



# Quantum adoption playbook

**A practical guide for business and IT leaders**

# What this playbook is all about

This playbook empowers business, IT, and innovation leaders to transform quantum hype into tangible steps. It frames quantum as a vital wave in advanced computing, alongside AI, cloud, edge, and HPC, highlighting realistic impacts over the next 3–10 years.

We'll show you how to embrace business-focused challenges like optimisation, simulation, security, cryptography, and hybrid AI, to get ahead in thriving sectors such as finance, logistics, energy, healthcare, or telecom.

Quantum adoption is an exhilarating journey and not a one-off project. Discover the seven dynamic stages, action-packed tools, and how to design a focused proof-of-concept.

You'll sidestep pitfalls and learn how to best track your progress.

**Call to action:** Start lean, learn boldly, embrace your ecosystem and elevate quantum from slideware to strategic strength within your organisation.

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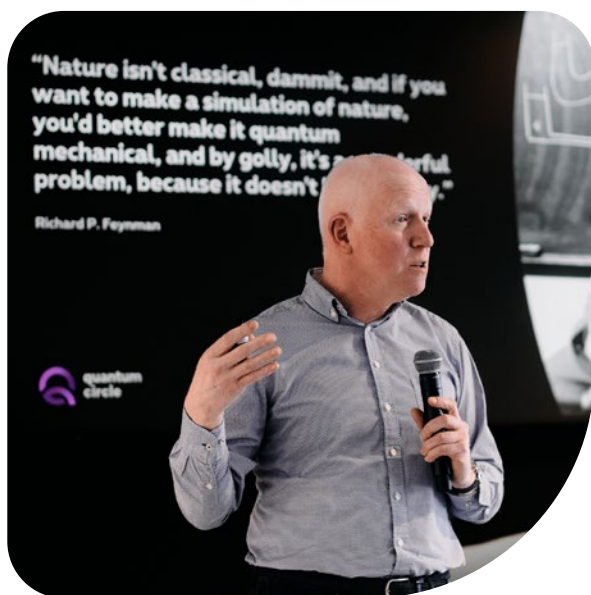
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**// From big talk to breakthrough strategy, quantum leadership starts with your first step today. //**

# Introduction

In boardrooms across Europe, “quantum” rings familiar, yet its practical business value still feels distant. Keynotes inspire, articles intrigue, competitor whispers stir curiosity, but conversations often stall at high-level slides. Leaders feel the pull to engage, although they wrestle with a core question: “What does this unlock for us, concretely, in the coming years?”

This playbook bridges that vital gap from spark to action. Tailored for business visionaries, decision-makers, strategists, innovators, and IT architects, it delivers quantum insight without requiring a physics degree. If you’re pondering “What’s the angle for my organisation?” or “What’s my first move?”, this guide is for you.

From over three decades at the crossroads of telecom and IT strategy, innovation, and go-to-market, I now guide practical quantum exploration for Belgian and European organisations through Quantum Circle, a dynamic community uniting industry, technology providers, academia, government, and startups. Daily, I witness electric excitement, candid doubts, and a shared hunger for clear, structured paths forward.

In this playbook, I’ll skip the technical deep dive. You’ll find no algorithm proofs or hardware specs here. Instead, we’ll revel in business-centric language, vivid real-world examples, honest timelines, and a flexible step-by-step roadmap you can adapt immediately.

By your journey’s end, three outcomes await:

- Confidently explain quantum’s relevance to your sector and company in simple terms.
- Pinpoint your organisation’s current adoption stage.
- Launch concrete 90-day steps toward action, solo or amplified by ecosystems like Quantum Circle and EU initiatives.

You’re not starting from scratch. Robust research programs, open-source tools, cloud platforms, and early pilots are only one web search away. Your opportunity lies in weaving them into your reality for a breakthrough advantage.

**Jan Sonck**  
Community & Quantum Innovation Lead

# 1

# Quantum in business terms, not physics

## What we mean by “quantum” here

“Quantum” too often blends distinct technologies into mystery. This playbook clarifies it as three interconnected pillars, each ripe for business impact.

First, **quantum computing** leverages qubits and quantum operations to tackle vast combinatorial challenges or quantum-scale phenomena where classical bits falter. Excitingly, you need no hardware: IBM, Pasqal, and many others deliver processors and simulators via familiar cloud platforms today.

