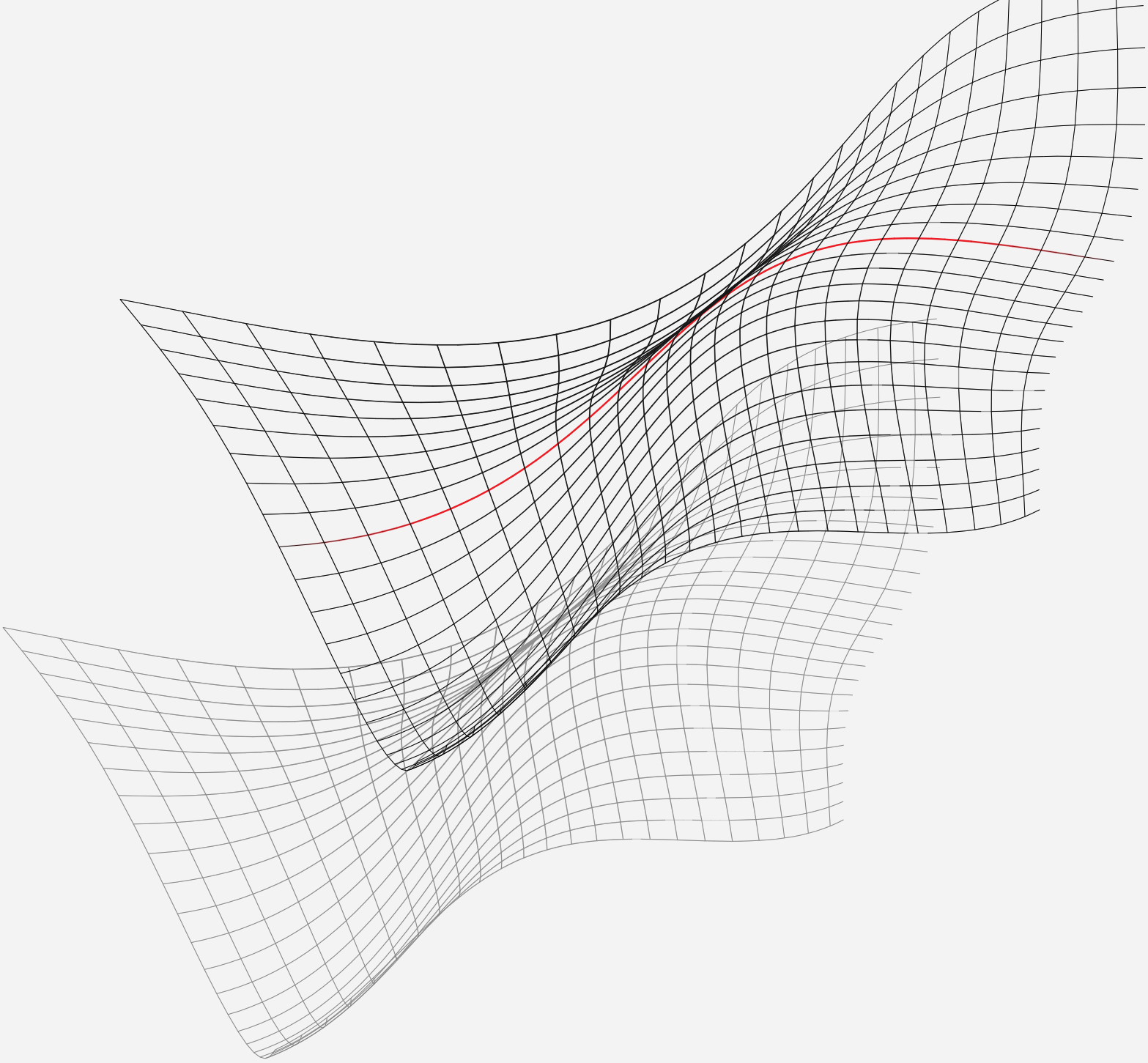


8 | Public Opinion

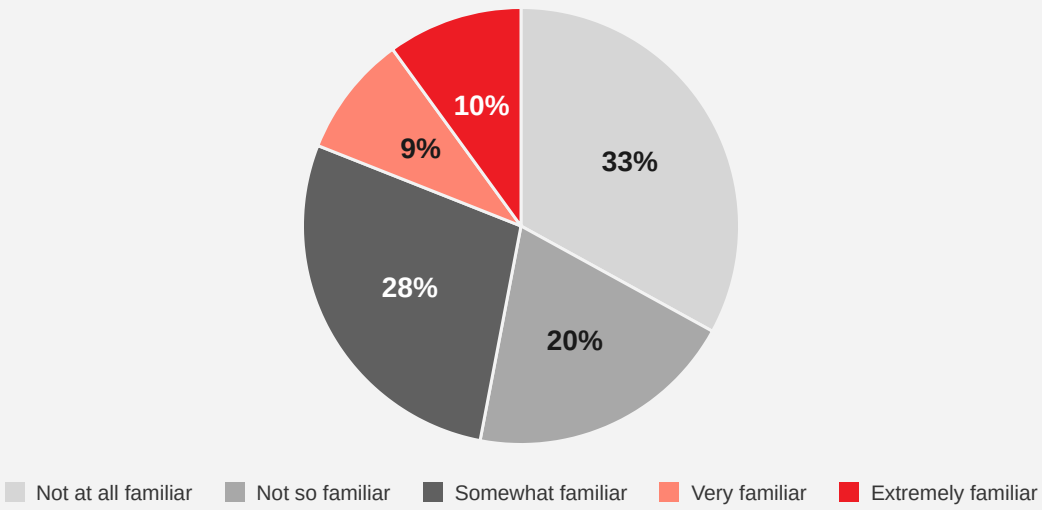
In December 2025, we surveyed 1,309 U.S. residents to assess public knowledge, expectations and attitudes toward quantum technologies. The sample was aligned with U.S. Census Bureau age and gender benchmarks to maintain representative demographic coverage. With quantum innovations increasingly shifting toward commercialization, cultivating public trust and engagement will play a decisive role in driving adoption and shaping future policy.

