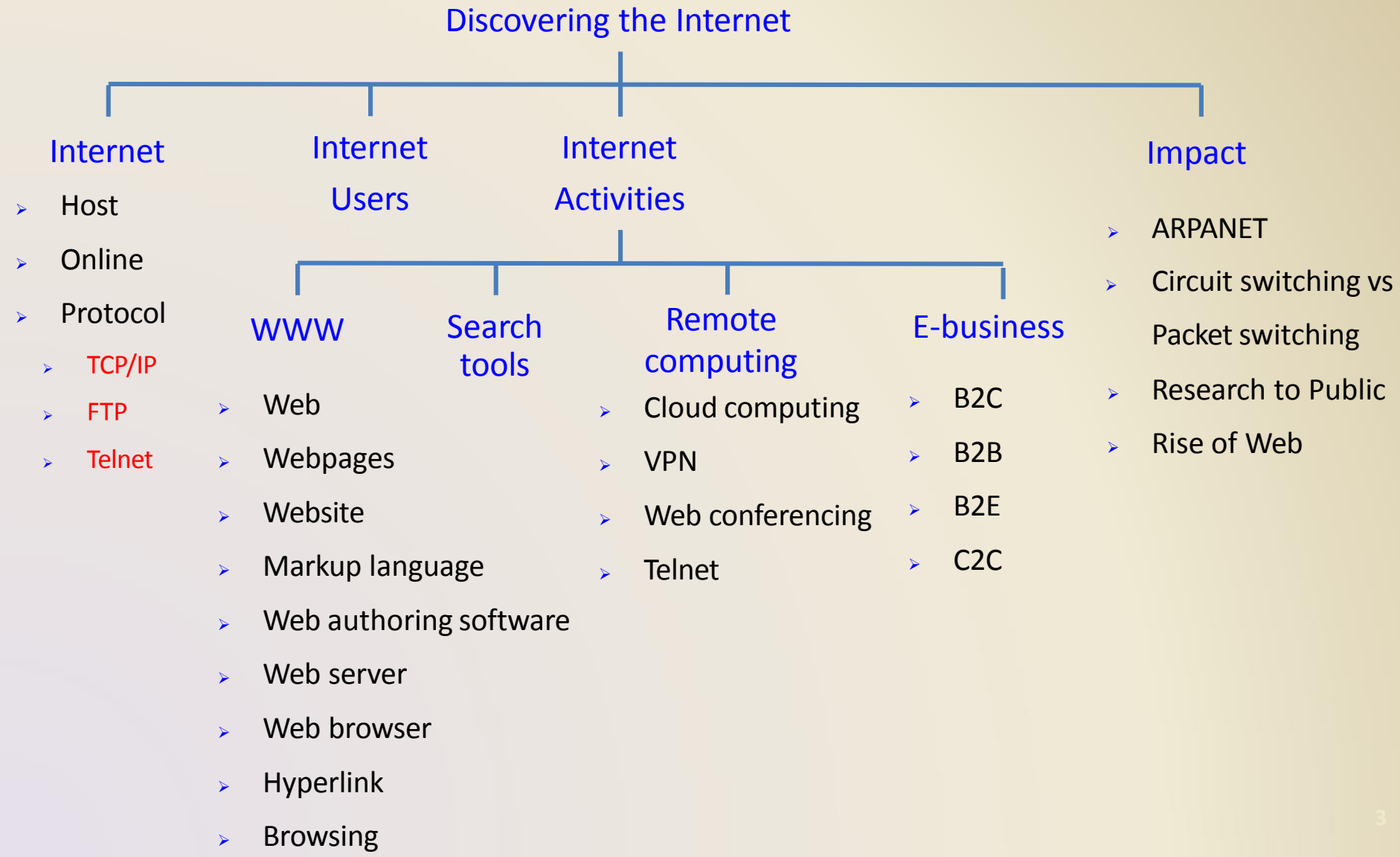
SEHH1016 REVISION

Table of Contents

Lecture	Topic
1, 2	Discovering the Internet
3, 4	Browsing the Web
5	Searching the Web
6	Communicating Online

