

# Internet and Web Principal

Week 1

**Introduction to Internet** 



### Content

- Introduction to Internet
- History of Internet
- Advantages of Internet
- Application of Internet for Business Development



### Introduction to internet

- Computers all over the world are connected by a huge global network called the Internet. People can share information and converse via the Internet from any location with an Internet connection.
- The Internet is a system architecture that has transformed how people communicate and conduct business by enabling different computer networks all over the world to connect.



### Introduction to internet

- The term "network of networks" is occasionally used to refer to the internet, which is a compilation of all globally connected networks.
- The Internet provides a capability so powerful and broad that it may be used for nearly any information-based purpose, and it is available to anybody who connects to one of its constituent networks.
- It creates a communication medium to share and get information online.



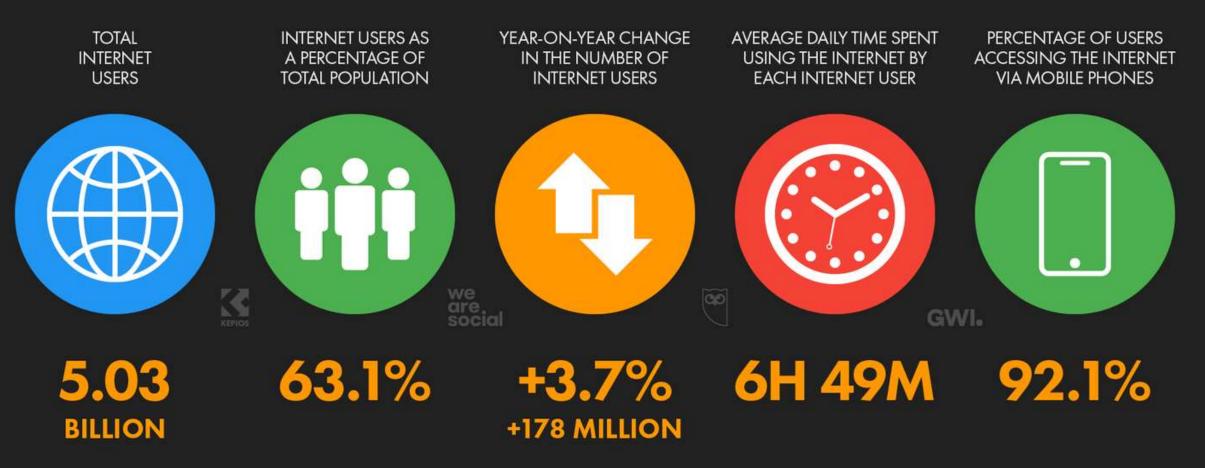
### Introduction to internet

- When someone says a computer is online, it's just another way of saying it's connected to the Internet.
- The Internet is the most important tool and great resource used by almost everyone in the world.

### **OVERVIEW OF INTERNET USE**

ESSENTIAL INDICATORS OF INTERNET ADOPTION AND USE





Source : https://datareportal.com/global-digital-overview

SOURCES: KEPIOS ANALYSIS; ITU; GSMA INTELLIGENCE; EUROSTAT; GWI; CIA WORLD FACTBOOK; CNNIC; APJII; LOCAL GOVERNMENT AUTHORITIES; UNITED NATIONS. TIME SPENT AND MOBILE SHARE DATA FROM GWI (Q1 2022), BASED ON A BROAD SURVEY OF INTERNET USERS AGED 16 TO 64. SEE GWI.COM FOR MORE DETAILS. ADVISORY: DUE TO COVID-19-RELATED DELAYS IN RESEARCH AND REPORTING, FIGURES FOR INTERNET USER GROWTH MAY UNDER-REPRESENT ACTUAL TRENDS. SEE NOTES ON DATA FOR MORE DETAILS. COMPARABILITY: SOURCE AND BASE CHANGES.

