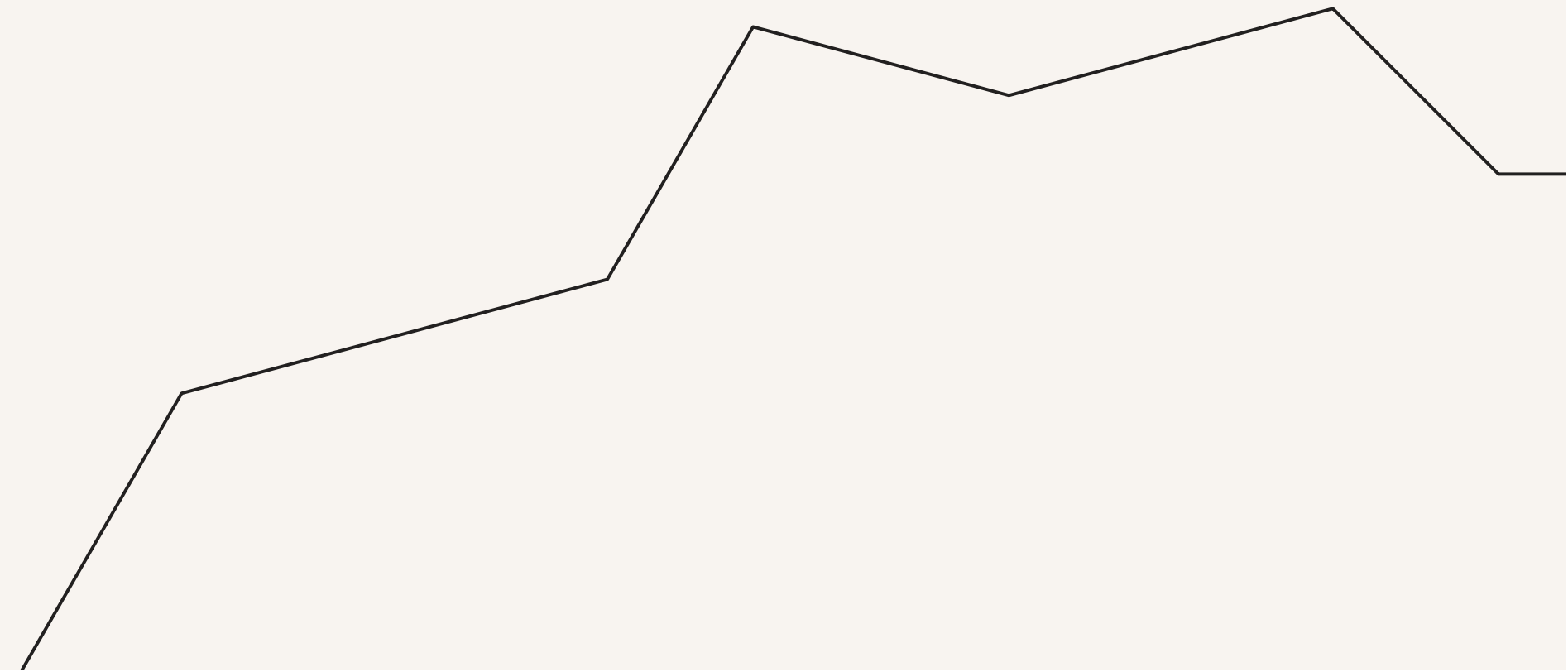
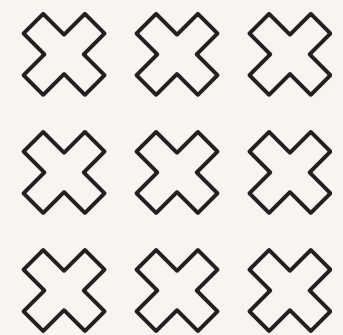




