PROJECT ON

"THE Growing Importance of Technology"

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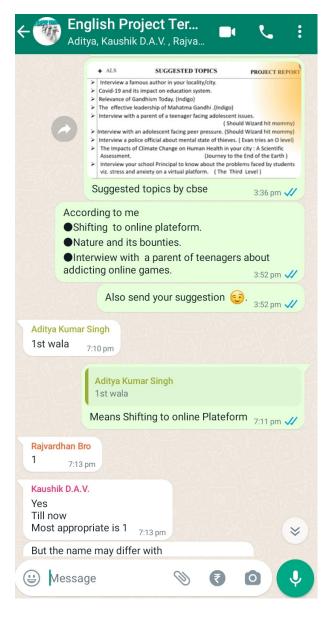
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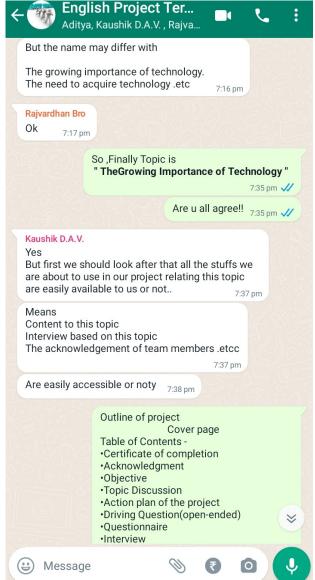


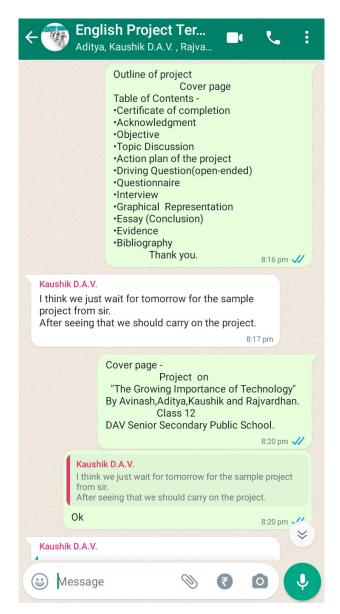
OBJECTIVE

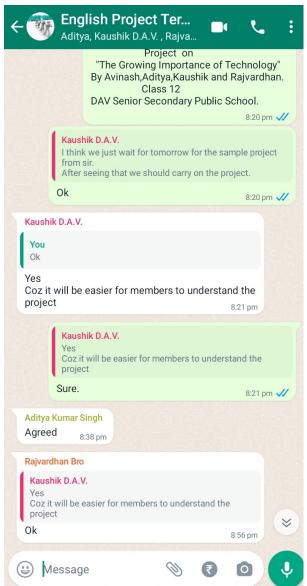
- 1. To study the emerging use of Technology in different fields.
- 2. To know how Technology helped human to grow in past few decades?
- 3. To study experience among people of using Technology.
- 4. To study the positive and negative impact of Tech World on the social life of Humans.

TOPIC DISCUSSION









DRIVING QUESTION

How is the growing important of Technology going to affect our lives?

HOW IS THE GROWING IMPORTANT OF TECHNOLOGY GOING TO AFFECT OUR LIVES?

TECHNOLOGY AFFECTING THE WAY OF LIFE

We all know that necessity is the mother of invention; so all invented technology came into place to meet the needs of people. Once developed, it changed our lives and behaviors in society, which may result in new ways of life. The people may simply use the technology to survive, or it may help the society to evolve and attain progress by creating a greater level of efficiency. At the same time, technological developments may even change the lifestyle and habits of people to the point of affecting human adaptive mechanisms and thus facilitating further technological evolution. Throughout the years, technology has kept providing us with amazing resources that can bring a vast difference in our everyday lives.

Every human society in the modern world has experienced technology as a utility and means of living more efficient lives. The infiltration of technology into our lives has been gradual and sometimes we may not even realize the extent to which technology has become part of our every waking moment. From the tiny to the enormous, every application of modern technology is opening a new world to us.