8.1 | Quantum computing

8.1.1 | Familiarity

Fig. 8.a | How familiar are you with quantum computing?

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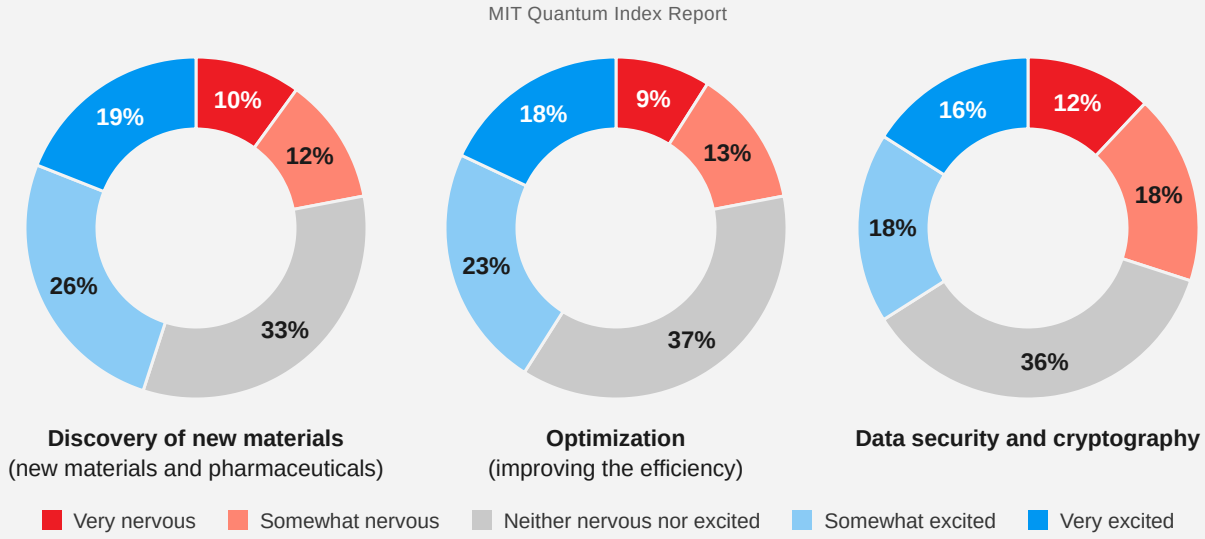


When asked about how familiar they were with quantum computing, from the 1,309 survey respondents, 33% responded they were “not at all familiar,” 20% said “not so familiar,” 28% indicated they were “somewhat familiar,” 9% claimed to be “very familiar,” and 10% reported being “extremely familiar.”