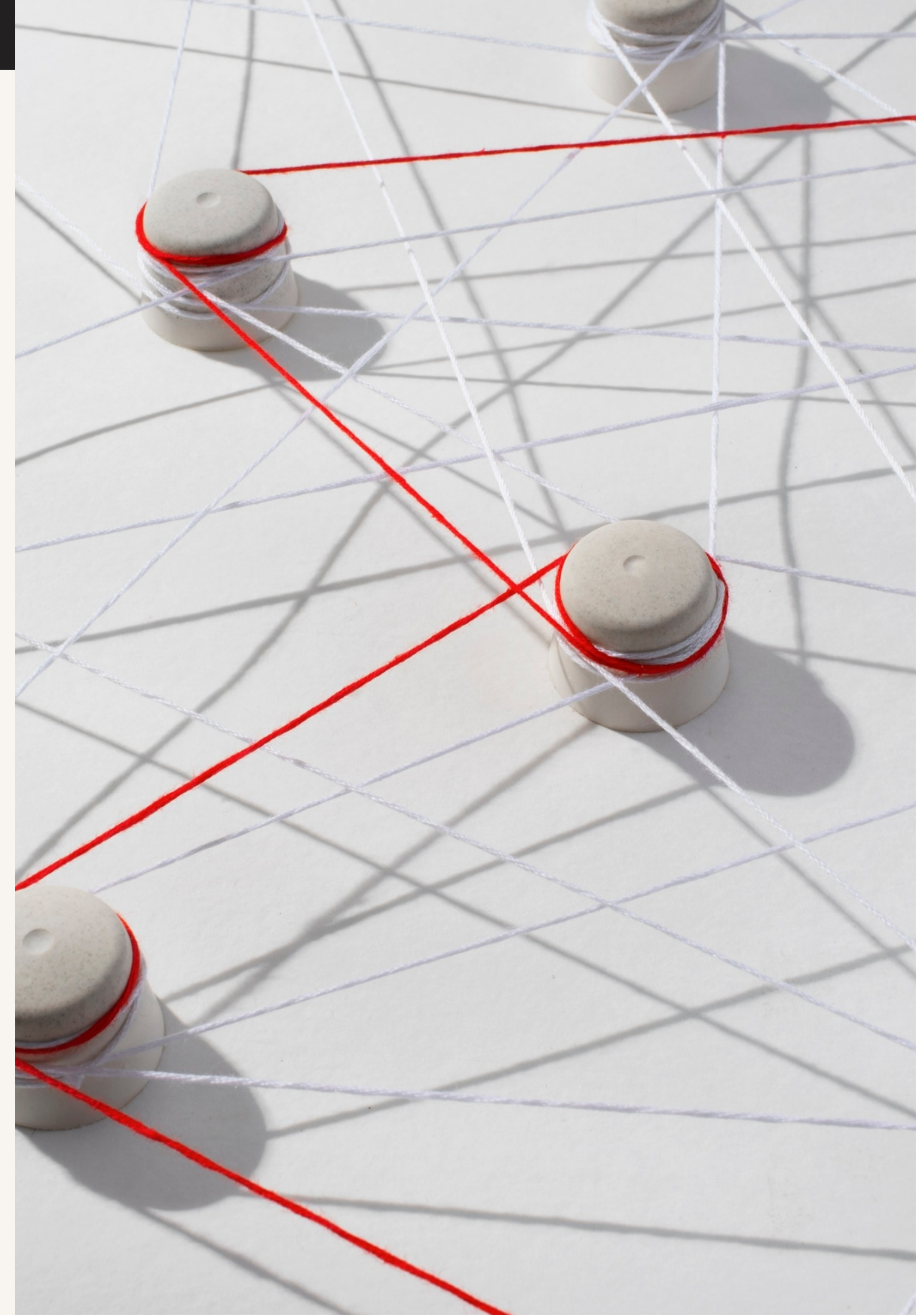
# Understanding the Key Differences Between Connection-Oriented and Connectionless Services





# Introduction to Services

In networking, understanding the **key differences** between **connection-oriented** and **connectionless services** is crucial. These services determine how data is transmitted over a network, impacting reliability, speed, and overall performance. This presentation will explore these differences in detail, highlighting their significance in various applications.







