

# Expanding Information Technology: Pros and Cons

## Outline

### 1. Introduction

**Thesis Statement:** Expanding information technology certainly has some pros as well as cons. However, its advantages certainly outweigh its drawbacks. With proper use, the world can reap its complete benefits and minimise its harmful effects.

### 2. An overview of expanding information technology

### 3. The pros of information technology

a) Promotion of transparency and reduction in corruption

b) Convenient collection and retention of people's data for the purpose of public services.

c) Easy access to education

d) Opportunities to learn new skills and earn

e) Opportunities to earn money through e-commerce

f) Improved communication

g) Improvements in the system of patient management

### 4. The cons of expanding information technology

a) Risk to national security of states

b) Cyber bullying and harassment.

c) Cyber financial crimes

d) A weapon of political propaganda

- e) Increased hate speech and crimes against minorities
  - f) wastage of time
  - g) democratisation of society
5. How can the world eradicate its cons and reap its complete benefits?

- a) By ending digital divide
- b) By increasing surveillance to stop hate speech
- c) By inflicting punishment to the perpetrators of cyber bullying and ~~bottom~~ harassment
- d) By completely banning pornography from online spheres
- e) By putting a ban on social media cells of political parties
- f) By making it easier for people to learn new skills

## ~~6.~~ 6. Conclusion

### ESSAY

"Technology is a useful servant but a dangerous master" - Christian Louis Lange. If used properly, information technology can guide humanity to new glory. However, it can also be a source of destruction if misused. Besides providing access to new business ventures, people can use it educate themselves and learn new skills from by sitting anywhere in the world. Moreover, it allows governments to fight corruption and improve the



delivery of services to people. It has also revolutionised the systems of communication. It also has some cons. It often poses threat to the national security of states.

Moreover, internet, in general, has become a hub for bullying and sexual harassment. It is also <sup>easy</sup> for someone to proliferate hateful speech and cause minorities to get hurt through those hateful messages. Where it can be used for the purpose of education and skill development, it can also be used to consume explicit content, and such type of content causes the society to be morally corrupt. The governments around the globe should make endeavours to rid the internet of pornography. Similarly, strong surveillance systems should be developed to stop people from indulging in hate crimes. In summation, expanding information technology certainly has some pros as well as cons. However, its advantages certainly outweigh its drawbacks. With proper use, the world can reap its complete benefits and minimise its harmful effects.

Information technology (IT) refers to the use of computers, software, networks and other digital technologies to store, process, and transmit data and information. According to ~~Britto~~ Britannica Encyclopedia, essentially anything having to do with computers and

digital technology falls under the umbrella of information technology. The term expanding information technology refers to continuous growth and development of technology in the field of information systems. It signifies the increasing scope and capabilities technology to store, process, and communicate data and information. In few decades, humans have successfully decreased the size of a computer from being as big as the room itself to a size that can easily be carried in a bag or pocket. This is an ~~ex~~ example of expanding information technology as each and every individual can now utilise it as per his needs. Similarly, internet, which was only accessible by very few people during the first decade of the 21st century, is now available to most of the world's population.

Information technology can play a significant role in the eradication of corruption. The reason for this is that it makes it easy for the governments and public sectors to keep complete record of the financial transactions. It is also easier to identify and comprehend the ~~trail~~<sup>trail</sup> of money. This way it becomes hard for anyone to misuse public funds without leaving any marks - According to U4 Anti-corruption resource centre, information and communication



Technology help make financial information more transparent. By keeping ~~recor~~ digital records of public finances, govern governments can ensure that the funds are not misused by some individuals. Moreover, by promoting digital transactions and payments, governments can reduce their dependence of physical cash, which ~~was~~ is an ingredient of corruption in a country. For example, according to <sup>an</sup> ~~the~~ Economist editorial, since India has successfully revolutionised the system of payment, it is performing well ~~an~~ in its fights against corruption. From a big shop ~~an~~ in a mall to a small vegetable vendor, almost every shop in India accepts payment through digital means. To sum up, ~~Inf~~ information technology can help reduce corruption.