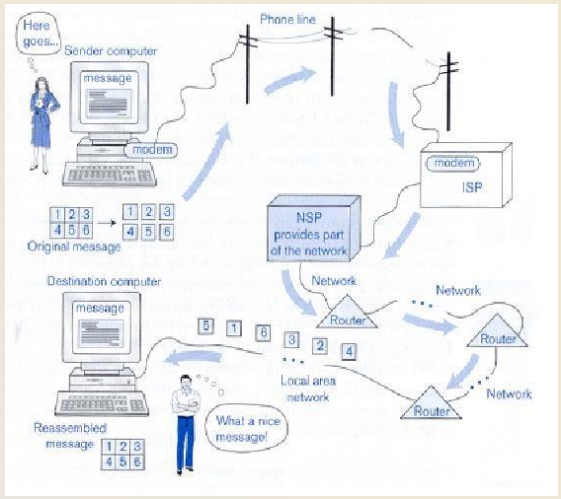
1. Discovering the Internet



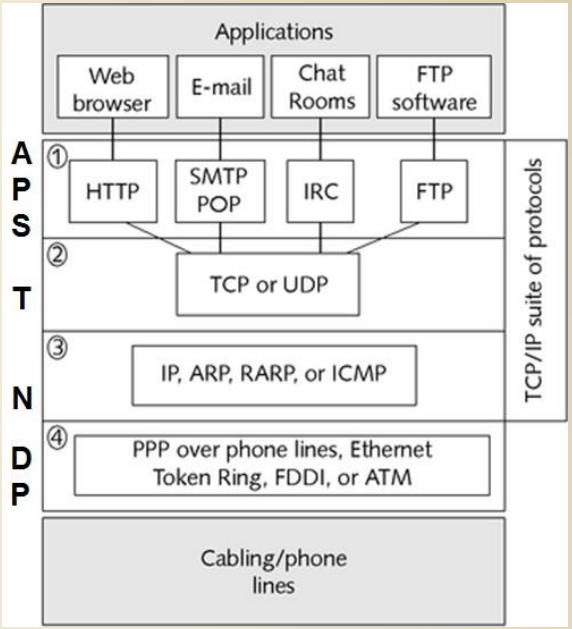
2. Discovering the Internet

Discovering the Internet

- ISP
  - Bandwidth
  - Transfer rate
- Connection Methods
  - Wired
    - Cable
    - Digital Dedicated Lines
      - ISDN
      - DSL
        - ADSL
      - T-carrier
        - T-1
        - Fractional T-1
        - T-3
  - Wireless
    - Wi-Fi
    - Satellite
- Sending Message



- OSI



3. Browsing the Web

Browsing the Web

Website

- Homepage
- Portal
- Webpages
  - Characteristics
- Web servers
- MAC address
- IP Address
  - Static vs Dynamic
  - Public vs Private
  - Class A –C
  - v4 vs v6
- Socket
  - IP + Port

