

# A Research Paper on INTERNET INDIA

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## ABSTRACT

This paper reports about the 'Internet in India', trends of the growth of Internet in India. This research paper has done an analysis of evolution of Internet in India.

Internet emphasises the gap among social groups and regions.

Internet in India began in 1986 and was available only to the educational and research community. General public access to the internet began on 15 August 1995, and as of 2020 there are 718.74 million active internet users that comprise 54.29% of the population.

India is still lacking internet in few parts. Our analysis also finds the correlation with the evolution of internet in India. In this research paper, we have compared the early internet days in India to the present internet days, and found that the usage has drastically increased and now there is also an internet society.

We have also viewed few survey reports and found that the need is required, but it is yet to be fulfilled by government.

The knowledge of Internet still to be spread widely in India, so that there can be a good reach and exposure to the world. As rural subscriber rate increases, the rural internet growth also increases. Urban Internet users mostly use wireless mode to access internet.

While a large part of the Indian population still suffers poverty, Internet is developing very fast in this country. This technology of information and communication is strongly involved with important social changes. Its development benefits from the mass of population, its high level of density and the existence of important diaspora.

## INTRODUCTION

Lets talk about what is internet:

The Internet is the global system of interconnected computer networks that uses the Internet protocol suite (TCP/IP)[b] to communicate between networks and devices. It is a network of networks that consists of private, public, academic, business, and government networks of local to global scope, linked by a broad array of electronic, wireless, and optical networking technologies.

## HISTORY OF INTERNET

Internet services were launched in India on 15th August, 1995 by Videsh Sanchar Nigam Limited, now widely recognized as Tata Communications Ltd. General public access to the internet began on 15 August 1995, and as of 2020 there are 718.74 million active internet users that comprise 54.29% of the population.

The Indian Government has embarked on projects such as BharatNet, Digital India, Brand India and Startup India to further expedite the growth of internet-based ecosystems.

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.

### Early days and present internet:

Internet in today's world has created so many jobs that weren't present aa decade ago. It isn't just a source of information anymore

In early days when internet was first developed it was used only for Educational Research Network (ERNET). It was a joint undertaking of the Department of Electronics (DOE) of the Government of India, and the United Nations Development Program (UNDP), which provides technical assistance to developing nations.

The initial launch of Internet services in India was with a rate of Rs 25,000 for a 250 hour TCP/IP account for commercial organisations at 9.6 kbps speed.

Now if we compare internet to today's time, it has changed itself from sharing a few bytes of information to a few thousand gigabytes of information. In early days it was just a static network designed to shuttle a small freight of bytes or a short message between two people or company. The emergence of *web 2.0* in the first decade of the twenty-first century was itself a revolution in the short history of the Internet, fostering the rise of social media and other interactive, crowd-based communication tools.

## How IS INFORMATION RETRIEVED FROM INTERNET:

Let's see what is the process of retrieval

**Information retrieval (IR)** in [computing](#) and [information science](#) is the process of obtaining [information system](#) resources that are relevant to an information need from a collection of those resources.

It can also be the process or an activity of obtaining material that can usually be documented on an unstructured nature, usually text which satisfies an information need from within large collections which is stored on computers.

Nowadays many people engage themselves in the process of IR , every day when they use web pages.

### 1. Early developments:

In early days there was the need for a lot of information and as it is it became necessary to build data structures to get faster access. The index is the data structure for faster retrieval of information in early days.

### 2. Information retrieval in libraries:

In library usually we use information retrieval process where the first generation search was based on authors name and title. It was the first one to accept information retrieval systems.

Now the second generation search was done by subject heading and keywords.

Third generation consisted of graphical interfaces, electronic, forms hypertext features etc

### 3. The Web and Digital Libraries:

It is cheaper than various sources of information, it provides greater access to networks due to digital communication and it gives free access to publish on a larger medium.

