

Computer Networks Using the Every Aspect Of Modern Life

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Abstract: Computer networks run over the telephone infrastructure at relatively low cost and providing the data cost to using the connections. Networks enable international communication with suppliers and stock holders as the traffic networks. Challenges that arise in networking and particularly in the internet trend to have the millions of people will use the internet. On huge growing impact is the online shopping has grown over the last 10 years to become the huge market. Wireless internet technology is development also known as Wi-Fi has really taking over the way of people to access through the username and then password for that connecting the Wi-Fi, widely more popular and then very short space and the save the time. Internet connections will allow the individual access the internet via a network hotspots while travelling without using the cables and wires. Computer network technology is the high-level technology it will maintains the developing companies are also fighting against the damaging software such as the attacks the malware, virus, worms.

Keywords : Hotspot, Wi-fi, network, Li-fi, virus, stock holders, dial-up connections.

1. INTRODUCTION

Modern Life Network has a number of modern technology, lifestyle, business, sports, and society. Through the eyes and ears of our hosts, we discuss and through life[2]. Modern life relies on computer network personal shopping we can do and can purchase through the certain website. Understand how networking through the IT industry by working with servers. In our industry standard network. An large modern systems like Google, so we can set for a successful career in IT. Some of the companies are used industry experience[3]. Computer network has a strong presence on social media as well. The internet is a huge network of computers spanning this planet and started to bring the surrounding our area[5]. With a computer at home and internet, students can now we get a college degree from the home there are lot of schools and colleges, universities, and then many organizations etc., using a computer and the internet can get you certificates at your own space faster than going to a college campus. All of the

devices work on a network and then often to communicate wirelessly[6].

2. Literature Review

The major effects of social networks on the economic integration of migrants is their facilitation of an individual's search for employment[3]. Your networks can be excellent source of new perspective and ideas to help in your role and exchanging information on challenges, experiences and goals is a key benefit of networking allows you to gain the new insights that you may not have otherwise[5]. Gaining the advice of experienced of benefits of networking and then common challenges and opportunities opens to valuable suggestions and guidance[7]. Regularly networking within your industry and discipline can set you up well to progress in your career and relationships raise your professional profile and broaden your access to opportunities, plus work through the industry challenges and gain their satisfaction from assisting and connecting others networks[9]. Strengthening relationships is connecting their networking device is sharing about is not taking and forming trust helping with one another towards is our goals, regularly engaging with your contacts and finding your opportunities to assist them helps need to achieve your goals[6].

3. Modern networks using in life

Computer navigate the modern planes, and ships such as navigation is used in the modern GPS devices that can identify the exact location can see route map in world

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otherwise we can see the longitudes and latitudes through travelling in ships. In our life computer is most useful and then to complicated the mathematical calculations through solve in the internet. Computer plays a important role in our life today it will realizes the some peoples will beginning to ask my opinion to become our necessary part in our modern life.

3.1 Modern technologies

Modern technologies is one of the largest providers of networks are using in the many IT sectors, and organizations providing of our security services to several organizations. Modern technologies are carried the number of projects are using through in the internet part and using clients, servers that will includes governments, commercial, and industrial purposes.

3.2 Li-fi

Li-fi is the advance of Wi-Fi networks it is more powerful than the wifi connections and can processing at the very high speed and the cost is very mainly we can save the time this is now latest technology in the world. Li-fi wireless connections are used mainly in the developed countries. Li-fi connections are modern network technology in the world. Now 4g network is newly introduced the some networks it process high speed and then more cost is gather between the 3g networks, but 4g network is processing very high speed through the satellite connections also used the some networks is announced the legally for welfare of the Country.

