QED·C

STATE OF THE GLOBAL QUANTUM INDUSTRY 2026

QUANTUM COMPUTING MARKET FORECAST

ABOUT QED-C

The Quantum Economic Development Consortium (QED-C) is the world's premier association of pioneers in the quantum technology marketplace. Members of QED-C enable the real-world application of quantum technology, and, in turn, grow a robust commercial industry and supply chain.

Sitting at the intersection of technology, academia, business, entrepreneurship, and policymaking, QED-C is uniquely able to foster the collaborations the industry needs. QED-C is where experts and organizations share knowledge and collectively shape how quantum technology will grow.

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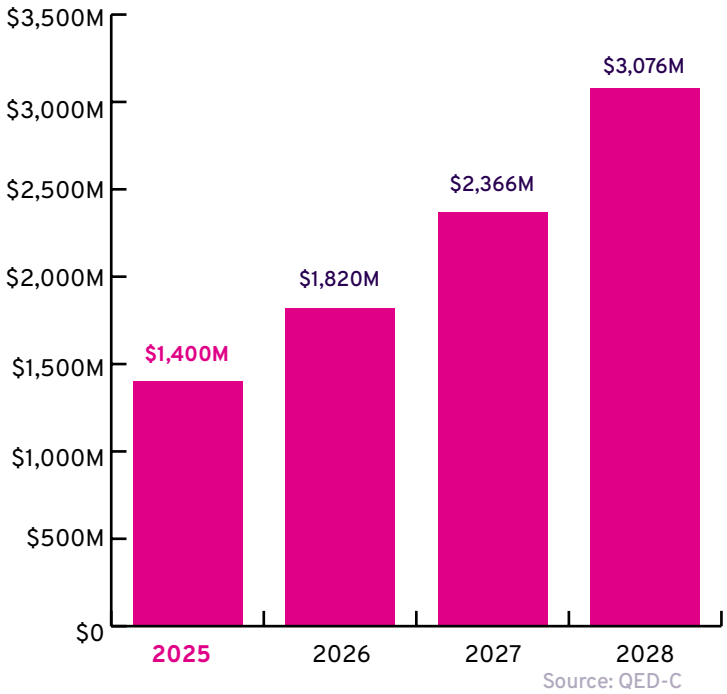
EXECUTIVE SUMMARY

This global quantum computing market analysis and forecast reflects a segment transitioning from research-driven activity toward early commercial opportunity, with accelerating revenue growth, shifting deployment models, and increasing realism about structural risks. The market reached an estimated $1.4 billion in 2025 and is projected to grow by approximately 30% annually to more than $3 billion by 2028 (figure 1).

FIGURE 1: GLOBAL QUANTUM COMPUTING MARKET ESTIMATES, 2025–28



Source: QED-C

Revenue optimism remains strong, on-premises systems are projected to become the largest market segment by 2028, application focus is narrowing toward simulation use cases, and partnership activity is supporting commercialization. At the same time, dependence on government funding and concerns about potential investment contraction underscore continued structural vulnerability.

Quantum computing remains at an early stage of technological maturity, but commercialization dynamics are strengthening. Companies are increasingly working toward commercial-grade systems with improved reliability, more standardized integration, and clearer maintenance expectations. Survey results indicate that 37% of companies expect revenue growth in 2026 exceeding 25%, and no respondents anticipate declining revenue.

Application focus continues to center on simulation. Computational chemistry (26%) and materials science (22%) together represent nearly half of identified near-term use cases. Cryptography (16%) remains strategically relevant, while enthusiasm for artificial intelligence (AI) and machine learning (ML) applications has moderated. This sharpening focus suggests a more disciplined assessment of where quantum advantage is most likely to emerge in the near term.

More than half of respondents (54%) see some probability of a "quantum winter" by 2031, defined as a sustained decline in quantum research and development (R&D) investment exceeding 25%. The increase since last year in "somewhat likely" responses indicates rising caution, though respondents are confident in their own companies' prospects. This suggests that anticipated contraction may be viewed as consolidation, where stronger players gain share, rather than systemic decline.

Overall, the quantum computing segment is advancing beyond pure research toward more durable commercialization, but on a disciplined and risk-aware path.

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The complete *State of the Global Quantum Industry 2026 Report* also includes the *Industry Overview & Methodology*, *Quantum Sensing Market Forecast*, and *Regional Analysis and Global Trends* reports.

View all of the reports here.

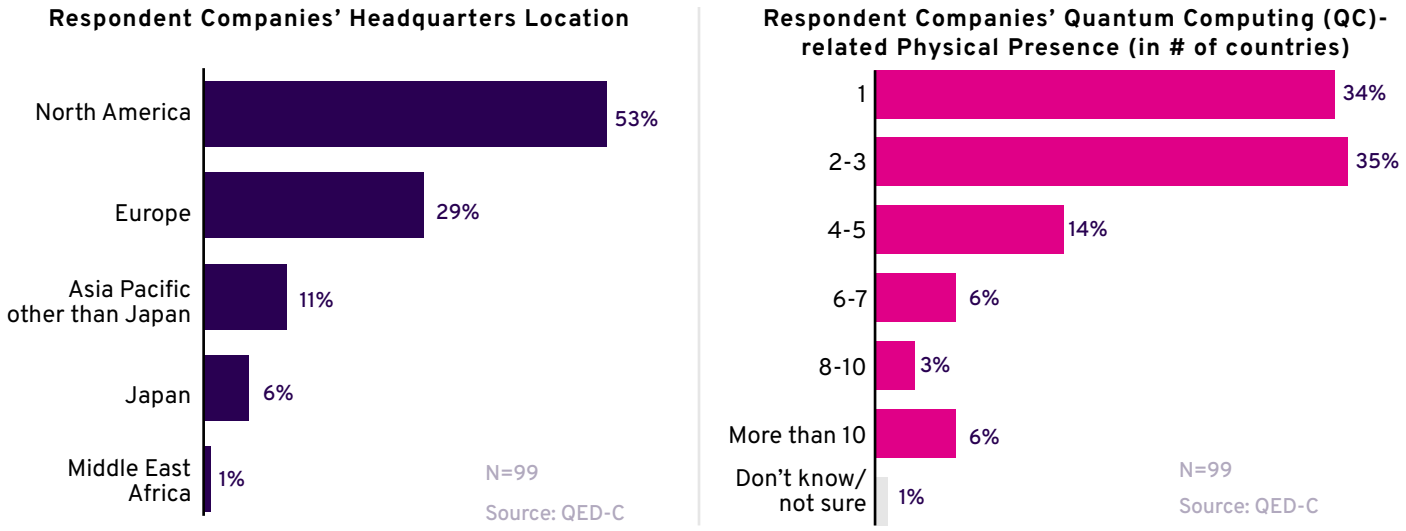
MARKET CHARACTERISTICS

The survey captures perspectives across various geographic locations, company sizes, quantum computing–related revenue, product categories, partnership structures, and industry sentiments. The resulting dataset provides structured, data-driven insight on both the current state of the quantum computing market and expectations for its near-term evolution.

The geographic breadth of survey respondents reflects the increasingly multinational character of the quantum computing segment. While 53% of companies surveyed are headquartered in North America, 29% in Europe, and 17% in Asia-Pacific, a significant share of respondents report maintaining quantum computing–related physical presence in multiple countries (figure 2). Only about one-third (34%) of companies operate exclusively in a single country; the remainder have two or more international locations spanning research, manufacturing, or sales activities. This dispersion reflects the global distribution of talent, innovation, investors, and markets.

Quantum computing has thus evolved into a multinational marketplace. Access to a specialized workforce, government funding programs, research partnerships, and regional customer bases increasingly require an international footprint. Competitive positioning appears less tied to national concentration and more to global integration.