Second, **quantum communication** harnesses inherent properties for tamper-proof transmission; eavesdropping inevitably disturbs the state, revealing intruders. Quantum key distribution advances secure critical infrastructure and high-stakes networks.

Third, **quantum sensing** equips ultra-precise detectors to detect minute shifts in fields, time, or position, opening the door to breakthroughs in navigation, healthcare, geophysics, and infrastructure vigilance.

For leaders, the mastery of physics misses the point. Quantum energises the advanced computing surge, including AI, cloud, edge, and high-performance systems as elegant hybrids: quantum boosts paired with classical power, delivered through cloud interfaces and woven into existing workflows, not disruptive overhauls.

## Why business leaders should care (and when)

“Isn’t quantum premature?” Fair question: today’s machines remain noisy, qubit-constrained, and not yet delivering widespread advantage. Yet three compelling forces demand your engagement now.

Quantum aligns precisely with pressing realities: tangled supply chains, volatile energy grids, intricate financial models, and complex production schedules. Reformulating these for quantum-inspired approaches sharpens strategic thinking today, even before full-scale wins arrive tomorrow.

Competitors have already advanced. JPMorgan and Goldman Sachs pioneer portfolio optimisation and derivatives pricing. Logistics giants pilot routing and allocation. Materials firms collaborate on chemistry simulations, accelerating drugs and designs.



// Forget physics. Look at quantum from a business perspective. Your advanced computing advantage awaits, cloud-ready now. //

Finally, capabilities compound over time. With 3–5 year horizons for impact, now is the time to educate teams, identify where quantum may fit, build relationships with organisations such as Quantum Circle, the European commission’s Quantum Flagship and the industry federator QulC across Europe, and begin small-scale experimentation. All to be better positioned when the ecosystem matures.

**Timing horizons simplify clarity:**

- **1–2 years:** Build awareness, map opportunities, launch pilots.
- **3–5 years:** Deploy hybrid solutions for operational gains.
- **Beyond 5 years:** Deep-tech fluency separates leaders from laggards.

## What’s in it for you?

Quantum’s value shifts by vantage point; so let’s translate it precisely.

For **CEOs and board members**, it’s strategic chess: Could quantum spawn novel models or efficiency leaps in your industry? Do post-quantum cryptography gaps threaten long-term data? Should you position boldly as an early advanced-computing adopter or measured follower?

**Business unit leaders** ground it in daily battles: costs, revenues, service excellence. Quantum shines in tackling logistics networks, risk/pricing models, resource scheduling, and product acceleration. No algorithm fluency is needed, only the clarity to ask: “Here are our three thorniest problems. Which merit quantum exploration?”

For **CIOs, CTOs, IT leaders**, the issue is how enterprise architecture must adapt. Quantum will not require dedicated data centres, but it will steer decisions around cloud platforms, developer capabilities and post-quantum security.

**Strategy and innovation heads**

treat quantum as a portfolio staple beside AI, edge, and analytics. Orchestrate structured probes, time-bound experiments with clear goals, partnered via Quantum Circle or national and EU programs. Resolve exploration budgets, ecosystem priorities and pilot-to-scale triggers.

If any of this resonates with you, upcoming chapters deliver your tailored roadmap to quantum mastery.

# 2

## Where quantum can thrive: use-case patterns by industry

**Rather than drowning in isolated examples, focus first on enduring patterns. These repeat across sectors, illuminating where quantum intersects your world with striking clarity and opportunity.**

### Cross-industry patterns

Hard optimisation stands out first, a relentless pursuit of “good enough” amid combinatorial explosions. Picture routing vehicles through urban chaos, scheduling crews and machines, allocating portfolios, or configuring assets under layered constraints. Quantum and quantum-inspired algorithms promise to explore these vast spaces more efficiently, delivering superior solutions within tight timelines.

Advanced simulation follows closely, vital for inherently complex problems in materials science, chemistry, energy, and finance. Classical approximations drain resources or sacrifice precision; quantum computing excels at modelling quantum-scale behaviours for molecules, materials, potentially slashing trial-and-error in designing drugs or next-generation batteries.

Security and cryptography form the third pillar. Today’s RSA and ECC systems rest on math that a scaled quantum machine could shatter. “Harvest now, decrypt later” looms for sensitive long-lived data, spurring standards bodies and vendors toward post-quantum safeguards, demanding for urgent planning for forward-thinking organisations.

