



Douglas Adams famously gave us one of the most elegant anti-answers in literature: **42**

The answer to life, the universe, and everything.

Perfectly precise.

Beautifully useless.

Completely meaningless without knowing the actual question.

And yet, maybe that is exactly where it becomes interesting.

THE QUESTION
to life, the universe,
and everything?

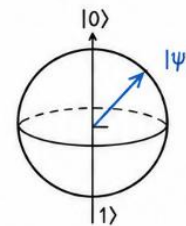
42

Maybe the answer is a number.
Maybe the question is the point.

IT FROM QUBIT

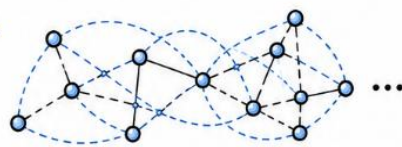
Reality arises from quantum informational distinctions.

① QUBIT
one quantum distinction



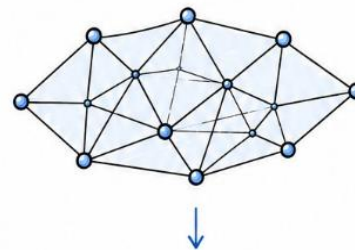
$|\psi\rangle = \alpha|0\rangle + \beta|1\rangle$
 α, β
superposition
potential information

② MANY QUBITS
correlations
entanglement



information
processes

③ INFORMATION
STRUCTURE
relations create
patterns



structure
emerges

④ EMERGENT
REALITY
space, time,
matter, laws



our universe
emerges

Want the full story? Read our **we4u** Insights edition.

Here the link: <https://we4u.io/we4u-Insights-Quantum-Technology>

Here is the short answer:

At first glance, this is comedy. At second glance, it is almost philosophy. And at third glance, after spending too much time with quantum physics, information theory and emergent spacetime, the joke starts behaving suspiciously like a serious metaphor.

Could 42 indeed be the answer to life, the universe, and everything?

Probably not in the literal sense. It would be scientifically irresponsible, and admittedly rather disappointing, if the entire universe turned out to be a poorly documented integer.

But the deeper idea behind the joke is more interesting: **what if the fundamental layer of reality is not made of “things” in the way we usually imagine, but of distinctions, relations, states and information?**

In that case, numbers, structures and informational patterns would not merely describe reality from the outside. They might be closer to the way reality becomes reality in the first place. That is the question we explore in our **we4u Insights** edition on quantum technology, especially in the chapter “Is information the deeper level of reality?”

From things to relations

In the classical worldview, reality feels fairly intuitive. There are objects. They occupy space. They change over time. They have properties such as mass, position, velocity and energy. Information, in this picture, seems secondary. It is what we know about a system. It is a description, not the system itself.

That view worked astonishingly well for centuries. It gave us mechanics, engineering, telecommunications, satellites, networks and a deeply practical way of dealing with the world.

But modern physics has been quietly dismantling some of our most comfortable assumptions.

Relativity already showed that space and time are not fixed, separate stages. They form spacetime, and spacetime is shaped by matter and energy. Quantum physics went further. At the microscopic level, nature is not described by definite trajectories and simple properties, but by quantum states, probability amplitudes, superposition, interference and entanglement.

At the quantum level, information is no longer just an external description of a system. It is tied to the physical state itself. If you measure a quantum system, disturb it or try to copy it, you change what can still be said about it. Information becomes physical in a much stronger sense than in classical communication.

This is why quantum technologies are so profound. They are not simply faster tools built on the same conceptual foundation. They arise from a different understanding of what physical reality is doing underneath the surface.

It from Bit, or perhaps It from Qubit

The physicist John Archibald Wheeler captured one version of this idea with the phrase “It from Bit”. The physical “it”, the thing we experience as reality, might arise from elementary distinctions, from yes-no alternatives, from information-like acts of differentiation.

In a quantum world, however, the phrase needs an upgrade.

Not only “It from Bit”, but perhaps “It from Qubit”.

A classical bit is either 0 or 1. A qubit can exist in a quantum state that is not simply one or the other before measurement. It can involve superposition. It can be entangled with other qubits. It can participate in structures of correlation that have no classical equivalent.

