

## Karbari.xyz to revolutionise online accounting

Karbari is an online accounting software. In Karbari (karbari.xyz), it is very easy to keep a record of business transactions of every business, from micro to corporate and can be used in both English and Bengali language.

This is one of the easiest softwares to keep your business accounts. Anyone can keep accounts very easily. The ease of operation and user experience has been given the most attention while designing the software.

The Karbari accounting software can be easily accessed by anyone from any location by signing up via internet-connected to any computer, laptop, tab or smartphone. It can be used for free for the first 30 days. Then it can be used with a certain amount of monthly fee. Monthly fees can be paid through Bkash, Nagad, Rocket and Bank accounts. However, if anyone pays the charge for 12 months together, there is a 50% discount.

Karbari has three packages namely Simple, Classic and Platinum. The Simple Package is a traditional accounting system designed for very small traders, the Classic package is suitable for distributors, wholesalers and retailers. Platinum is for Producer, Restaurant, School-College, NGO, Association, Hospital etc.

Karbari is a service of Prosar ICTech Limited and has been designed, developed and maintained by Prosar ICTech Limited. The users will also be able to manage the sale and purchase of goods, debts, customers, inventory, manpower, assets etc. One will also get reports of various accounts, stock, trial balance, profit-loss, balance sheet etc. on a real-time basis. Through Karbari, users will also have the opportunity to process bank loans online.



# Digging deep into quantum computers: myths and realities

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The prevailing air surrounding quantum computing is that of wonder and awe. We have all heard about quantum computers, the next big technology that's going to transform our lives and society. But does the hype really hold true when we look at the current progress of technology? Is the immense potential power of quantum computing going to be in the hands of children anytime soon? Or will it remain a very sophisticated technology, only applicable in highly specialized fields, never really touching the lives of the general person? Let's take a deeper look at where the technology currently stands, debunking the myths surrounding it and analyzing its possibilities in a practical light. First, a short introduction to the basic mechanism of quantum computers.

### FUNDAMENTAL MECHANISM

A classical computer operates as a binary system. The smallest unit of information that it can process is known as bits. The value of a bit can be either 1 or 0. The unit of information in a quantum computer is known as qubits. The value of a qubit can also be set to 1 or 0. Here comes the first interesting principle of quantum mechanics, namely superposition. According to this principle, the value of a qubit can be any proportion of both values simultaneously. To put this in perspective, whereas 4 classical bits can have any one of sixteen possible combinations of information, 4 bits can hold all sixteen pieces of information at once. This number grows exponentially with each added bit and grants quantum computers vast computational power.

Another exciting principle used in quantum computing is entanglement. This essentially means if two qubits are in an entangled state, the value of one can be instantaneously known by measuring the value of the other. Along with other technically sophisticated quantum mechanical laws such as interference, qubit manipulation etc- quantum computers have the potential to perform computations in less than an hour that even the world's most powerful supercomputers would take a practically unrealistic amount of time to perform. A 1000 qubit quantum computer can simultaneously carry out more calculations than there are particles in the known universe.

### MISCONCEPTIONS

Quantum computing is a very recent technology that still has a long way to go before it can achieve any relevance in the real world. The very complex and sophisticated challenges facing the new tech makes many existing ideas surrounding it sound almost like myths. Let's look at two of the most common misconceptions regarding quantum computers.

#### 1. Quantum computers will replace classical computers

This is not happening in the foreseeable future, and according to some experts- never. Firstly, quantum computers aren't