Emerging fourth: Hybrid AI-quantum fusions, where quantum methods enhance elements of machine learning and optimisation pipelines. Still early-stage, they are nonetheless proving compelling for firms with strong AI ambitions.

There is no need to master the technical detail at the outset. Start by asking a simpler question: “Which of our challenges follow these patterns?” Even that can spark transformative discussions.



## Industry-specific examples

These patterns gain vivid opportunities across key sectors.

**Finance** thrives on optimisation and simulation: banks allocate capital, balance risk-return, and stress-test scenarios. JPMorgan, Goldman Sachs, and others experiment with quantum methods for portfolios, options pricing, and credit analysis.

**Manufacturing and logistics** battle production scheduling, capacity planning, stock inventory, and parcel routing. Global players deploy quantum-inspired pilots for container flows, deliveries, warehouses, and factories, sequencing jobs across sites under intricate limits.

**Energy and utilities** grapple with real-time energy balancing, renewables integration, and distributed assets. Quantum aids energy grid configurations, battery storage and network maintenance. All this while material innovators strive for superior batteries, catalysts, and solar tech.

**Healthcare and pharma** tap quantum for precise molecular interactions in drug discovery; hospitals mirror optimisation in scheduling and personal medicine development.

**Telecom and networks** blend optimisation for antenna lay-outs, network routing and maintenance planning with quantum communication or QKD fortifying critical links against future threats.

These aren't overnight revolutions, but beacons. Serious players commit time and pilots where potential glimmers. They inspire your charge and affirm you're far from alone.

## A quick reality check

Can-do grounds ambition. Most quantum applications dwell in exploration or prototypes; hardware limits persist, and classical methods outperform many tasks today. Yet steady advances roll forward, with companies gaining not just from quantum itself, but the rigor of reframing stubborn problems.

For your organisation, embrace quantum short-term as a vibrant learning pursuit within your innovation portfolio; ringfenced by clear goals and measured expectations. Medium-term, quantum-inspired or hybrid edges emerge. Long-term, it integrates as a core tool alongside AI, high-performance computing, cloud, and edge.

Upcoming chapters skip precise mainstream predictions, zeroing instead on your control zone: orchestrating a winning journey.

// **Optimisation beasts, simulation frontiers, security shields. Spot quantum's patterns in your toughest business challenges.** //



# 3

## The quantum adoption journey: from curiosity to impact

When organisations first encounter quantum, reactions span enthusiastic “We must step up now!” to cautious “Wait for proof.” Both instincts have merit, yet neither suffices as a strategy. What triumphs is a deliberate journey, a sequence of

seven stages carrying you from initial curiosity to measurable impact, paced and scaled to your reality.

Through Quantum Circle collaborations with corporate teams across Belgium and Europe, these

stages emerge consistently, though not always linearly. Recognising your current position reveals the smart next step, avoiding the trap of vaulting from keynote inspiration to full production.

### Stage 1 Curiosity and shared awareness

The journey ignites with curiosity. A conference whisper about the EU’s multibillion Quantum Flagship, an article on rival consortiums, or colleague chatter sparks internal dialogue. Excitement clashes with scepticism; confusion often dominates.

Your aim here isn’t universal expertise, but a shared baseline: agreement on quantum’s meaning in your context, potential relevance, and realistic timelines. Deliver this through focused, low-lift actions: a plain-language executive briefing, casual lunch-and-learns, or a Quantum Circle webinar featuring practitioner stories. The transition from hype to informed curiosity creates momentum without premature decisions.

### Stage 2 Exploration and opportunity scanning

With core grasp established, questions evolve: “Where does this fit us?” Scan operations for echoes of earlier patterns: optimisation tangles, simulation demands, security vulnerabilities, AI synergies.

Cross-functional dialogue proves essential: business leaders voice pains and priorities, IT and data teams highlight system realities and constraints, and strategy brings peer benchmarks. Workshops accelerate discovery: present finance, logistics, energy examples, then probe: “What resonates?” Capture a broad idea harvest without hasty judgment, fuelling rich possibilities.

### Stage 3 Prioritising use cases with intent

Idea abundance risks paralysis. Stage three demands disciplined selection: 2–3 high-potential cases worthy of deeper pursuit.