# Connection-Oriented Services

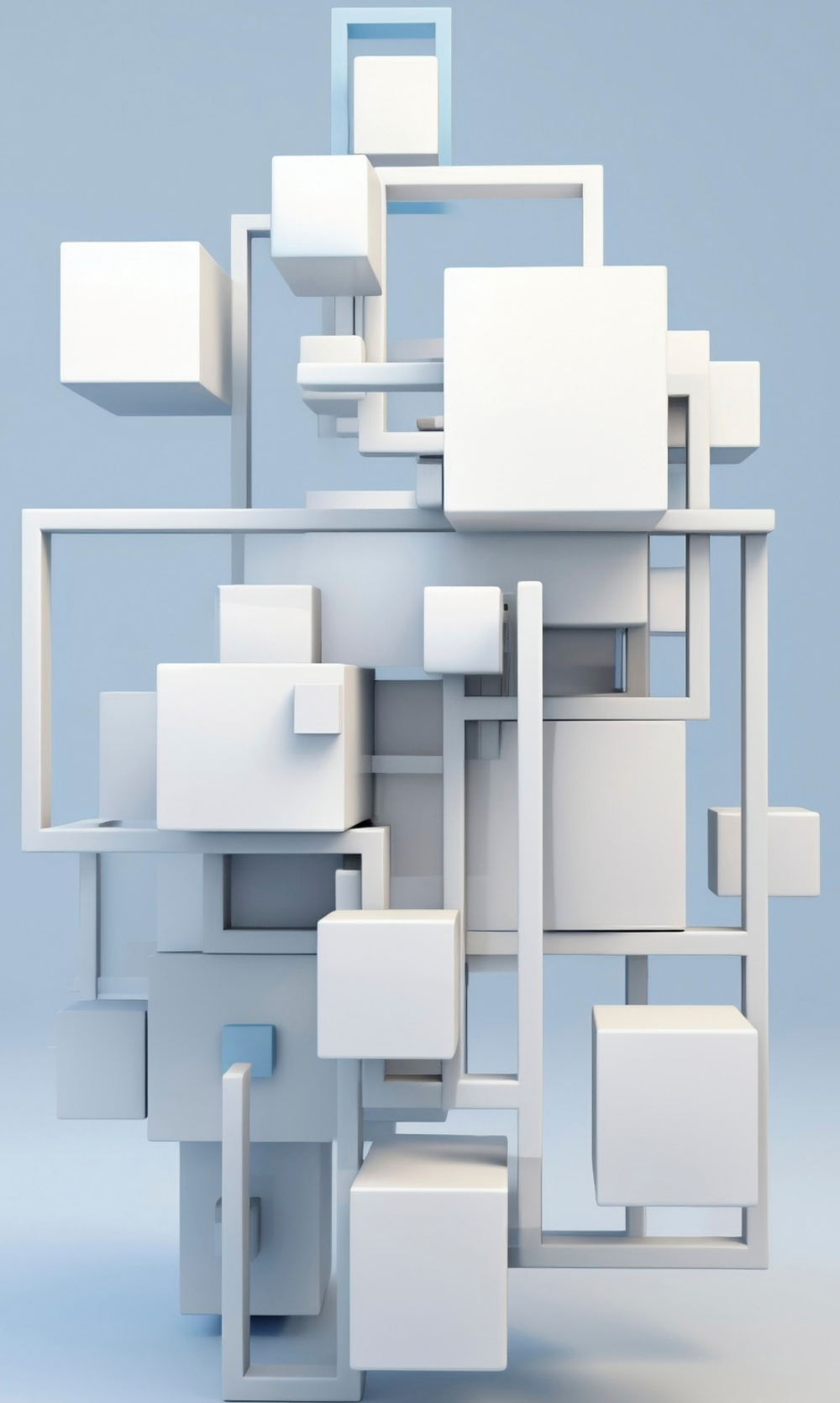
**Connection-oriented services** establish a dedicated connection before data transfer. This ensures **reliable** communication with **error checking** and **flow control**. Examples include **TCP** (Transmission Control Protocol), which is widely used for applications requiring high reliability, such as web browsing and file transfers.