Taken together, the data points to a general lack of familiarity: more than half of respondents (53%) placed themselves in the “not at all” or “not so familiar” categories, while only about one in five described themselves as “very” or “extremely” familiar. The largest single group was “not at all familiar” at 33%, suggesting this remains an unfamiliar topic for a substantial share of the population. “Somewhat familiar” was the second most common response at 28%, indicating a sizable middle group with at least a passing understanding, while the highest levels of familiarity were comparatively rare, with “very familiar” the smallest category overall at just 9%.

8.1.2 | Emotional responses

Fig. 8.b | Quantum computing can be potentially used for different areas. To what extent do you feel nervous or excited regarding the potential uses listed below?



Among the 1,309 survey respondents, emotional responses to quantum computing applications in 2025 continued to vary across use cases. When asked to report on the extent to which they feel nervous or excited regarding potential uses of quantum computing, for materials and pharmaceuticals development, 10% felt very nervous, 12% somewhat nervous, 33% neutral, 26% somewhat excited, and 19% very excited. Regarding optimization, 9% reported to feel very nervous, 13% somewhat nervous, 37% neutral, 23% somewhat excited, and 18% very excited. For data security and cryptography, responses showed 12% very nervous, 18% somewhat nervous, 36% neutral, 18% somewhat excited, and 16% very excited.

Across all three applications, “neutral” was the single largest response category in 2025, ranging from 33% (discovery of new materials) to 37% (optimization). Using quantum computing for the discovery of new materials and pharmaceuticals development remained the application generating the most positive sentiment, with 45% of respondents reporting some degree of excitement (26% somewhat, 19% very) compared to just 22% expressing any nervousness.

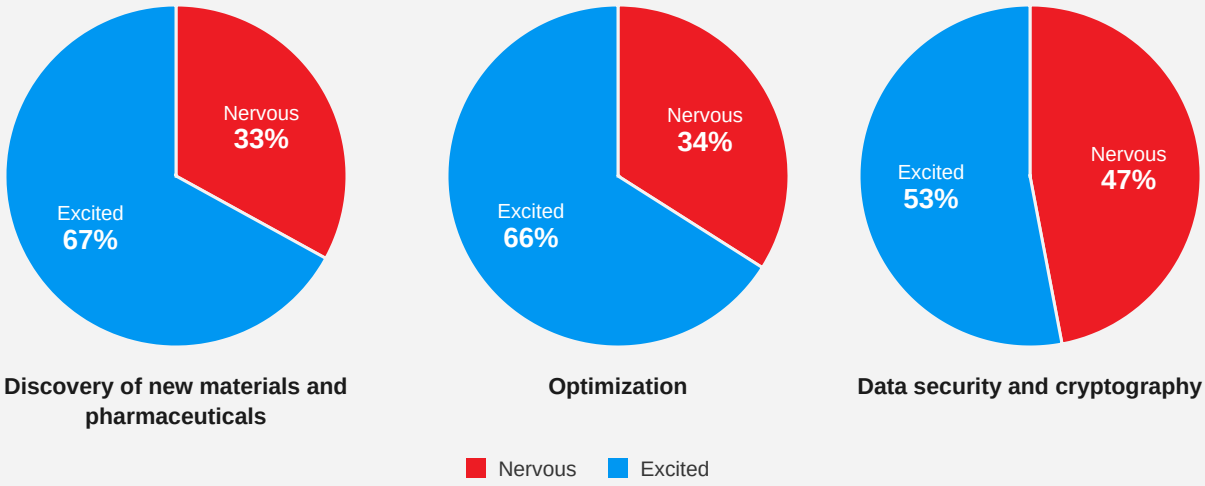
Optimization followed a similar but slightly more muted pattern, with 41% expressing excitement versus 22% nervousness.

Data security and cryptography stood out as the application generating the most ambivalence and unease: it had the lowest share of excited respondents (34% combined) and the highest share of nervous respondents (30% combined) among the three categories, continuing to reflect the perceived risks associated with quantum computing's potential to disrupt encryption and security systems.