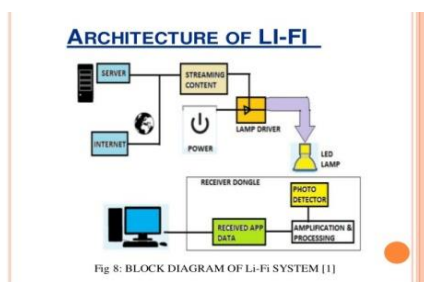


Fig.1 architecture of li-fi [10]

3.3 Mobile Internet

Mobile internet is used the internet services through the wireless communications it will accessed at different locations it will have high speed from traditional dial-up internet connections through broadband connections have

some rural areas and network communications to support the internet. Some of issues are mobile internet connections has the lower speed of internet broadband connections has improved from the broadband services are fixed connections is using the username and password.

4. Uses of computer in education field

Many organizations are using the internet in classroom will explores the students mind. Drawing tools, spreadsheet, Audio, Video lectures and power point presentations are very beneficial for students to learn more deeply and accurately education is more important in our life. Computer network is also the education system. So many college and universities are using the online degree programs for college and school students.

EXAMPLE: YouTube, Blogs, eBooks, Newsletters, Newspaper etc. such educational tools are not possible without computer in that education field.

5. Uses of technology in our life

Technology is increasing day by day, technology to accomplish specific tasks our lives. Today, emerging technologies is being implemented in almost every section of our lives and business structures, new emerging technologies and to use them to learn in our daily life.

5.1 Technology in Business

Today businesses can save money by using network technology is to perform .When it comes to technology a small business can scale out and deliver more with less human resource. Now a days, employees will do the work at home through the internet connections. Employees will work at company websites, and then now part time jobs are doing only in the internet connections.

5.2 Technology in communication

Communication was limited to store the datas for the one message, in internet we can send the unlimited message to deliver for other person. Today technology has made the field of communications so easy. Now you can draft a business message and email in a second without any delays through using in the network fields using communicating the recipient will get the message and will reply you send or received.

5.3 In Business

Now some of the organizations are using social websites to earn the money like to sharing the information. Social applications are important for network communications and companies will give advertisements for develop their marketing business products and entrepreneurs can peddle their goods and services to their small network fields, with the circle having a great expansion due to sharing their functionalities.

5.4 Social Issues

Networking has introduced the new social problems and some personal matters for others for the welfare of the country and then political problems. Then problems come from the newsgroups and then taking care about the politics, religion or etc., Some of the information cannot type the text we can share their information through high resolution color photos and then short video clips can be transmitted over through the computer networks we take a live-to-live through the religions.

5.5 Internet Our Daily Life

Internet has become a part of our life. It is used to connect to the world of no boundaries for hundred of thousand of different purposes. Internet is there to stay with us and has taken a place where it is a part of our everyday life now. There are millions of applications that we can find out with the internet. Now, internet have become the first priority needs to everyone. In fact many people would think that a part of their life is missing if they are not able to log on for even one single day.

5.6 Modern living life

Modern living life is possible without internet expert call that internet is evolution element behind in life. Life says it increasing the stress and speed of life. Educations are analyzing the internet based advantages and disadvantages in that student's life. Internet is a part of life for professionals business communities say very important for the economic development and then Politicians say Internet is there so many job opportunities on the internet for college graduates students for his living life stages.

Agriculture looks different for that today cultivating the lands by farmers are using the GPS and can monitoring the irrigation systems through the internet.

6. Internet applications

We can roughly separate internet applications into the following types: online media, online information search, online communications, online communities, online entertainment, e-business, online finance and other applications.

6.1 Applications of internet

Internet is treated as one of the biggest invention. It has a large number of uses.

- ✓ Communication
- ✓ Job searches
- ✓ Finding books and study material
- ✓ Health and medicine
- ✓ Travel
- ✓ Entertainment
- ✓ Shopping
- ✓ Stock market updates
- ✓ Research
- ✓ Business use of internet

6.1 Networks changing the way we live

Early communication relies on face-to-face conversation. As our society advances, other means of communication emerged.

- ✓ Mail (written message)
- ✓ Telephone (voice)
- ✓ Television broadcast (one-way video communication).

With the use of the Internet, all the different types of communication are converging into Web-based communication. Early data networks were limited to exchanging character-based information between connected computer systems.