Dividing a network

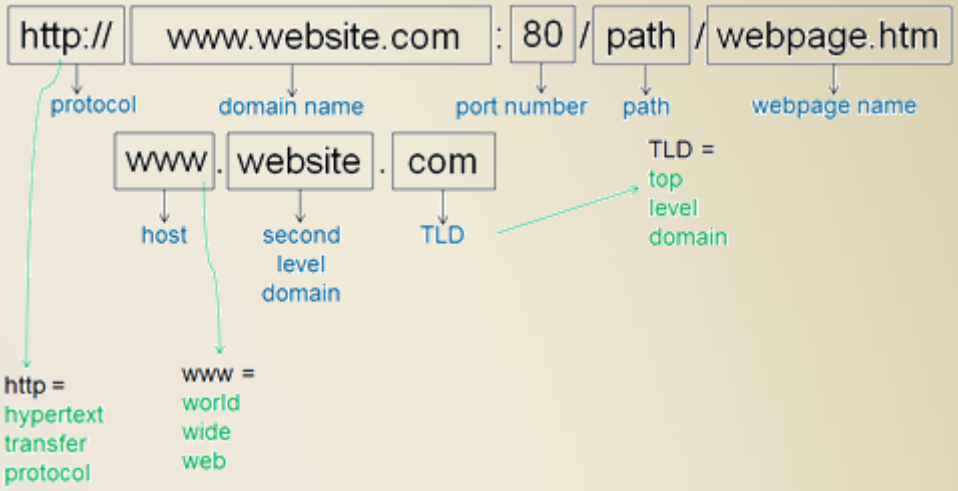
Segmenting

- Hub
- Bridge
- Switch
- Router
- Gateway

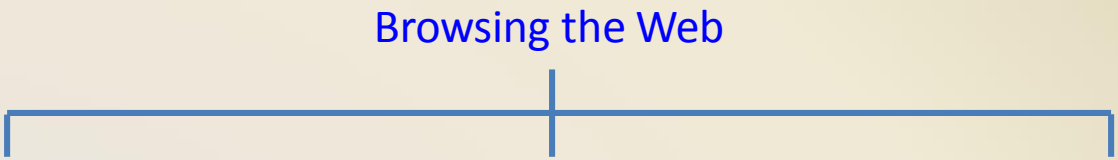
Subnetting

- Subnet mask

URL



4. Browsing the Web



Browsers

- Navigating
- Tabbed Browsing
- Shortcuts
  - Favorites
  - History
  - Accelerators
  - Web feeds
  - Address bar drop-down list
  - Suggested websites

Risks

- Hacker
- Virus
- Malicious website
- Malicious software
  - Spyware
  - Adware

Safeguards

- Firewall
- Secure connection
- Filtering Web Content
  - TPLs
  - Internet filters
- Information privacy
- Cookies

5. Searching the Web

Searching the Web

Search process

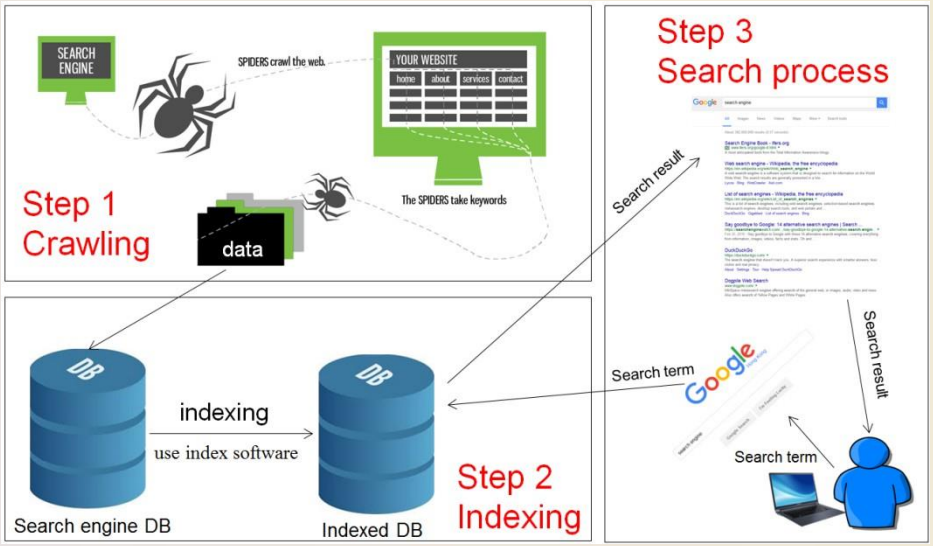
- Choose tool
- Formulate query
  - Targeted search
  - Open-ended search
  - Natural language search
- Perform search
- Exam result
- Evaluate credibility
  - Authority
  - Objectivity
  - Scope and Quality
  - Design and Functionality

