

● PRE-RAISE READINESS · QUANTUM EDITION · Q2 2026

30 items to pass before a quantum-fluent investor opens your data room.

Pre-seed and seed quantum founders. Diligence calls do not fail because the deck is ugly. They fail because something in the data room contradicts something in the story. This is the surprise list. Close it before you open outbound.

HOW TO READ THIS

Each item is a yes / no, not a maybe. If you have to explain it, count it as a no.

WHO IT IS FOR

Pre-seed and seed founders building on a real quantum modality. Series A reads it differently; most items still apply, but the bar moves up.

THE ANGLE

Every item is judged from the seat of an investor who already understands quantum. We assume nothing about the market. We assume everything about the technical read.

If you miss five of these, you are not raising. You are gathering material. That is fine. Triage, then start.

● 01 · NARRATIVE & POSITIONING

Say what you actually do, in language a quantum-fluent investor cannot dismiss.

Most quantum decks die on the first slide. Not because the science is weak. Because the sentence is fuzzy.

- 01 Your one-sentence pitch states the modality (gate-based superconducting, neutral atom, photonic, trapped ion, NV-centre, annealing, post-quantum software...), the problem class you target, and the advantage horizon: NISQ-relevant, FTQC-eventual, or classically-better-today, without ambiguity.
- 02 "Why now" is anchored to a specific milestone: a fidelity threshold crossed, a fab process matured, a published algorithmic result, an enterprise procurement signal. Not to "the quantum market is forecast to reach \$X by 2030".
- 03 Your competitive map names actual companies (IBM, Quantinuum, IonQ, PsiQuantum, Pasqal, Quandela, QuEra, Atom Computing, Rigetti, Xanadu, D-Wave, Oxford Quantum Circuits, Quantum Motion...) and tells the truth about where they win and where you lose.
- 04 The advantage claim is bounded: you can name the application, the qubit count and gate fidelity required, the classical baseline you beat, and a realistic year, even if the year is "not in this round's lifetime".
- 05 "Why us" goes beyond credentials. You can name one specific technical bet (a fabrication choice, an architecture trade-off, a software primitive) that the rest of the field did not make, and explain why it pays.
- 06 The deck is consistent with the model, the model is consistent with the science, and the science is consistent with what your last preprint actually demonstrated. No "the deck says X but the paper says Y".

● 02 · SCIENCE, TECH & IP

What you can demonstrate, what you can patent, and what you depend on.

Quantum diligence is technical diligence. The data room either survives a physicist's read or it doesn't.

- 07 Your latest internal benchmarks (qubit count, T_1/T_2 , single- and two-qubit gate fidelity, SPAM error, cycle time, or the photonic, atom or software equivalents) are reproducible in less than a working day from a written protocol owned by your team, not a single PhD's notebook.
- 08 Public benchmarks have been run against the relevant frameworks for your modality (Quantum Volume, CLOPS, randomized benchmarking, mirror circuits, the QED-C application suite, or domain-specific suites), with full methodology disclosed.
- 09 The patent portfolio includes at least one filed application in a defensible claim space, and a freedom-to-operate (FTO) opinion has been started; most quantum platforms touch foundational IP held by IBM, Google, D-Wave, IonQ, MIT or Yale.
- 10 Peer-reviewed publications, preprints (arXiv, PRX Quantum, Nature/Science family, PRL) and patents are tracked in a single citation log that makes the scientific story legible in fifteen minutes.
- 11 Hardware dependencies are named: foundry (Imec, GlobalFoundries, AIM Photonics, IQM Foundry...), cryostat (BlueFors, Oxford Instruments, ICEoxford), control electronics (Zurich Instruments, Quantum Machines, Keysight), lasers, vacuum, helium-3 supply. Each single-source critical part has a backup or workaround.
- 12 The technical roadmap distinguishes hardware milestones (physical qubits, fidelity, yield) from software milestones (compilation, error mitigation, logical qubits) and tags which milestone unlocks which fundraise.
- 13 IP assignment is on file for every founder, every PhD or postdoc you hired, and every academic collaborator who contributed code or design, including a written tech-transfer agreement with the lab or university where the founding science was incubated.
- 14 A scientific risk register lists the top five things that could break the thesis (decoherence scaling, two-qubit gate floor, fabrication yield, error-correction overhead, supply chain), with a one-line mitigation per risk and a named owner.