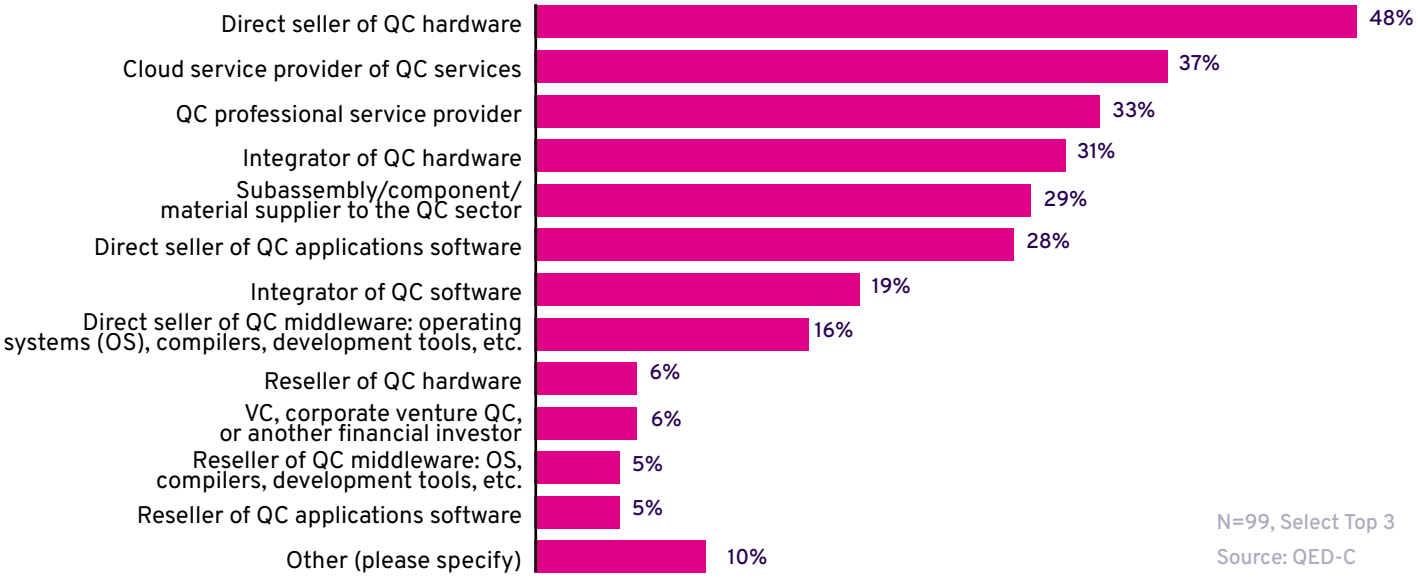
FIGURE 2: QUANTUM COMPUTING COMPANY LOCATIONS



Nearly half of respondent companies include direct sales of quantum computing hardware among their top three quantum computing-related offerings (figure 3a).

However, hardware is often not their primary product (figure 3b). Many companies operate across multiple verticals of the value chain. When respondents were asked to identify their single most important quantum computing-related product or service, hardware represented a smaller share than when they were asked to select their top three offerings. This distinction underscores

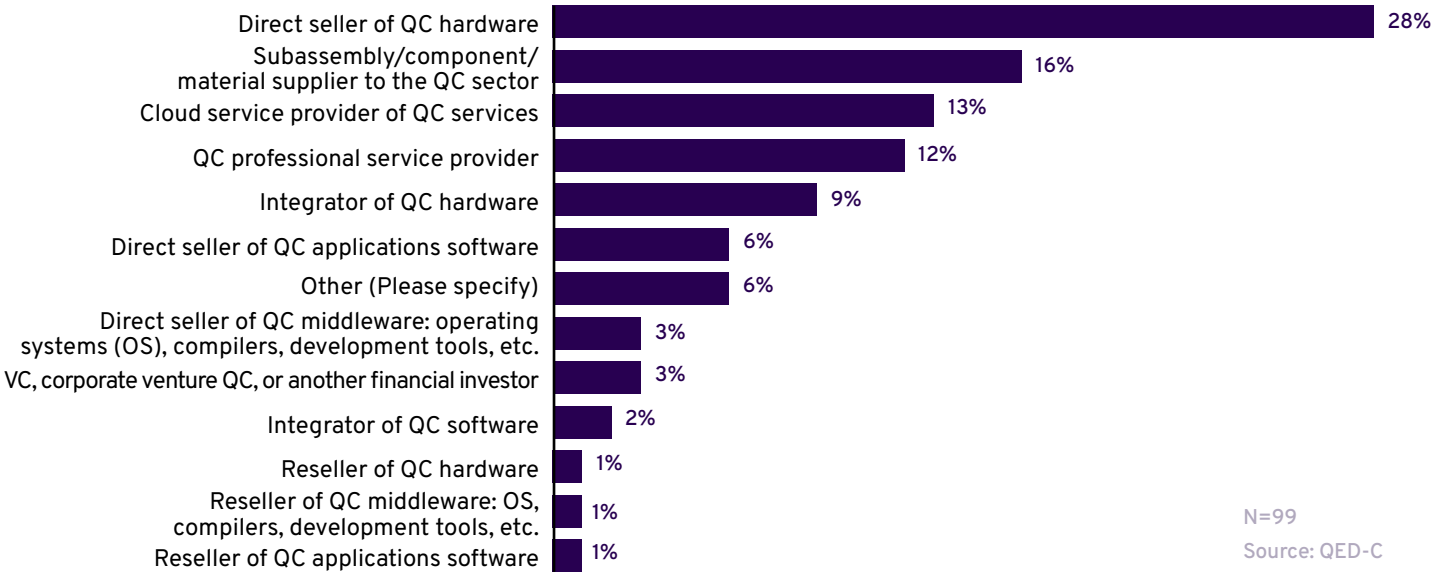
FIGURE 3A: RESPONDENT COMPANIES' TOP THREE QUANTUM COMPUTING (QC)-RELATED PRODUCTS AND SERVICES



the prevalence of "semi-full-stack" companies—those that engage in hardware development while also providing cloud access, software tools, integration services, or professional consulting.

The survey findings indicate that the quantum computing ecosystem continues to be modular rather than vertically consolidated. Component suppliers, system integrators, hardware manufacturers, cloud operators, and service providers coexist in overlapping roles. Few companies currently operate as fully integrated end-to-end providers, likely reflecting the high capital requirements and technical complexity associated with controlling every layer of the stack.

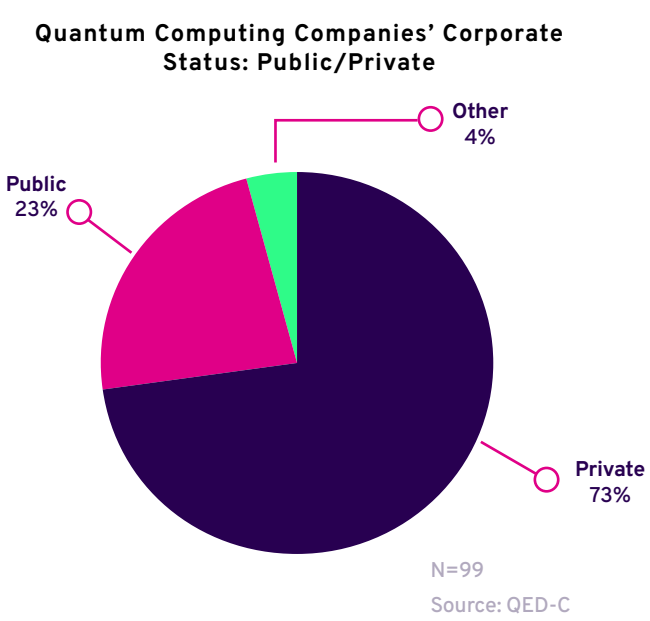
FIGURE 3B: RESPONDENT COMPANIES' MAIN QUANTUM COMPUTING (QC)-RELATED PRODUCTS AND SERVICES

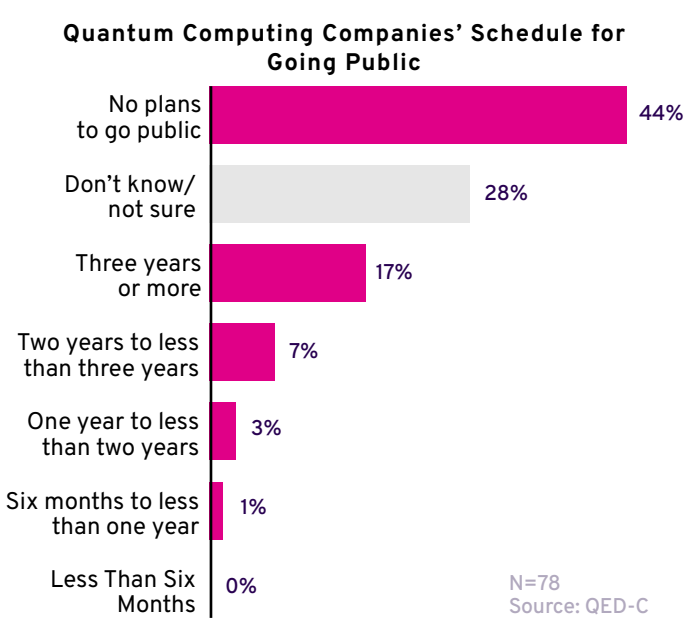


The quantum computing segment is still predominantly made up of privately held companies. Approximately two-thirds of respondent companies are privately held (figure 4), a proportion that has been relatively consistent since 2020. More than 40% of respondents indicate no intention to transition to public markets, and only 11% expect to become publicly held within the next three years. Private status allows companies greater flexibility in managing long R&D timelines, production scaling challenges, and fluctuating revenue streams without the pressures of quarterly earnings expectations.

