

Profound Importance of Cyber security in the Field of Business

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Annotation: Cyber security refers to the safeguarding of the systems which are connected to the Internet including hardware, software, and data, from cyber threats. Individuals and businesses utilize the method to prevent illegal access to data centers and other digital systems. A robust cyber security strategy can give a good security posture against hostile attacks aimed at gaining access to, altering, deleting, destroying, or extorting critical data from an organization's or user's systems. Cyber security is also important in avoiding attacks that try to disable or impair the operation of a system or device (Shea and S. Gillis, 2022). These days, the necessity to cyber security in any business is massive since they are absolutely weak to external and internal attacks. Great importance of cyber security in this field with numerous compelling reasons of attacks along with threats will be widely discussed.

Keywords: cyber security, business, attacks, security, phishing, worms, ransom ware, mitigation, weakness, hacker, malicious software.

Introduction

Technology has already greatly advanced and entered every single direction of the live. The number of Internet users is dramatically increasing on a daily basis since the information exchange plays a crucial role in terms of social media of business as technology facilitated the way of transferring the data between people. It should be admitted that there are a considerable number of benefits of technology and usage of Internet within the folks, however, detrimental effects of it cannot be invisible since the coin has two sides. Not only online and large businesses are attacked by hackers at a large scale, but also small businesses are victims of them because their data is confidential and worth to be stolen. According to the Cyber security Magazine.com, 43 % data breaches belong to small and medium-sized businesses while phishing attacks are regarded as the biggest cyber threat to 30% of small businesses. Meanwhile, 83% of small and medium-sized companies are not able cover themselves after cyber-attack due to the low financial status (Lukehart, 2021). Various of components of Cyber security, weaknesses, importance of Cyber security, prevention methods will be discussed in upcoming paragraphs with satisfactory explanations.

Elements of Cyber security

Organizations and companies need to identify their security branches in order to troubleshoot the system to resolve the issues and establish proper mitigation plan. There are a number of components of Cyber security below:

Network security is a method of safeguarding a company's network from malicious threats and attacks.

In Application security, continuous testing and updates are required to ensure that programs are secure.

Endpoint security is for businesses that have remote access to their network. There may be a weak spot in the system where data can be stolen. Remote access to the company's network is protected by endpoint security.

Data security safeguards company and customer information inside networks and applications.



Database and infrastructure security ensures that the company's network's physical equipment and databases are protected.

Cloud security: Data and files stored in the cloud are protected. Because data protection occurs entirely online, this raises numerous issues (Amos, 2022).

Top common Cyber security weaknesses

- 1. Unsecured Networks
- 2. Communication Channels That are not Secure
- 3. Outdated Technology
- 4. Unidentified Bugs
- 5. Lack of a cyber-security strategy
- 6. Lack of monitoring
- 7. Insufficient employee training
- 8. Multiple Connection Points and the Internet of Things (Amos, 2022).

Cyber-attacks

There are a substantial number of attacks in the world of Cyber security, nevertheless, it would be quite fair to mention some of them. Famous cyber-attacks are illustrated in the figure 1.

Cyberattacks at a Glance

Ponder these prominent cybersecurity threats in recent years.



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There was a 40% surge in global ransomware in 2020.



22% of consumers have detected **malware** on an internet-connected devices.



Phishing was the topmost internet crime reported to the FBI in 2020.



There was a 67% increase in security breaches between 2014 and 2019.



Instances of stalkerware increased by 20% from November 2020 to January 2021.



Social engineering is the most successful means to a data breach.

Importance of Cyber security in business

attacks demonstrated by Norton

Cyber security is critical because it safeguards all types of data against theft and loss. It contains sensitive data, personally identifiable information, medical records, private information, intellectual property, data, and governmental and industry information systems. Company cannot defend itself against data breach operations



without a Cyber security program, making it an easy target for fraudsters (Tunggal, 2021). Here is several top prominent importance of Cyber security in business.

- > Business reputation can be saved with the aid of Cyber security
 - 60% of businesses usually suffer from security incidents and this will bring to loss of money and business. Reasonable effects from data breach will highly lead to taking leave of company; decrease of stock price; huge governmental fine; probability of being blacklisted; negative attention of media towards business.
- Personal data can be protected from hackers
 - Not only the data of company is important, but also the data of employees and customers is vital. When hackers gain access to this type of sensitive information, they can use it to perform crimes including identity theft, fraud, and extortion. As a result, Cyber security can assist in protecting employees and customers from a variety of cyber-attacks. Furthermore, several app development firms use blockchain technology to build more secure platforms.
- Employees are able to work safely from anywhere
 - Company data is now available from any device thanks to the growing use of cloud services. This allows employees to work securely from any location. However, this increases the risk of cyber-attacks because unwary staff can easily download malware onto their devices. By providing security measures such as password protection and firewalls, Cyber security can assist protect company's data. It can also assist you in keeping track of staff activity in order to spot any unusual conduct.
- Efficiency and productivity are protected
- ✓ It creates a secure atmosphere for collaboration and communication.
- ✓ It helps employees to access files, apps, and websites more quickly.
- ✓ Employees in an organization can readily share data via the Internet.
- ✓ Employees can work from wherever without worrying about security or connectivity.

All of these elements combined can help your employees be more productive and efficient. Furthermore, they can assist company in generating cash in unimaginable ways.

Websites do not go down due to Cyber security

Attacking a website is one of the most common ways for hackers to obtain access to company's data. They accomplish this by sending a torrent of traffic to your website until it crashes. This is referred to as a denial-of-service (DoS) assault, and it can be extremely costly to company. Furthermore, recovering from such an attack might take time, and consumers may not be willing to wait that long. In that case, a Cyber security solution like a web application firewall (WAF) might be used to defend website from such attacks. It can assist in reducing traffic and keeping your website operational.

Malicious software and external attacks are prevented

Malicious software, sometimes known as malware, poses a serious risk to your company's data. This program can be installed on your devices by hackers in order to steal your data or take over your system.

Malware comes in a variety of forms.

Viruses are computer programs that can replicate and propagate from one computer to another.



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- Worms are self-replicating programs that can infect or take control of a computer system.
- Trojans: Malware that imitates legitimate software but is intended to harm your machine.
- > Spyware is software that is placed on a computer to monitor the activities of its users.
- Adware is software that shows advertisements on the user's computer.

If any of these threats harm the business, it can be protected with equipment with the help of a Cyber security solution. Antivirus software, firewalls, and anti-phishing software can all aid in the detection of malware and the protection of devices from external threats (Cyber security in Businesses – Importance, Challenges, Strategies, & Future, 2022).

Conclusion

It should be said that Cyber security plays a tremendous role in every single internet-connected device like computers, servers, IoT and among other examples since there are possible probabilities of being hacked in terms of data leakage or gaining financial profit. Hence, the importance of Cyber security is profound to deliver flawless protection to those devices in order for business to run effectively and efficiently. In addition, being aware of current cyber threats and attacks gives companies to establish superior security to mitigate the risks of being attacked. The primary goal of this paper is to discuss importance of Cyber security in small business by explaining a number of threats and attacks.

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