TECHNOLOGY IS EVERYWHERE

The field of communication has seen very quick and significant changes in technology. Communication is immediate regardless of if a person is right

there or across the globe. The education system has adapted new technology where students have the freedom to learn at any time and location of their choice through online facilities. The need for comfort and convenience has always been a strong motivator for the emergence of new technologies.

Access to any information is just a matter of a few clicks on the devices. The definition of entertainment has taken a new form with the latest technology. There has been a drastic change in our personal lives as we are open to numerous choices but we need to keep pace with their rapidly changing profiles. The most noticeable change in our lives has been the introduction of social media. This culture of getting involved in social networking through online mode has developed too fast. It allows a virtual entry into the lives of others in real-time whether they're friends, followers, or celebrities.

TECHNOLOGY CONTROLLING US

Technology has made our lives faster and convenient by changing the way we do everything. As we move forward, technology accompanies us. We are surrounded by technology and become dependent on it. As we look around us and realize how technology has positively changed our lives, we must also remember how technology is controlling our lives by influencing our thought processes, ideas, and preferences. The big question is, whether we are using technology or being used by technology?

Too much dependence on technology has restricted the scope to flourish our creative and intellectual abilities. We are shifting to quantity from quality in terms of time, emotions, and relations. Our lives are getting trapped within technology and we feel helpless without the support. Technology is like an elevator that can take us to new heights as we desire, but we have to be ready to use the staircase as well in case it fails.

The History of Technology and Society in Changing Our lives

Throughout history, each civilization, society, kingdom and empire has grown, risen and fallen with technology at its helm. Mesopotamia, the ancient so-called "cradle of civilization," saw the ancient Sumerians invent most of the basic items (technologies) that are still used today, including ships, the wheel, irrigation systems, metallurgy, and one of the oldest written scripts. Technology affects every part of a society, kingdom or empire, and is based on the available math and science of a society, affecting each sub-facet of a civilization, including its:

- Military
- Architecture
- Cities
- Health
- Communication
- Government
- Time/Calendars
- Record Keeping
- Language

Ancient technology, of which the oldest science, math and medicine is recorded in East, Southern and Northern Africa, such as Adam's Calendar and the oldest math-based calculator, helped the ancient kingdoms to keep time, communicate numerical quantities, and helped them to govern their economies and grow in size. Technology also helped to shape agricultural practices, which helped ancient societies to thrive, and formed the backbone of the powerful economies of antiquity. The invention of irrigation systems, architectural structures, the invention of glass, and the use of baked clay all played a part in the development of ancient cities and kingdoms. After the industrial revolution, these landmark inventions have evolved into mega cities, sky scrapers, and farms that feed millions today. Technology also played a part in the creation of empires in globalization and in ancient trade, as chariots, ships, and the ancient "Silk Road" all helped kingdoms trade, become wealthy and powerful, and to spread in influence, resulting in the conquering of kingdoms and

the linking together of different civilizations. Technology has even affected how the most basic essence of human communication - language - has developed. For instance, some ancient languages, such as the still-spoken Basque language, has root words for modern tools linked to the word "stone," indicating its ancient, potentially stone-age origins. Though it is a language isolate, hypothetically, if such language changed the roots of English words, for instance, the invention of stone tools eons ago could potentially affect the spoken language of English today.

In fact, two of the most important examples of how technology helped change human societal behavior and perhaps evolution is the development of stone tools and the ability to harness fire. Both aided in the survival of early hunter societies that created the ancient behaviors that Homo sapiens are known for (the hunter-gatherer model before the development of agricultural societies), effectively changing the course of our evolution by even changing the genetics of whole societies (genetic flow).

