



# HACKTIFY


## CYBERSECURITY TRENDS 2023

WHAT CAN WE EXPECT AND HOW CAN WE PREPARE?


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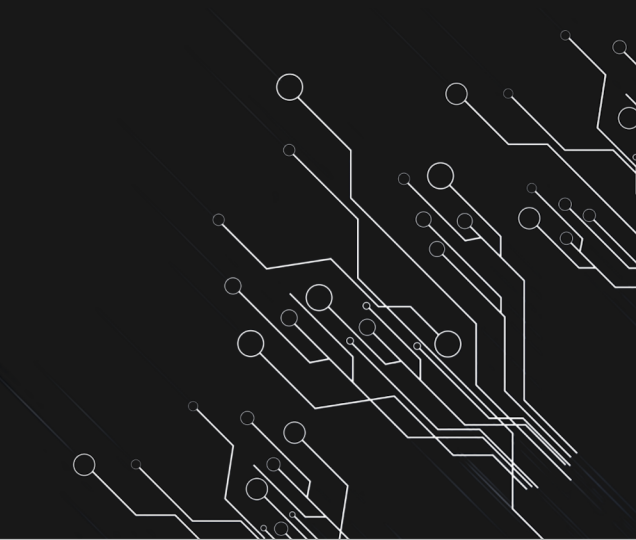
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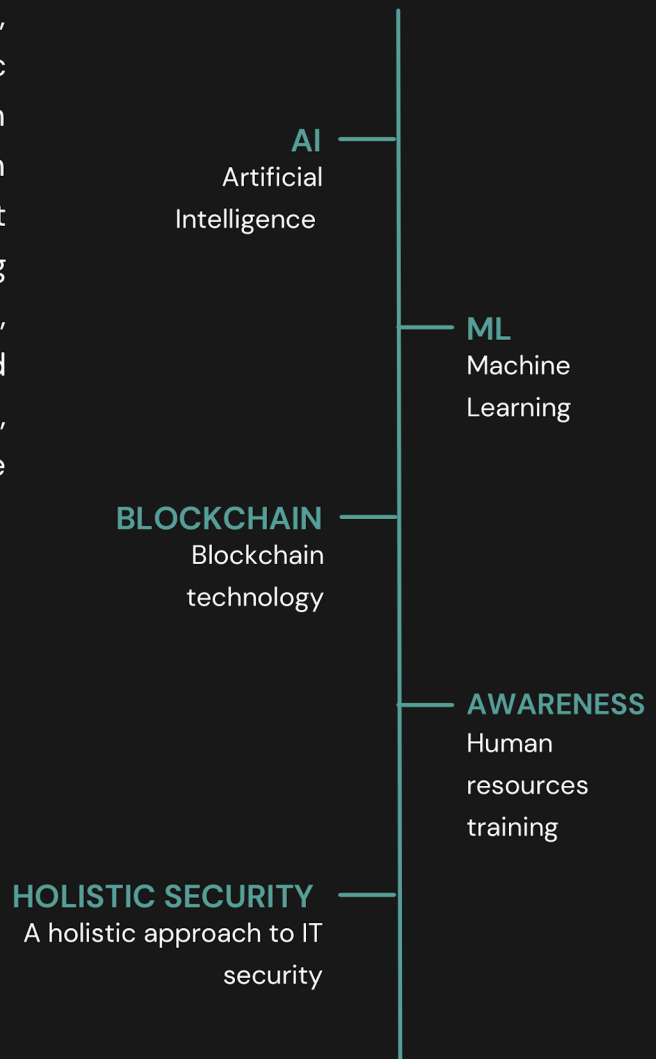
# INTRO

In this summary, we provide an overview of the new trends in cybersecurity for 2023. We cover how Artificial Intelligence (AI), Machine Learning (ML), and blockchain technology can be used to improve IT security; offer advice on how organizations should invest in human capital training; and explain why companies need to take a holistic approach to keep their systems secure. This information will help businesses keep up with attackers to protect their data and networks.



# Cybersecurity trends in 2023

As cyber-attacks continue to rise, companies need to take a holistic approach to secure their systems – both externally and internally. To maintain secure systems, all potential threat vectors, and all aspects – including physical security, access control, employee education programs, and advanced technologies such as AI, ML, and blockchain technology – must be addressed to mitigate all potential risks.



