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# **TECHLORE**

"Insider Tips to Make Your Business Run Faster, Easier and More Profitable"

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"As a business owner, you don't have time to waste on technical and operational issues. That's where we shine! Call us and put an end to your IT problems finally and forever!" -Jim Stackhouse NeoLore Networks

# How Quantum Computing Will Improve Data Security for Businesses?

Quantum computing is still in the early phases, but we can anticipate that it will improve encryption, investment strategies optimization, and product discovery. That's why leading IT companies such as IBM are working on it. They are investing a tremendous amount of money, scientific and mathematical talent, and resources for quantum research.

Quantum computing connects principles of quantum mechanics to improve computational abilities for businesses and other sectors. Companies with quantum computing integration would be able to solve complicated problems in real-time.

# Benefits of Quantum Computing to Improve Data Security

# 1. Random Number Generation and Cryptography

Traditional random number

quantum optics. Although these products are under development, they are seeing commercial deployment.

#### 2. Quantum Key Distribution

Users can privately communicate by sharing cryptographic keys with others. This is one of the secure methods of communication. The encryption key allows relevant users to access the communication. QKD or Quantum Key Distribution uses quantum mechanics for communication. It encrypts the information and requires an encryption key to access it. Furthermore, it also notifies any attempt of the breach to the users.

Currently, QKD is available for fiber transmission and transfers the data via satellite over several thousand kilometers. Toshiba and KETS Quantum Security are two major companies working on than 4,000 error-free qubits can solve RSA in seconds. Today, we have access to less than 100 qubits of quantum computers. However, tech companies such as Google and IBM are working on a project to achieve 1 million qubits before 2030.

Imagine, in less than a decade we will be able to access a millionqubit quantum. Until then, sensitive national and financial data is at high risk of security threat. Still, there are many tools and algorithms to improve data security for businesses, but they are inefficient in front of quantum computers. Many companies are working on advanced RSA algorithm that is powered by Quantum computing. PQShield is a leading name in the tech industry that is trying to improve data security with post-quantum cryptography.

# 4. Machine Learning and Cybersecurity

Training deep models is getting expensive with increasing data volume and complexity. Also, the Open AI GPT-3 is using a significant amount of carbon. However, quantum machine learning is an energy-efficient and faster algorithm than traditional ones. Thus, it will enable businesses to identify cyberattacks efficiently.



Traditional random number generators used an algorithm to solve problems such as pseudorandom number generators. This generator is not completely random and contains many loopholes. Companies such as IDQuantique and Quantum Dice are working on random number generators with quantum computing. These generators offer true randomness through

Quantum Key Distribution.

# 3. RSA Algorithm and eCommerce Industry

RSA algorithm is a success because it states that the code composed of two prime numbers is computationally challenging to break. A classical computer will take more than trillions of years to break RSA encryption. But, quantum computers with more

### **Oculus Quest 2**

Virtual reality might take its time to have its 'iPhone moment,' but it is still very much the next big thing for the coolest tech gadgets. And there is not a single VR device that flashes that promise more than the Oculus Quest 2. Without the need for a powerful computer or special equipment, you can simply strap the Quest 2 to your head, pick up the controllers and move freely in VR space. Get yours at https://www.oculus.com/quest-2/



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## Virtual and Augmented Reality in Retail Industry

Augmented Reality became incredibly popular after Pokemon Go. However, the game eventually lost its shine for many reasons. That said, the people's interest in Augmented Reality is not over. Everyone with a little interest in video games knows about Virtual Reality. We saw how VR equipment improved the gaming experience. Hate it or Love it AR and VR technology trends are still in the initial stage. Many retail and eCommerce businesses are using VR and AR technologies to gain a competitive edge in relevant industries.

Let's learn how Virtual and Augmented Reality is helping the retail industry:

#### 1. Improve Conversion Rates

AR and VR technologies can improve online conversion rates

and reduce returns. As a result, businesses can increase their sales and expand.

#### 2. Optimize Storage Space

Businesses can save significant storage space by shifting to AR technology. When customers enter the store they can virtually navigate through inventory. So, businesses won't need huge warehouses and storage space for more product options.