6.2 Current networks have evolved

- ✓ Text
- ✓ Graphics
- ✓ Voice
- ✓ Video Streams

- ✓ Computers
- ✓ PDAs
- ✓ Mobile phones
- ✓ Webcams
- ✓ Refrigerator
- ✓ Microwave

6.4 Most companies have an intranet.

- A private network belonging to the company.
- Allows communication between employees and also between branches.
- Some companies also have an extranet.
- A network (or network resources) to provide suppliers, vendors, customers, limited access to corporate data.

Example: order status, inventory, part lists.

6.5 VPN (virtual private network)

The use of technology VPN (virtual private network) allows employees to access company intranet remotely.

- Work can be done even though the employee is outstation or at home.
- In certain countries, there is a rising trend on the concept of "working from home".
- No longer need to go to the office every day.
- Communications with other employees or clients can be done online.
- Can work and take care of family at the same time.

6.6 Arpanet

Long-distance computing was an original inspiration for development of ARPANET and does still provide a very useful service on Internet. Programmers can maintain accounts on distant, powerful computers, execute programs. File transfer service allows Internet users to access remote machines and retrieve programs, data or text.

6.7 History of Arpanet

Internet was jump started in the early days of computing history, in 1969 with the U.S. Defense Department's Advanced Research Projects Agency Network (ARPANET). ARPA-funded researchers developed many of the protocols used for Internet communication today.

- ✓ **1934:** Belgian information expert named Paul Otlet imagined a "Radiated Library" that would use technology of the day — the telephone and radio — to create something very much like the Internet.
- ✓ **1965:** Two computers at MIT Lincoln Lab communicate with one another using packet-switching technology.
- ✓ **1968:** Beranek and Newman, Inc. (BBN) unveils the final version of the Interface Message Processor (IMP) specifications. BBN wins ARPANET contract.
- ✓ **1969:** On Oct. 29, UCLA's Network Measurement Center, Stanford Research Institute (SRI), University of California-Santa Barbara and University of Utah install nodes. The first message is "LO," which was an attempt by student Charles Kline to "LOGIN" to the SRI computer from the university. However, the message was unable to be completed because the SRI system crashed.
- ✓ **1972:** BBN's Ray Tomlinson introduces network email. The Internetworking Working Group (INWG) forms to address need for establishing standard protocols.
- ✓ **1973:** Global networking becomes a reality as the University College of London (England) and Royal Radar Establishment (Norway) connect to ARPANET. The term Internet is born.
- ✓ **1974:** The first Internet Service Provider (ISP) is born with the introduction of a commercial version of ARPANET, known as Telenet.
- ✓ **1974:** Vinton Cerf and Bob Kahn (the duo said by many to be the Fathers of the Internet) publish "A Protocol for Packet Network Interconnection," which details the design of TCP.
- ✓ **1976:** Queen Elizabeth II hits the "send button" on her first email.
- ✓ **1979:** USENET forms to host news and discussion groups.
- ✓ **1981:** The National Science Foundation (NSF) provided a grant to establish the Computer Science Network (CSNET) to provide networking services to university computer scientists.
- ✓ **1982:** Transmission Control Protocol (TCP) and Internet Protocol (IP), as the protocol suite, commonly known as TCP/IP, emerge as the protocol for ARPANET. This results in the fledgling definition of the Internet as connected

TCP/IP internets. TCP/IP remains the standard protocol for the Internet.