Apply clear criteria: Does success deliver meaningful business value? Is the pain acute or peripheral? Are feasibility and data readiness viable? What’s the timeline? Answer critically: Does the business leader own it passionately?

The prize: consensus shortlist, each with a crisp non-technical summary outlining the problem, upside, and quantum angle. Alignment achieved, progress accelerates.

### Stage 4 Ecosystem and partner strategy

Solo quantum voyagers go slow. Technologies span hardware, algorithms, cloud, standards, and policy. Even giants lack full coverage. Ecosystems, therefore, become a strategic advantage.

Select partners for your shortlist: cloud providers offering quantum access, sector-specialised startups, EU or national labs, neutral communities like Quantum Circle. Ask not, “best technology?” but “best learning allies?” Talk to those eager to co-create pilots, be candid about limits, and get invested in your long-term success over logo polish.



// **Seven stages from curiosity  
spark to deep-tech mastery.  
Your deliberate path to  
quantum confidence.** //

**Stage 5**  
Proof of concept  
and experimentation

Action electrifies here. Select a prime use case, unite an internal squad with partners, craft a focused proof-of-concept (PoC) or pilot. Your goal: concrete learning on whether quantum adds edge to your problem.

Success depends on a tightly defined approach: clear goals (“Can quantum outperform the baseline?”), limited scope, and straightforward success metrics. With cloud platforms and open-source tools, projects can run in 8 to 16 weeks without hardware constraints. The right mix of business owners, IT and data experts, and specialised partners turns abstract ideas into tangible insight.

**Stage 6**  
From pilots to scalable  
impact

Operational integration tests is essential: mesh with cloud and data architecture, navigate risk and compliance, manage change.

Quantum reveals itself not as an isolated solution, but a thriving ecosystem-driven service amid your tools, processes, and governance.

**Stage 7**  
Continuous learning  
and portfolio  
management

There is no finish line. It’s a virtuous cycle. Quantum joins your advanced computing portfolio of AI, high-performance computing, edge and beyond.

Institute regular pulse-checks: Assess use-case pipeline, experiment yields, partner value, and capability growth. Query boldly. Deepen which? Halt which? Repurpose this journey as a deep-tech blueprint.

Quantum is moving beyond isolated projects and headlines, becoming part of the broader evolution of the organisation.

# 4

## Getting started: a 90-day action plan

**The full journey may seem vast, but distil it to a powerful question: “What can we achieve in the next 90 days?” Grand gestures aren’t required; deliberate steps will propel you through stages 1–3 while priming a meaningful first experiment to move decisively from discussion to discovery.**

### **Build a small quantum exploration team**

Launch with a lean, cross-functional squad of 3–5 motivated players. Include one business representative, ideally tied to a process or P&L; one from IT or architecture versed in systems and data flows; one from strategy or innovation to bridge internal and external worlds. Add risk/compliance if your sector demands regulation.

Equip them with a crisp 90-day mandate: foster shared understanding, map use cases, nominate 1–2 PoC candidates, and pinpoint partners or communities. Secure an executive sponsor to unlock doors and clear hurdles. One with a light touch and high leverage.

### **Run a focused awareness and ideation sprint**

With the team assembled, orchestrate a brisk 4–6 week sharp on structure!

Phase one: Host an internal “quantum in plain language” session tailored to your company, weaving sector examples and takeaways from external meetups or conferences. Invite broadly across business and IT.

Phase two: Organise 1–2 workshops for opportunity scanning, anchor on cross-industry patterns and sector stories from finance, logistics, energy, healthcare, telecom or other industries. Invite teams to surface toughest pains and match them boldly.

Phase three: Regroup a smaller team to cluster, prioritise via simple criteria (value, pain, feasibility, data readiness, timeline, ownership). Emerge with 2–3 prioritised cases and a compelling “why them” narrative.



## Choose your first use case and partner

From your shortlist, select one starter case, manageable over ambition. Capture it on one potent page: the problem at hand, current baseline, desired leap, and quantum-inspired rationale. This exercise alone forges crystal alignment.

Simultaneously, scout partners: cloud providers with quantum services, sector-tuned startups, universities in European or national programs, or connectors like Quantum Circle. Initiate exploratory conversations with a handful of people: collaborators, not contractors.

