**Addis Ababa Institute of**

**Technology**

Department of Information Technology and Scientific Computing

Prepared by: Kaleb Besufikad

ID: ATR/7065/11

Section 1

Submitted To: Mr Fitsum Alemu

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Questions:

* History of the Internet [The evolution]
* View the 5 – 10 popular websites of your choice from web archive URL and put your observation and assessment
  + Web Archive: [Link](https://web.archive.org/)
* List 5 website each on the 12 categories you learned
  + Try to view their look in different years web archives
* What are the guidelines for evaluating the value of a Web site? Try to evaluate 2-5 websites based on the guideline and put your judgment

# The Evolution of the Internet

The internet is a system architecture which allows various computer networks all over the world to share information and communicate. In the few decades of its existence, it has revolutionized the ways people communicate over long distances. However, before the internet came about to get to its current state, the constituting networks were the most advanced ways of communicating in the 1950s and early 1960s. These networks were only capable of communicating over short distances and served specific purposes. These first computer networks included the likes of the airline reservation system -SABRE and the command-and-control system for defence -AUTODIN I. By the early 1960s computer manufacturers had begun to use semiconductor technology in commercial products, and both conventional batch-processing and time-sharing systems were in place in many large, technologically advanced companies. Time-sharing systems allowed a computer’s resources to be shared in rapid succession with multiple users, cycling through the queue of users so quickly that the computer appeared dedicated to each user’s tasks despite the existence of many others accessing the system “simultaneously.” This led to the notion of sharing computer resources (called host computers or simply hosts) over an entire network. Host-to-host interactions were envisioned, along with access to specialized resources (such as supercomputers and mass storage systems) and interactive access by remote users to the computational powers of time-sharing systems located elsewhere. These ideas were first realized in ARPANET, which established the first host-to-host network connection on October 29, 1969. It was created by the Advanced Research Projects Agency (ARPA) of the U.S. Department of Defense. ARPANET was one of the first general-purpose computer networks. It connected time-sharing computers at government-supported research sites, principally universities in the United States, and it soon became a critical piece of infrastructure for the computer science research community in the United States. Tools and applications—such as the simple mail transfer protocol (SMTP, commonly referred to as e-mail), for sending short messages, and the file transfer protocol (FTP), for longer transmissions—quickly emerged. In order to achieve cost-effective interactive communications between computers, which typically communicate in short bursts of data, ARPANET employed the new technology of packet switching. Packet switching takes large messages (or chunks of computer data) and breaks them into smaller, manageable pieces (known as packets) that can travel independently over any available circuit to the target destination, where the pieces are reassembled. Thus, unlike traditional voice communications, packet switching does not require a single dedicated circuit between each pair of users.

The name ARPANET was used for all manners of communications between computers until 1982; which is when the name was changed to “Internet” to represent the world wide communication between computers- not to be confused with “internet” which just refers to local connections. Even though the Internet offered a means of communication reliable at the time, establishing that very connection required much effort not to mention it was not human-friendly as it required the IP-address (a combination of numbers that points to a specific computer on the internet). This problem was solved in 1984 when the DNS servers came into action. The DNS servers mapped the IP-address from an easy to remember domain name.

Following the experimentations in linking a commercial electronic mail (e-mail) service in 1988, Tim Berner Lee prepared a proposal for the World Wide Web(WWW) to convince CERN that a global hypertext system was in their best interest. After the commercialization of the Internet, the WWW was first integrated into an application called Mosaic, the first graphical web browser made in 1993 at the University of Illinois. Mosaic, through its “point-and-click” interface, simplified access, retrieval, and display of files through the Internet.

Following the commercialization of the Internet, numerous web services started to emerge over the years. Some of the more popular web services included:

* E-commerce services such as eBay and Amazon
* Webmail services such as Hotmail
* Search engines such as Gopher and Google
* Wikipedia, Facebook, Youtube, Skype, Hulu and many more web services

Currently, the Internet is used in almost every person’s day to day activity. It’s being used :

* to synchronize accounts across devices to create an easy workflow
* to monitor households remotely
* to have meetings without going through the trouble of travelling
* Access information in the most convenient ways possible
* Shop for items online without worrying about transportation, availability and the like
* To educate oneself on a career of choice

These are the very few things that could otherwise not have been possible if not for the development of the Internet.

# Website Assessment

## Internet Archive - [www.archive.org](http://www.archive.org)

## Amazon - [www.amazon.com](http://www.amazon.com)

## W3Schools – [www.w3schools.com](http://www.w3schools.com)

## WikiHow – [www.wikihow.com](http://www.wikihow.com)

Figure 1: wikiHow in different languages

## Hulu - [www.hulu.com](http://www.hulu.com/)

Hulu is an American online video streaming site dedicated to streaming popular movies and reality television shows. The web service went live in august 2007 and it was at the time limited to American residents.