- ✓ **1983:** The Domain Name System (DNS) establishes the familiar .edu, .gov, .com, .mil, .org, .net, and .int system for naming websites. This is easier to remember than the previous designation for websites, such as 123.456.789.10.
- ✓ **1984:** William Gibson, author of "Neuromancer," is the first to use the term "cyberspace."
- ✓ **1985:** Symbolics.com, the website for Symbolics Computer Corp. in Massachusetts, becomes the first registered domain.
- ✓ **1986:** National Science Foundation's NSFNET goes online to connected supercomputer centers at 56,000 bits per second-the speed of a typical dial-up computer modem. Over time the network speeds up and regional research and education networks, supported in part by NSF, are connected to the NSFNET backbone effectively expanding the Internet throughout the United States. The NSFNET was essentially a network of networks that connected academic users along with the ARPANET.
- ✓ **1987:** The number of hosts on the Internet exceeds 20,000. Cisco ships its first router.
- ✓ **1989:** World.std.com becomes the first commercial provider of dial-up access to the Internet.
- ✓ **1990:** Tim Berners-Lee, a scientist at CERN, the European Organization for Nuclear Research, develops (HTML). This technology continues to have a large impact on how we navigate and view the Internet today.
- ✓ **1991:** CERN introduces the World Wide Web to the public.
- ✓ **1992:** The first audio and video are distributed over the Internet. The phrase "surfing the Internet" is popularized.
- ✓ **1993:** The number of websites reaches 600 and the White House and United Nations go online. Marc Andreessen develops the Mosaic Web browser at the University of Illinois, Champaign-Urbana. The number of computers connected to NSFNET grows from 2,000 in 1985 to more than 2 million in 1993. The National Science Foundation leads an effort to outline a new Internet architecture that would support the burgeoning commercial use of the network.

- ✓ **1994:** Netscape Communications is born. Microsoft creates a Web browser for Windows 95.
- ✓ **1995:** America Online and Prodigy begin to provide Internet access. Amazon.com, Craigslist and eBay go live.
- ✓ **1996:** The browser war, primarily between the two major players Microsoft and Netscape, heats up. CNET buys tv.com for \$15,000.
- ✓ **1997:** PC makers can remove or hide Microsoft's Internet software on new versions of Windows 95, thanks to a settlement with the Justice Department. Netscape announces that its browser will be free.
- ✓ **1998:** The Google search engine is born, changing the way users engage with the Internet.
- ✓ **1999:** AOL buys Netscape. Peer-to-peer file sharing becomes a reality as Napster arrives on the Internet, much to the displeasure of the music industry.
- ✓ **2000:** The dot-com bubble bursts. Web sites such as Yahoo! and eBay are hit by a large-scale denial of service attack, highlighting the vulnerability of the Internet. AOL merges with Time Warner.
- ✓ A newly expanded global Internet, to focus solely on science and education, now includes half of the world's countries. The high-speed fiber-optic network connects users at speeds of 10 Gbps.
- ✓ Credit: GLORIAD.
- ✓ **2001:** A federal judge shuts down Napster, ruling that it must find a way to stop users from sharing copyrighted material before it can go back online.
- ✓ **2003:** The SQL Slammer worm spread worldwide in just 10 minutes. Myspace, Skype and the Safari Web browser debut.
- ✓ **2004:** Facebook goes online and the era of social networking begins. Mozilla unveils the Mozilla Firefox browser.
- ✓ **2005:** YouTube.com launches.
- ✓ **2006:** AOL changes its business model, offering most services for free and relying on advertising to generate revenue. The Internet Governance Forum meets for the first time.
- ✓ **2009:** The Internet marks its 40th anniversary.
- ✓ **2010:** Facebook reaches 400 million active users.
- ✓ **2011:** Twitter and Facebook play a large role in the Middle East revolts.

7. Networks in human knowledge

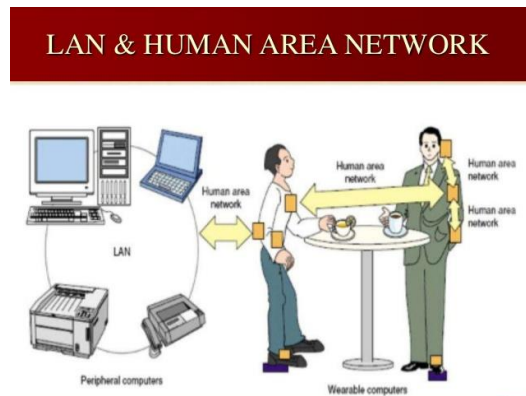


Fig.2 human area networks [11]

Modularity is a powerful system using the human brain developing the knowledge has swappable modules are removed by the factory service and increasing the quality improvements and defects through the reliability process. Modular design allows the reliability of fault tolerance to redundant modules for the parallel system performance.