// **Team. Awareness.**  
**Use cases. PoC.**  
**In 90 days. Transform**  
**quantum talk into**  
**tangible exploration.** //

## Design a first proof of concept

Use case locked, partners engaged? Then blueprint your debut PoC: modest, laser-focused, time-boxed. Agree on learning goals upfront: “Can quantum-inspired optimisation outpace our heuristic on this routing slice?” or “Does simulation match or exceed our molecule model?”

Define scope (problem subset, data, constraints), metrics (baseline gains, solution quality, solve time, expert input), timeline (8–16 weeks with milestones), and tools (cloud quantum services, partner-recommended frameworks). Frame communication clearly for stakeholders: This is a learning venture. Plan to share insights, win or learn.

At 90 days’ close, it’s time to celebrate: team formed, cases mapped and chosen, partners contacted, PoC designed or underway. You’ve transcended talk. You’re quantum explorers in motion!

# 5

## Key roles and responsibilities in a quantum initiative

**Even the finest playbook falters without clear ownership. Quantum adoption spans business, IT, innovation, security, and external allies like technology partners. Clarity on roles transforms potential into progress. View your initiative as a nimble, evolving network rather than a rigid organisation chart; here are the ingredients that drive success.**

### Internal roles: who owns what

The executive sponsor lends vital legitimacy, linking quantum to corporate strategy without micromanaging daily operations. They ensure visibility at key levels and sweep away roadblocks; often a CIO, CTO, strategy head, or innovation-driven business leader.

The program lead (quantum or advanced computing) orchestrates seamlessly across stages, from awareness workshops to PoCs and pilots. Fluent in business and technology, they navigate ecosystems and convert external insights into internal momentum. No physics PhD required, just curiosity, facilitation prowess, and dot-connecting skill.

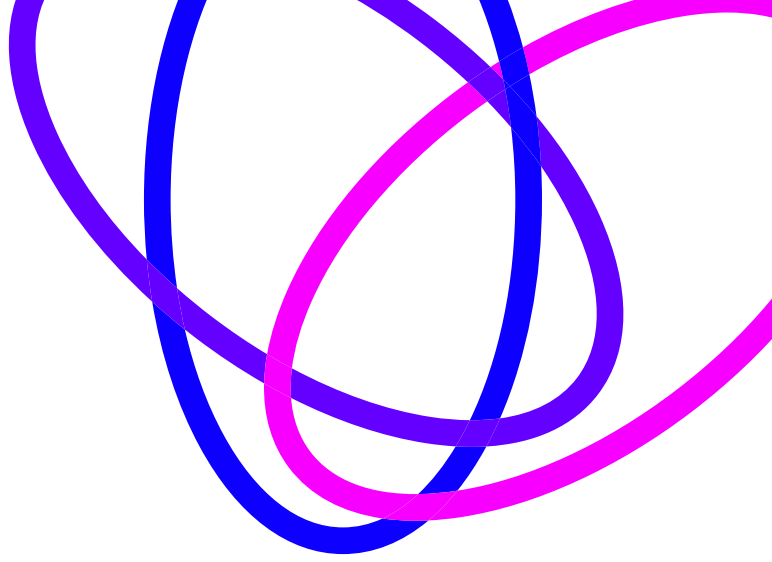
Every selected use case demands a business owner, the daily warrior tied to the process, P&L, or KPI. They define success, decode results, and chart next steps. No owner means no advance.

IT, architecture, and data leads ground experiments in reality: vetting data quality and availability, testing cloud integrations, safeguarding security, performance, and compliance. In regulated arenas, loop in risk, legal, and compliance early for regulatory alignment, data protection, ethics, and partner contracts.

### External roles: who you learn with

Technology suppliers unlock hardware, simulators, software, and expertise, cloud titans with quantum offerings, specialised software firms, and select hardware innovators. The best co-design realistic experiments with refreshing transparency on capabilities and limits.

Research partners like universities, public institutes, national or cross-border program labs infuse deep understanding and long-view perspective, aiding problem formulation, joint projects, and talent pipelines.



Ecosystem and community partners, like Quantum Circle in Belgium or broader European quantum networks, foster neutral gathering grounds for industry, academia, government, and startups.

Their events, working groups, white papers, and candid exchanges unearth opportunities and connections you'd otherwise miss. They are the true accelerators.