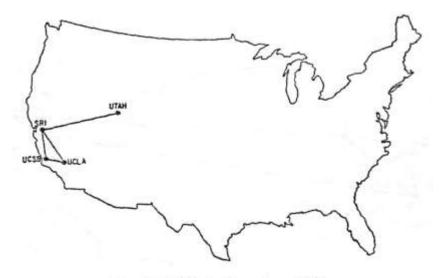




- The Internet started in the 1960s as a way for government researchers to share information.
- Computers in the '60s were large and immobile and in order to make use of information stored in any one computer, one had to either travel to the site of the computer or have magnetic computer tapes sent through the conventional postal system.



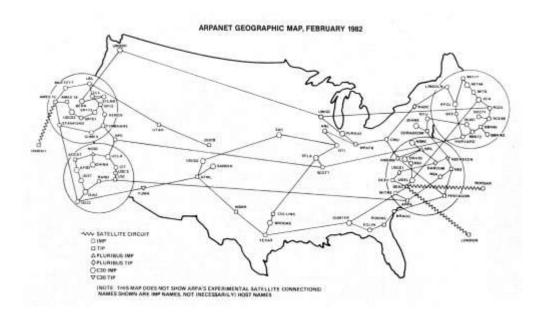
- Another catalyst in the formation of the Internet was the heating up of the Cold War
- This eventually led to the formation of the ARPANET (Advanced Research Projects Agency Network), the network that ultimately evolved into what we now know as the Internet.



https://www.vox.com/a/internet-maps

The ARPANET in December 1969





- January 1, 1983 is considered the official birthday of the Internet. Prior to this, the various computer networks did not have a standard way to communicate with each other.
- A new communications protocol was established called Transfer Control Protocol/Internetwork Protocol (TCP/IP). This allowed different kinds of computers on different networks to "talk" to each other.



 Tim Berners-Lee, a scientist at CERN, the European Organization for Nuclear Research, develops Hyper Text Markup Language (HTML). This technology continues to have a large impact on how we navigate and view the internet today.

The 1<sup>st</sup> Website in the world

#### World Wide Web

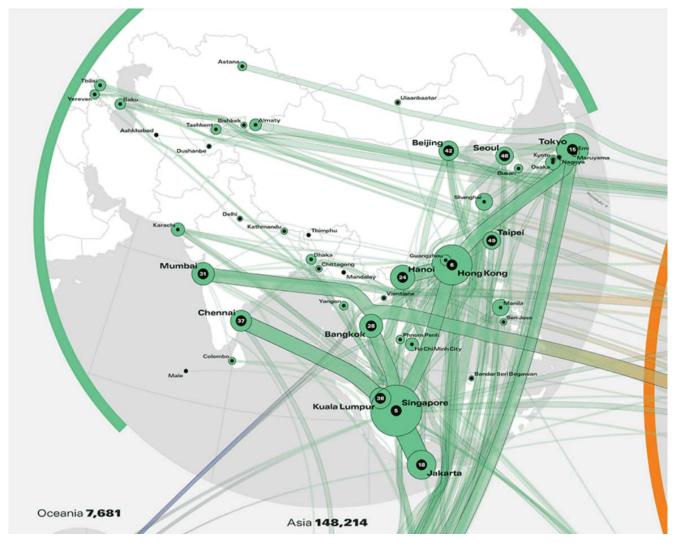
The WorldWideWeb (W3) is a wide-area hypermedia information retrieval initiative aiming to give universal access to a large universe of documents

Everything there is online about W3 is linked directly or indirectly to this document, including an executive summary of the project, Mailing lists , Policy , November's W3 news , Frequently Asked Questions .

```
What's out there?
      Pointers to the world's online information, subjects , W3 servers, etc.
      on the browser you are using
Software Products
      A list of W3 project components and their current state. (e.g. Line Mode X11 Viola , NeXTStep , Servers , Tools , Mail robot , Library )
Technical
      Details of protocols, formats, program internals etc
Bibliography
      Paper documentation on W3 and references.
People
      A list of some people involved in the project.
History
      A summary of the history of the project.
How can I help 1
      If you would like to support the web ..
 Setting code
      Getting the code by anonymous FTP, etc.
```

http://info.cern.ch/hypertext/WWW/TheProject.html





https://gigazine.net/gsc\_news/en/20210228-global-internet-map-2021/

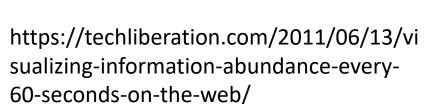


- The internet is perhaps one of the best inventions thus far. As anyone can access the computer this made people by stripping away geographical barriers and sharing information instantaneously.
- **Communication Forum:** The speed of communication becomes faster which is obtained through the web. Families and friends can confine touch easily. The platform for products like SKYPE allows for holding a video conference with anyone within the world who also has access.



