

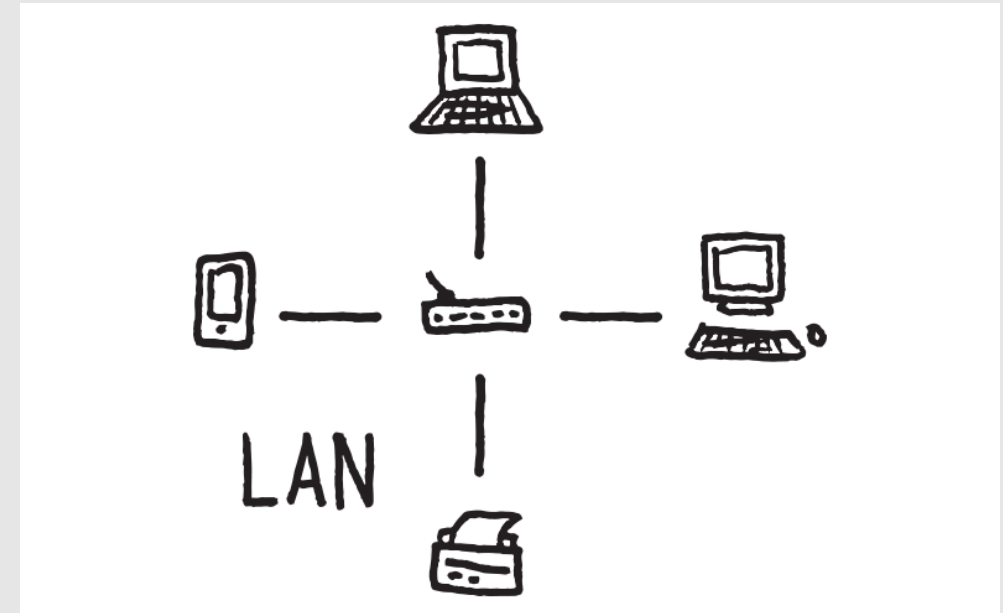
# COMPUTER NETWORKS



Computer networks are an essential part of modern business operations. They allow for the sharing of data and resources across multiple devices and locations. There are various types of computer networks, including LAN (Local Area Network), WAN (Wide Area Network), WLAN (Wireless Local Area Network), and MAN (Metropolitan Area Network). In this presentation, we will compare two different types of computer networks and explore their strengths and weaknesses.

# LAN

- A LAN, or Local Area Network, is a type of network that covers a small geographic area, such as an office or a building. It connects devices like computers, printers, and servers together and allows them to share resources such as files, printers, and internet connections.



# Features

- High-speed data transfer: LAN networks are designed for high-speed data transfer within a small area.
- Security: LAN networks provide a higher level of security as data is shared only among devices within the network.
- Easy to set up: LAN networks are easy to set up and configure, making them a popular choice for small businesses.



# Strengths/Weaknesses

## Strengths:

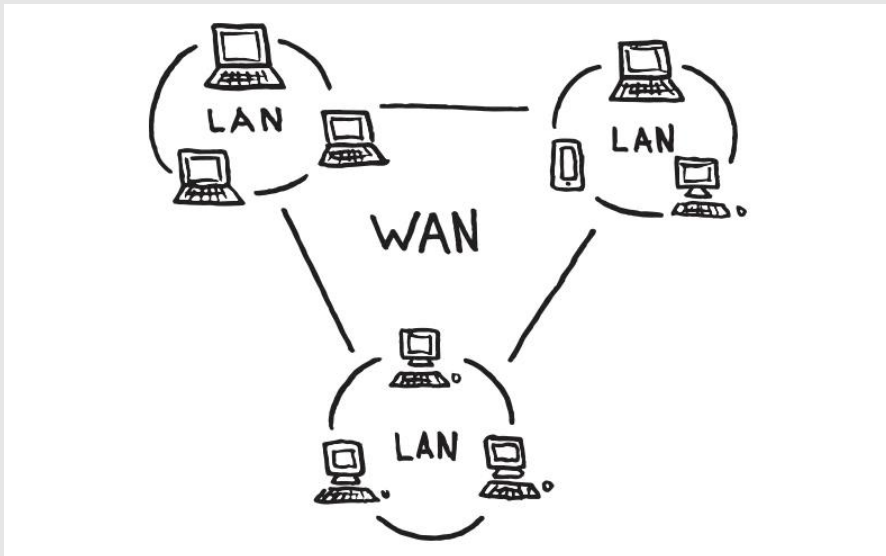
- High-speed data transfer: LAN networks offer high-speed data transfer within a small area, making them ideal for businesses with large amounts of data to transfer.
- Security: LAN networks provide a high level of security as data is shared only among devices within the network.
- Easy to manage: LAN networks are easy to manage and configure, making them ideal for small businesses.