● 03 · TEAM & GOVERNANCE

Who is on the cap table, who is on the masthead, and who actually ships.

A famous advisor on a slide is not a hire. Investors call references; make sure yours expect the call.

- 15 At least one founder has shipped quantum hardware or software in a production setting or a top-tier academic group, not only authored a thesis. You can prove it with commits, lab notebooks, fabrication runs, or shipped product.
- 16 Scientific advisors are contractually engaged (advisor agreement, equity grant, time commitment in writing), willing to take a 30-minute investor reference call, and have not been quietly endorsing two competitors at the same stage.
- 17 The cap table reflects deep-tech reality: founders hold meaningful equity post-Seed (typically 60–75% combined for a 2–3 founder team), with enough option pool reserved for the head of hardware or head of software hire that almost every quantum company makes by Series A.
- 18 Co-founder breakup terms are written and signed: vesting acceleration triggers, IP ownership if a founder leaves, what happens if a founder returns to academia or to the lab where the science was incubated.
- 19 Conflict-of-interest policy is in place for any founder, advisor or employee still affiliated with a university, national lab, or government program, covering IP, time allocation, student involvement, and grant overlap.
- 20 Board structure (or pre-board observer rights) is mapped today, with named seats at Seed and intended seats at Series A, including at least one technical or scientific seat (not only investors and the CEO).

● 04 · COMMERCIAL, GTM & PROOF

Who pays you today, who pays you in five years, and how the gap closes.

Quantum revenue at pre-seed is rare and that is fine. What is not fine is pretending pilots are pipeline.

- 21 Customer segmentation is honest: early-adopters (national labs, defense, R&D quants in finance, pharma discovery, materials, telco) are separated from “wait until it works” buyers, and the pipeline reflects the segments that actually buy at your maturity stage.
- 22 At least two paid pilots, POCs, or hardware orders are signed with named customers, with value, deliverables and success metrics agreed in writing. Free MOUs do not count and investors will ask.
- 23 Non-dilutive funding is mapped as a real pipeline: EIC Accelerator, France 2030 / Plan Quantique, Innovate UK, DARPA, DOE, NSF, ARIA, EU Quantum Flagship. Applications dated, win-rate tracked, expected dilution offset documented, and a realistic view of cash-timing risk.
- 24 Quantum-cloud and ecosystem partnerships (AWS Braket, Azure Quantum, IBM Quantum Network, Pasqal Cloud, Google Quantum AI partners...) are signed and have a contact, a co-marketing or technical milestone, and an end date.
- 25 A “what we sell today vs. what we sell at year five” page exists, the gap is explained without hand-waving, and the next two product steps each have an internal technical lead and a named customer who would buy them.

● 05 · FINANCIALS, DATA ROOM & PROCESS

What is in the data room, who owns it, and which funds you actually call.

Roughly eighty funds in the world write quantum cheques with conviction. Pitching the rest is a tax on your runway.

- 26 Burn covers at least 18 months at the round you're raising, with the next two scientific milestones tagged to the months they consume cash and the months they unlock the next raise.
- 27 Capital intensity is honest in the model: hardware companies commit to capex (cryostat, fab access, clean-room time, cryogenic helium) within six months of close; software companies allocate sixty percent or more to scientific headcount.
- 28 Use of funds breaks down by scientific headcount, hardware and lab capex, IP and legal, fab access, cloud compute, and BD, not generic "hiring + product". A reviewer can tell where every euro goes.
- 29 The data room includes a /Science folder: experiment notebooks, benchmark logs, peer-reviewed publications, patent filings, FTO opinion or status, key academic collaboration agreements, and a one-page index naming every file before an investor asks.
- 30 Your investor mapping is restricted to quantum-fluent funds; there are roughly eighty in the world. You do not pitch generalist deep-tech funds without a warm intro and a one-page technical brief that gives them context. The Investor Directory is exactly this list.

Miss five and you are not raising. You are gathering material. Close them, then start outbound.

Built by the diligence team at CFO Fractal, from the gaps we see every week reviewing quantum data rooms. Live updated edition at investordirectory.netlify.app/resources.