## Making collaboration work

Superior teamwork hinges less on structures and more on vibrant routines. Explicitly define roles for each use case or PoC: sponsor, lead, owner, technical experts, and external allies. Institute light, regular check-ins through biweekly sprints to keep alignment crisp and adaptations swift.

Visualise progress with simple maps of use cases, roles, and partners with tools that demystify the effort organisation-wide. With these foundations secure, teams know expectations, and energy surges toward breakthroughs rather than bureaucratic fog.

**// Sponsors steer, owners champion, while partners accelerate. Clear roles power your quantum journey forward. //**

# 6

## Pitfalls, risks and how to avoid them

Every deep-tech adventure comes with risk, and quantum is no exception. Forewarned leaders sidestep time, budget, and morale drains, channelling energy into genuine progress. Here are the most common stumbles and proven antidotes.

1

### Quantum as a branding exercise only

Some organisations trumpet quantum initiatives for innovation parade, press releases, and co-branded labs, but lack internal substance. Business teams disengage, cynicism festers as employees spot announcements without action, and partners sense marketing over partnership.

**How to avoid:** Anchor every public move in real internal traction: a dedicated team, at least one solid use case, and a 90-day plan. Let communication mirror substance, not substitute for it—authenticity builds trust.

2

### Proofs of concept without business ownership

Technical teams, dazzled by novelty, launch PoCs absent business champions. Demos dazzle briefly, but without P&L linkage, they gather dust when priorities shift to other topics.

**How to avoid:** Name a business owner before kick-off. No passionate advocate tying experiment to real objectives? The use case isn't ready. Ownership ensures relevance and follow-through.



3

### Over- and underestimating maturity

Hype cycles breed extremes: imminent disruption panic spurs reckless bets, while science-fiction dismissal delays engagement a decade. Both extremes erode judgment.

**How to avoid:** Embrace measured realism; the quantum field advances steadily. Acknowledge uncertainty, monitor milestones, and invest in contained learning experiments now. Small, smart bets position without peril.

4

### Ignoring data and integration realities

Promising concepts crumble against data chaos with scattered, incomplete, siloed, or workflow integration becoming far tougher than anticipated.

**How to avoid:** Elevate IT and data voices early. During use-case prioritisation, probe readiness explicitly; Do realistic data preparation and architecture scouting into every PoC. Face messiness head-on for credible outcomes.

5

### Neglecting security, governance and ethics

Early-stage excitement tempts rules-free experimentation, backfiring in regulated blockers. Data protection, post-quantum crypto, model transparency, and partner duties still apply.

**How to avoid:** Engage risk and compliance upfront, design pilots compliant from inception. Prevention is better than retroactive fixes every time. Stick to existing governance frameworks.

// Avoid branding traps, ownerless experiments and maturity myths. Wise leaders sidestep quantum's hidden pitfalls. //

# Pitfalls



# 7

## Building your quantum and advanced computing ecosystem

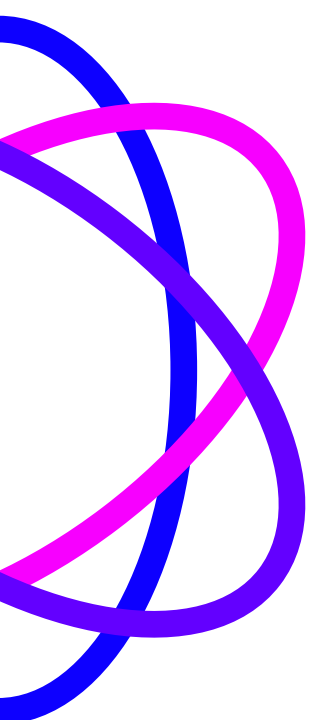
**One resounding theme weaves through this playbook: you won't conquer quantum alone. It thrives within a rich, evolving ecosystem of research programs, vendors, startups, communities, investors, and policymakers. Your strategic positioning here determines acceleration and advantage.**

### Why ecosystems are important

No organisation masters quantum's full stack: hardware, software, algorithms, infrastructure, use-case expertise, regulation, talent. Ecosystems unlock shared risk and cost, collective learning from experiments, and complementary strengths that amplify your own.