7.1 Components of Network :

Most of the web servers will consider the internet works and explore pieces to come from enable the network communications. Network will provides the stable and reliable channel for the communications of infrastructures.

- ✓ End device
- ✓ Intermediary device
- ✓ Network device

7.2 End device

Host device is the source or destination will reaches the message transmitted through the internet. Modern networks are acts has the client and server. Software installed the host services and then provides the information obtained through the server.

7.3 Intermediary Device

It is an interconnected end device and then provides to connectivity ensures that data flows across through the internet.

- ✓ Network access device
- ✓ Internet working device
- ✓ Security devices

7.4 Network media

Modern networks are connected the primarily carried out to the medium it will travels through the source to destination is the source code and then transmitted.

- ✓ Metallic wires with the thin cables
- ✓ Glass or plastic fibers
- ✓ Wireless transmission

When conveying information are displaying the devices are the large internetworks is very useful representations of way to understand the symbols to represents the different devices and connections.

8. Networks in internet layers

Network layer protocol will holds with together for the TCP/IP it will provides of the internets data transport services and then ultimately either layers is the top internet protocol and then any task of the users. TCP/IP is not proprietary to the companies and then network software to connects multiple LANs to the large internet works to suite the industry standard protocols. Internet protocol is the diagram oriented protocol and then each packet.

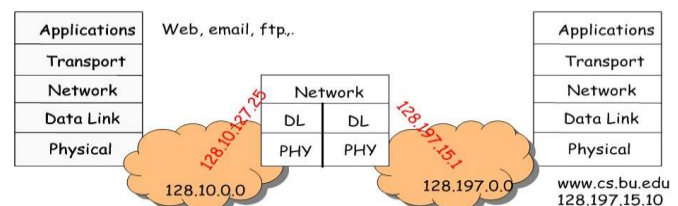


Fig.3 network layers [12]

8.1 File Sharing

The major advantage of a computer allows file sharing and remote file access. A network workstation of a network can easily see the files present, provided he is authorized to do so. It saves the time which is wasted in copying a file from one system. In addition to that, many people can access or update the information stored.

8.2 Resource sharing

Resource sharing is also an important benefit of a computer network the same time. A computer network on

the other hand that provides a cheaper and low quality of resource sharing. Computers can be interconnected using a network and one modem and printer can efficiently provide the services to all four members.

8.3 Increased cost efficiency

There are many software are available in the market which are costly and take time for installation. Computer networks resolve this issue as the software stored and then installed on a system it can be used by the different workstations is increased the cost for using the softwares.

9. Network telecommunication

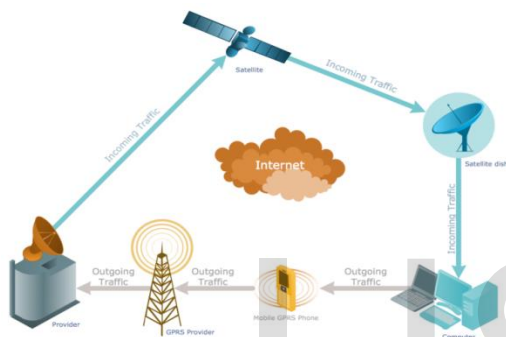


Fig.4 telecommunication network [13]

Real power of networking computers becomes your own network growing across both networks. Networking computers first and tracking connections later and quickly become confusing and unmanageable computer communicates with and shares. In your family network you want to use your parents or guardians to your head and it is important to keep track and share something where it was not intended. Connect your first computers together you should have a plan. A network plan is formally created product that shows all the network components and then planned to the connections between them. Plan is also used to manage the various types of information.

10. Conclusion

The advantages of the networking is tremendous, the applications are vast. It saves the lot of time and energy. It

has touched almost all fields, where you cannot say we don't need network anymore. Education, commercial to life saving telemedicine application everything is dependent on networking. To make it happen the services should be reliable and secured. The Encryption serves the purpose all time and every time.

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