Through information technology, it has become easy for the states to collect <sup>and retain</sup> people's necessary data. It allows the countries to get rid of obsolete ~~data~~ systems of data collection, and it also makes it easier for them to provide people with necessary services. It makes easier for them to ~~target~~ property tax or subsidise certain people from <sup>different</sup> socio-economic stratas. According to the Economist, India's Aadhaar digital ID program has now registered approximately 1.2 billion Indians, which is almost 99% of the adult population, and through this mechanism, India is successfully fulfilling the needs of its people. Instead

of blindly subsidising some sectors, Indian government <sup>provide</sup> can provide amnesties and tax relief to the people who are actually needy. Hence, it is easy to collect and maintain public records through information technology.

Information technology has granted everyone an easy access to education. Through computers and mobile phones, and internet, people can learn anything by sitting anywhere in the world. People are no longer required to sit in populated classrooms to acquire education. Information technology has revolutionised the education system around the world. Internet is going to rid the world of obsolete 18<sup>th</sup> century education, and through its use, people can learn anything that they desire by clicking only few buttons (21 lessons for the 21st century, Yuval Noah Harari, 2018). It is now easy for people to learn from the best teachers of the world by sitting in the comfort of their homes instead of travelling to different cities or countries. In summation, information technology has made education accessible to everyone.

Information technology (IT) has provided everyone with equal opportunities to learn and adopt new skills. Since almost every person has access to



the internet, he can tap-into the desired skills with unprecedented ease. These new skills can allow people to earn money by sitting behind their computer screens. They can sell their skills through various online platforms. According to a study performed by Abid Hafeem and Mohd Jawaid in 2020, Internet can free people from the shackles of poverty by allowing them to learn ~~and~~ new skills and by selling those skills to different people through online means. They can use those skills to work for people around the world and can earn from the comfort of their homes. Conclusively, information technology has made it easier for people to acquire new skills.

Besides learning new set of skills, people use information technology to do business. This type of business is done on online platforms, and it is also called the e-commerce. E-commerce allows people to conduct their businesses without owning a shop or a warehouse. It is growing to be one of the largest industries of the world. According to the World Economic Forum, the e-commerce market is worth \$6.3 trillion globally and it is projected to grow by ten percent in 2023. The amount generated through e-commerce is increasing by each passing, and that's all because of the

expanding information technology. Hence, information technology has also made it easier for people to carry out their businesses.

Owing to information technology, it is easy for people to communicate with each other. It has easier for people to connect with each other via internet connectivity. Unlike 1800s, people can send messages to other parts of the world within seconds. Although telegraph was somewhat a good step towards future, it was still really slow. As Yuval Noah Harari argues in his book 21 lessons for the 21st century, internet has brought people, around the world, closer than they ever were, and it has greatly reduced distances. People can, within a second, reach out to their loved ones who living in other parts of the world. Information technology has revolutionised the communication infrastructure.

Information technology has also revolutionised health care system. Hospitals no longer have to keep records in the form of piles of paper. They can simply store all the relevant information regarding patients



in their digital databases. It becomes easy for them to keep track of ~~every~~ patients and their medical history. For example, hospital records in every state of the USA are completely digitised. It keeps them from being lost, and it is also a good way to know about the insurance liabilities of patients. Hence, IT has made it easier for to permanently store citizens' ~~data~~ medical records.

Information technology poses a risk to the national security of countries. It can be used to infiltrate sensitive databases of countries. Although there are measures to keep sensitive data secured, ~~however~~ vigilante hackers often find ways to mess up cyber security measures. These black-hat hackers try to extract sensitive information from the national data bases of their rival countries. For example, in 2012, Turkish hackers tried to extract citizens' data after they hacked into the servers of 'National Database and Registration Authority (NADRA)'. Similarly, during their ongoing ~~war~~ proxy war against Pakistan, Indian hackers sabotaged the servers of the Federal Board of Revenue (FBR) for seventy two hours in 2021. These malign efforts were carried out by black hat hackers that wished to threaten the national security of Pakistan. To sum up, expanding

information has changed the dynamics of national security.