Search tools

- Directory
- LDAP
- Search Engine
- Metasearch engine

Search techniques

- Boolean operator
- Search forms
- Filters



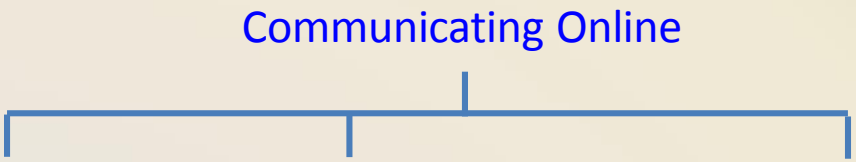
Browser Searches

- Address Bar
- Webpage

Specialized Searches

- People & Business
- News & Current Event
- Video
- Social Media
- Shopping

6. Communicating Online



Email

- Benefits
- Components
- Client
- Protocols
  - POP
  - SMTP
  - IMAP
- Server

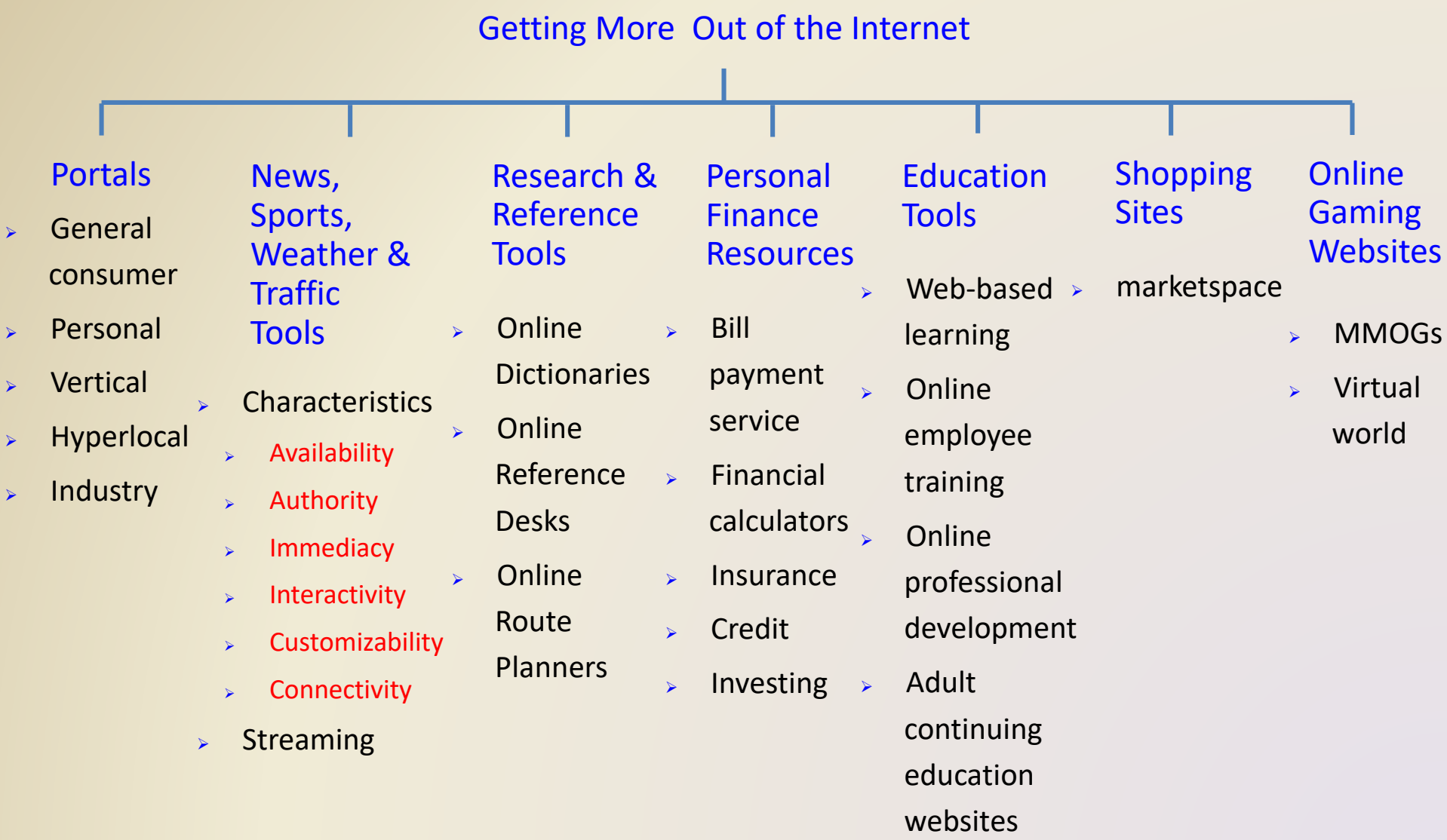
Problems

- Spam
- Virus
- Worm
- Trojan Horse
- Phishing
- Stock-manipulation schemes
- “Nigerian Sting” operation