The limited near-term movement toward public markets may reflect structural caution, ability to fund activities without turning to public markets, e.g. through private capital and revenue growth. While several high-profile public listings have occurred, most suppliers appear to prefer to maintain private capital structures as the technology and market continue to mature. This capital posture reinforces a broader theme: the quantum computing segment is advancing commercially, but it has not yet reached the stage where public market dynamics are the preferred path for most firms.

FIGURE 4: PUBLIC VS. PRIVATE QUANTUM COMPUTING COMPANIES





MERGERS, ACQUISITIONS, AND PARTNERSHIP ACTIVITY

Seventeen percent of respondent companies report involvement in a merger or acquisition (M&A) transaction in the past three years. Activity is roughly split between companies that initiated acquisitions and those that were the subject of acquisition, capturing motivation for both sides of the deal.

For acquiring companies, motivations center on capability expansion. These include access to new geographic markets or to quantum computing-related software and/or hardware technologies, and the closing of product gaps.

In contrast, companies that were acquired cited a broader range of motivations. These included access to classical IT expertise, specialized quantum technical capabilities, new segment verticals, expanded customer bases, and increased public visibility. These responses suggests that acquired companies often view transactions as integration into a larger capability ecosystem rather than purely financial events.

No dominant consolidation driver is evident. M&A activity appears opportunistic and capability-driven rather than reactive. While overall transaction levels are moderate at this point, the pattern indicates a quantum computing segment beginning to reorganize and align around strategic capabilities. As deployment scales and integration demands increase, M&A may become a more prominent structural feature of the quantum computing market.

The survey included questions pertaining to quantum computing companies' partnership activity—characterized by relationships of synergy to advance a common goal rather than outright purchases—with both the government and end users. Sixty-three percent of respondent companies report having engaged in quantum computing-related partnerships with government research organizations within the past three years. These collaborations are primarily motivated by access to government funding and government-supported quantum research activities, underscoring companies' continued reliance on public sector R&D support to sustain development efforts (table 1). Access to national laboratories, research programs, and technical expertise remains central to advancing private-sector quantum capabilities and maintaining ecosystem momentum. Additional motivations for these partnerships include access to quantum testbeds, cryogenic cooling systems, adoption support for quantum computing hardware and software, and development of quantum/high-performance computing middleware (table 1). Government partnerships therefore serve not only as financial support mechanisms but also as a way for companies to access government capabilities, technology, and infrastructure.

A substantial majority of respondents (78%) characterize government partnerships as successful, with more than half describing them as very successful (table 2). No respondents indicate that their government partnerships were unsuccessful, suggesting generally positive outcomes.

More than 60% of the government partnerships extend beyond two years, while only a small share (16%) last less than one year (table 3). This duration profile reflects the structured nature of public-sector research collaboration, which often operates on multiyear funding cycles.

TABLE 1: QUANTUM COMPUTING (QC) PARTNERSHIPS WITH GOVERNMENT RESEARCH ORGANIZATIONS

Option	Percent Selected
Access to government funding	63%
Access to government-funded QC research activities	38%
Access to leading-edge QC hardware development	37%
Explore the co-design of QC systems	29%
Explore the hybrid quantum/classical QC systems	29%
Explore key government QC use cases	28%
Access to leading-edge QC research in algorithms	25%
Access to leading-edge QC research in applications	25%
Explore key government QC applications	25%
Access to key advanced quantum computing experts	24%
Foster public attention	22%
Help develop quantum/classical hybrid algorithms	21%
Access to leading-edge QC software development	16%
Support for publication of QC-related research in key journals	12%
Access to key advanced classical computing experts	11%
Access to key advanced classical computing hardware	8%
Access to key advanced classical computing software	7%
Other (Please specify)	5%
Don't know/not sure	1%

N=64, Select all that apply Source: QED-C

TABLE 2: OUTCOMES FOR QUANTUM COMPUTING PARTNERSHIPS WITH GOVERNMENT RESEARCH ORGANIZATIONS

Very successful	55%
Somewhat successful	23%
Neither successful nor unsuccessful	3%
Somewhat unsuccessful	0%
Very unsuccessful	0%
Too early to assess	16%
Don't know/not sure	3%

N=64 Source: QED-C

Financial commitments vary widely but are mostly concentrated in the $1–5 million range (20%), with a smaller subset (8%) exceeding $50 million (figure 5). The scale and longevity of these partnerships reinforce the role of government as foundational, providing stable base funding to the quantum computing ecosystem.

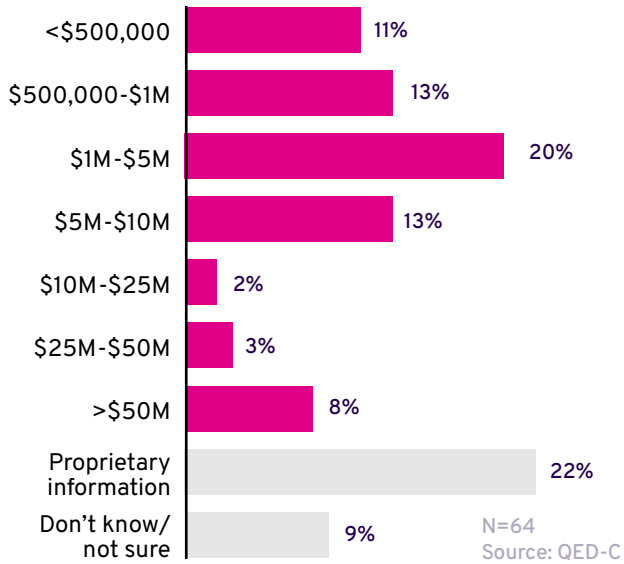
Commercial engagement is becoming increasingly visible in the quantum computing segment, with 62% of respondent companies reporting quantum computing-related partnerships with end users over the past three years. The primary motivation for these collaborations is exploration of new quantum computing segments or vertical-specific opportunities, cited by 68% of respondents (table 4). In addition, the partnerships of approximately one in five respondent companies (22%) are motivated by an interest in developing sector-specific capabilities.

TABLE 3: TIME SPAN FOR QUANTUM COMPUTING PARTNERSHIPS WITH GOVERNMENT RESEARCH ORGANIZATIONS

Less than 1 month	0%
1–3 months	3%
4–6 months	0%
7–9 months	0%
10–12 months	13%
13–18 months	5%
19–24 months	11%
2–3 years	27%
Longer than 3 years	17%
Ongoing with no planned end	17%
Don't know/not sure	8%

N=64 Source: QED-C

FIGURE 5: GOVERNMENT RESEARCH ORGANIZATION FINANCIAL COMMITMENTS FOR PARTNERSHIPS WITH QUANTUM COMPUTING (QC) COMPANIES (US DOLLARS)



N=64
Source: QED-C

A significant share of partnerships focus on understanding performance relative to classical systems (42%) and evaluating segment-specific workloads (39%). More than one-third of respondents (36%) report working directly with end users to explore hybrid integration challenges, reflecting growing recognition that quantum systems must operate in broader classical computing environments.

TABLE 4: QUANTUM COMPUTING (QC) PARTNERSHIPS WITH END USERS

Option	Percent Selected
Explore new QC sector/vertical-specific QC-related opportunities	68%
Explore key performance gains over classical counterpart	42%
Explore QC sector/vertical-specific performance opportunities on existing classical workloads	39%
Explore QC/classical integration issues	36%
Field test/evaluate new QC hardware	32%
Field test/evaluate new QC software	30%
Access QC end-user QC expertise	29%
Foster public attention	29%
Establish sector-specific capabilities	22%
Encourage follow-on sales	20%
Access QC end-user classical IT expertise	8%
Other (please specify)	5%
Don't know/not sure	0%

N=62, Select all that apply Source: QED-C

These partnerships also serve practical validation purposes. Companies report field testing and evaluation of new quantum computing hardware (32%) and software (30%), and access to end-user expertise (37%). Overall, the data suggest that commercial engagement is moving beyond awareness-building toward structured experimentation and capability alignment in specific industries.

