Tech Trends for Businesses to Watch Out for in 2023

7 min read



Depending on your leadership style as CEO in addition to your brand, industry, and company culture, your business might be an early adopter of new technologies, constantly pushing forward at the forefront of new developments, capabilities, and technologies.

Key Takeaways

- 12 Tech Trends to Watch for in 2023: Leaps and bounds are being made in quantum computing research centers around the world. When this technology becomes viable and scalable, the processing power of computers will be...
- **Web 3.0:** As we continue to increasingly adopt cloud-based tech, we should also keep an eye on Web 3.0, the newest iteration of and vision for the Word Wide Web based on blockchain technology, decentralization, and...
- Keeping Your Back Office Up-to-Date in 2023: Your business's back office is like its
 core engine. The back office and its policies and procedures control your business's
 data, finances, technology, and security...

On the other hand, your company might be more suited to hanging back and waiting for the early adopters to work out the bugs and for a large portion of your market to show interest before you're willing to adopt new tech into your business.

No matter which camp you find your business in (or if you're somewhere in between), there's no denying that technology affects your business, your consumers, market demand, and the industry. So, part of your company's technology best practices should include keeping an eye on the latest developments and advancements in addition to the technology trends that could have an impact on your industry, business, and market in the near future.

12 Tech Trends to Watch for in 2023

1. Artificial Intelligence (AI)

Al is no longer the stuff of science fiction. It exists in the real world, and it's already being used in practical applications throughout the business world. It's helping online stylists personally select and recommend clothing items to customers based on historical data. It's informing the design and layout of retail warehouses to improve efficiency and logistics. It's automating inventory assessments to improve the experience of shopping online and picking up or returning products in-store. It's informing marketing decisions through the automated analysis of brand perception. Al is everywhere, and if it hasn't already, it's coming to your industry soon.

In 2023, look for <u>AI applications</u> to increase in use and become increasingly integrated alongside human employees and their operational job functions.

2. Automation With Autonomous Systems

Entire businesses and systems within businesses are swiftly becoming fully and/or partially autonomous. Think self-driving trucks, robotic online order fulfillment, and shipments with drone delivery. These technologies are already in use, but in 2023, we will likely see the capabilities and scope of autonomous systems advance and expand.

Read More: 4 Ways to Fight Employee Burnout With Automation

3. Digital Business in the Metaverse

<u>Metaverse</u> is a term that refers to an expansive and immersive future vision for the internet. It refers to the vision of a digital universe that exists alongside and integrates seamlessly with our actual universe. It's a virtual space that will be able to accommodate work, recreation, shopping, and socializing in a way that doesn't feel much different from reality.

In the coming year, companies like Nvidia and Microsoft will continue research and development in the creation of virtual workspaces and meeting spaces that enable communication, real-time collaboration, brainstorming, and more.

Additionally, the future goal for avatar technology developed for use in this space is intended to be more like a mirror of reality. Where an individual's avatar can replicate gestures and facial expressions to improve communication.

4. Decentralized Power and Renewable Energy

Energy is clearly a major focus around the globe. In 2023, we'll see more work and research being done in the development of renewable energy sources in addition to the attempt to decentralize the power grid, allowing for renewable sources and small battery stores to feed the power grid – even in the midst of a blackout.

5. Quantum Computing

Leaps and bounds are being made in quantum computing research centers around the world. When this technology becomes viable and scalable, the processing power of computers will be unprecedented. While these advancements will lead to unimaginable advancements and applications in every industry and aspect of life, they'll also create new challenges in cybersecurity. Quantum computers will be so much more advanced than existing technology that they'll be able to crack any encryption or code out there.

6. Ongoing Cloud Computing Shift

As has been the trend for the past several years, companies will continue to shift more and more of their data and their businesses to the cloud. They'll continue to adopt more remote operational capabilities, third-party outsourcing opportunities, cybersecurity, and data storage made available through cloud-based technologies.

7. Web 3.0

As we continue to increasingly adopt cloud-based tech, we should also keep an eye on <u>Web 3.0</u>, the newest iteration of and vision for the Word Wide Web based on blockchain technology, decentralization, and a token-based economy. Although the concept is still a work in progress, Web3 is likely to continue advancing toward becoming a reality in the upcoming year.

8. AR and VR Integrations

Augmented reality and virtual reality will become increasingly present in our daily lives and business applications. These technologies can be used in employee onboarding and training in addition to troubleshooting with consumers. Its applications in business have the potential to permeate every industry and will likely benefit your own company with creative and new applications focused both internally on employees and externally on consumer-populated platforms.

9. Robot Butlers

While robots, such as Hanson Robotics' Sophia, still inhabit the uncanny valley, they are predicted to become more and more human-like in the near future. It's likely that while these technologies will be advancing in 2023, we can expect to see major strides in just a few years. Companies such as Tesla are actively working on developing robots for home use, promising a release in three to five years of robots that can help with basic household chores and tasks.

10. Design Using Digital Twins

Digital twin technology is on the rise as it becomes increasingly accurate. By creating digital models of almost any product or system and feeding real-life data and design specifications into a digital twin program, companies can perform virtual testing on new designs for safety, efficiency, and more. This reduces costs in research, development, and production, as these virtually-tested designs are moved directly into production by pairing digital twin design with 3D printing technology.

11. Sustainable Technology

The demand for technology like smartphones and computers is not likely to slow in the coming years. As a result, the resources used to make technology components such as lithium batteries and microchips are in equally high demand, becoming more and more precious with every smartphone sale. In addition to advancing tech in 2023, we'll also see an increased focus on creating sustainable technology and reusable/recyclable hardware.

12. Digital Immune System

<u>Cybersecurity</u> threats become increasingly advanced every day. As a result, cybersecurity protections must keep up. In the coming year, we'll see a shift in cybersecurity as companies begin thinking about IT security globally like a business immune system that can actively and decisively

respond to threats and shut down breaches much like the body's immune system fighting off viruses.

Read More: Major Failure in the C-Suite: CEOs Need to Take More Caution In Cybersecurity

Keeping Your Back Office Up-to-Date in 2023

Your business's back office is like its core engine. The back office and its policies and procedures control your business's data, finances, technology, and security. Without a solid back office that functions efficiently and effectively, your business simply won't run. Just like mechanical engines, a business's engine requires maintenance and updating to continue operating smoothly.

As 2022 closes out, take a close look at your back office, the technologies you use, and your current processes. Identify any manual processes that could be automated and look for potential weaknesses in cybersecurity and internal security that could be better protected.

Plus, as new technologies emerge, pay close attention – no matter your early or late adopter management style. New technologies always have the potential to take your business to the next level by helping you increase efficiencies and cut costs. However, they also have the potential to threaten your company's core value proposition, necessitating a major pivot in the future. By watching trends closely, you'll be able to identify threats and opportunities early to ensure your business is in the best possible position for obtaining future success.