## Weaknesses:

- Limited coverage area: LAN networks are designed for a small area, so their coverage is limited.
- Limited scalability: LAN networks are not very scalable and may require additional hardware to expand.

# WAN

- A WAN, or Wide Area Network, is a type of network that covers a large geographic area, such as a city or country. It connects devices together over a long distance and allows them to share resources.



## Features:

- Large coverage area: WAN networks cover a large geographic area and connect devices over long distances.
- Flexibility: WAN networks can be used to connect devices in different locations, making them ideal for businesses with multiple offices.
- High-speed data transfer: WAN networks offer high-speed data transfer over long distances.

# Strengths/Weaknesses

- Strengths:

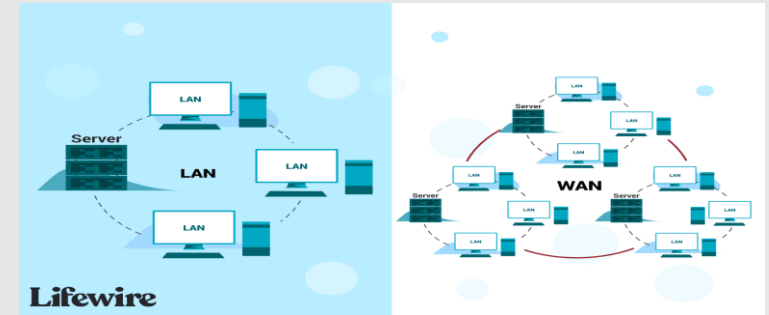
- Large coverage area: WAN networks cover a large geographic area, making them ideal for businesses with multiple offices.
- Scalability: WAN networks are highly scalable and can be expanded easily as a business grows.
- High-speed data transfer: WAN networks offer high-speed data transfer over long distances, making them ideal for businesses with large amounts of data to transfer.

- Weaknesses:

- Expensive: WAN networks are expensive to set up and maintain due to their complex infrastructure.
- Security: WAN networks may be more vulnerable to security breaches as data is transmitted over a long distance.
- Complexity: WAN networks are more complex to manage than LAN networks.



# Review of different networks



## LAN Network Review:

- LAN networks are designed for a small geographic area, such as an office or building. They connect devices like computers, printers, and servers together and allow them to share resources such as files, printers, and internet connections. The user experience on a LAN network is generally very fast and reliable as the network covers a small area. Connectivity issues are rare, and data transfer is quick. The reliability of a LAN network is generally high, and network failure is rare. However, the performance of the network may be affected by the number of devices connected to the network and the amount of data being transferred.

## WAN Network Review:

- WAN networks are designed to cover a large geographic area, such as a city or country. They connect devices together over a long distance and allow them to share resources. The user experience on a WAN network may vary depending on the distance between devices and the amount of data being transferred. WAN networks are highly scalable and can be expanded easily as a business grows. However, WAN networks are more complex to manage than LAN networks.



# Conclusion

- In conclusion, LAN and WAN networks are both essential in today's business world, but they differ in their coverage area, speed, and complexity. LAN networks are ideal for small businesses with limited coverage areas and require high-speed data transfer with high security. In contrast, WAN networks are suitable for large businesses that require long-distance connectivity and scalability. When selecting a network, businesses need to consider their specific requirements, such as coverage area, security, and cost, to determine which network is best suited for their needs.

# Thank you for your attention