End-user partnerships are reported as largely successful: 78% of respondents characterize these collaborations as successful, and more than half (55%) describe them as very successful. There are no reports of unsuccessful outcomes, although a portion indicate that it is too early to assess long-term results (table 5).

Unlike government partnerships, commercial engagements tend to operate on shorter time horizons. Approximately one-third (34%) last a year or less, and about one-quarter (26%) extended two years or longer (table 6). This variability reflects the exploratory and application-specific nature of many commercial collaborations.

Financial commitments for quantum computing partnerships with end users are generally more modest than those observed in government partnerships. The most frequently reported budget range falls below $500,000 (27%), and only a very small share (2%) exceeds multimillion-dollar levels (figure 6). Notably, more than 40% of budget figures are considered proprietary, likely reflecting a competitive sensitivity surrounding customer relationships and commercial terms.

Overall, these findings indicate that commercial end-user partnerships in quantum computing are functioning as structured early-stage commercialization pathways, characterized by positive outcomes, variable durations, and less investment than public-sector collaborations. This will continue to evolve as the quantum computing segment matures.

TABLE 5: OUTCOMES FOR QUANTUM COMPUTING PARTNERSHIPS WITH END USERS

Very successful	55%
Somewhat successful	23%
Neither successful nor unsuccessful	3%
Somewhat unsuccessful	0%
Very unsuccessful	0%
Too early to assess	16%
Don't know/not sure	3%

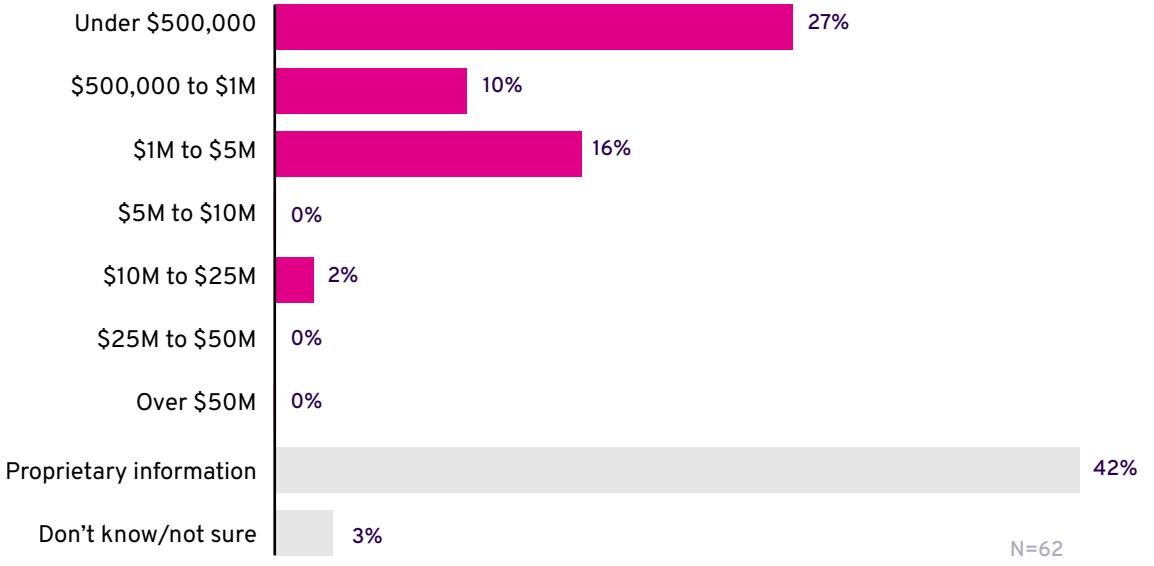
N=62 Source: QED-C

TABLE 6: TIME SPAN FOR QUANTUM COMPUTING PARTNERSHIPS WITH END USERS

Less than 1 month	0%
1–3 months	5%
4–6 months	11%
7–9 months	3%
10–12 months	15%
13–18 months	2%
19–24 months	8%
2–3 years	18%
Longer than 3 years	8%
Ongoing with no planned end	19%
Don't know/not sure	11%

N=62 Source: QED-C

FIGURE 6: END USER FINANCIAL COMMITMENTS FOR PARTNERSHIPS WITH QUANTUM COMPUTING (QC) COMPANIES (US DOLLARS)



N=62
Source: QED-C

FUNDING AND REVENUE

Quantum computing companies continue to rely on a diversified mix of financial inputs to sustain operations (table 7). Government funding for R&D remains the most common source, as cited by 52% of respondent companies. Venture capital follows at 34%, while 33% report support from company-internal R&D budgets.

Commercial revenue streams are present but not yet dominant. Twenty-six percent of companies report payments from commercial end users for on-premises quantum computing products and services, and 15% report government end-user payments for on-premises systems. Revenue related to cloud-based services includes 13% from commercial users, 6% from government users, and 5% from academic users, together accounting for about 24% of reported revenue streams. Additional sources of financing include private loans (7%), stock offerings or private equity rounds (7%), and commercial loans (5%).

The quantum computing segment is thus supported by a blend of public funding, private investment, and early-stage customer engagement. External capital, particularly government R&D and venture funding, continues to play a central role in sustaining supplier activity.

TABLE 7: 2025 QUANTUM COMPUTING (QC) FINANCIAL RESOURCE INPUTS

Option	Percent Selected
Government-provided R&D funding	52%
Venture capital funding	34%
Internal organization R&D budgets	33%
Commercial user payments for on-premises QC products and services	26%
Government end-user payments for on-premises QC products and services	15%
Commercial user payments for cloud access models	13%
Private loans	7%
Stock offerings or private equity rounds	7%
Academic user payments for on-premises QC products and services	6%
Government end-user payments for cloud access models	6%
Academic end-user payments for cloud access models	5%
Commercial loans	5%
Don't know/not sure	10%

N=99, Select Top three sources

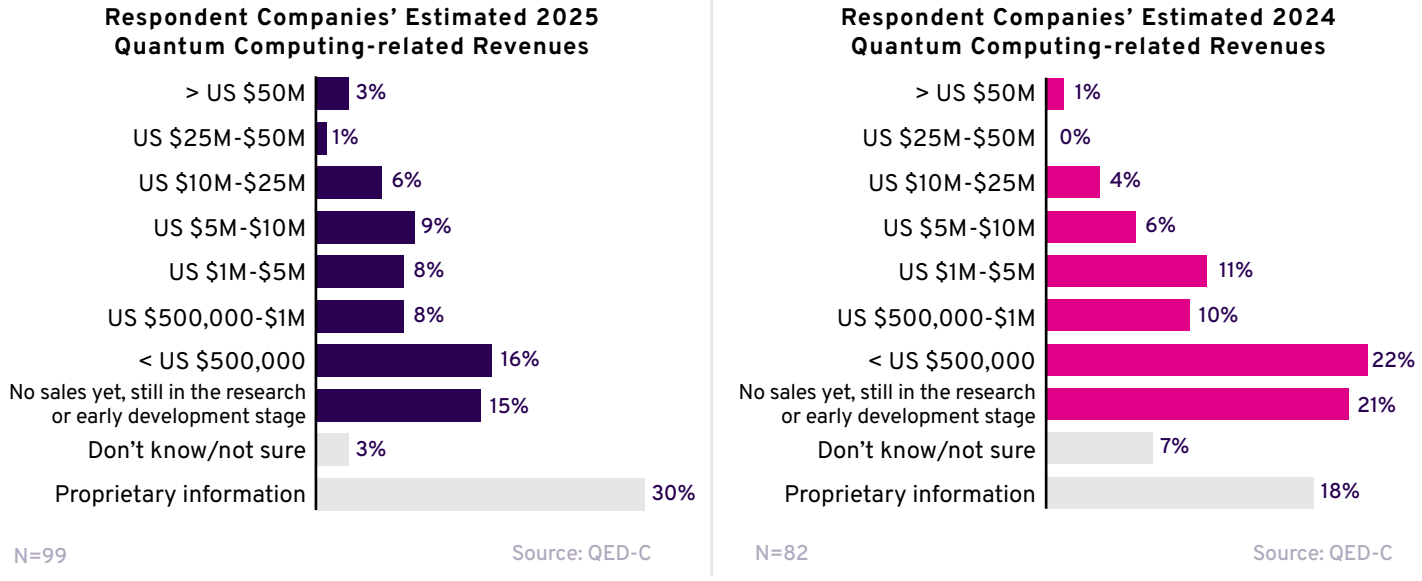
Source: QED-C

The distribution of reported quantum computing-related revenues indicates incremental but measurable progress across the supplier landscape, reflecting general upward movement from 2024 to 2025 (figure 7). For 2025, 3% of respondent companies report revenues exceeding $50 million, compared to 1% in 2024. Nineteen percent report revenues of at least $5 million in 2025, indicating expansion in higher revenue brackets. At the lower end, 31% of companies report revenues below $500,000 in 2025, fewer than the 43% reported in 2024. This shift suggests gradual migration out of the lowest revenue tiers, although a substantial portion (15%) of the ecosystem is still in the early stages.

