Net Neutrality
According to Wikipedia...

- “Net neutrality is the principle that Internet service providers and governments regulating most of the Internet must treat all data on the Internet the same, and not discriminate or charge differentially by user, content, website, platform, application, type of attached equipment, or method of communication.”

- Term coined by Tim Wu in 2003
For it
Against it

COMCAST

verizon

CISCO
Related concepts

- End-to-end principle: network smarts should be at the edges of the network
- Traffic shaping: control of network traffic
- Quality of Service (QoS): guaranteeing performance by reserving resources
Specific fights

• Comcast vs. Bittorrent users
• Netflix vs. Comcast
• AT&T vs. Facetime
• Verizon vs. Netflix and Youtube
Arguments for

- Internet should be easily accessible by all
  - Freedom of speech issue
  - Examples: Kazakhstan and China
- Slow content can turn users away
- Discrimination of IP packets == censorship
- Common carriers
Arguments against

- Stifles innovation and reinvestment
- Stifles investment in underserved areas, hurting minority communities
- Deters competition, e.g., smaller ISPs
- Companies like Netflix overuse bandwidth
- Internet functioned for a long time without it
USTelecom broadband CapEx ($B)

Drop of almost $1B attributed to the Title II Order
Related: Zero Rating

- Practice of not charging Internet users for traffic for specific applications or Internet services
- Facebook Zero, Google Free Zone, Wikipedia Zero
- Especially common in the developing world
Is the debate about net neutrality still going?

• Yes, and it probably will be for a long time
  – Fundamentally a battle for control/$ between the edges of the Internet and the core of it

• Current Chairman of the FCC is against net neutrality (former Verizon lawyer)
  – With a 3-week notice they can vote on it
My humble opinion

- Both sides are looking out for their own interests
- Net neutrality is a good thing, generally speaking
  - But sometimes the core of the network has to discriminate
- Even with net neutrality regulations, companies will find innovative ways to wall users in and intrude on the open Internet
  - Users have to take personal responsibility
Sources and other resources

- https://www.measurementlab.net/