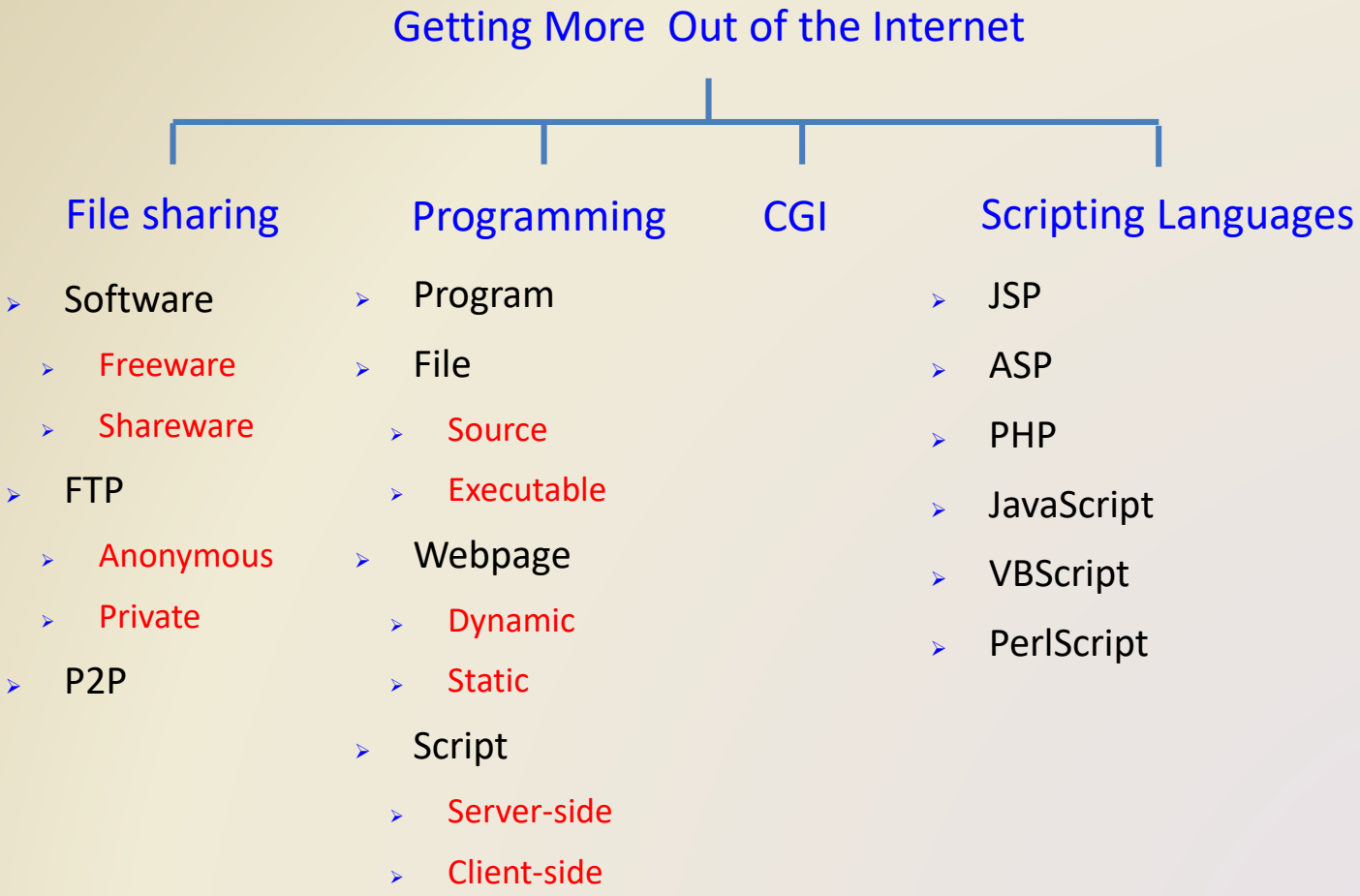
Social Media

- Blogging & Microblogging
- Text Messaging
- Chat
- IM
- Collaboration & Sharing
  - Wiki
  - Social tagging
  - Photo sharing
  - Social opinion
- Email marketing software
- Online survey technology
- Newsgroup & Web-based Discussion Groups
  - NNTP