## How can information be retrieved?

Two main approaches are:

1. Matching words in the query against the database index
2. Traversing the database using hypertext or hypermedia links

Text indexing is a pre-processing step for text retrieval. This is called as Text retrieval. It is also called as document retrieval. In this the information is stored in the form of text. Now text retrieval is the process of matching some stated user query with some a set of texts. Then texts are ranked and displayed to user according to their relevance. Queries can be in the form of few words to multi sentence full descriptions, which represent the user's information need. The most fundamental part of a retrieval system.

1. Traversing the database using hypertext or hypermedia links

What are hypertext and hyperlinks:

Hyperlinks:

A hyperlink points to a whole document or to a specific element within a document. In computing, a hyperlink, or simply a link, is a reference to data that the user can follow by clicking or tapping

Hypertext:

**Hypertext is text with hyperlinks.** The text that is linked from is called anchor text.

To see this in detail let's take the example of a shopping website:

A shopping site includes images of the product, sometimes videos to describe the product, the price tag, customer reviews and lot more.

Using hyperlink we can generate a relationship between these different sections of the same page.

## INTERNET IN RURAL INDIA

Rural India has a 20% higher presence of internet users than urban parts of the country, according to a recent study by data and market measurement firm Nielsen. Overall, India has 646 million active internet users aged two years and above as of December 2021.

The study was based on surveys carried out across states from September 2021 to December 2021 covering 110,000 household members across 27,900 households.

Further, the number of active internet users aged 12 years and above stands at 592 million. Compared with 2019, active internet user base for 12 years and above has shown growth of 37%. Rural users' growth at 45% continues to outshine urban users' growth at 28% over 2019. In the past two years, female Internet users have grown by 61% as compared to male users who grew at 24%. One in every three India is actively using the internet, Nielsen said.

Almost 90% access the internet on a daily basis. Users aged 50 and above users too are active, with 81% accessing it daily. Mobile phones have remained the key device for all internet usage across sectors

As published by Shangliao Sun,

As of June 2021, the leading service area with the largest number internet subscribers in rural India was Bihar, with nearly 36 million users. The total number of internet subscribers in rural India during the measured time period was over 336 million.

A study has also found that by 2025, rural India will likely have more internet users than urban India.

But the problem is with the knowledge of internet, how to use it and when to use it.

This problem has to be tackled, people must be made aware of how to use internet and should also be made clear about the advantages and disadvantages of internet. While there are a lot of advantages of using internet from paying your bills online to sharing your images, internet can sometimes be a dangerous to few innocent ones.

With Its population of 7 billion and more and having the literacy rate of 74% , It becomes very important for students and other people to know what exactly is internet.

Here below we have mentioned few disadvantages of internet:

### **Disadvantages of Internet for students and solutions**

**Internet was introduced to facilitate people**, but **unfortunately**, it came with perks and became a **double-edged sword**.

The uses of the Internet had been for entertainment also, which **drifted the students away from taking the benefit from it**. That is why it is essential to **discuss the problems** associated with it as well.

#### **1. Cyber bullying**

You know when you the difference between saying something face to face and online. It is hard to face the consequences through the virtual world, so **people can come up with remarks called trolls, and bullying** others while hiding behind the screen is **cyber bullying**.

#### **Solution:**

- It is essential to know the extent of sharing and keeping the private life private by showing minimal content
- Try not to respond to **someone unkind**, for it may make way for further attacks
- Know the privacy settings of the particular website
- In case of facing cyberbullying, block the person and **know the proper means of reporting them**

#### **2. Violence**

**Internet usage somewhat does expose students to violent images**. They have a long lasting **negating impact** on them.

#### **Solution:**

- Parents/adults should know about the **hazards** of violent content
- Parents/adults should have sound communication with their children to be aware of the content
- Elaborate on the age limits for specific content.
- Teach positive ways for using the technology.

### 3. Causes distraction

Internet addiction is an intense **preoccupation** and an urge to use the Internet, which causes **distress**, and a person is unable to perform the daily routine task. This is not just a term but actually, a psychological disorder that is seen prevalent among people from late 20s to 30 years of age.