The graphs below compare and contrast the number of positive and negative sentiments (neutral answers are not represented in these graphs).

Fig. 8.c | Quantum computing uses: nervous vs. excited (neutral responses excluded)

MIT Quantum Index Report



For materials and pharmaceuticals development, among the respondents who expressed a directional sentiment, 33% felt nervous while 67% felt excited, more than a two-to-one margin favoring excitement. Optimization showed a nearly identical split: of the respondents with a directional response, 34% felt nervous compared to 66% excited. Data security and cryptography told a different story: among the respondents who leaned one way or the other, 47% felt nervous versus 53% excited, a far narrower margin, with sentiment nearly evenly split.

This comparison sharpens the contrast between applications considerably. When neutral responses are set aside, discovery of new materials/pharmaceuticals and optimization both show excitement outweighing nervousness by roughly two to one, suggesting that among respondents who hold an opinion, enthusiasm clearly dominates for these use cases. Data security and cryptography, by contrast, stands apart as the only application where sentiment approaches an even split: just 6 percentage points separate nervous from excited, underscoring that this remains the most emotionally contested application of the three.

> Discovery of new materials and pharmaceuticals and optimization both show excitement outweighing nervousness by roughly two to one among respondents with a directional opinion.

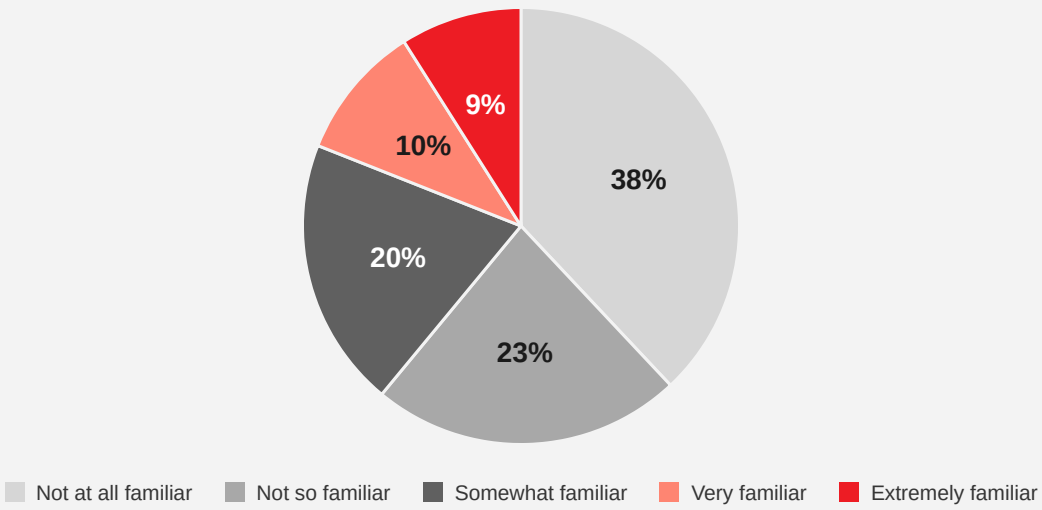
- Comparing the 2025 directional sentiment data (neutral responses excluded) to our 2024 survey[1] reveals a consistent trend: excitement has declined and nervousness has risen across all three applications, with the shift most pronounced for data security and cryptography.

8.2 | Quantum networking

8.2.1 | Familiarity

Fig. 8.d | How familiar are you with quantum networking?

MIT Quantum Index Report



When asked about how familiar they are with quantum networking, from the 1,309 survey respondents, 38% reported being "not at all familiar" with quantum networking, 23% said they were "not so familiar," 20% indicated they were "somewhat familiar," 10% claimed to be "very familiar," and 9% reported being "extremely familiar" with the technology.