7. Getting More Out of the Internet



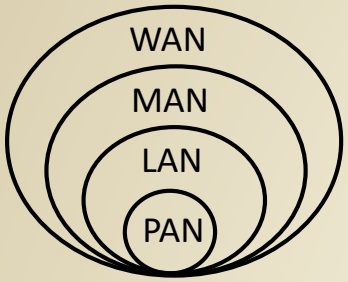
8. Getting More Out of the Internet



9. Understanding Internet Technologies & Security

Understanding Internet Technologies & Security

Basics



- LAN
  - P2P
  - Client/Server

Models

- 2-tier
  - Client
  - Server
- 3-tier
  - Client
  - Web server
  - DB server

Throughput

Physical topology

- Bus
- Ring
- Star

Access method

- Ethernet
- Token ring

Transmission media

Wireless

- IR
- NFC
- RF
- Bluetooth
- Wi-Fi

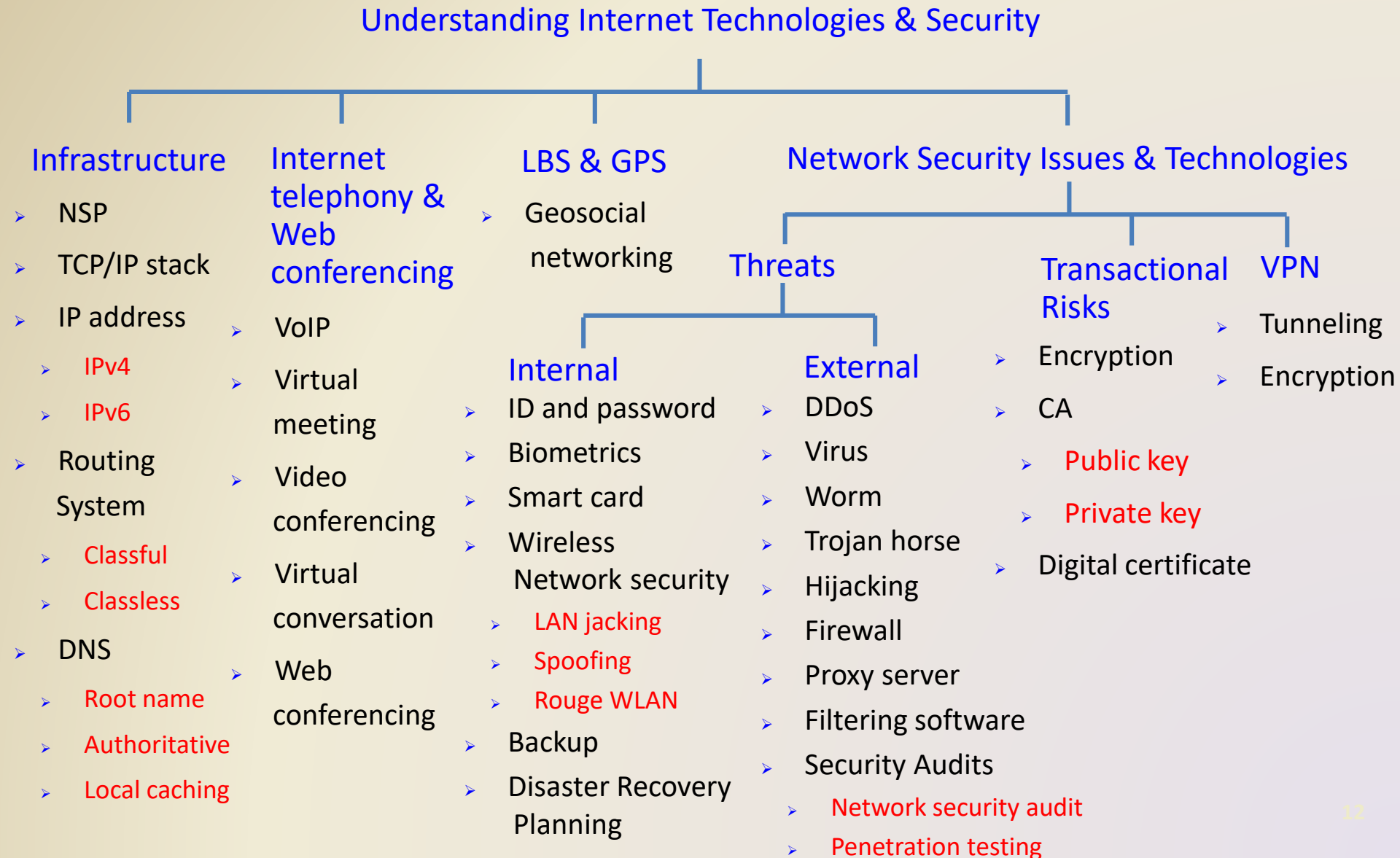
Physical cables

- Coaxial