• Abundant Information: Anyone can find information on almost any imaginable subject. Plenty of resources are often found through the

program in minutes.







• Inexhaustible Education: For instance, students can gain readily available help for his or her homework online.





• Entertainment for everybody: Most folks love using our laptops, smartphones, and, tablets. The web is the big reason behind us spending such a lot of time on these gadgets.



https://www.techquark.com/2018/08/how-internet-has-changed-entertainment.html



• Online Services and E-commerce: Many services of emails, online banking, online shopping, etc are there. Free mail to anyone is definitely accessible all around the world. E-commerce enables one in America to shop for things in Asia, Africa, or other areas within the world through some simple clicks of the mouse.



https://koinworks.com/blog/platform-ecommerce/



• Social network: Social networking is the sharing of data with people across the planet. Aside from being an entertainment website, it's many uses.



https://mommiesdaily.com/2015/07/06/sombong-bersocial-media-boleh-kok/



• Learning: The web has now become a neighbourhood of education. Education like home schooling is definitely administered using the web. Teachers can upload their teaching videos on the web



https://blog.ecampuz.com/manfaat-e-learning/



- Internet Addiction Disorder: Internet addiction is detrimental to not only fitness but also psychological state.
- **Cyber Crime:** Hacker programs a virus that gets into the pc and ruins valuable data. Users' personal information like name, address, master card, bank details, and other information are often accessed by culprits when used on the web, leading to significant economic loss.
- Social Alienation: Time spent online flies fast without consciousness. After getting
  attracted the user is trapped into the trap, users are trapped by a "net", spending less
  time with people in the real world. Less interaction and face-to-face communication,
  actually, may end in a decrease in social abilities.
- Spam: The unnecessary emails, advertisements, etc. are sometimes said to be spam because they need the power to hamper the system and make the users face many problems.
- Health issues: Playing games and spending too much time on monitors leads to obesity and an unhealthy lifestyle.



#### • The Dot-Com Bubble

The internet experienced an incredible boom, followed by a crash or levelling events of sorts. This is popularly referred to as the dot-com bubble.

JU

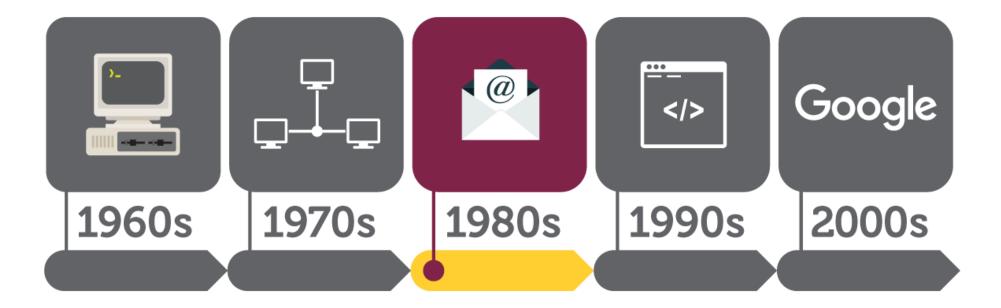
HANDONG UNITWIN FELLOWSHIP

https://flatworldbusiness.wordpress.com/flat-education/previously/web-1-0-vs-web-2-0-vs-web-3-0-a-bird-eye-on-the-definition/dotcom-bubble/



#### • Early Days of the Internet

The early days were pretty basic, and those days had a greater effect on internal rather than external business processes.