From antiquity to now - from the Egyptian and Kushite empire, to the Aksumite and Chinese empire, to the Assyrian, Babylonian and Persian empires, to the Greek, Roman, Mali and British empires - all such advanced kingdoms grew into empires due to their strong economies (resulting from advanced technology), strong militaries (resulting from advanced technologies), and powerful communication/transportation abilities (resulting from advanced technologies). It could be said that history has been written by the invention and use of advanced technology.

Throughout human history and after the industrial revolution, humans changed from being hunter-gatherers to more sedentary creatures whose technology automates many tasks for them, resulting in more sedentary-based chronic illnesses and unhealthy diets, while also making life more convenient and "easier." While in the ancient world it could take months to send a message from one end of the globe to the other - or to travel from one country to another - today, messages can be sent almost instantly via the Internet, and it is possible to travel around the world in a fraction of the time via airplanes.

How has Technology Affected Human Life?

Ultimately, technology has positively affected human life from antiquity until now by solving problems associated with everyday life, and making it easier for different tasks to be completed. Technology has made it easier to farm, more feasible to build cities, and more convenient to travel, among many other things, effectively linking together all countries on earth, helping to create globalization, and making it easier for economies to grow and for companies to do business. Virtually every facet of human life can be carried out in an easier, more effective, and quicker fashion via technological solutions, resulting in less problems in one way, and more problems in another.

Positive Impact of Technology on Society

While technology has had several less-than-desired impacts on society as a whole, there are potentially more positive impacts on society than negative impacts. Such impacts have made life easier for multitudes, and have gifted many with the resources, education and tools needed to live a better life. Such impacts have greatly affected agriculture, transportation, communication, and the education sectors within societies globally.

MECHANIZATION OF AGRICULTURE

Ancient agricultural practices have seen a radical change with the mechanization of agriculture. Such mechanization simply means that machines and technological systems (including robots) have replaced ancient farming systems such as work animals and manual labor. This has resulted in more automated, highly efficient farm practices, producing far more abundant food resources for more people.

Improvement of Transportation

While it is still possible to walk to most places on earth, the advent of trains, buses, cars, airplanes, speed boats, etc. has made it feasible for people to travel to and from their required destination in much less time. Adding to that are ridesharing apps, such as Uber and Grab, which have made it incredibly easy to get to a destination very quickly and inexpensively. The backbone of

any society is its infrastructure, which includes both telecommunication and transportation systems, so the evolution of both systems has greatly helped to shape the modern world.

Improvement on Communication

Telecommunication systems are a very crucial part of any advanced society. From using bird messages and smoke signals, to the faster, more efficient, more effective, and more global system of email, phone calls, and app messaging allows for people to stay connected in a globalized world. From Skype to VOIP to global telecom carriers, it is highly feasible for people to travel the world and stay connected, and even possible for remote workers or international businesses to utilize video calls and conference calls via the Internet to keep their businesses going without interruption.

Improving the Education and Learning Process

In the modern world, it is as easy as utilizing a Google search, podcast, or YouTube video to learn virtually any skill that one needs to succeed, whether it be a new language, a programming language, a technical skill, or an obscure part of history. As opposed to having to learn from printed paper books, now ebooks and even online seminars allow people to learn in a faster, more efficient fashion, and with the convenience of mobile computer systems/apps. Online gateways and websites have also allowed institutions of education to offer educational materials in an all new, streamlined manner, helping students to master materials using computer systems that they are familiar with, and also allowing them to consolidate their educational materials in a single place.

NEGATIVE IMPACT OF TECHNOLOGY ON SOCIETY

The depletion of fossil fuels, the need for more rare-earth elements, the use of rare elements such as gold, coltan and tantalum (as is required for modern electronics) - which have often helped fuel wars in mineral rich continents and countries - and the burning of fuels potentially impacting Global Warm-

ing are all very real issues created by an increasing use of technology.