# 2023

## The Year of Cybersecurity

### What to Expect and How to Prepare

The future of cyber security is upon us. Technology and the way we live our lives have changed rapidly over the last decade, but the potential harm to our information has grown too. 2023 will be a make-or-break year for cybersecurity as businesses across all industries have become increasingly reliant on digital infrastructure and data protection. It's time to take proactive steps to prepare ourselves against possible threats – both known and unknown – before it's too late! As IT professionals we must stay ahead of emerging trends, learn about new risks, adopt best practices, build more secure systems and understand what lies ahead for cybersecurity in 2023. So, without further ado, let's jump into what you need to know about cyber security in 2023 and how you can ready yourself now!



Cybersecurity threats have grown exponentially over the past few years, posing a major risk to businesses, individuals, and governments alike. As technology continues to advance, so too do the tactics used by attackers to gain access to valuable data. To stay ahead of these threats and protect confidential data, organizations need to stay up-to-date on current cybersecurity trends.

# Artificial intelligence

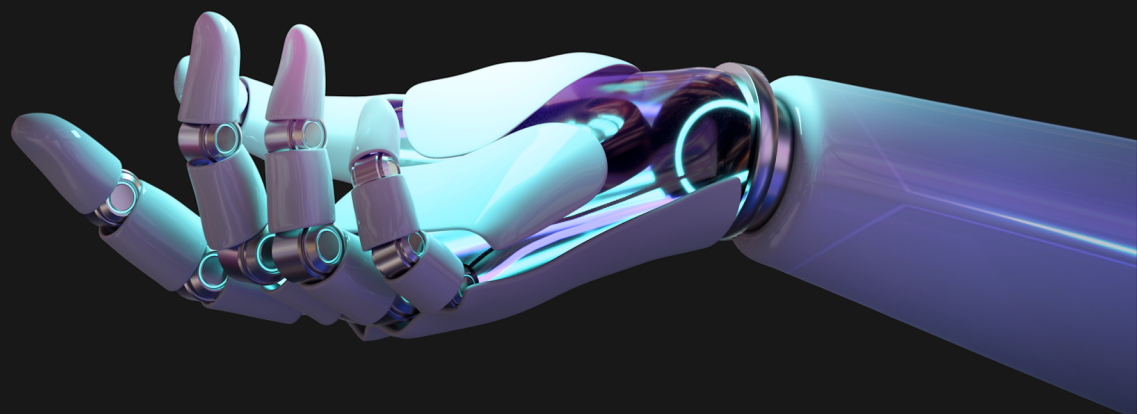
(AI)



One of the most important trends in cybersecurity is the importance of leveraging artificial intelligence (AI) and machine learning (ML) technologies to detect and prevent cyberattacks. AI and ML can be used for automated malware detection, email filtering, user authentication, and password management – all critical tools for keeping systems secure. AI can also be used for predictive analytics that can identify potential threats before they occur as well as automate tasks associated with responding quickly when an attack does occur.

Another key trend involves using cloud-based solutions as part of any organization's security measures. Cloud computing offers organizations greater scalability at lower costs while providing faster security updates compared to traditional IT infrastructures. Additionally, many cloud services offer advanced encryption protocols and multi-factor authentication that help ensure data is properly secured.

In addition, there has been a significant shift toward proactive methods of managing cyber risk instead of reactive measures such as patching vulnerabilities after they are discovered. Organizations should look into having dedicated security teams or consulting firms that can provide advice on how best to manage their data security posture. This could include developing an enterprise risk assessment framework that identifies potential threats and determines how best to address them before they become an issue. Additionally, organizations should review their incident response plans regularly to ensure they are prepared in case of a breach or other malicious activity affecting their networks or systems.



Overall, organizations must remain aware of the latest advances in cyber security technology if they want to remain safe from ever-evolving cyber threats in today's digital world. By leveraging AI and ML technologies, incorporating cloud solutions into their security framework, taking a proactive approach towards managing risks, and continuously reviewing incident response plans, companies can stay up-to-date on current cybersecurity trends and mitigate risk from cybercrimes effectively.

## What is the current state of cyber security

and its implications in 2023?



The state of cyber security in the future will be drastically different than it is today. Cyber threats are becoming increasingly sophisticated, leaving businesses and individuals vulnerable to data breaches, malware attacks, ransomware attacks, and other malicious activities. This has resulted in organizations around the world needing to take proactive steps to protect their systems and data from potential harm.

