-compatible manufacturing)

Target machine Starling, first large-scale error-corrected quantum computer, 2029

Share price vs high ~28% below June 2026 peak

A wafer fab is a factory.

Not a lab. Somebody has decided quantum needs to be manufactured at scale, and the government has decided it needs to be manufactured in the United States. That is a structural commitment, not a press release.

TIER 1 — PICKS AND SHOVELS

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

TIER 1

Alphabet (GOOGL)

THE THESIS:

Willow started the cycle. Their CEO just compared quantum to AI 5 years ago. And Alphabet is down about 14% since May. If quantum takes another 8 years — and it might — you still own Google. Search, YouTube, Android, the cloud, the AI. The pure plays don't have that luxury.

THE WILLOW CHIP

The error correction breakthrough is theirs. Each time they scaled up the grid, the logical error rate fell by about 2.14x. That result is what turned quantum from a physics problem into an engineering problem.

THE OPTIONALITY

The cheapest way to be in the room. Unlike pure-play quantum stocks, Alphabet has a profitable core business generating hundreds of billions in revenue. Quantum is a free option on top of a business you'd be happy to own anyway.

THE HONEST BIT

It's also the least exciting. And that, as the video says, is kind of the theme. The least exciting decision in this list has been the most profitable (Honeywell, next page).

−14%

Since May 2026

WILLOW

Started the quantum cycle

"5 YRS"

CEO's AI comparison

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

THE LEAST CLEVER, MOST PROFITABLE DECISION

The Honeywell callback

JULY 2025: THE BORING PICK NOBODY CLICKED ON

3 quantum plays. 2 obvious. Then Honeywell. A big, dull, profitable industrial company that makes thermostats and jet parts. Felix picked it because Honeywell owned a majority stake in Quantinuum. If quantum went nowhere, you still owned a real business.

AUGUST 2026: QUANTINUUM IS INSIDE ORACLE'S CLOUD

Helios — the machine Oracle just installed — belongs to **Quantinuum.** Of every quantum company in the world, the one a major cloud provider physically put in the building is the one attached to the boring industrial.

THE SHARE PRICE

Honeywell is up about 10% since May and sitting near its highs. Meanwhile the 3 exciting pure plays did nothing.

THE LESSON

"Institutions accumulate while it's boring. Retail turns up for the momentum." Or put it another way — by the time it's exciting, the smart money is already in.

+10%	−2%	+6%
Honeywell since May	IonQ since May	Rigetti since May

TIER 2 — THE REVENUE ONES

IONQ

THE INVESTMENT CASE

Revenue leader. $80.1M Q2 revenue, +287% YoY, 5th record quarter. $485M backlog. Roughly half the business is international, ~60% commercial rather than government. This is a company that sells things.

SKYWATER ACQUISITION

$1.8B, closed July 31. SkyWater is a US-based semiconductor foundry. IonQ now owns its manufacturing — the Tesla model. Own the supply chain from chip design to production. It costs more and takes longer, but nobody can squeeze you on supply.

THE HONEST BIT

The headline loss is scary. GAAP net loss of $1.87B in Q2. But $1.58B of that is a non-cash accounting item on warrants — paper, not real money going out the door. Actual cash burn is

~$120M/quarter. They've got ~$2B in cash after SkyWater. The money is there.

OTHER MOVES

Nexus Photonics (photonic interconnects), plus MOUs with Anduril and Sandia. Broadening the customer base beyond cloud and research into defence and national security.

TIER 2 — THE REVENUE ONES

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

TIER 2

Rigetti (RGTI)

THE BUSINESS

4 earnings beats in a row. Revenue up 173%. New 108-qubit chip (Cepheus). Owns its own fab. $100M from the government programme. Deals in the UK, India, and a partnership with Quanta in Taiwan.

THE WAIT-FOR-CONFIRMATION RULE

In May, Felix said wait for it to break $20. Ideally push to $27 before getting involved — he wanted the market to confirm the story before paying for it. It never broke $20. It's sitting at $18.60 right now.

THE FRUSTRATION

The business delivered. The share price didn't. 4 beats. New chip. Government money. Everything Felix wanted from the company happened. The confirmation from the market did not.

THE DISCIPLINE

The wait-for-confirmation rule is the same rule that would have got you out in October. You can't use it only when it's comfortable. So Felix still doesn't own Rigetti.