- Twisted pair
- Fiber-optic

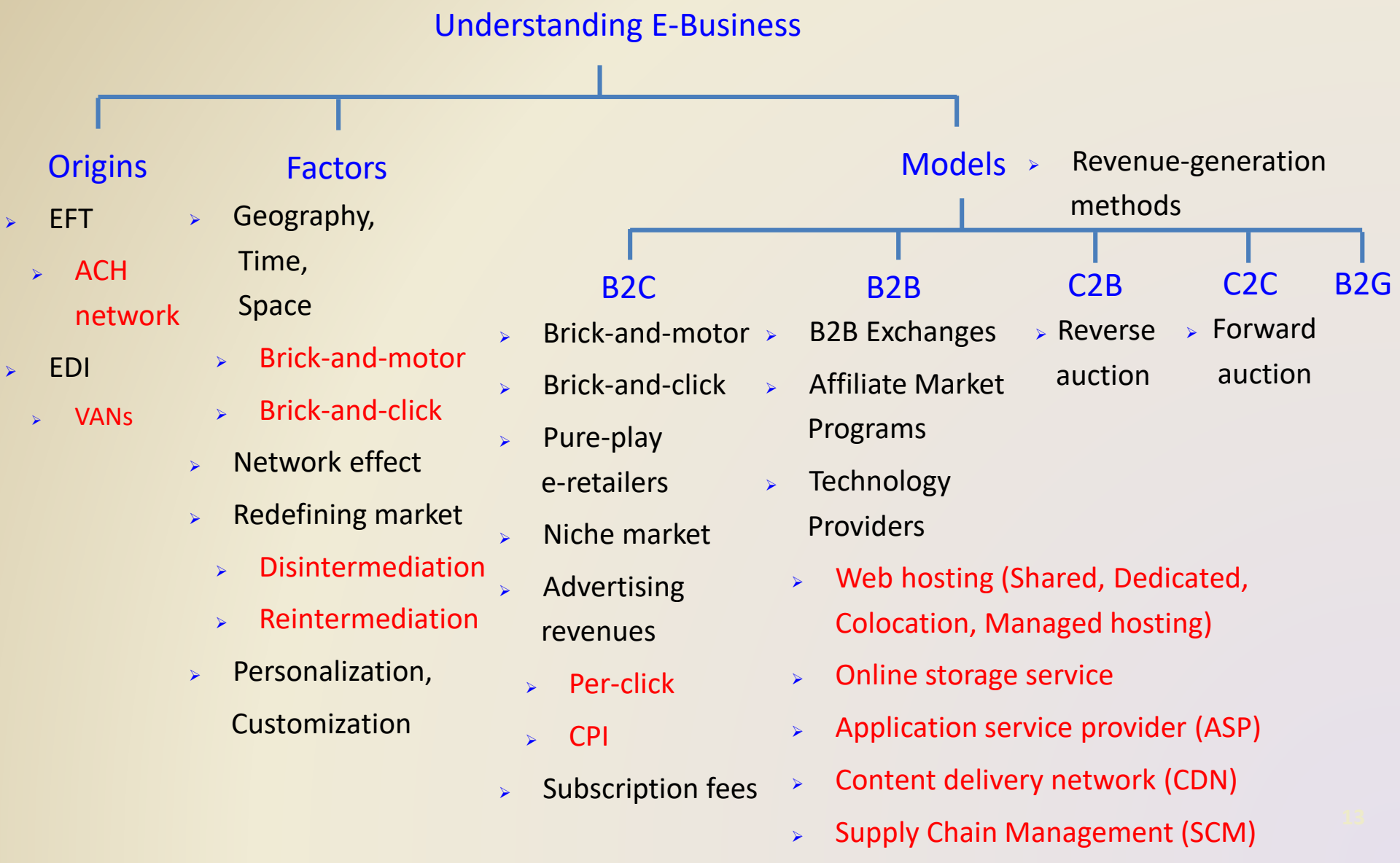
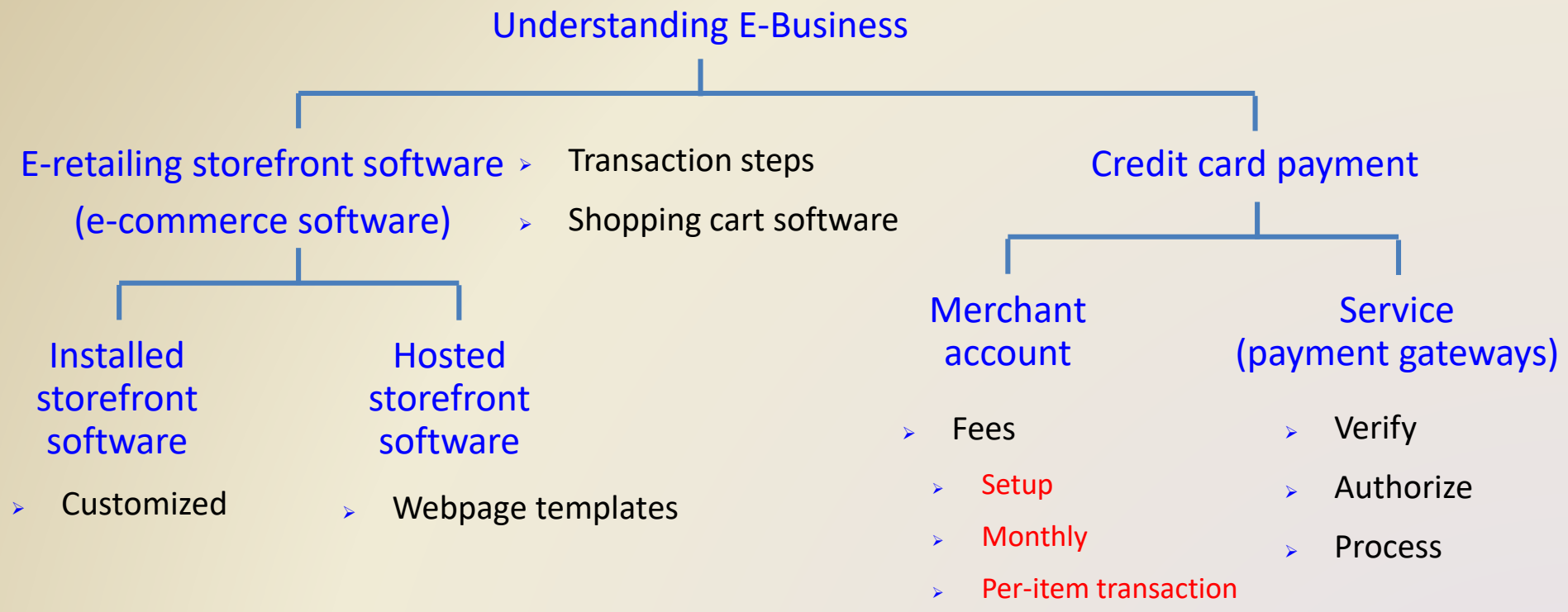
Connectivity

- Hub
- Bridge
- Switch
- Router
- Gateway

10. Understanding Internet Technologies & Security



11. Understanding E-Business



12. Understanding E-Business