Cybersecurity is no longer just about securing networks against hackers; organizations must also consider the security of cloud services, mobile applications, IoT devices, big data analytics, and more. As the world becomes increasingly connected via technology, cyber security becomes even more critical. It's no longer enough to just have a firewall or anti-virus solution; organizations must also have comprehensive plans in place that address all aspects of digital security.

Organizations must also take into account the increasing use of artificial intelligence (AI) and machine learning (ML) technologies in cyber security. These technologies are being used to detect malicious code faster and help monitor network activity for suspicious behavior. As AI/ML continues to evolve over time, it will become even more important for organizations to leverage these powerful tools as part of their overall defense strategy against cyberattacks.

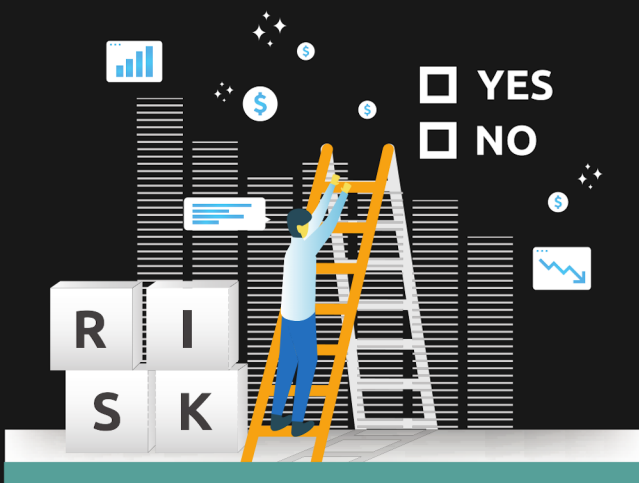
In addition, governments around the world are beginning to recognize the importance of cyber threat intelligence sharing between corporations and nations in order to better protect their citizens' data from malicious actors. In 2023, we can expect continued advancement in this area as governments seek out ways to improve collaboration among national agencies and private companies. Finally, as businesses continue to rely heavily on remote access solutions, there will be an increased focus on protecting those systems from unauthorized access or manipulation by malicious actors.

Overall, it is clear that the state of cyber security will continue to evolve over time with new advancements in technology enabling both attackers and defenders alike with innovative tools at their disposal. Organizations must stay ahead of emerging threats by continuously investing in updated cybersecurity tools while also staying informed on best practices for keeping their systems secure against modern threats. Doing so will ensure that they remain one step ahead of malicious actors while protecting their assets from harm now and into the future.

## Emerging Trends

An overview of new and upcoming trends in cyber security for 2023

As cyber security continues to evolve, it is important to keep abreast of new and emerging trends in the field. In 2023, organizations will need to be prepared for several new threats and vulnerabilities. From machine learning-based malware detection systems to cloud-native security solutions, there are a variety of ways that cyber security can adapt and protect against malicious actors.





# Cloud

60% of the world's corporate data is stored in the cloud

## Data centres

Cloud data centres contribute to global energy consumption 3% of the world's energy



One of the most important cyber security trends for 2023 is the use of artificial intelligence (AI) and machine learning (ML). AI and ML have already been used in cyber security applications such as malware detection, but they are now being applied more broadly throughout the industry. Machine learning-based applications enable systems to analyze large datasets quickly in order to detect patterns that would not be easily visible with traditional scanning techniques. These AI-powered solutions can reduce false positives and decrease the time needed for analysis significantly.

Cloud computing is another trend that is likely to dominate the cyber security landscape in 2023. Cloud-native security solutions allow organizations to move their data and applications from on-premises servers into cloud environments with ease. With cloud computing, businesses can benefit from enhanced scalability, improved cost efficiency, better compliance with regulations, and enhanced performance across different devices or platforms. Additionally, many cloud providers offer built-in features such as encryption, secure access management protocols, identity management tools, automated patching for vulnerabilities, and advanced analytics capabilities to help organizations assess risk levels more effectively.

# Awareness

Finally, it is also becoming increasingly important for companies to focus on user education in regard to cybersecurity awareness. With more users accessing sensitive data online or through mobile devices each day, it has become necessary for businesses to provide users with clear instructions on how they should protect themselves while online – including recognizing malicious emails or suspicious websites. Providing employees with regular training sessions on how best to recognize threats will greatly reduce the chances of falling prey to attackers' exploits in 2023 and beyond.