The expansion of information technology has left people vulnerable to cyber bullying and ~~harass~~ harassment. Owing to easily-achievable anonymity, it has become easier to sexually or psychologically harass individuals. Millions of internet users face cyber bullying and stalking on daily basis. Similarly, with the advent of internet, a new method of blackmailing came to be born. By using explicit and edited pictures of people, some hawking elements try to extract favours. As per Emily Vogel's research, which was conducted in 2021, one in ten Americans face online blackmailing, and ~~un~~unsupervised minors ~~using internet~~ are in the most vulnerable to this form of blackmailing. Their chats and pictures are used to ~~ex~~ sexually exploit those minors. Hence, expanding information technology also poses a great ~~to~~ threat to the personal safety of the individuals.

Information technology has made it easier for the criminals to commit high-level financial crimes. Although financial crimes have



existed since the dawn of the concept of money, IT has caused them to occur on a much larger scale. It simply allows for skilled hackers to hack into someone's account and transfer all the amount to their pool accounts. For example, on January 4, 2015, Bitstamp company's wallet was hacked by hackers, and the company lost over 19,000 Bitcoins within a span of few seconds. Despite stealing Bitcoins worth of \$8.6 million, the thieves were never caught because they left no footprint behind. Since anonymity is easily achieved, IT criminals conduct their activities while remaining completely fearless. According to European Union, the dynamics of financial crimes have completely changed because instead of physically robbing a bank, criminals use their good friend internet to earn their dirty livelihood. Instead of putting themselves on the line, they choose to sit behind a screen and steal people's hard-earned money while remaining completely anonymous. Hence, with the expansion of information technology, financial crimes have become easier and much larger.

Information technology has equipped political parties with new weapons for the purpose of propaganda. Through internet, more specifically social media, political parties push their narratives towards public.

In the past, narratives used to be spread through rallies and speeches. However, in the 21st century, a huge propagation of narrative is done through social media, and in the name of political participation, people are asked to fight certain ideologies. According to a press release by Oxford University in 2021, internet has allowed ideologues to possess specific tools and strategies that they need to mould people's opinion as per their wishes. Social media is a way to keep listening and seeing those ideologies that they need to listen or see. The constant repetition of videos and pictures subconsciously affect people's opinions. Hence, information technology has proven to be a tool for political propagation.

Information technology has also caused an overall increase in hate speech and violence against minorities. The reason is that it is easier nowadays for certain racial or religious elements to proliferate incendiary material against minorities. Evidently, such incendiary content result in the actual violence against the concerned minorities. As said by 'Pakistan Internet Landscape report 2022', "digital platforms are being used to spread hatred and accusations of blasphemy." Through social media, some hawkish



elements or individuals spread lies against people from other that belong to different race, sect and religion, and that content often lead to massacres. In summation, hate speech and violence has risen manifold due to an overall expansion of information technology.

Information technology cause people to waste time. Due to social media, and internet in general, people waste so much of their time and energy. Since human brain is wired in such a way that it repels pain, which is caused by better and productive activities such as reading and exercising, and enjoys pleasure, internet provides that pleasure to the brain. According to a study by John Mantas and Adrianna Magita in 2022, excessive use of social media traps people in an endless cycle of dopamine rush that causes them to procrastinate indefinitely. The repetitive consumption of content gives a certain sense of pleasure to people and resultantly, they avoid the pain that they may endure by doing some productive activity. Hence, information technology has allowed people to possess tools that are total wastages of time.

It has also played some part in the demoralisation of society. Unlike early 2000s when

people had to be over the age of adulthood to acquire DVDs of porn, ~~but~~ porn is <sup>just a few clicks</sup> rampant ~~on~~ away internet, and evidently, minors, underage individuals, are consuming it at an alarming rate. ~~This~~ Internet is riddled with ~~porn~~ explicit content. Resultantly, people are less likely to remain within moral bound and more likely to give into their sexual desires. According to a research done by 'Brigham Young University, the more porn a person is exposed to, the more likely he or she is to act in an unscrupulous manner. A porn consumer is less likely to control his sexual desires, and those desires may cause him to do some immoral acts. To sum up, information technology has increased immorality in society.