From a business lens, strong ecosystem ties deliver early signals on relevant breakthroughs, pilot opportunities, and talent flows you might otherwise miss. Well-connected players hear whispers of sector-tailored advances first, turning information asymmetry into a competitive edge.

In Belgium and Europe, this means tapping Quantum Circle, cross-border networks, QuIC, EU Quantum Flagship initiatives, all vibrant hubs accelerating real-world translation.



// **Quantum Circle, EU Flagship  
and cloud pioneers;  
Your ecosystem allies turn  
solo struggle into collective triumph.** //

### How to engage effectively

Start with curiosity, not commitment. Attend ecosystem events, meetups, workshops and industry consortia to absorb trends, spot peers facing similar challenges, and identify potential collaborators without formal strings.

Next, prioritise 2-3 targeted engagements matching your use cases: Join a working group on optimisation for logistics, co-fund a university pilot on materials simulation, or test cloud quantum services with a vendor offering white-glove onboarding. Measure success by learning velocity, not logos collected.

Cultivate mutual value: Share anonymised insights from your experiments, host ecosystem players for internal talks, or contribute to open standards. Long-term relationships flourish when all parties win. Position yourself as a valued contributor, not just a consumer.

### Measuring ecosystem ROI

Track three pillars: **Access** (new tools/partners unlocked), **Intelligence** (trends/competitor moves surfaced), and **Capability** (skills/partnerships built). Quarterly reviews reveal if connections deliver tangible value.

Ultimately, your ecosystem evolves quantum from an isolated gamble to orchestrated strength. Lean in boldly: In interconnected deep-tech, isolation spells obsolescence and vibrant networks forge the future. You've got the journey, now claim your place in the circle.

# 8

## Measuring progress: are we moving beyond curiosity?

Self-assess instantly: Where do you stand? Set a bold 18–36 month target.

This language elevates boardroom talks from “Are we doing enough?” to “Shall we surge from Level 1 to 3, and what’s our playbook?”

### Simple maturity model

Level

0

**No awareness**

Quantum off-radar;  
no conversations,  
no champions.

1

**Awareness and interest**

Leaders grasp basics;  
1–2 sessions or events  
spark dialogue.

2

**Exploration and mapping**

Cross-functional workshops yield  
use-case mappings tied to real  
business pains.

3

**Experimentation**

One+ PoC or pilot runs or completes,  
backed by business owners and  
external allies.

4

**Integration and strategy**

Experiment insights shape roadmaps;  
quantum joins strategic planning,  
architecture, and upskilling.

// **Level 1 to 3 use cases in 24 months.**  
**Track experiments and partnerships.**  
**Progress is more important than perfection.** //

## Indicators of healthy progress

Complement levels with vital signs across four fronts, keeping scrutiny light yet illuminating.

**Use-case momentum:** Clearly identified cases, prioritised shortlists, and business-wide spread, beyond niche silos.

**Experiment vitality:** Count launched and completed PoCs or pilots, post-mortems (stop? Pivot? Scale?) and captured technical/business lessons.

**Ecosystem pulse:** Active communities and consortia, joint activities, fresh partnerships born from connections.

**Capability build:** Hands-on participants, awareness sessions, trainings delivered, and self-paced course completers.

Public scorecards and incentives are not essential. What matters is knowing whether your quantum initiative is progressing strongly, standing still, or losing momentum. With that insight, you can steer decisively towards deeper expertise in the field.

# 9

## What's next after quantum: building a deep-tech adoption muscle

**By now, the synergy shines through: Your quantum efforts, raising awareness, mapping opportunities, forging ecosystems, and launching pilots, not only advance this frontier but hone a reusable playbook for all deep-tech horizons. Quantum emerges not merely as a challenge, but as a golden opportunity to elevate how your organisation tames emerging technologies with confidence and agility.**

### Building frameworks

Envision your quantum journey as a dynamic rehearsal. The frameworks you forge – a cross-functional exploration team, a streamlined maturity model, use-case prioritisation rituals, ecosystem collaboration rhythms – recycle effortlessly for cloud-edge fusion, advanced AI leaps, next-generation networks, or breakthrough sensor realms.

These aren't one-offs; they're foundational assets.

In action, this cultivates a robust deep-tech adoption model: the power to scan horizons, evaluate signals, and integrate waves systematically. Forget starting from scratch with every buzzword; you now have a battle-tested playbook and unified language that accelerates every innovation challenge.