173%

Revenue growth Cepheus qubits

$18.60

Still below $20 trigger

TIER 3 — THE LOTTERY TICKET

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

TIER 3

One speculative name. Your pick.

OPTION A: INFLEQTION (INFQ)

$100M from the government. Different technology —

neutral atoms. Also has a quantum sensing business (navigation and timing) with defence customers who buy things now, not in 2029. Over $440M in cash. Felix's preference, because of the sensing revenue today.

OPTION B: XANADU (XNDU)

First photonic pure play you can buy. Listed March 2026. Revenue quadrupled. Photonics is the "runs at room temperature" route. If it works it's enormous. If it doesn't, it's nothing.

POSITION SIZING

This is the money you can be completely wrong about. If a name in tier 3 going to zero would ruin your year, it's too big.

ONE DEMOTION: D-WAVE (QBTS)

Given a full segment in May. Not this time. The bull case is real — it's the only one in commercial production, its machines solve specific annealing problems today for money. But the stock is up 2% in 3 months across the best news cycle the sector has ever had, and the story hasn't moved in a year.

Owning it isn't stupid. It's just no longer a top pick. Felix would rather tell you that than quietly stop mentioning it.

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

FULL DISCLOSURE

What Felix actually owns

Stock Position Notes

Owns — core Would add on weakness

Alphabet (GOOGL) Owns — core Not going anywhere

IonQ Owns — real position Sized smaller than the boring 2, because it can halve

Honeywell (HON) Owns — never sold "The least clever and most profitable decision in the entire pile"

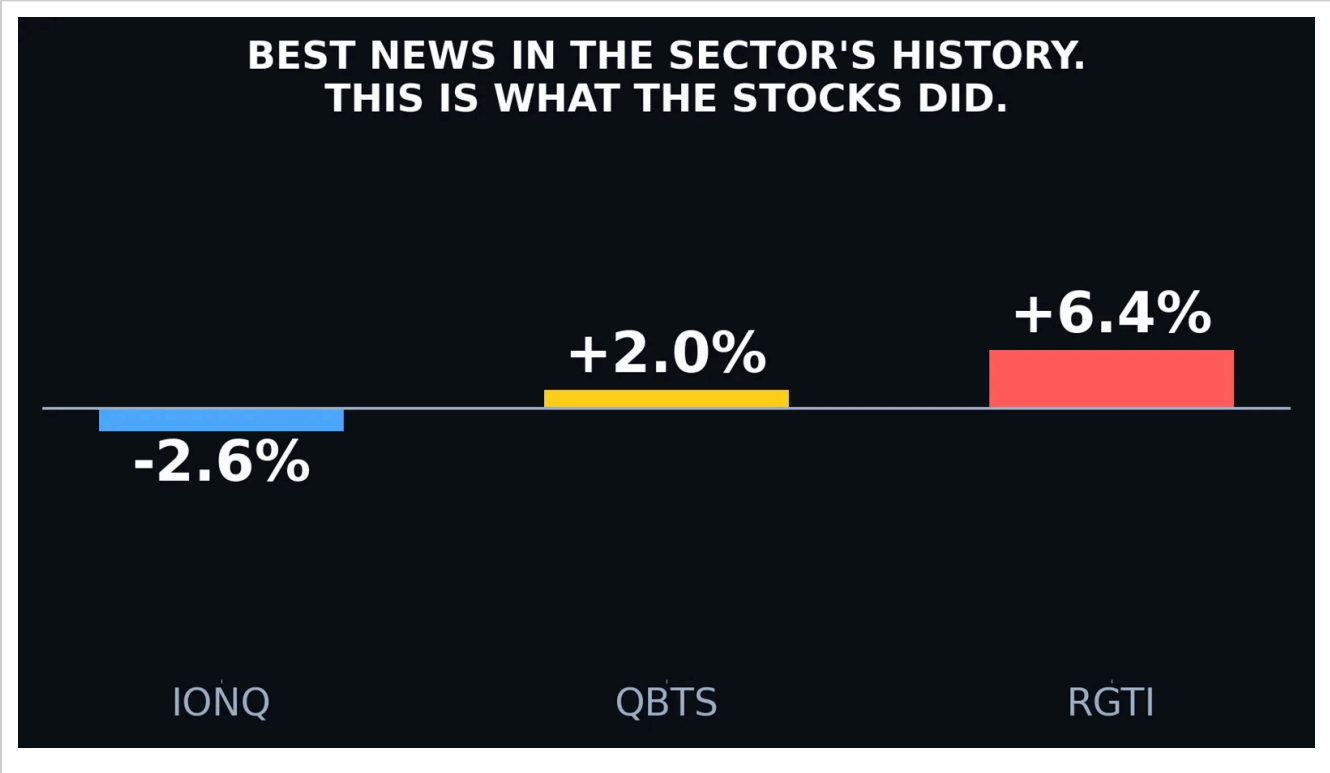
Rigetti (RGTI) Does not own Still waiting for $20