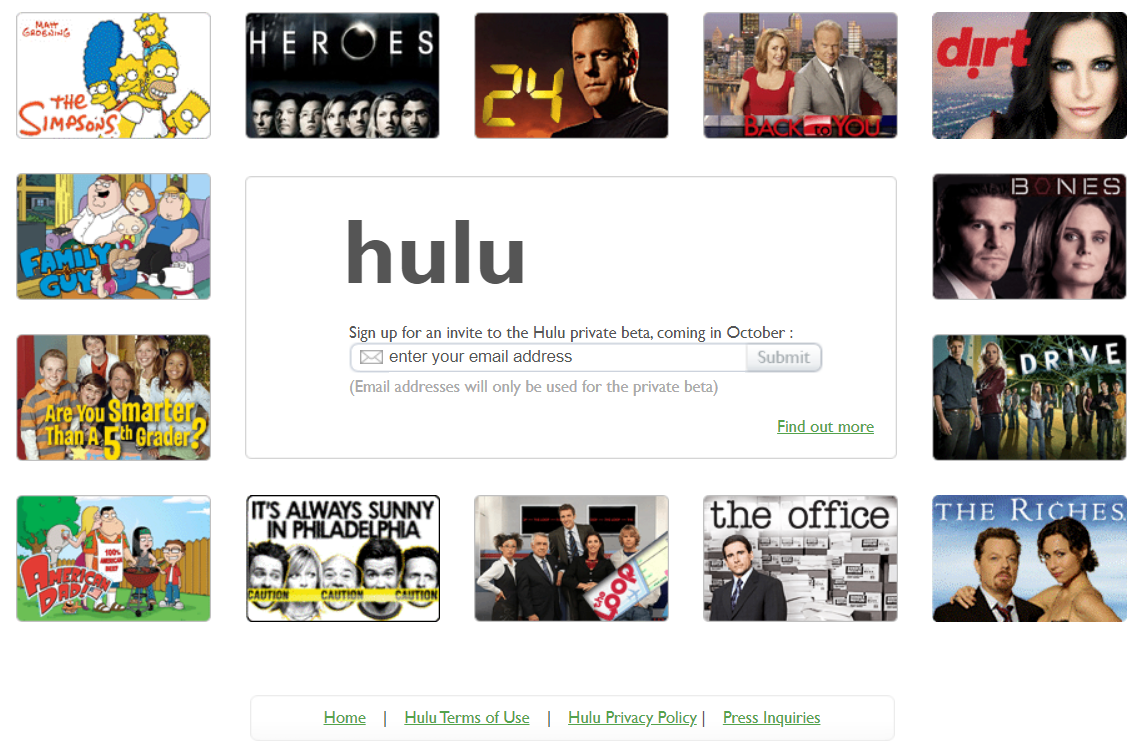


Figure 2: Hulu first release- August 2007 (Source: [Internet Archive](http://web.archive.org/web/20071020061930/http:/www.hulu.com/index.html))

However, the launch didn’t have any contents and instead it was intended to announce the beta test coming later that year in October. The beta release which came out later that year, in addition to the promised video streaming, it featured additional features such as video sharing. Through video sharing, Hulu lets users easily share their favourite videos via email or embed these videos on their own website. Users can even choose to share the entire video or just one scene. By selecting the share or embed feature, users have the option of selecting their own start and stop point in a video to create their own fun video clips.

The service provided by Hulu was especially online video streaming hence it had various settings to play the videos. In the beginning, the service had three different preferences for the users to choose from:

1. watch the video in full screen
2. pop out the video player and place it anywhere on your computer screen and re-size it if you're multi-tasking
3. dim the lights and mute the rest of the browser window so nothing distracts you from the video that is being streamed

sadly, the fourth option which allows viewers to stream in a window of its own didn’t appear until recently.

Until 2010 Hulu didn’t charge for streaming videos. Instead, the service was based around advertisements. The advertisements presentation, which was launched in 2008, of Hulu’s service is very appreciable as the advertisements play at times when no video is streaming and when the video is paused. After Hulu converted the streaming services to a subscription-based, it was made possible to opt-out of all forms of advertisements and data collections for subscribers. To achieve this, Hulu uses a Trackermap - a service provided by evidon. As you can see from the figures below, it is also possible to choose from a list advertising service and disable the ones user is not comfortable with.

Figure 3:Hulu's Tracker map

# References

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