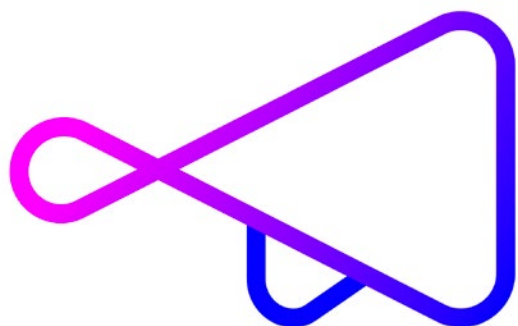
For leaders, this reorients ambition: Trade fragile predictions of "winners" for masterful orchestration of learning. Craft tailored journeys, nurture safe experimentation zones, and spark cross-pollination. While quantum insights fuel AI, AI breakthroughs inspire quantum. You've built more than a technology response, serving organisational resilience.

//

**Quantum can be a victory testbed: structures for AI, edge and beyond. Build your deep-tech adoption powerhouse now.**

//





# 10

## Call to action

**Reaching this point marks a decisive step many leaders overlook: dedicating time to quantum with structure and intent. Uncertainty remains, and that's ok. Perfection isn't the aim; it's igniting thoughtful exploration from fleeting curiosity, propelling your organisation forward.**

Three cornerstone truths bear repeating as you step into action.

First, quantum leadership demands no expertise badge. Arm yourself with sharp questions, keen eyes for business intersections, and trust in your teams to experiment. Let partners, vendors, researchers, and open-source communities shoulder the technical load. Your strength lies in guiding the voyage.

Second, precise small steps outshine grand visions. Within 90 days, rally a compact team, spark shared insight,

prioritise use cases, and blueprint your inaugural PoC. This alone reframes the conversation: from "We ought to explore" to "We're advancing" and "Here's our momentum and discoveries."

Third, isolation solves nothing. Vibrant ecosystems, from EU programs and national strategies to Quantum Circle and vendor networks, await to amplify your speed and savvy. Joining them signals strength, not shortfall: Quantum thrives as a collective triumph.

Your moment: Launch today. Small, bold, connected! Transform quantum from enabler to differentiator. Your competitive edge awaits.

**// Share this playbook, schedule that 30-minute chat. Your modest step claims quantum's competitive edge today. //**

# 11

## Closing: your next step starts today

So, what could your immediate action be?

It might be as simple as forwarding this playbook to a trusted colleague with the question: “Where do you see us on this quantum journey?” Or scheduling a focused 30-minute session with your leadership team to gauge your maturity level and sketch a 90-day plan. Perhaps reaching out to a Quantum Circle contact or potential partner to brainstorm a tailored use case together.

However modest the move, it catapults quantum beyond theoretical presentation into purposeful engagement. In this youthful, accelerating field, thoughtful exploration already secures a commanding edge.

You’ve got the roadmap. Step forward now and lead the charge!



# Useful links

## Learn more

### **Quantum business foundations**

Course on quantum computing and its applications

[Follow here](#)

### **Building business readiness for quantum computing**

Report highlighting barriers and support mechanisms

[Read here](#)

### **2026 Quantum business readiness report**

Survey results about quantum readiness

[Read here](#)

## Open-access books

### **Introduction to Quantum Computing for Business**

Everything you should know about quantum technologies

[Read here](#)

### **The Business of Quantum Technologies**

From theory to innovation strategy

[Read here](#)

## News sites & newsletters

### **Quantum Zeitgeist**

Bridging complex physics and commercial applications

[Visit here](#)

### **Quantum Pirates**

Quantum Computing curated news and information

[Visit here](#)

## EU initiatives & ecosystems

### **EU Quantum Technologies Flagship**

The official website of the European programme

[Visit here](#)

### **Quantum for Business**

European platform of quantum technology

[Join here](#)

### **Quantum Circle**

Leading quantum community in Belgium

[Join here](#)



Quantum is here to stay, and Belgium has what it takes.

Quantum Circle, founded by Jan Sonck, is the non-profit community bringing industry, academia and government together around one question: what does your organisation do next? Honest, practical, and focused on getting you started.

Join the Quantum Circle: [quantumcircle.eu](https://quantumcircle.eu)