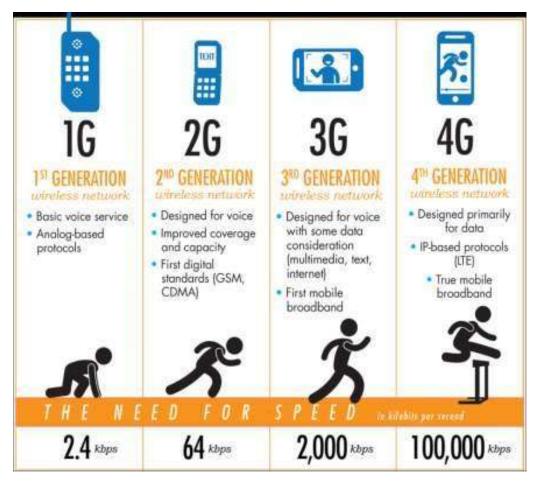


#### High-Speed Revolution

High-speed internet added several value points for businesses. The ability to publish and play music, and play video added a new element to online advertising.

JIU

https://www.kaspersky.com/blog/internet-ads-101/12904/



https://www.researchgate.net/figure/The-historyof-mobile-devices\_fig1\_324949988

#### Mobile Internet Access

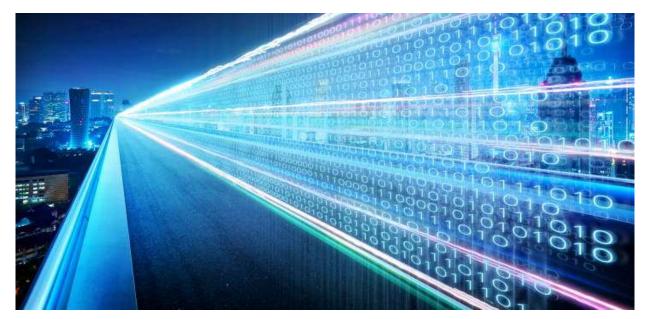
Mobile internet added another internet element and business benefit. Business users can access potential customers from the mobile devices they have on their person nearly 24/7.





#### Access to Information

The ability to access information quickly and easily is a major benefit for businesses. The internet has just about every fact and piece of information immediately available that a business could need.



https://www.4d-dc.com/insight/gigabit-internet-and-business-what-speed-do-you-need



#### Internal Communication

The internet improves internal communications through email, connected calendars and chat services specifically designed to improve business communications.







#### • Globalizing Physical Products and the Supply Chain

Traditionally, the supply chain required visiting factories, sourcing products and running through a detailed process to create and brand a product.



https://sell.amazon.com/fulfillment-by-amazon



#### Marketing and Audience Effects

One of the biggest advantages created by the internet is the ability to access and market to large audiences. Content marketing is essentially free, and businesses can create content that their audience desires, as a means of driving qualified traffic to the business.



https://www.dhadigital.com/perbedaan-internet-marketing-dan-digital-marketing/



#### • Benefits of Social Media

The benefits of social media for businesses are extensive. Some businesses actually build their entire customer base through social media channels.



https://vocasia.id/blog/manfaat-social-media-marketing/



#### • Review Sites

The internet is loaded with review websites and review options on business listings. These reviews have a major impact on business as consumers research and filter through positive and negative reviews before making purchase decisions.



https://neilpatel.com/blog/review-sites/



#### Business Automation

Automation is a major internet driven trend in the business world. The ability to automate tasks that traditionally required a workforce ultimately saves businesses money and makes their operations simpler and more efficient. Everything from basic accounting practices to customer service has some automation abilities depending on the business model and requirements.

https://blog.vaulterp.com/post/2021/07/06/whyshould-you-automate-your-businessprocesses





### Thank You

Alfred Tenggono, S.Kom., M.Kom. alfred.tenggono@jiu.ac



### Reference

- Practical TCP/IP: Designing, Using, and Troubleshooting TCP/IP Networks on Linux and Windows, Niall Mansfield, UIT Cambridge, 2011, ISBN : 978-1-9068603-6-3
- Computer Networking first-step, Wendell Odom, CISCO Pers, 2004, ISBN: 1-58720-101-1
- https://www.vox.com/2014/6/16/18076282/the-internet
- https://www.geeksforgeeks.org/what-is-internet-definition-usesworking-advantages-and-disadvantages/
- https://www.britannica.com/technology/Internet