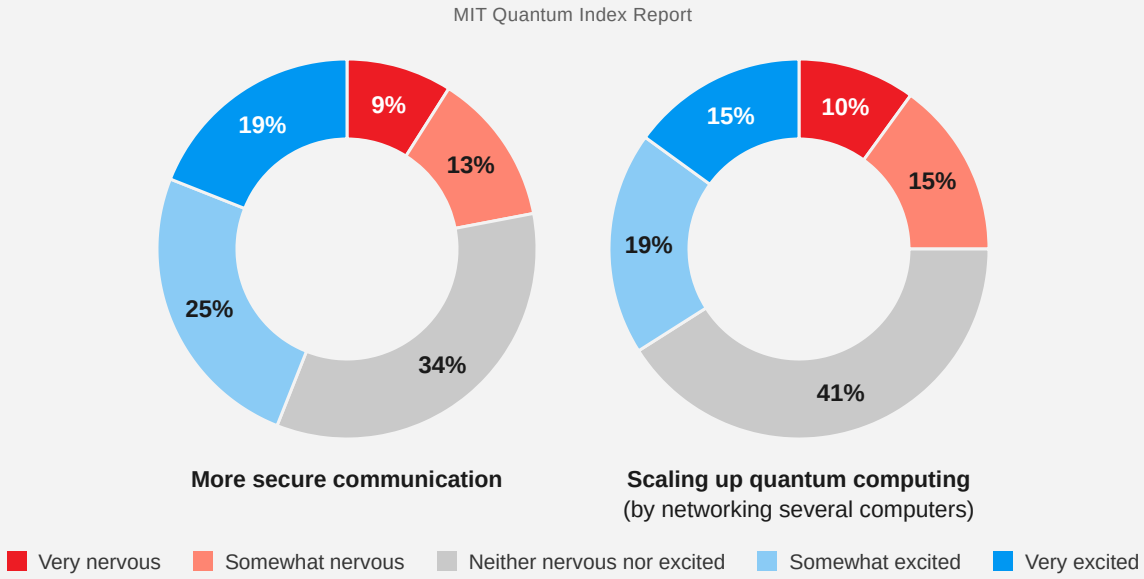
Taken together, the data points to a pronounced lack of familiarity with quantum networking: 61% of respondents placed themselves in the "not at all" or "not so familiar" categories, while only 19% described themselves as "very" or "extremely" familiar. "Not at all familiar" was by far the largest single response, claimed by more than a third of respondents, underscoring how unfamiliar quantum networking remains for the general population. "Somewhat familiar" made up a fifth of responses, representing a moderate middle group with at least some passing awareness, while the two highest familiarity categories were comparatively rare and nearly identical in size, together accounting for less than one in five respondents.

38%

In 2025, “not at all familiar” was the single largest response category for both topics, but was notably higher for quantum networking (38%) than for quantum computing (33%).

8.2.2 | Emotional responses

Fig. 8.e | Quantum networking can be potentially used for different areas. To what extent do you feel nervous or excited regarding the potential uses listed below?



Among the 1,309 survey respondents, the emotional responses varied across different potential uses of quantum networking. When asked to report to what extent they feel nervous or excited regarding potential uses of quantum networking for its relevance to secure communication: 9% of the respondents reported very nervous, 13% somewhat nervous, 34% neither nervous nor excited, 25% somewhat excited, and 19% very excited.

For its relevance to scaling up quantum computing by networking: 10% of the respondents reported being very nervous, 15% somewhat nervous, 41% neither nervous nor excited, 19% somewhat excited, and 15% very excited.

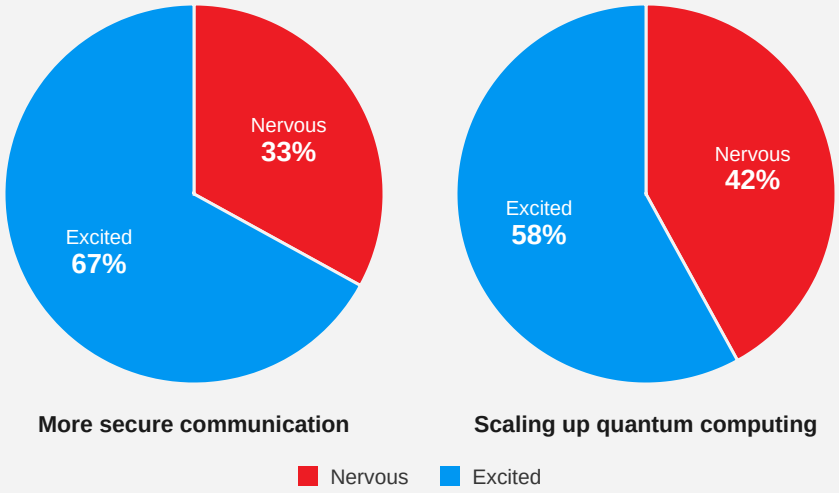
Across both applications, “neither nervous nor excited” was the most common response, and notably more so for scaling up quantum computing (41%) than for secure communication (34%), suggesting respondents feel more ambivalent about networking’s role in computing infrastructure than about its communication use case.