OCTOBER

The European Cyber Security Month (ECSM) campaign has been organised by Member States across Europe since 2012. The international coordination of CSM is carried out by ENISA (European Union Agency for Cybersecurity).

# Proactive Steps

How businesses and IT professionals can best prepare for potential threats in 2023?

As we look ahead to 2023, businesses and IT professionals need to begin planning and implementing proactive steps to protect against potential cybersecurity threats. To stay ahead of the game, it is essential for organizations to stay informed about current and emerging trends in the cybersecurity landscape.

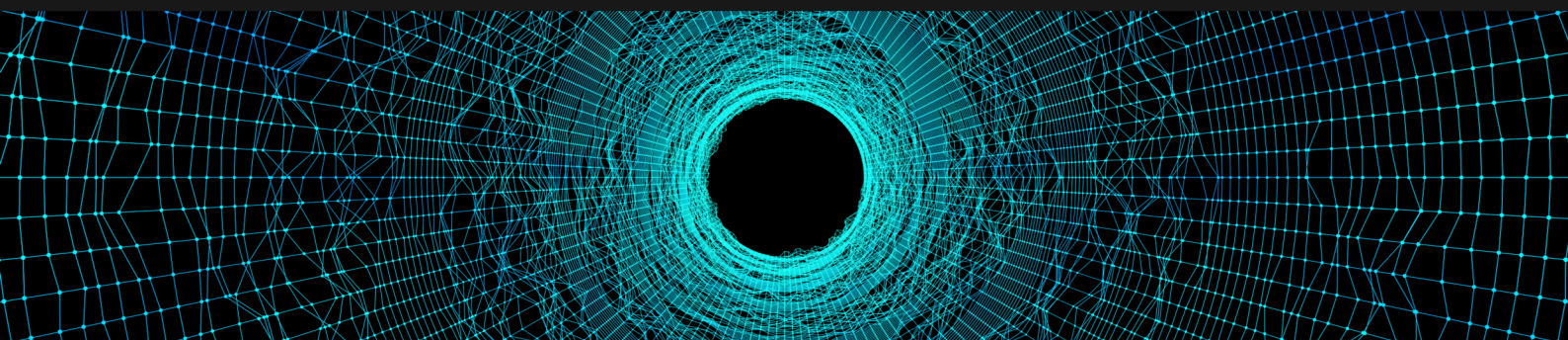
The most common threats that businesses face today include malware attacks, phishing schemes, data breaches, and ransomware. Malware attacks occur when malicious software is installed on a system by an attacker with the intent of compromising confidential information or taking control of devices. Phishing schemes use emails or other forms of communication that appear to be from trusted sources but are actually scams designed to obtain sensitive information or money from victims. Data breaches occur when hackers gain access to a company's sensitive data and can lead to lost revenue and reputational damage if not addressed quickly. Ransomware is a form of malware that encrypts a victim's files until they pay a fee in order to unlock them.



In addition, businesses should also be aware of emerging trends such as cloud-based threats, targeted attacks, artificial intelligence-based malware, insider threats, cryptojacking (the unauthorized use of computing power for cryptocurrency mining), DDoS attacks (distributed denial-of-service), and supply chain attacks (a type of attack where an adversary infiltrates a business's network through its vendors or suppliers). Each of these poses unique risks that must be addressed accordingly; staying up-to-date with the latest developments in the cybersecurity arena is essential for minimizing potential dangers.

Businesses should also make sure their IT departments are well-funded and staffed with professionals who understand the latest technologies such as cloud computing and who are capable of deploying effective security measures. This requires regular training sessions on topics such as threat detection methods, response plans for mitigating risks posed by new threats, secure programming techniques, and processes that ensure appropriate access controls are in place. Additionally, organizations should establish comprehensive policies related to the acceptable use of technology resources within the company as well as procedures specifically detailing how employees should handle customer/client data safely and securely.

Finally, businesses should consider investing in cyber insurance policies which can help cover financial losses incurred due to online security issues such as data loss caused by malicious activities or human errors. Although there is no guarantee that any protective measure will completely mitigate all risks associated with cyber security threats in 2023, taking proactive steps now will go a long way toward keeping your organization safe from potential harm down the line.



# Best Practices

Adopting industry-wide practices to remain secure against possible threats in 2023

The world of cyber security is ever-evolving, and the need for organizations to remain secure against potential threats in 2023 is of the utmost importance. It is essential that companies stay up to date on the latest cybersecurity trends and adopt industry-wide best practices. By taking an active role in developing their own security strategy, businesses can ensure they are protected from malicious attacks and data breaches.