Notably, 30% of respondents classify their 2025 revenue data as proprietary, up from 18% in 2024. The increase in proprietary reporting may reflect growing competitive sensitivity as commercialization efforts intensify.

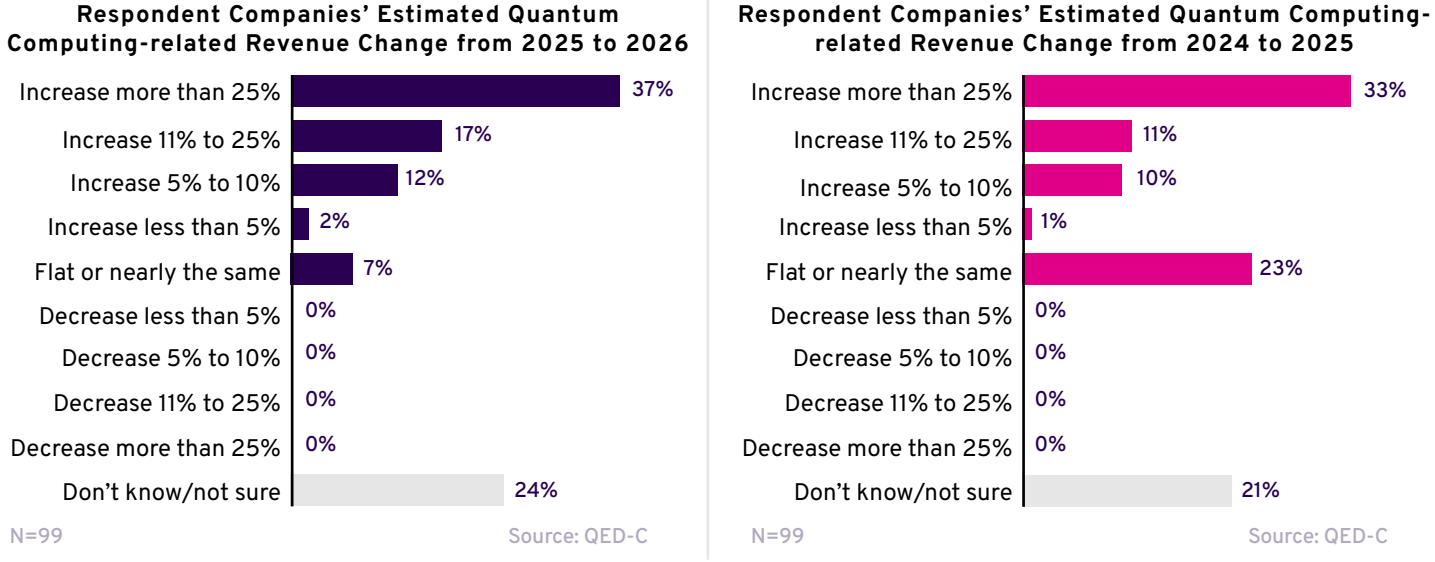
A larger share of quantum computing companies expect meaningful revenue growth from 2025 to 2026 compared to last year's expectations for growth from 2024 to 2025 (figure 8). Fifty-four percent of respondents project that their company's revenues will increase by more than 11% in 2026, up from 44% entering 2025: 37% of respondents anticipate 2026 revenue growth exceeding

FIGURE 7: QUANTUM COMPUTING REVENUES IN 2025 AND 2024



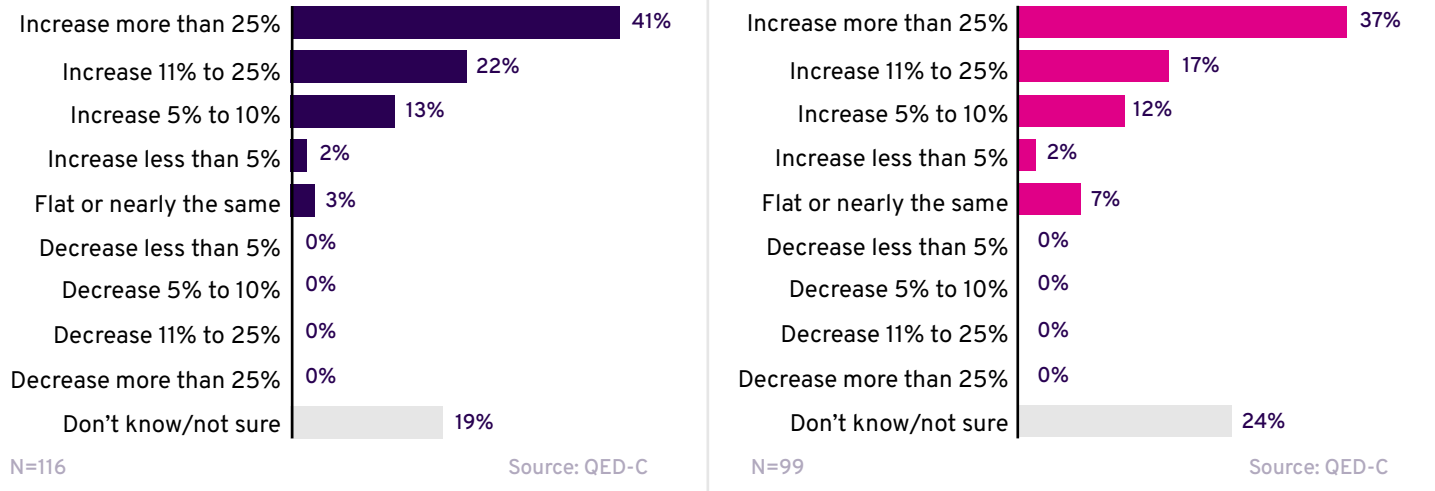
25%, and 17% expect growth between 11% and 25%. By contrast, the share of respondents expecting flat or nearly unchanged revenues is significantly lower—from 23% in the 2025 outlook to 7% in the 2026 outlook. No respondents anticipate revenue decreases in either period. Although 24% respondents are uncertain about 2026 outcomes, the overall distribution indicates that more suppliers now expect double-digit growth in their own revenues compared to the prior year's outlook. These results reflect increasing confidence at the company level.

FIGURE 8: QUANTUM COMPUTING REVENUE GROWTH: 2025-2026 VS. 2024-2025



There is broad confidence in continued expansion both at the company level and throughout the sector. Respondents were asked to separately assess expected revenue growth for the quantum computing segment as a whole and for their own company (figure 9). Across 116 individual responses, which represented duplicate company representation in some cases, 41% project revenue growth exceeding 25% in 2026, and an additional 22% expect increases between 11% and 25%. Only 3% anticipate flat performance, and none expect contraction.