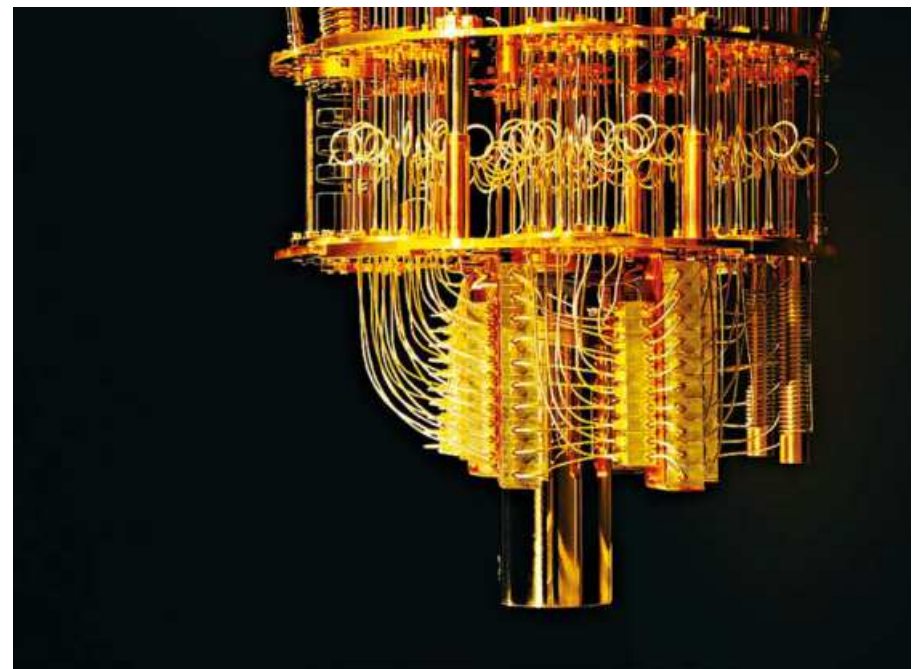
being developed to take over classical computers. It's more accurate to think of them as a new kind of technology designed to carry out high-precision, specialized activities. For everyday use ranging from streaming high-definition videos to writing this article- quantum computers remain largely useless. A quantum computer may be able to outperform a classical computer at a specific task, but for most day-to-day activities, it's a safe assumption that they won't become a fixture in our lives.

#### 2. Commercial quantum computers are just around the corner

Even though quantum computers show us glimpses of an exciting technology of the future, we are still at least decades away even before this technology crawls out of its infancy. The main hurdles to overcome include writing quantum algorithms, which is vastly different from classical algorithms. To build

quantum computers is promising. Big tech companies such as Google, IBM, Intel, Honeywell etc. are all racing to increase the number of qubits in their quantum computers and reach quantum supremacy. IBM has recently unveiled a roadmap to a million-qubit system. Ambitious as it is, the company predicts a fault-tolerant functional quantum computer within 10 years. D-Wave is a Canadian company that's been using quantum annealing technology and has already met success.

Quantum computers show huge promise in the field of computational chemistry. By accurately simulating the highly complex molecular systems within chemicals, pharmaceutical companies could bypass the long trial and error process of developing a new drug. Microsoft has already shown how quantum modelling can lead to the production of fertilizers with much higher yield and which take a lesser



a functional machine, absolute zero temperature has to be generated and maintained. The error in calculations is still too large. To efficiently solve practical computational problems, the computer would require millions of qubits. Most current quantum computers are being experimented with using less than 100 qubits. The device is extremely complex overall compared to classical computers. So it's a long shot to predict the availability of commercial quantum computers anytime soon.

### CURRENT STATE AND APPLICATIONS

'Quantum supremacy' is a buzzing keyword in the tech world today. In January 2019, IBM developed the world's first quantum computer that could operate outside of a tightly-controlled lab setup. In October 2019, Google announced that it has achieved quantum supremacy. Even though progress in research and innovation in this field is slow due to its complex nature, the evolution of

toll on the environment. This kind of quantum simulation is being actively investigated by industries ranging from automobiles such as Daimler to oil and gas titan like ExxonMobil.

Other booming fields in which the massive computational power of quantum computers could make a real difference include machine learning, cybersecurity, database searching, financial modelling, logistical optimisations etc. From making our daily lives easier to exploring the depths of space- quantum computers are likely to penetrate the very heart of research into all human endeavours.

Even though it's unlikely that we'll soon have quantum computers on our desks, the genuine transformational power of quantum computing can't be denied. Leading researchers think a future where classical computers will work in sync with quantum computers is the best possible outcome from work in this revolutionary field.