Secure communication generated the more favorable emotional profile of the two, with 44% of respondents expressing some degree of excitement (25% somewhat, 19% very) compared to 22% expressing any nervousness, a two-to-one margin favoring excitement. Scaling up quantum computing showed a more muted response: only 34% reported excitement (19% somewhat, 15% very) against 25% nervousness, a narrower gap that points to greater uncertainty around this particular application. Notably, “very excited” responses were higher for secure communication (19%) than for scaling up quantum computing (15%), while nervousness levels were comparable across both applications (22% vs. 25%), together indicating that respondents view quantum networking’s communication benefits somewhat more favorably than its role in expanding quantum computing capacity, even as neutrality dominates sentiment on both fronts.

The graphs below compare and contrast the number of positive and negative sentiments (neutral answers are not represented in these graphs).

Fig. 8.f | Quantum networking uses: nervous vs. excited (neutral responses excluded)

MIT Quantum Index Report



For secure communication, among the respondents who expressed a directional sentiment, 33% felt nervous while 67% felt excited, a two-to-one margin favoring excitement. Scaling up quantum computing showed a narrower split: of the respondents with a directional response, 42% felt nervous compared to 58% excited. This comparison sharpens the contrast between the two applications.

> Secure communication elicits a higher excitement share and lower nervousness among respondents in comparison to scaling up quantum computing.

Scaling up quantum computing, by contrast, shows a meaningfully tighter margin: just 16 percentage points separate nervous from excited, compared to a 34-point gap for secure communication, indicating that among respondents who hold an opinion, sentiment toward using quantum networking to scale up computing infrastructure is more divided.

Comparing the 2025 directional sentiment data to 2024 shows a decrease of excitement and rise in nervousness for both quantum networking applications, with the shift more pronounced for scaling up quantum computing.

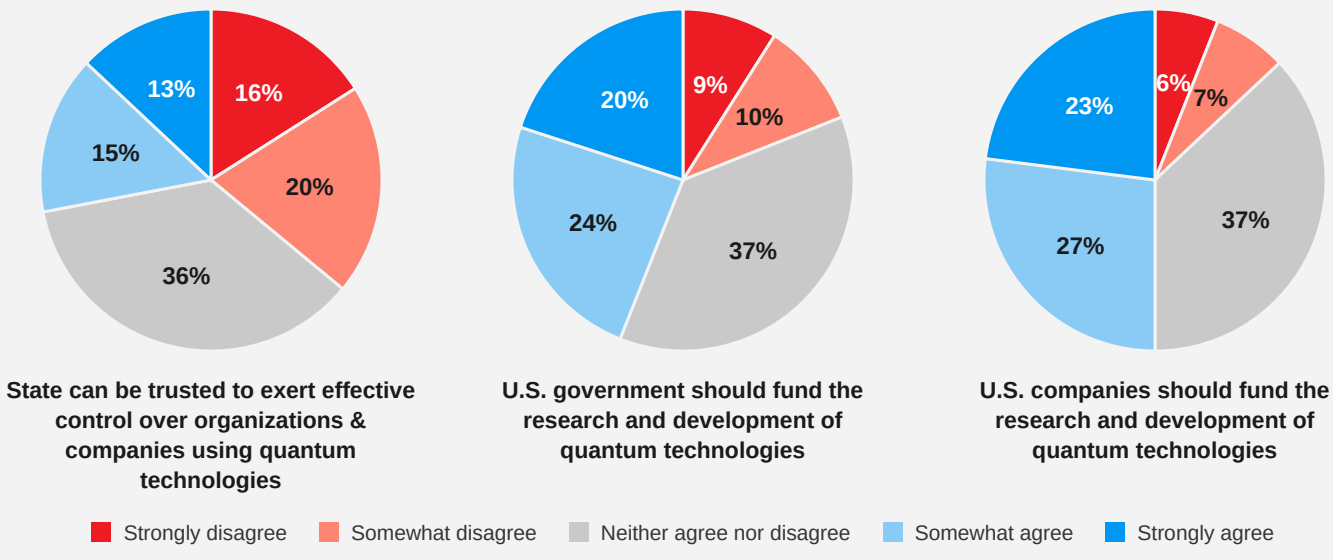
The survey results allow the interpretation that regardless of whether the technology is quantum computing or quantum networking, applications tied to expanding or scaling the underlying infrastructure (optimization, scaling up) or touching sensitive systems (data security) are consistently viewed with more ambivalence than applications with clearer, more relatable benefits (pharma, secure communication), and that ambivalence has intensified for both technologies over the past year.