D-Wave (QBTS) Reduced Not adding

Tier 3 (if any) Would pick Infleqtion Likes sensing business selling to defence today

Sizing principle from the video.

Tier 1 (IBM, GOOGL) = core positions. Tier 2 (IonQ) = real but smaller, because it can halve. Tier 3 = money you can be completely wrong about without it changing your week. Felix owns the video's exact picks in the video's exact sizing logic.



Quantum pure plays since May 2026. Best 3 months ever. The stocks just sat there. Source: Winston app.

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

TURN UNDERSTANDING INTO PROCESS

5 questions before you buy another quantum stock

Free live when-to-sell training

WHENTOSELL.ORG

Live on Zoom · Free · With Felix

US times and Europe / UK times available

Everyone teaches you what to buy.

Almost nobody teaches you when to sell.

Do I already know the price at which I would sell this? Before I buy it, not after it has fallen 40%?

✓

Am I sizing this so that a 50–70% drawdown would be painful but not life-altering?

✓

Do I understand whether I'm buying picks-and-shovels (Tier 1), a real but risky revenue company (Tier 2), or a coin flip (Tier 3)?

✓

Am I buying because the news is good, or because the chart confirms the story?

✓

Could I sit through 3 months of excellent news and a flat chart without panic-selling?

✓

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.

REFERENCES

Sources & disclosures

SOURCES

1. Video: "Quantum Computing: The Second Wave" by Felix Nikolas Prehn. Published August 2026.
2. Previous video: "If You Missed Palantir or Nvidia. This is Even Bigger." by Felix Prehn, May 5, 2026.
3. Winston app: app.goatacademy.org — stock-market price data and performance figures.
4. IonQ Q2 2026 earnings: Company press release, August 2026. Revenue $80.1M, guidance $280–$290M, RPO $485M.
5. Oracle × Quantinuum: Oracle newsroom, August 11, 2026. Helios quantum computer installed in US OCI data centre.
6. US government investment: CHIPS and Science Act quantum provisions, May 2026 announcements. ~$2B across 9 companies with minority ownership stakes.
7. Google Willow: Google Quantum AI research publications. Error rate reduction of ~2.14x per lattice scale-up.
8. HRL Labs spin qubits: 18 qubits at 0.02% error rate. Subsequently acquired by IBM.
9. SkyWater acquisition by IonQ: $1.8B, closed July 31, 2026.
10. Google CEO quote: Sundar Pichai interview, shared by Vivek Ramaswamy on X, July 2026.
11. Market forecasts: Quantum computing market forecast of $850B by 2040 cited in the approved video script.
12. Images: Source screenshots from X (Vivek Ramaswamy, ZeroHedge, Felix Prehn), Oracle newsroom. All captured for fair-use educational commentary.
13. FULL EDUCATIONAL DISCLAIMER
14. Analyst: Felix Nikolas Prehn for The Prehn Institute.

The Prehn Institute

prehninstitute.com

The Institute publishes research and provides instruction. Its published research is open to any reader, and its instruction is given by people who have worked in professional markets. The Institute does not manage money and does not advise on investments.

DISCLOSURES

This report is for educational and informational purposes only and does not constitute financial, investment, legal, tax or accounting advice. It is not a recommendation, solicitation or offer to buy or sell any security, currency, commodity or financial product. No buy/sell rating or price target is provided. All investments involve risk, including the possible loss of principal. Market events, relationships and historical comparisons described here may not repeat. Illustrations simplify complex systems and may omit factors. Readers should conduct their own research and consult appropriately qualified professionals before making financial decisions. Past performance is not indicative of future results. The Prehn Institute makes no guarantee regarding outcomes.

Author: Felix Nikolas Prehn, The Prehn Institute.

© 2026 The Prehn Institute. Published by Skillset Solutions FZ-LLC.