FIGURE 9: QUANTUM COMPUTING REVENUE GROWTH: SECTORWIDE VS. INDIVIDUAL COMPANY



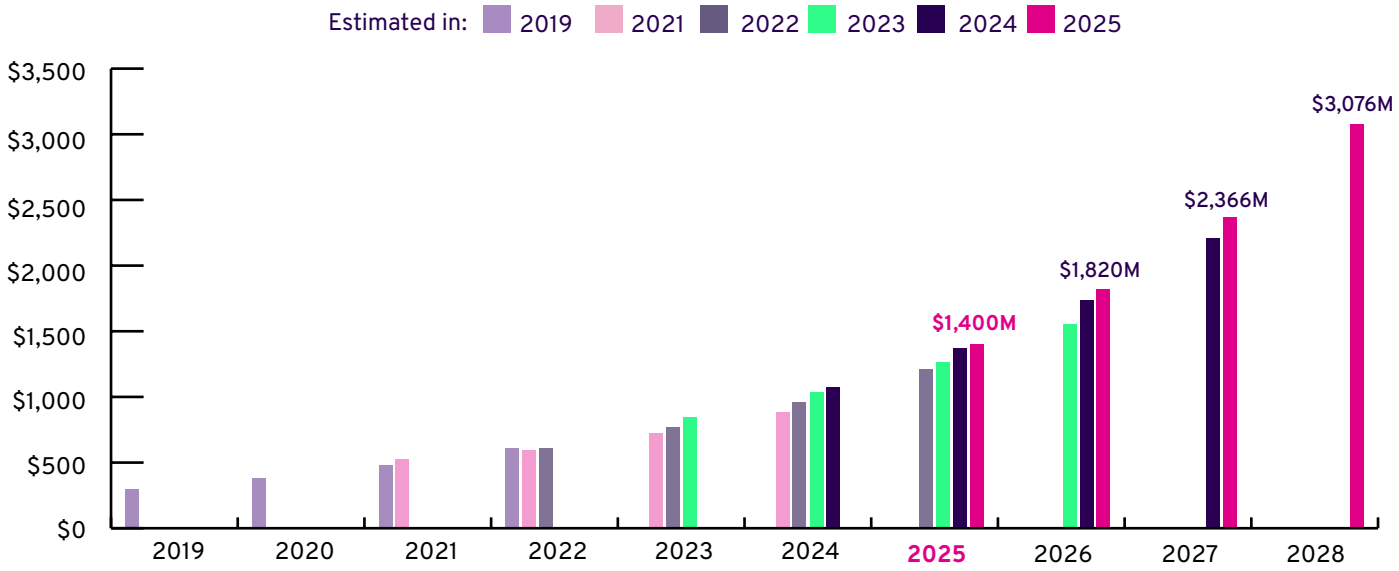
In evaluating their own companies (based on 99 responses that ensured no duplicate company representation), respondents' projections track closely: 37% anticipate revenue growth above 25%, and 17% project increases between 11% and 25%. Seven percent expect flat performance, and 24% report uncertainty.

The alignment between aggregate and company-level expectations suggests broad confidence in continued expansion. Respondents appear to believe that their companies will grow in parallel with the quantum computing segment overall. At the same time, this optimism coexists with the flurry of recent acquisitions indicating consolidation in the segment.

MARKET PROJECTIONS

The global quantum computing market reflects continued year-over-year expansion (figure 10). Each year since 2019, survey respondents have been asked to estimate the market for the current year and several years ahead. The fact that there is no dramatic variation among estimates for a given year (e.g., the 2025 estimate for 2025 market value versus the 2022, 2023, and 2024 projections for 2025 market value) confers confidence in forward-looking estimates. Growth at this stage is steady rather than explosive, supported by incremental commercialization, expanded partnerships, and increased supplier engagement with end users.

FIGURE 10: GLOBAL QUANTUM COMPUTING MARKET, 2019–28



Source: QED-C

As suppliers transition from primarily research-oriented deployments toward production-ready systems, revenue contributions from hardware sales are projected to become more substantial. This shift signals movement from experimental access models toward more permanent infrastructure commitments.

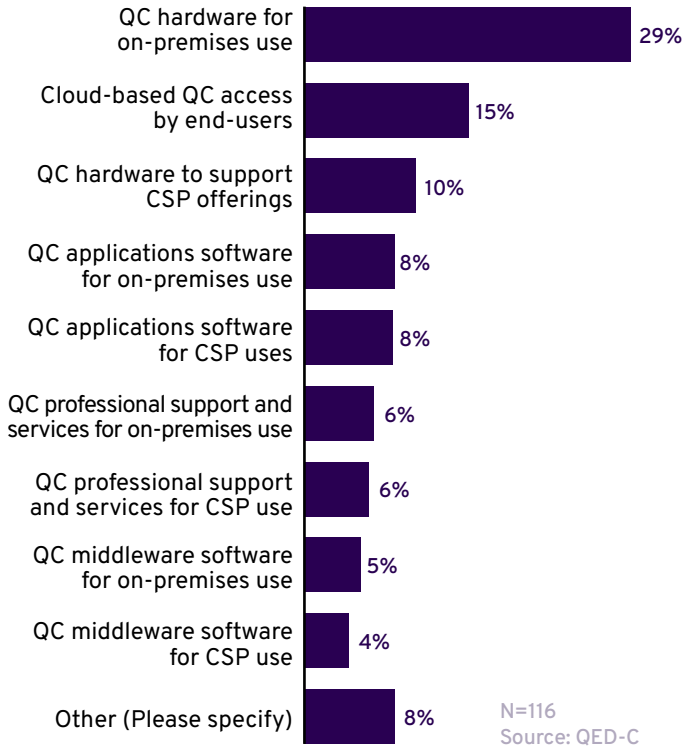
While practical quantum advantage has not yet been demonstrated on a business-relevant problem, expectations for 2028 suggest that many in the segment anticipate measurable performance milestones within the next several years. Until then, growth appears likely to remain progressive and capability-driven rather than sudden or discontinuous.

Projected market segmentation indicates that quantum computing hardware for on-premises use will represent the largest single revenue category by 2028, accounting for 29% of the overall market (figure 11). This represents a notable shift from earlier assessments and reflects growing expectations that companies will move toward direct system deployment rather than relying exclusively on remote access models.

Cloud-related revenues are projected to account for only a third of the market in 2028. Cloud-based access by end users is projected to account for 15% of revenues, with quantum computing hardware supporting cloud service provider offerings representing another 10%. Cloud-based software applications and on-premises software stacks each contribute an additional 8%, underscoring the continuing role of software in enabling deployment.

Overall, the segmentation suggests that, while cloud access remains important, the center of gravity is shifting toward on-premises installations, signaling increased enterprise confidence and infrastructure commitment in the quantum computing ecosystem.

FIGURE 11: MAJOR GLOBAL QUANTUM COMPUTING (QC) MARKET SEGMENTS PROJECTED IN 2028



N=116
Source: QED-C

Note: CSP is constraint satisfaction problem.

The distribution of the most promising quantum computing applications suggests a maturing prioritization of applications where quantum systems provide intrinsic advantage, particularly in quantum-native simulations, rather than broader positioning as a general accelerator for classical workloads.

The most promising application for quantum computing is simulation workloads, while enthusiasm for AI and ML applications has declined, suggesting a maturing assessment of where quantum advantage is most plausible in the near term (figure 12).

Computational chemistry leads at 26%, followed by materials science at 22%. Together, these two categories account for nearly half of the most promising application areas identified. Both rely on quantum systems to simulate quantum mechanic phenomena, aligning closely with the foundational theoretical motivations for quantum computing. Cryptography and cybersecurity rank next, at 16%, reflecting continued attention to encryption verification and post-quantum security considerations. Optimization and logistics account for 11%, while ML and AI represent 10%. Scientific and engineering modeling registers at 5%, suggesting either a current lack of applicable algorithms or a perception that traditional classical methods continue to be more practical for those workloads. Finance, at 8%, represents an industry where small computation advantages may produce outsized returns.