One of the most effective ways to protect against potential threats is to have a well-defined set of policies and procedures in place that all employees must follow. This includes regular employee training sessions about security protocols, regular system updates, and ensuring that everyone has access only to the information they need to perform their job duties. Additionally, all devices used by company staff should be properly secured with passwords, encryption, and other protective measures.

Organizations should also take advantage of modern tools such as artificial intelligence (AI) and machine learning (ML) to scan networks for suspicious activity or vulnerabilities. AI can quickly detect anomalies or malicious files on a network so that any threats can be addressed before they become serious issues. Additionally, ML algorithms can be used to analyze large datasets of network traffic and identify patterns or attributes indicative of malicious behavior.

Finally, organizations should utilize cloud computing solutions whenever possible as this has been proven to increase flexibility while reducing costs associated with maintaining IT infrastructure. Cloud providers offer additional layers of security such as data encryption, identity management solutions, multi-factor authentication solutions, firewall protection services, and more so it is important for businesses to select a cloud provider with strong security credentials. By adhering to these best practices for cyber security in 2023, businesses will greatly reduce the risk posed by malicious actors and keep their systems safe from attack.

# Closing Remarks

A summary of what needs to be done to stay ahead of emerging cyber security trends in 2023

As technology continues to evolve and expand, cyber security threats become increasingly more sophisticated. In 2023, staying ahead of these emerging cybersecurity trends will require organizations to take a proactive approach in order to protect their data and networks. This requires an organization to create a comprehensive security plan that covers all areas of the network, while also keeping up with the latest trends and technologies.

Organizations should start by creating an inventory of all hardware and software used on their network, as well as any connected devices or services. This should include the operating systems, applications, networking equipment, and cloud services that are used within the company. By having an understanding of what is present on the network, organizations can develop a strategy for protecting it against potential threats. Additionally, organizations should keep track of any new software releases or updates that may affect their security posture.

Organizations must also be diligent about updating any existing software or applications with the latest patches and security fixes. Any unpatched programs can leave networks vulnerable to malicious actors who exploit known vulnerabilities in outdated software versions. To keep up with these updates, organizations should establish a system for regularly monitoring available patches and checking and implementing them after they are released. Enabling automatic patch management can ensure that all systems stay up-to-date with the latest security enhancements.

Organizations should consider participating in bug bounty programs to detect vulnerabilities. Bug bounty programs allow businesses to have ethical hackers search for vulnerabilities and receive rewards for finding and reporting them. This helps businesses stay at the forefront of protecting their data and systems, all in a cost-effective way.

In addition to internal measures organizations must also remain vigilant regarding external threats such as phishing attacks and malware campaigns which continue to be popular vectors for attack in 2023. Organizations should utilize email filtering solutions that detect anomalous behavior from incoming messages such as suspicious links or attachments before it reaches their intended recipients. Additionally, proper user education is essential in helping employees identify fraudulent emails so that they do not fall victim to phishing scams or other malicious activity conducted through email correspondence.

Finally, organizations need to stay on top of emerging cybersecurity trends by regularly reading blogs or publications written by industry experts on topics such as secure coding practices, malicious techniques attackers use today, or even new regulations regarding data privacy laws being implemented around the world. Keeping up with these ever-changing trends can help ensure that an organization's networks remain secure throughout 2023 and beyond into 2024 and beyond.

Cybersecurity is an ever-changing and complex field. As attacks become more sophisticated, it's important for businesses and IT professionals to remain proactive in their approach to cyber security. By understanding the latest trends and taking steps to mitigate potential threats, businesses can best prepare themselves for what lies ahead. Adopting industry-wide practices and standards is one way to stay ahead of the curve and ensure that your organization is well-protected against emerging threats.

## CONTACT

Every year, tens of thousands of companies fall victim to hackers with malicious intent.

Don't let it happen to your company!

Hacktify International Kft.  
+36 30 851 8205  
info@hacktify.eu

[WWW.HACKTIFY.EU](http://WWW.HACKTIFY.EU)



### Bug Bounty

A new generation of IT security that increases the cyberresilience of your business with the power of the ethicalhacker community.

Take a look at our program options and feel free tocontact us and we will help you find the most suitable service for you.





ИНСИДЕНТ!