Depletion of resources

One of the most troubling issues associated with the increasing use of technologies is the depletion of natural resources, whether that be rare earth elements/minerals, food sources, or fossil fuels. As noted by Karehka Ramey (2012), the use of corn to produce fuel in the form of ethanol, for instance, can greatly reduce corn/food supplies globally. Additionally, the world's hunger for more and more electronics can greatly or completely deplete the world's resources of gold, coltan, and other rare minerals, while helping to fuel conflicts around the world where those "blood minerals" are found and often fought over.

POPULATION INCREASE/HEALTH CONCERNS

Despite the invention of contraceptives, the human global population has exploded, in part due to better technologies that have allowed for longer life spans, more abundant sustenance availability, and the management of resources that have allowed for more effective reproduction. Ironically, the presence of more humans is partly related to resources being more depleted, but also resulting in more effective management being implemented. However, the increasing usage of technology has affected some health epidemics that previously were unheard of, including the development of societal sedentary lifestyles (such as constant sitting), excessive exposure to blue light from electronic devices, and constant exposure to EMFs, which can result in chronic illness such as immune system dysfunction.

POLLUTION INCREASE

Along with the depletion of resources, one of the most notable negative impacts of technology is the great increase in pollution due to industrialization. This includes fossil fuel emissions, global warming, and cities around the world whose factories emit massive quantities of solid and air pollution/waste, resulting in large increases in cancer and chronic illness incidents. And while climate change is a highly controversial subject, many scientists agree that

global warming is very real and is a threat to the human species.

Areas in which Technology changed our lives

From the dawn of civilization, technology has changed - sometimes radically - the way people have lived, how businesses have operated, how youths have grown up, and how people in society, as a whole, have lived day to day. This includes facets of societal behaviors such as communication, travel, learning, business, convenience, and health. Technology has typically had both positive and negative effects on society, regardless of how drastic the effects on human behavior have been.

LIFESTYLE

If the modern lifestyle could be characterized in a single word, it would have to be "convenience." From shopping online from one's couch and having goods delivered next-day to the appropriate doorstep, to joining friends for a meetup via a social app without having to leave the house, to booking a flight and hotel across the world for travel the next day, tablet computers, wearable computer systems (I.e. smart watches), and smartphones allow people to perform tasks in a moment, on robust apps via the Internet, that previously would have required going in person. Essentially, technology has helped people to carry out complex tasks in a simpler, quicker manner.

HEALTH

Smart bracelets and health apps have allowed a world increasingly plagued by chronic illness to monitor, analyze and alter personal health habits via computational systems. Hospital infrastructures now include computer systems with advanced security as a norm, while advanced apps may allow doctors to wirelessly obtain health info from patients via WiFi-enabled nano-pills, and even the Sci-Fi-like gadgets, such as the medical tricorder, are being developed for quick medical assessments. Additionally, many hospital systems have online gateways that allow patients to obtain their medical records, or communicate with their physician online, nearly instantly.

PRIVACY

Technology has had a somewhat marred history with regard to the issue of privacy. Most people view cameras, intrusive apps, smart devices like smart homes, and Alexa), and spy-devices as having helped to increasingly compromise the privacy of multitudes. However, while this is partly true, technology has also increased the ability for end-users to have encrypted web sessions, and to send encrypted messages to other users. The evolution of cryptography has helped to somewhat maintain digital privacy in a digital world.

However, we must note that the art of cyber hacking would not have been possible if not for the evolution of computer networks and computer systems., This generation has seen a frightening increase in security breaches, hacks, and malware/ransomware attacks that have compromised the privacy of millions.

ATTITUDE OF THE YOUTH

The younger generations have typically been most impacted by the rise of technology. While the older generation might have grown up using technology for certain, critical tasks such as email, millennials and generation Z typically use technology for virtually every task, and are often overexposed to EMFs and blue light. This includes using tablets in school, using web gateways to complete homework, and using YouTube to learn a language, for instance, which is a stark contrast to how the previous generation learned. Due to an increasing reliance on technology, the younger generation is more prone to care less about privacy issues associated with technology. At the same time, the younger generations are more likely to have a better understanding of how the Internet and technical systems work, which could fill in the massive gap associated with industries needing technical personnel.

