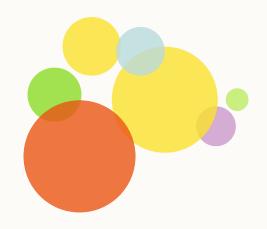
# GROUP 2 SEMINAR PRESENTATION



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- 01 Introduction
- 1st Argument
- 2nd Argument
- Third Argument
- Fourth Argument
- Conclusion

## Inroduction

- Team 2: It is our belief that the future of the Internet is based on peer-to-peer overlay-based networking (BitTorrent, TOR, Freenet, KAD)
- peer to peer (P2P) overlay network is a network built on top of the internet which allows sharing of information without the use of IP addresses and provides a good option for large scale data sharing and content distribution (Eng Keong Lua et al, 2005)
- Today's computing and communications environments are more complex and chaotic than classical distributed systems, without any centralised hierarchy or organisation
- Current physical architecture which uses the IP addressing system is unable to cater for various needs of these systems
- Emerging Internet technologies like block chain, IoT and BitTorrent are based on peer-to-peer Networks

#### **Blockchain**



cryptocurrencies to be exchanged instantaneously without middlemen, intermediaries, or an intermediary server.

Distributed peer-to-peer network gives blockchains a relatively high degree of resistance to malicious activity like the Denial-of-Service (DoS) attacks due to its decentralised architecture (Koegel, Hong Heather Yu and Eng Keong Lua, 2009).

other peers will still be present because of the P2P networking capability, such that even if one peer goes down, information is store with the other peers. Thus, nobody can completely take down the blockchain.

#### **Decentralisation**



Distributed systems face a challenge with the current network Architecture thus limiting its versatility

Peer-to-peer network overlays have a major advantage of decentralizing communication, and fit technologies that are based on distributed systems

Decentralisation in peer - peer networks offer great advantage because it has no single point of failure

#### **BitTorrent**



Peer-to-peer networks are an excellent foundation for large-scale data sharing and multicast applications at the application level

Users can use BitTorrent to transfer data and electronic files over the Internet using the peer-to-peer file-sharing protocol

This enables users to distribute data and electronic files over the Internet decentralised

#### **IoT Devices**

Internet of Things (IOT) devices generate a vast amount of data over the internet and therefore require architecture that can support the retrieval and efficient storage of this data

this level of demand is therefore moving IoT Services towards an architecture that can support this area of growth is sensible

Peer to peer network overlay based networks can be easily scaled, as the information is distributed among many objects, and this also ensures there is no single point of failure

### Conclusion

Peer to Peer Networks are decentralised networks that are scalable with no single point of failure.

these features have made emerging internet technologies to rely on it thus projecting it as a suitable solution for future network advancements

## THANK YOU!