## 3. Combine eCommerce and Retail Store

Creating virtual retail stores businesses can reduce long lines in the store. Also, they won't need to stock inventory in-store. Instead, customers can navigate products and even try them virtually.

#### 4. Enhance Brand Recognition

AR and VR tools in the retail industry engage more customers since these are new technologies and everyone wants to try it. By introducing the latest technology, businesses can improve brand reputation and recognition in the market. Furthermore, the technology simplifies and improves the shopping experience giving a competitive edge.

#### 5. Empowers Advertising Campaigns

Brands can include their AR technology and how it improves the customer experience in the advertisement. Thus, you can create an outstanding and effective marketing campaign to engage users.

#### 6. Allow 3D Preview

Customers can test the products with a 3D preview before purchasing. Thus, they can make an informed decision. Every customer wants to make the right choice while purchasing the products. This gives businesses a selling opportunity. They can demonstrate products that are impossible to exhibit in the real world. As a result, it gets easier for customers to make buying decision.

#### 7. Enrich Shopping Experience

The notable benefit of AR and VR technology is adaptability. Anything that businesses can offer at checkout, customers can access with AR technology. This includes virtual coupons, discounts, and instant checkout.

### How Businesses Can Enter Metaverse?

The basic concept of Metaverse is easy to understand and implement for big as well as small businesses. It offers shared experience, 24/7 service, and mixed realities. In simple words, it is a digital experience with a virtual, threedimensional, and immersive interface. Integrating Metaverse allows businesses to reduce expenses, work in unusual settings, and enable better remote work environment. If you want to incorporate Metaverse for your business you should follow these steps:

1. Gather resources, money, and skills. Creating a Metaverse environment for your business is expensive and you should be ready for that.

2. List down pointers for how Metaverse will improve your business

3. Prepare your team

4. Consider the risks such as security threats before integrating

5. Create strategies to achieve short and long term goals

6. Choose effective tools to create an environment

#### 7. Train your employees

8. Test your strategies

9. Evaluate results



### How to Integrate QuickBooks for Financial Management?

- Evaluate your social media content and networks
- 2. Select social media channels your target audience use
- 3. Choose what the calendar will track
- 4. Create content library assets
- 5. Establish a workflow
- 6. Design engaging posts and write captions to attract your audience
- Gather feedback from your marketing team. Many social media calendars allow remote access, where more than one employee can log in.
- 8. Schedule and publish the content

### How to Integrate QuickBooks for Financial Management?

- 1. Open a new project
- 2. Select "File" and then "New Company"
- 3. Now open the QuickBooks setup and click "Express Start"
- 4. Enter your company's information and click "Continue"
- Fill out the legal form with contact information and click "Preview Your Settings"
- 6. Check the boxes for the accounts to include in your chart of accounts
- 7. Save the company data
- On the company information details click on "Create Company File"
- 9. Enter your clients, customers, and bank details

# Steps to Incorporate AR Technology in Business

Augmented Reality has become one

Here are some steps you can

Take the NeoLore Cyber Security Survey

Has your company done a Cyber Security Maturity Assessment Get the NeoLore Networks Cyber Security eBook for Free!

of the top trending technologies in the business sector. The technology creates life like objects in the virtual world and blends them with the real environment. Many businesses are introducing AR technology in retail, recruitment, and training settings.

Although AR is a futuristic technology like we saw in the Blade Runner movie, many businesses are incorporating it with their business for a competitive edge. introduce AR technology in your business:

- Brainstorm with your team and come up with the idea to use it in your industry
- 2. Define target audience who will use the AR app
- 3. Hire AR/VR app development company
- 4. Test the final application
- 5. Follow AR/VR market trends

within the last year? Do you have an IT security policy in place? Do you know if you've been hacked or are leaking data?

If your answer was "no" or "I'm not sure" to any of those questions, your company may be at risk for a devastating cyberattack.

#### **It Features**

- Information on the various threats to your business
- NIST Security Framework
- CIS Controls
- Basic Controls

#### And More!



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