This does not mean that the universe is a laptop, or that we are living in a simulation running on a cosmic quantum computer. That would be too simple, and probably too Hollywood.

The more subtle idea is stranger: reality itself may be understood, at a deeper level, as an ongoing quantum information process.

Not a simulation of reality, but the physical unfolding of the informational structures from which our experienced world emerges.

In that sense, 42 becomes an excellent joke because it compresses the whole problem into one number.

It reminds us that an answer is meaningless without the right framework. If reality is informational at its deepest level, then numbers and structures are not trivial bookkeeping. They are part of how we ask the question.

The information tree

One of the speculative images used in our **we4u Insights** is that of a growing information tree.

The idea is not that the universe is literally a tree. It is a metaphor for a possible deeper structure: every new relation, every quantum fluctuation, every entanglement and every differentiation creates another branch. Reality would not primarily be an object sitting inside space. It would be a process of increasing structure.

In this picture, space is not the container in which everything happens. Space is the large-scale appearance of the information network itself.

Distance, then, would not be fundamental in the way we usually imagine. It would not simply mean separation inside a pre-existing spatial container. It could correspond to degrees of separation within an underlying structure of relations.

Time, too, would be reinterpreted. It would not be an external river flowing independently of everything else. It would be the order of growth.

The past would be realized informational structure. The present would be the current growth front. The future would be unrealized possibilities.

But cautious: This is not established physics. It is a speculative synthesis inspired by serious research fields, including quantum information, holography, entanglement entropy, emergent gravity and quantum gravity. It does not yet provide a complete mathematical theory of everything. It does not explain all observations.

It is not a finished replacement for the standard models of cosmology and gravitation. But it is valuable because it shows how deeply quantum thinking can shift our worldview.

Why this is not just philosophy

For telecommunications companies, this may sound far away from practical reality. But it is not.

In classical communication, information is content transported over a medium. In quantum communication, the physical state itself carries the information. If that state is measured or disturbed, it changes.

This is why quantum information cannot simply be copied or secretly read out like ordinary data.

Quantum key distribution, for example, uses the fact that measuring a quantum state changes it. Entanglement-based communication uses correlations that Einstein famously found deeply unsettling. Quantum repeaters must preserve and pass on entanglement. A future quantum internet would not simply be a faster version of today's networks. It would be an infrastructure for distributed quantum states.

This is why the foundational question matters.

If information is physical, then network infrastructure is not only about bandwidth, latency and routing. It is about preserving, distributing and securing physical states. The strategic role of telecommunications changes when information is no longer just an abstract payload but part of the physical fabric of communication.

So, is 42 the answer?

Certainly not literally. But as a metaphor, 42 is surprisingly effective.

It points to a deeper issue: we may be too focused on looking for final answers while still asking classical questions. We ask what the universe is made of, expecting a list of things. Particles. Fields. Forces. Space. Time. Matter. Energy.

Quantum physics suggests that this list may not be fundamental enough.

Perhaps the deeper level is not made of things, but of states. Not isolated objects, but relations. Not passive information about reality, but information as part of reality's structure. Not a universe expanding into space, but a growing structure from which space itself emerges.

If that is even partly right, then the real lesson of 42 is not that a number answers everything. The lesson is that the answer may look absurd until we understand the question.

And quantum physics is very good at making us realize that we have been asking the wrong question.

In our **we4u Insights** edition “Quantum Technology: What makes it so extraordinary?”, we explore exactly this shift.

Part I starts with the foundations, from the classical worldview to quantum states, entanglement, emergent spacetime and the speculative idea that information may be the deeper level of reality.

Part II then moves to the technological implications for quantum computing, post-quantum cryptography, quantum key distribution, network security, digital sovereignty and the long-term prospect of a quantum internet.

So perhaps 42 is not the answer to life, the universe, and everything. But it is a useful reminder that the universe may be less like a machine made of things, and more like a structure of information whose deepest logic we are only beginning to understand.

And that is perhaps even stranger than the joke!



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