8.3 | Governance

We asked the same 1,309 participants to report to what extent they agree or disagree with the following three statements: (1) the state can be trusted to exert effective control over organizations and companies using quantum technologies, (2) the U.S. government should fund the research and development of quantum technologies, and (3) U.S. companies should fund the research and development of quantum technologies.

Fig. 8.g | To what extent do you agree or disagree with the following statements?

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For the statement about state control over quantum technologies: 16% strongly disagree, 20% somewhat disagree, 36% neither agree nor disagree, 15% somewhat agree, and 13% strongly agree. For government funding of quantum technologies: 9% strongly disagree, 10% somewhat disagree, 37% neither agree nor disagree, 24% somewhat agree, and 20% strongly agree. For company funding of quantum technologies: 6% strongly disagree, 7% somewhat disagree, 37% neither agree nor disagree, 27% somewhat agree, and 23% strongly agree.

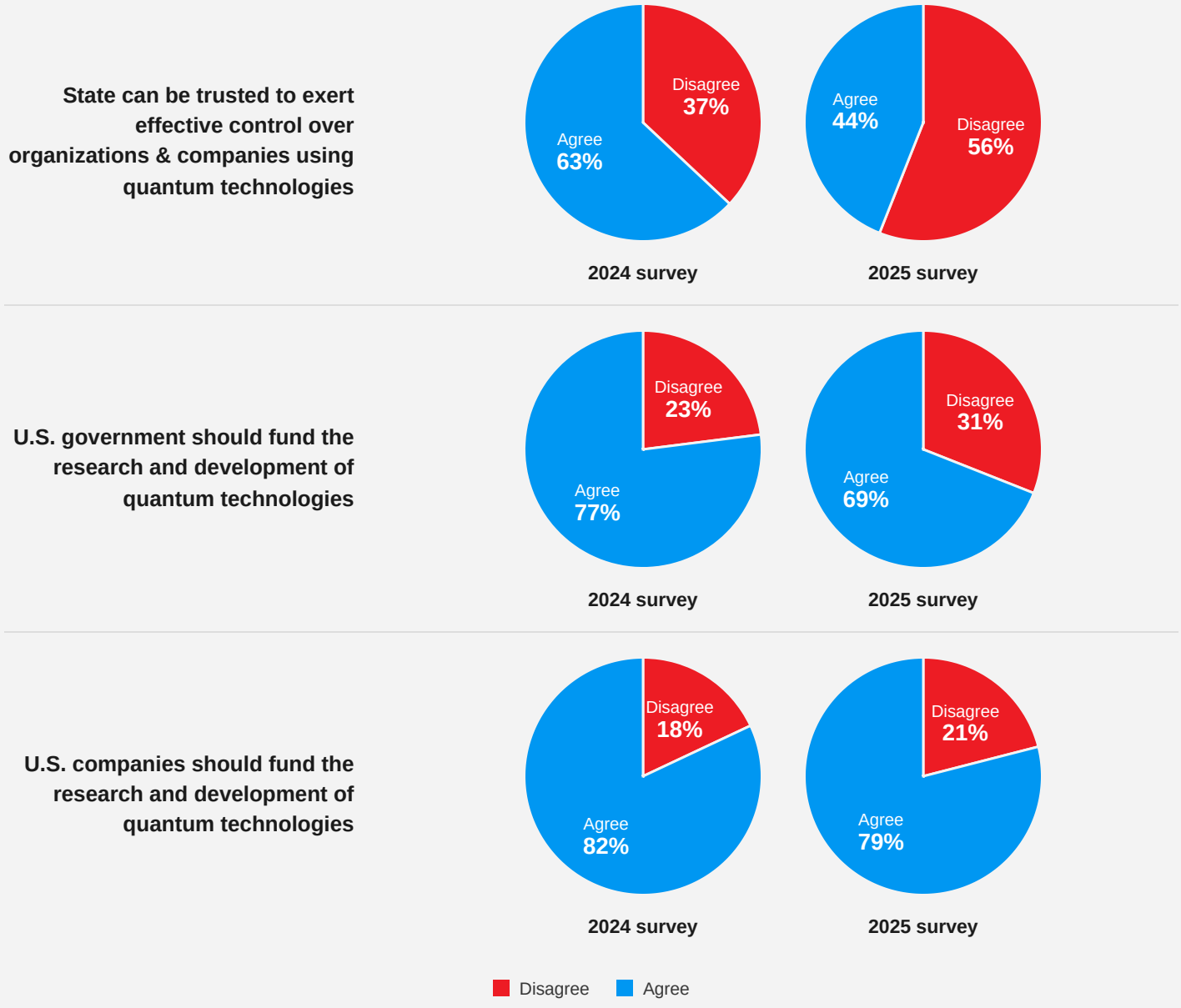
Across all three statements, “neither agree nor disagree” was the most common response, ranging from 36% to 37%, indicating that a substantial share of respondents remain undecided on questions of quantum governance and funding.