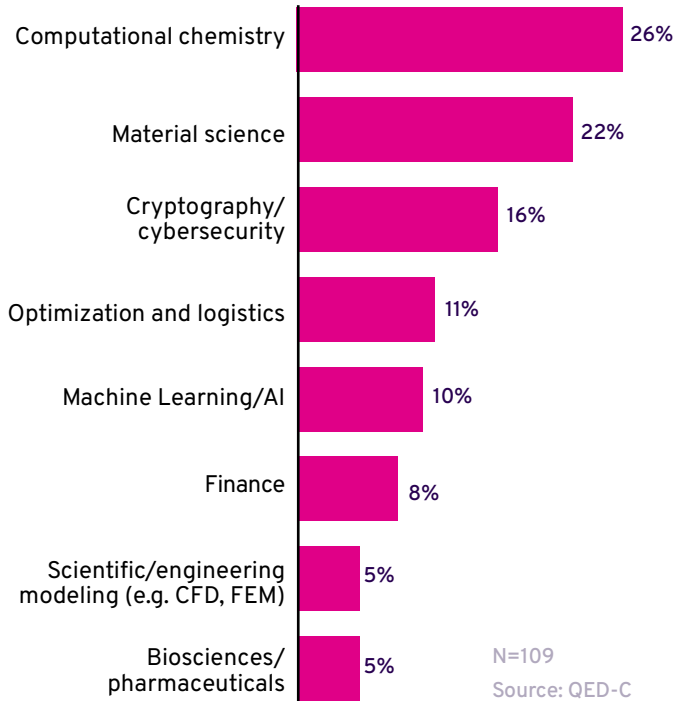
Projected 2028 revenue distribution indicates that noisy intermediate-scale quantum (NISQ) systems remain the dominant architecture, accounting for 38% of total market revenues (figure 13). This is nearly twice the projected share of universal error-corrected gate model systems (22%), suggesting that fully fault-tolerant quantum computing is still several years from large-scale commercial dominance. The data indicate that near-term deployment expectations continue to align with currently available system capabilities.

Quantum simulators that run on classical processors represent approximately 22% of projected revenues. The preference for graphics processing unit (GPU)-based simulators (14%) over central processing unit (CPU)-based simulators (8%) may reflect increased integration between quantum simulation environments and established GPU-based accelerator ecosystems. Growing interest in GPU-centric architecture also aligns with broader attention to hybrid computing models that combine quantum processing units (QPUs), GPUs, and CPUs in coordinated workflows.

Overall, the architecture landscape remains diversified. Rather than converging on a single dominant modality, the projections suggest increasing emphasis on architecture with multiple modalities and layered computational approaches as the market evolves.

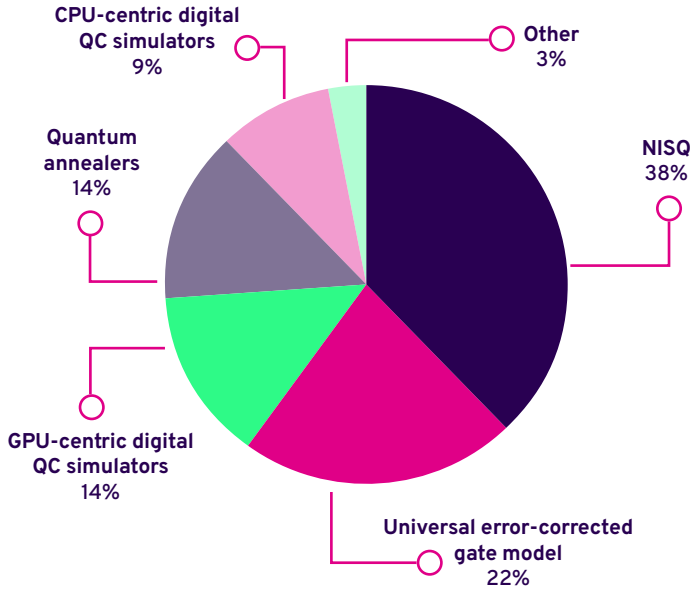
Companies are placing broad bets on industry adoption of quantum computing by 2028. While concentration in a few sectors exists at the top, quantum computing is viewed as having multisector potential. Projected adoption patterns indicate that research and development in quantum technologies is the most promising end-user sector, ranked as the most important category by 21% of respondents (figure 14). Chemicals and chemistry (excluding pharmaceuticals) follow at 18%. These two categories thus account for nearly 40% of top selections, reinforcing concentration in domains closely aligned with quantum-native research and simulation.

FIGURE 12: MOST PROMISING QUANTUM COMPUTING APPLICATIONS NEXT 3–5 YEARS



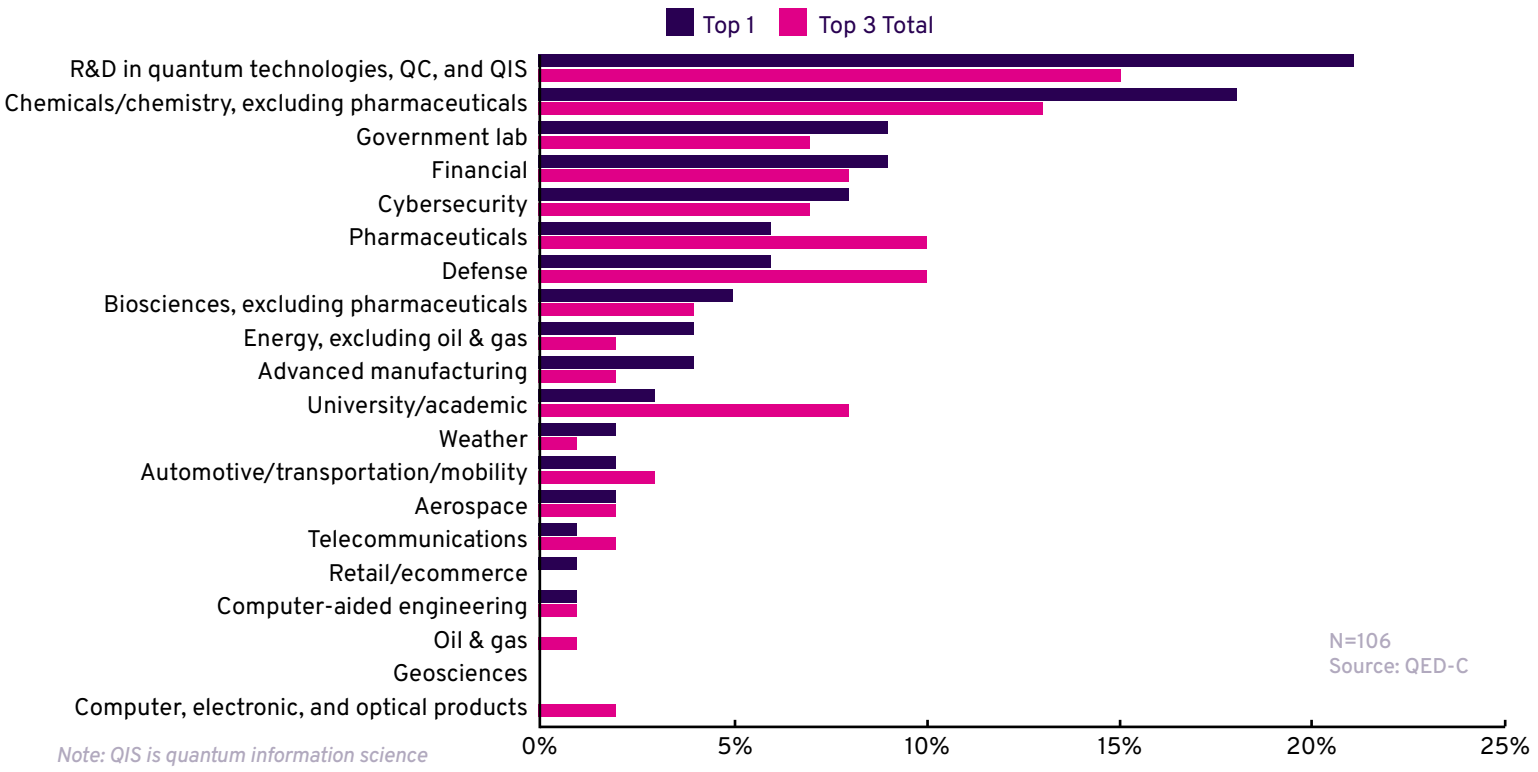
Note: CFD is computational fluid dynamics and FEM is finite element method.

FIGURE 13: QUANTUM COMPUTING (QC) ARCHITECTURES IN 2028



Note: CPU is central processing unit, GPU is graphics processing unit, and NISQ is noisy intermediate-scale quantum.

FIGURE 14: QUANTUM COMPUTING (QC) MARKET 2028: TOP END-USER SECTORS



Note: QIS is quantum information science

Broader Interest is revealed in respondents' identification of their top three end-user sectors rather than a single primary sector. For example, the academic sector increases from 3% as a top choice to 8% among top three choices, representing the largest relative expansion, and defense and pharmaceuticals increase from 6% to 10%.

Overall, the data indicate that early deployment is expected to remain anchored in quantum-centric R&D and chemistry-related applications, while secondary segments maintain meaningful participation. The combination of concentration and breadth reinforces the view that near-term commercialization will be focused but not narrowly confined.

