

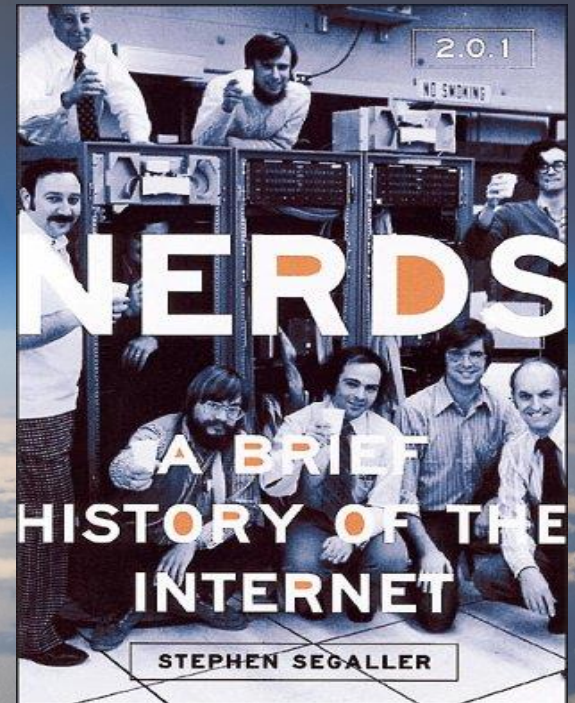


MONASH  
University

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INFORMATION  
TECHNOLOGY

# History of the Internet:

Ref: NERDS 2.01 A Brief History of the Internet, Stephen Segaller



## 1960's

- ARPA: Advanced Research Projects Agency, USA
- Funding researchers and computers
- Networking a solution to buying everyone a computer
- Made possible by timesharing main frames
- ARPAnet proposal, 1967



# ARPAnet

- Challenges:- Incompatible proprietary machines
- Original Motivation
- Load Sharing and Data Sharing
- Emerging Use
- Large number of messages and Notice boards

# ARPAnet Characteristics

- Fast Response time
- Distributed, decentralised
- Packet Switching digital approach
- Intermittent Connections
- Modems are not connected all the time

# ARPAnet Implementation

- 1969
- IMP: Interface Message Processor
  - One per site, extended to multiple per site
- UCLA – Stanford Institute
  - Login .... Crash



# 1970's

- LAN and WAN's proliferate
- Satellite and wireless comms
- IMP used to communicate between proprietary machines
- Killer Apps, e.g. Email

# Towards Personal Computers

- Xerox Palo Alto Research Centre
  - Graphical research work stations with mouse input
- Hypertext document systems
- IBM PC
- Microsoft DOS
- Apple

# 1980's

- Business Investment in networking
- SUN
  - The network is the computer
- Apple
  - Mac with build in networking, WYSIWYG user interface
- Novell, 3Com, Cisco, Ethernet etc



# Applications

- More Email
- Ftp
  - Especially research file sharing
- Bulletin Boards
  - Online discussions, news posts
- Online Games
  - MUD's etc

# 1990's

World Wide Web

Tim Berners-Lee

URL: Universal Resource  
Locator

HTTP: HyperText Transfer  
Protocol

HTML: HyperText Markup  
Language

# Technologies



- Standardised address name for resources (documents, images..) on the WWW.
- A URL has two parts:
  - [protocol scheme] :// [target]
- E.g.
  - <http://www.monash.edu>
  - <ftp://ftp.redhat.com>

# Browsers

- User Friendly Browsers
  - NCSA Mosaic
  - Netscape
  - MS Internet Explorer (free)



# Search Engines

- Excite
- Lycos etc
- Yahoo
- Google



# Java

- Language built for the internet
- Security Model
- Applets, Applications
- Server side programming

# Linux

- Redhat
- Suse
  - etc
- Opensource software
  - GNU tools
  - Apache
  - MySQL, PostgreSQL
  - Jboss, Jonas

# e-Commerce

- Online business
  - Business 2 Business
  - Business 2 Consumer
- Amazon
- eBay
  - etc



# Summary

Main points to remember:

- Early government funding.
- Research projects commercialised.
- Big business backing of Internet and Technologies
- Rapid growth in users and connectivity