# Connectionless Services

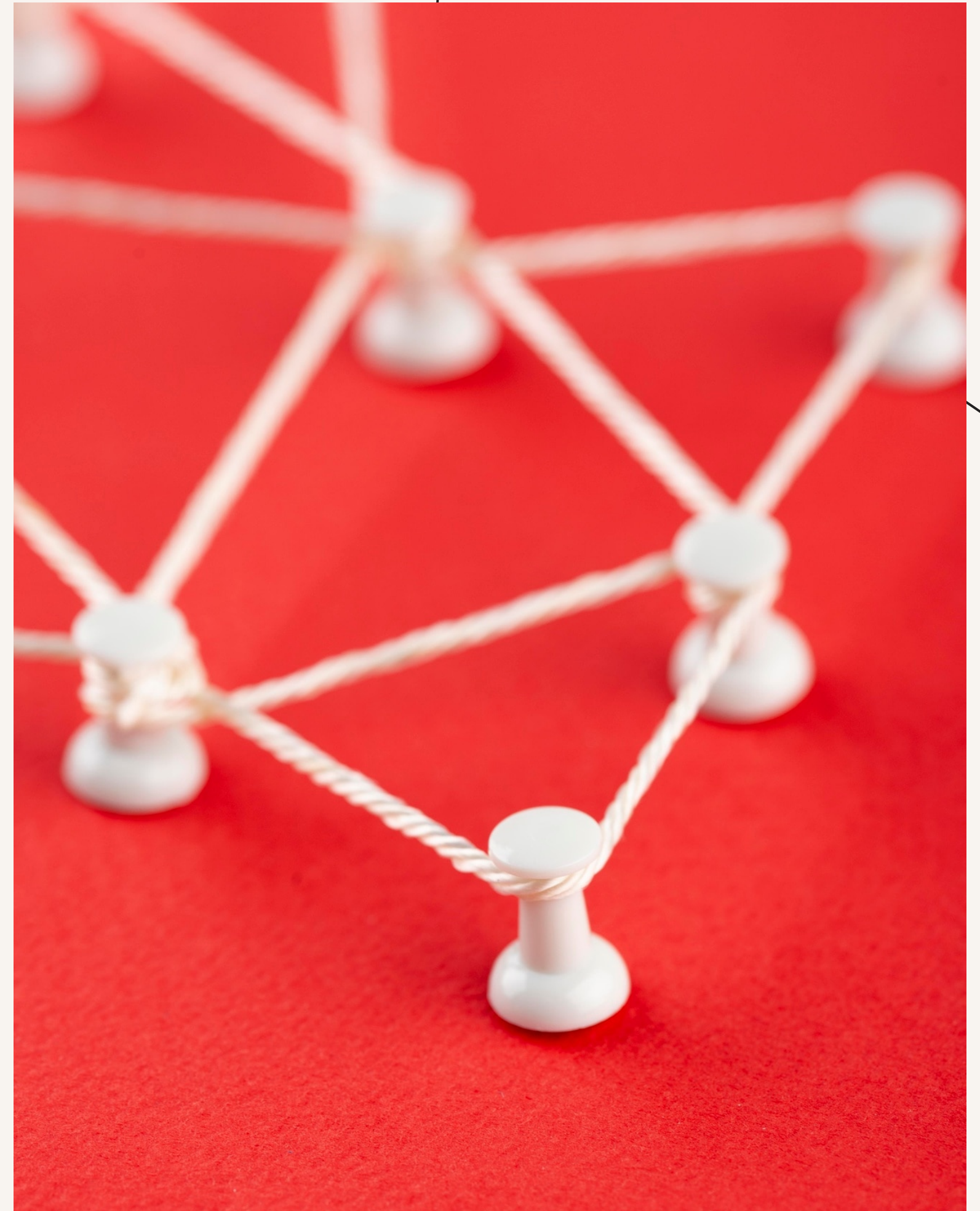
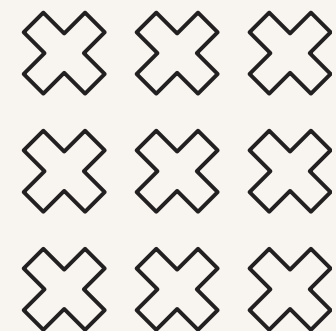
**Connectionless services** send data without establishing a connection first. This allows for **faster transmission** but may result in **packet loss** and **no error recovery**. An example is **UDP** (User Datagram Protocol), often used in real-time applications like video streaming and online gaming where speed is prioritized over reliability.





# Conclusion

In summary, the main differences between **connection-oriented** and **connectionless services** lie in their approach to data transmission. While connection-oriented services prioritize **reliability** and **error correction**, connectionless services focus on **speed** and **efficiency**. Understanding these differences helps in choosing the right service for specific applications.





# Thanks!