To ensure equitable benefit <sup>through</sup> of information technology, the world must ensure an end to the digital divide. It is necessary <sup>for</sup> <sup>all the</sup> people to possess similar internet connections and electronic devices. Through this way, ~~people~~ <sup>all the</sup> people would be able to receive similar education and would have opportunities to learn necessary skill sets. As of now, a huge population of the world is deprived of these facilities. According to the Pakistan Internet Landscape Report 2012, almost half



of the country's population lack decent electronic devices as well as internet connection. This leads to ~~an~~ a further stratification of society because a huge proportion of population is deprived of opportunity to use IT to learn, ~~a~~ get educated and earn money. To sum up, for people to enjoy complete benefits of information technology, digital divide must be ended.

The countries need to have proper surveillance infrastructure to identify and eradicate hate speech from digital space. There has to be a system to ~~know~~ identify the perpetrators of hate speeches and remove hateful content from internet platforms.

As of 2022, most of the hate speech against women, religious and racial minorities <sup>was</sup> ~~is~~ proliferated through internet. According to <sup>the</sup> Pakistan Internet Landscape Report 2022, compared to pre-internet era, there has been an eighty seven percent (87%) rise in hate speech in Pakistan. Since it is possible to post anything while remaining ~~any~~ anonymous, it has become extremely easy to incite people's ~~a~~ sentiments without facing any repercussions. Hence, It is impediment for countries to take measures to free online spaces from hate speech.

For the cyber space to be safe for every individual, it is necessary for the perpetrators of cyber bullying and harassment to get punished. Some sort of deterrence should be created put in place to keep people from being harassed or bullied. Although most countries have laws against cyber harassment, their implementation, ~~remain~~ in letter and spirit, remains halfheartedly done thing. Despite being convicted, most of the perpetrators of cyber harassment ~~cannot~~ face shorter jail time (Using Criminal Law to Tackle Cyber Harassment: Shmygalkhan, 2021). In addition to low conviction rate, shorter imprisonment term also cause such elements to harass people without having any fear. Hence, perpetrators of cyber bullying and harassment should face extreme repercussions for their actions.

Pornography and explicit content should be made completely inaccessible. Instead of just banning it, the world needs to make endeavours to put a complete stop to its existence on internet. It is not enough to put a ban on such immoral content because people still find way to unlock those sites. Therefore, the world should join its hands stop that content from being made in the first place. For example, according



to the latest statistics released by Google, ~~despite~~ although porn sites are completely banned in India and Pakistan, both countries are the top porn searching countries in the world. Instead of just banning these sites, actions should be taken to put an end to its existence. In summation, pornographic content should not exist on cyber space.

Political parties should not have their digital footprints on internet. They should be ~~abstained from~~ not be allowed to have their political cells on social media platforms. Although this might sound like a violation of liberal democratic values, yet it is <sup>the</sup> best way to protect people from being indoctrinated. Social media is used ~~to strip~~ by political parties to strip people off their abilities to think and formulate their own opinions on issues (Breaking the social media Prism, Chris Bail, 2021). They ~~can~~ repeatedly push their agendas to entrench their ideologies. Hence, political parties should only be allowed to use conventional electronic media to build their narratives.

In summation, expanding information technology has its pros and cons. Despite being extremely beneficial for human beings, it also causes damage to the society. It has completely revolutionised education and businesses. Similarly, it can be used to bring

about an end to corruption. However, it has also equipped supremacists and political parties with weapons to spread hate speech and propaganda respectively. It also causes people to act in an unethical way because they can easily access explicit content on the internet. Similarly, it also causes people to waste enormous amount of time. Therefore, proper use of the information technology should be encouraged.