BUSINESS

Businesses, both large and small, have been impacted by technology perhaps more than any other sector within modern societies. Virtually every successful technological innovation has helped to increase business opportunities, has shaped business models, and has resulted in the production of new products and services, which also results in the creation of new imports/exports on a national level, and international, globalized business opportunities. Technologies that have changed the way businesses operate include:

- Printing Press
- Computer
- Personal Computer
- Fax Machine
- Email
- Social Media
- Servers
- Networking
- Internet/World Wide Web/TCP-IP
- Cryptography
- Business Intelligence
- Cloud Computing
- Big Data
- Artificial Intelligence
- Data Science

The results have been increased automation, better efficiency, less overhead, and increased bottom/top lines of SMEs and larger enterprises. Completely new executive roles have arisen to handle the use of new technologies, including the CDO (chief data officer), CIO (Chief Information Officer), Chief Digital Officer (CDO), and Chief Marketing Officer (CMO), to name a few.

Using the Internet for inbound marketing, and social media for reaching prospects and leads, as well as e-commerce, have all resulted from the World Wide Web, which has also spawned new working roles such as remote working, telemarketing, and the evolution of the digital nomad.

Human Behavior

Human behavior is as complex as it is mysterious, but as sociologists and anthropologists study human behavior within a societal context, it is clear that technology has helped to mold and evolve human behavior as the human species continues to increasingly depend on technology on a daily basis.

As creatures of comfort, the ease of use, and the convenience that technology provides calls for a steady adoption of smartphones, social media, and Internet-connected devices, while WiFi hotspots become a must in virtually every establishment within the hospitality industry.

People increasingly look to apps to help them with virtually every task possible - from learning a language, to finding a place to rent, to finding a date. There are many positives to technology, yet one negative is that human behavior has become so reliant on technology that people have the potential to become lazy, and unable to survive or function without the technology that so many have become accustomed to. Though it is debatable, some believe that convenience typically comes at a price.

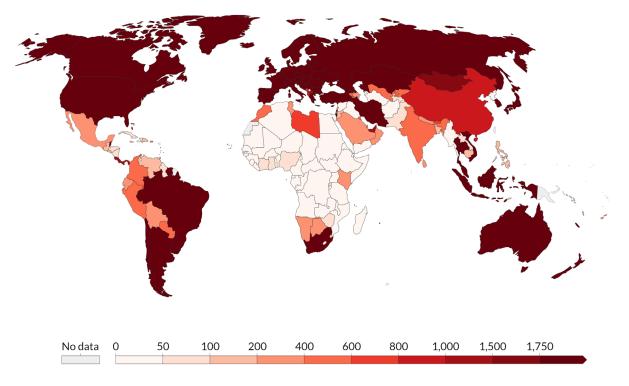
THE BOTTOM LINE

Technology has had a tremendous, almost unimaginable impact on human life from the dawn of civilization. While it is near impossible to gauge the entire impact on human society, technology clearly has done a lot to make human life easier, more enjoyable, and more convenient. However, when misused or produced irresponsibly, it has had the potential to have devastating consequences, and thus is not without its drawbacks. As humans venture into the future, it is increasingly important for engineers to operate in a more conscientious and responsible manner, and for end-users to create a balance between the usage of technological systems with old-fashioned techniques for getting things done in a more healthy, productive manner.

Secure internet servers, 2020



Number of secure internet servers, measured per one million people. Secure servers are servers using encryption technology in Internet transactions.