### 4. Criminal activities

Cybercrime is fraudulent or criminal activities through the Internet. All of these are increasing. As suggested by 2003 [research](#) that 43% of the public in the United Kingdom considered it a real problem. The more public depends on the Internet for their day-to-day activities, there are increasing criminal activities.

#### Solution:

- Use strong passwords to protect against invasion
- Keep the software updated to stop criminals from breaching it, knowing the tactics
- Try to manage your social media setting by not giving away **too much personal information**
- *Keep yourself knowledgeable* regarding the security breaches

### 5. Students avoiding outdoor activities

It is a known fact that physical activities are essential for all ages. **However, especially for students**, it is more critical because that Increases their **Intellectual capabilities**. A study on 493 students revealed that men were more involved in physical activities than women and that the major culprit depriving them of exercise is computers and watching television.

Another study showing similar results is upon medical students showing that internet addiction and physical activity have an inverse relation. **This shows loud and clear that** excessive use of the Internet only leads to a sedentary lifestyle, and that can cause health problems.

#### Solution:

- Try finding more engaging activities outdoor for students
- **Teach limited use of the Internet and keep it majorly for entertainment purposes.**

## 6. Depression, loneliness, and social isolation

**Internet is engaging for students**, and they can use it for **entertainment or communication**. However, if the usage increased more than required, then it will leave some marks. Mental health, commonly ignored, is severely affected by the Internet, with its addiction causing **moderate** to severe **depression**.

The studies do not reveal any weak, relatively strong associations between depression and internet addiction. Human beings are prone to interact with others because they are **social beings**. Still, the **captivating nature of the internet** world has also deprived people of their friends, and loneliness is associated with **internet addiction**, and the research studies clearly state it. Furthermore, adolescents are reported to have a better relationship with their mothers and friends about **less Internet use**. So this means **internet use can affect socialization** as well.

### Solution:

- The number of hours being spent on the Internet should be kept in the account
- See for where the time is being wasted most
- Cut out activities that are causing waste of time as well.
- **Find activities that lead to psychological well-being.**

## 7. Addiction, time wastage, and causes distraction

Internet addiction is not a term. Instead, it is a full-blown disorder that can lead to many problems as well. It is classified as excessive preoccupation and urges to use the Internet. This leads to too much usage and is associated with substance use, impulse control, anxiety, and mood disorders.

Among 2257 English University students, 3.5% were reported to have inter web addiction. Several factors can lead to internet addiction: anxiety, depression, the age of first exposure to the Internet, homesickness, etc.

## 8. Health issues and obesity

The **Internet can provide valuable information to the students**, but unfortunately, its too **much use** can also lead to health problems. In addition, the excess use can **cause the students to lead to a sedentary lifestyle** which can have health issues.

**Research** on 337 adolescents **revealed** that internet use more than 2 hours a day could lead to high blood pressure. Among these issues, another important risk is getting obese. The immobility resulting from internet use leads to gaining more fat. 38,537 participants from different countries reveal that their chances of gaining weight and becoming obese are 47% increased when **using the Internet too much**.

### Solution:



- **Physical activity should be essential for internet users**
- **Students should be taught to keep a balance in internet study and exercise or physical activities**
- A constant check on body mass index and overall health is a must for internet users.

## CONCLUSION

Internet has become a basic need for almost everyone in every perspective. It is very important for us to know how to retrieve proper information.

Internet is different today than it was a decade ago. It is changing life and also lifestyles. So it becomes our responsibility to know what exactly it is.

It won't be wrong if we say that internet will become a fundamental right to live in near future as our everyday activities is based on the speed, availability and importance of internet.

In this survey paper we have also discussed about ways to retrieve information from internet.

We have also talked about the internet condition in rural India, Will it be good worse in near future.

We have also mentioned few disadvantages of internet to people who are new to internet or who are unaware of internet.

Finally, we want to conclude this paper by saying that internet will become our necessity need just as water, food etc. Without internet it would be very difficult for us to function.

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