The statement on whether the state can be trusted to exert effective control over organizations and companies using quantum technologies stands out as the only one of the three statements where skepticism exceeded support.

By contrast, both funding statements drew clearly favorable responses: government funding saw 44% agree against just 19% disagree, while company funding drew the strongest support of the three, with 50% agreeing compared to only 13% disagreeing. Notably, company funding edged out government funding as the more broadly supported statement, suggesting respondents are somewhat more comfortable with private-sector investment in quantum research than with public funding, and considerably more comfortable with either form of funding than with the idea of state control over the technology itself.

Fig. 8.h | Governance statements: disagree vs. agree, 2024 vs. 2025 survey (neutral responses excluded)

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Comparing the 2025 directional sentiment data (neutral responses excluded) to 2024 reveals a dramatic reversal on state control and more modest softening on funding support.

For state control over quantum technologies, sentiment flipped entirely: in 2024, among directional respondents, 63% agreed that the state can be trusted to exert effective control, against 37% who disagreed, a clear majority in favor. By 2025, that had reversed to 56% disagreeing and just 44% agreeing, a swing of roughly 19 points away from trust in state control.

79%

Support for funding quantum R&D remained comparatively resilient, with company funding still commanding strong majority backing (79%, down just 3 points) even as enthusiasm cooled slightly across the board.

Government funding also saw a decline in support, though far less dramatic: agreement fell from 77% in 2024 to 69% in 2025, while disagreement rose from 23% to 31%. Company funding showed the smallest movement of the three, with agreement slipping only modestly from 82% to 79% and disagreement rising from 18% to 21%; support remained strong and comparatively stable.

The results suggest that respondents' confidence in funding quantum research, whether public or private, has remained relatively resilient, while confidence in government's ability to effectively regulate or control the technology has deteriorated over the past year.

8.4 | Future research

Running this study on an ongoing basis will let us map long-term shifts in public perceptions and knowledge of quantum technologies. Gathering longitudinal data will help highlight emerging concerns, clear up misconceptions, and pinpoint where focused outreach and education are needed most. It will also provide meaningful insight into societal readiness and institutional trust. We invite readers across the public, academic, industry and policy spheres to share their feedback and propose themes or questions for upcoming surveys.

Your input will ensure our research stays relevant, inclusive, and attuned to the needs of the broader community.

You can reach us at contact@qir.mit.edu

Footnotes

[1] Ruane, J. et al., “The Quantum Index Report 2025”, MIT Initiative on the Digital Economy, Massachusetts Institute of Technology, Cambridge, MA, May 2025.