The quantum computing sector views its customers as forward looking. Respondents were asked what they believe motivates end users to explore quantum computing (table 8). Exploration-oriented drivers rank highest.

A similar share of respondents (44%–47%) cited exploring applications without expectation of near-term advantage, building in-house familiarity and quantum skills, and implementation of algorithms not possible on classical systems. These responses suggest that current engagement is centered on building understanding, developing capabilities, and experimenting with applications rather than immediate system deployment. More than a third of respondents also believe a primary motivation of end-user exploration is to engage with quantum computing vendors for future activities.

Quantum computing companies believe that their customers understand their roadmaps: end users are not broadly demanding production-scale integration today, but instead positioning themselves in an exploratory phase. The emphasis appears to be on learning what quantum computing may bring to future workflows rather than replacing classical systems in the near term.

TABLE 8: END-USER MOTIVATIONS FOR EXPLORING QUANTUM COMPUTING (QC)

Option	% Selected
Explore organizationally relevant QC use case potential with no expectations of near-term advantage	47%
Develop in-house familiarization with QC skills with no expectations of near-term end use deployment	45%
Implement new algorithm(s) not possible on classical counterpart systems	44%
Engage with the QC vendor community for future activities	37%
Address concerns with future performance capabilities of classical computing systems	35%
Enable better real-time computational capabilities	22%
Realize faster turnaround time on existing classical counterpart systems	19%
Reduce overall computational power and cooling requirements	17%
Reduce overall computing systems costs	12%
Other	7%
Don't know/not sure	9%

N=116, Select all that apply

Source: QED-C

Survey respondents estimated the percentage of corporate IT budgets that would be dedicated to quantum computing technologies or services in 2028. The allocations are broadly distributed but cluster with nearly half of respondents anticipating that between 1% and 7% of overall IT budgets will be allocated for quantum computing (figure 15). Expectations for allocations above 20% have declined from 10% last year, indicating more measured projections of near-term investment intensity. Elevated uncertainty (27%, compared to approximately 10% of respondents across the previous three years) suggests that budget planning for quantum computing remains in flux as deployment models and cost structures continue to evolve.

For the past five years, we have reported on quantum computing market sentiment. A "quantum winter" characterizes a greater than 25% decline in investment in quantum computing R&D that lasts more than three years. This year 54% of respondents indicate that there is at least some chance of a quantum winter by 2031 (figure 16). Within this group, the share selecting "somewhat likely" increased year-over-year, while the share selecting "somewhat unlikely" nearly halved. These shifts suggest rising caution, even as aggregate growth expectations remain positive.

FIGURE 15: ANTICIPATED QUANTUM COMPUTING BUDGET COMMITMENTS IN 2028

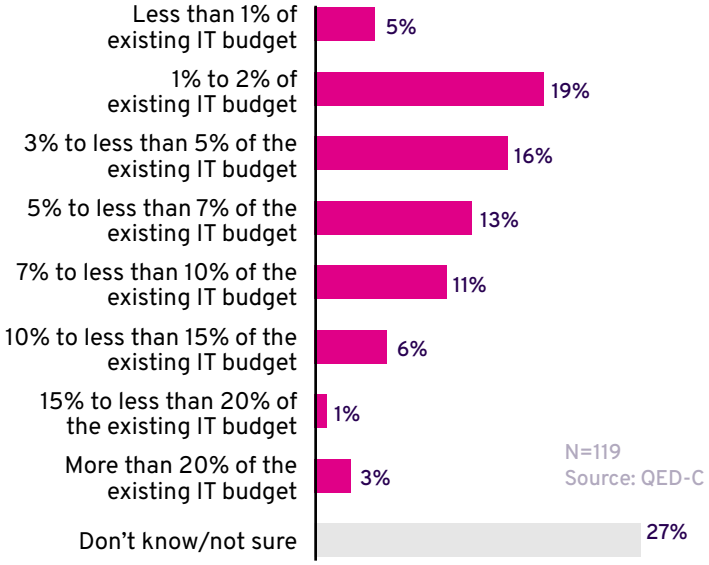
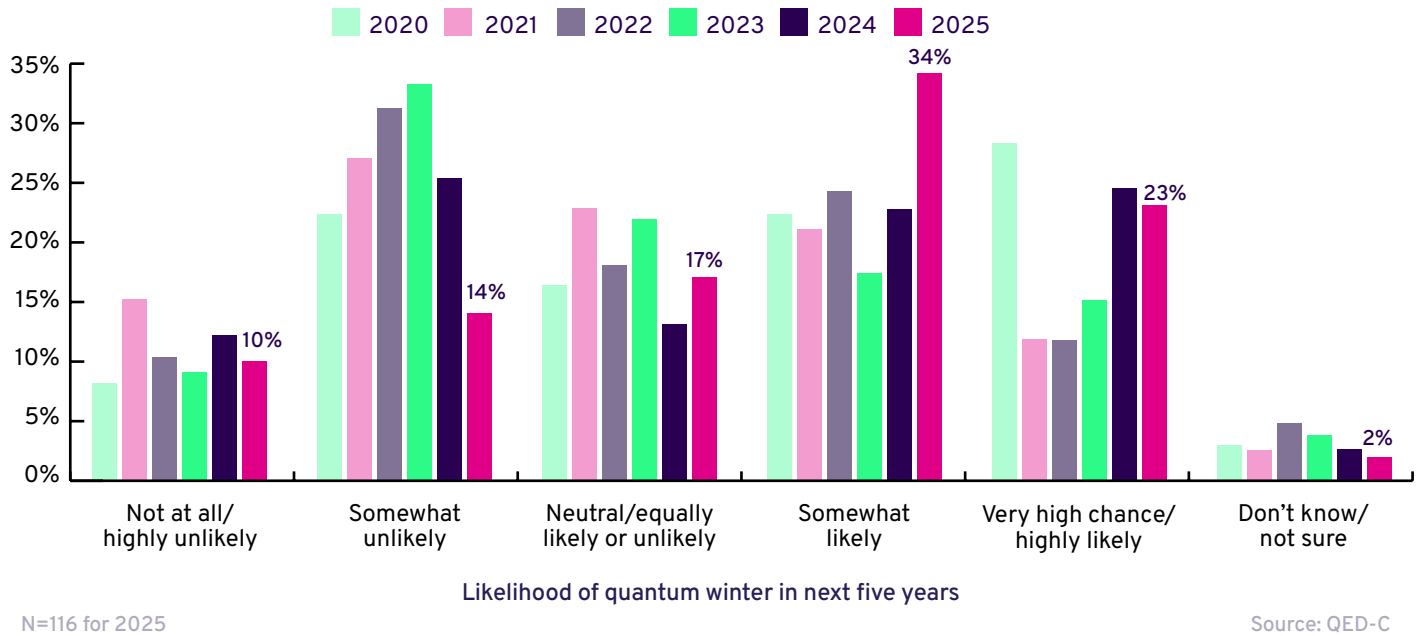


FIGURE 16: QUANTUM COMPUTING MARKET SENTIMENT



N=116 for 2025

Source: QED-C

Respondents cite several contributing factors. Market fragmentation with numerous competing suppliers and fundamentally different qubit modalities may contribute to uncertainty among investors and end users. Despite increasing revenues, losses remain significant for many companies in this R&D-intensive industry. Budget pressures associated with scaling from R&D to manufacturing are intensifying. The shift from cloud-based experimentation to on-premises deployment introduces additional capital demands. External factors, including capital allocation to AI infrastructure, are also identified as possible stress points.

This market sentiment must be reconciled with the revenue forecast: concern about a segment-wide decline in investment coexists with optimism for revenue growth at the company level. As in prior years, respondents generally expect their own companies to grow in line with the broader market (figure 9). This juxtaposition of tempered market sentiment with rosy revenue projections suggests that anticipated contraction, if it occurs, may reflect structural consolidation and competitive realignment, where stronger players gain market share, rather than systemic collapse. Sustained progress will depend on honest assessments of near-term capabilities rather than speculative projections.

Respondents express confidence in the long-term trajectory of the field. Several point to the need for demonstrable use cases to catalyze broader adoption. There is growing expectation that investment will favor hybrid quantum-classical approaches, domain-specific applications, and measurable demonstration of practical advantage. These perspectives encapsulate the broader findings: continued commercial momentum moderated by expectations regarding technological maturity and utility.