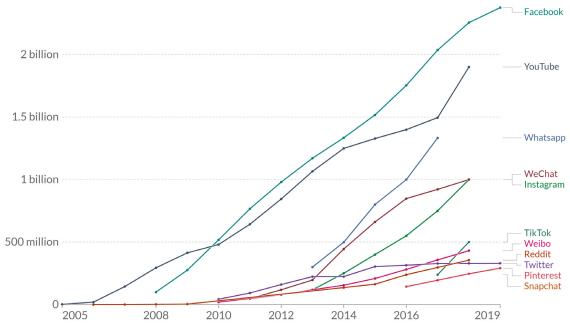
Source: Netcraft and World Bank

 $OurWorldInData.org/technology-adoption/ \bullet CC\ BY$

Number of people using social media platforms, 2005 to 2019



Estimates correspond to monthly active users (MAUs). Facebook, for example, measures MAUs as users that have logged in during the past 30 days. See source for more details.



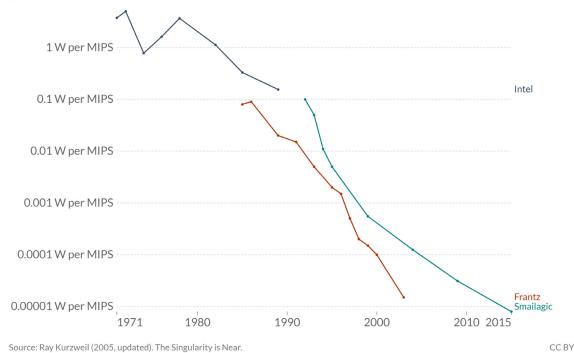
Source: Statista and TNW (2019)

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Computing efficiency, 1971 to 2015



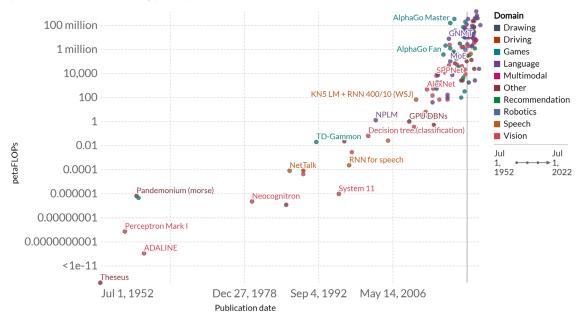
Computer processing efficiency, measured as the number of watts needed per million instructions per second (Watts per MIPS).



Estimated computation used in large AI training runs



Selection of notable AI systems that used a large amount of computation in training. Computation is measured in petaFLOPs, which is 10^{15} floating-point operations.



Source: Sevilla et al. (2022) Note: The estimates have some uncertainty but are expected to be correct within a factor of \sim 2.

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QUESTIONNAIRE

- 1. What are the changes we see in the tech world?
- 2. How technology is helping the nation?
- 3. Do we feel of being close to someone through online connections who is actually far from us
- 4. How it's helpfull in building a educated one?
- 5.Do you feel of being close to someone through online connections who is actually far from you?

INTERVIEW

Me: What are the changes we see in the tech world?

Mr. Arun Goel-Tech world has provided everyone a better way to understand our surroundings, to interact with every thing with the fullest knowledge of it. Everyone is now going to be literate in their desired fields.

Me: How technology is helping the nation?

Mr. Arun Goel -At present time the nation is interestingly growing with the use of technology. The necessary matters can be discussed very easily through online way without any paperwork saving our wood resources. Important notifications can be shared with the authorities fastly and many more.

Me- Do we feel of being close to someone through online connections who is actually far from us?

Mr. Anun Goel- This facility of technology is greatly admired by the users .Everyone can just connect to his/her relatives, lovable and others making there info sharing beneficial and this made someone greatly feel of being close to someone who is actually far from him/her.

Me- How it's helpfull in building a educated one?

Mr. Arun Goel- It is said that internet is a sea of knowledge, the more you go deep in it, the more you will be educated. Internet provides us the answer of each and every question. The proper use of internet for learning of our aims just enhance our blocks in achieving our aim. also with the facility of minimum fees. So it's serves as a building block of an educated man.

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