Emerging Technology and Students and Society

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Abstract: This study delves into how society is keeping tabs on these young people who need everyone's attention by guiding them toward the right educational practices, as well as the implications of new technologies on their financial, spiritual, psychological, and social health. This research highlights the significance of collective action in minimizing the risks and reaping the rewards of technological innovation. While these tactics are widely used in business and government, this research highlights the need for personal responsibility in their ethical application.

Keywords: Emerging Technology, Historic Relationship, FinTech.

1. INTRODUCTION

Our species feel an ever-increasing sense of helplessness and helplessness as technological advancements continue to occur. People who live in today's technologically advanced society are not only able to make effective use of a wide variety of technologies but they are also compelled to do so. This is because people in today's society are expected to live in a technologically advanced society. This is due to the fact that people are expected by society to remain current with the most recent advances in technology. Traditional social norms are on the verge of extinction and will do so in the not-too-distant future as a direct consequence of the rapid development of capabilities afforded by new technologies. In spite of this, contemporary societies are coming to terms with the reality that in order to solve challenges and create progress, they want information that is on the cutting edge of the disciplines in which they operate.

The origin of the word "technology" may be traced back to the Greek words "techno" and "logy," both of which signify "practical knowledge" or "expertise." Together, these words form the etymology of the English word "technology." The term "technology" is an English word. These Greek terms are the origin of the word "technology" that is used in English. The processes that have enabled human civilizations to grow more effective at addressing day-to-day challenges and satisfying essential demands are referred to as "technology." The

mechanisms that have made it possible for human civilizations to grow more advanced are referred to as "technology," and the name "technology" refers to those processes. There is general scepticism about the spread of this technology because of the increased risks, hazards, and criminal conduct that are associated with it.

Despite the harm it is causing to interpersonal ties in both public and private settings, modern technology, and social media in particular, is gaining ground in modern relationships. This is the case despite the fact that it is gaining ground. Despite the fact that it takes place in both public and private settings, this remains the case.

A highly developed grasp of technology concepts is not only vital for success in the modern world, but it also works as a marker of a sophisticated civilization. This is because technological concepts are becoming increasingly intertwined with almost every aspect of human life. This is due to the fact that a profound comprehension of various technological concepts serves as the foundation for the development of new technologies. As a result of the fact that a developed culture is a mirror of the culture of the society in which it exists, it is one of the distinguishing qualities of our era. This is because a developed culture reflects the culture of the community in which it exists. It has permeated every element of society in order to assist individuals, improve the overall quality of their lives, and broaden their social networks so that it is possible for them to connect with more people.

As a direct result of this, a great number of individuals are concerned about the potentially catastrophic impacts that may be brought about as a result of the rapid spread of technology. There are a variety of distinct communities located all over the world that are currently in jeopardy as a direct result of irresponsible leadership. Because education is of such critical significance, it is in the best interest of everyone to make use of cutting-edge technology whenever and wherever it is even somewhat practicable to do so. This is because education is in everyone's best interest.

This research will assist in educating the general public on the right utilization of emerging technology, the ramifications of which can have a significant impact on society. The general public will benefit from the education that this research provides regarding the correct application of developing technologies.

Literature Review
Baker, M.A. (2023) said the psychological effects of technology. Addicts to technology may feel alienated and lonely since they spend more time with their gadgets than with others. It also increases anxiety, tension, and depression.
Mohammad Bani Younes (2015) undertook a study to determine the harmful effects on society of improper use of modern technologies. The study also demonstrated the necessity of uniting all efforts to safeguard the entire society from the risks of contemporary technology and cooperate to effectively use its riches.
Ashwin D. Bhagat (2021) conducted a study that shows how technology has negative effects on data storage, identity, security, the future of hyperconnected youth, the effects of data

breaches, including their causes and outcomes, as well as the overall psychological impact on people and society.

Andrea Loubier and and Yogesh Kumar Sharma (2021) studied that technology by itself is neither good nor evil. According to the research If technology advancements are handled responsibly, they can only benefit society, but excessive usage of digital tools, such as smart devices and applications, can occasionally have tragic results.

Siddhartha Paul Tiwari (2022) defined emerging technology as generally understood to refer to a technology that has not yet reached its full potential. In his research, he mentioned the impact of emerging technology on Culture and Societal Norms, The Education Sector, Privacy and Accountability, Frauds and Scams, and The Future of Governance.

Stephanie Walden (2020) conducted a study on Fintech. The researcher showed how society is benefiting from Fintech. The author also mentioned how consumers, businesses, and all sorts of financial services firms are increasingly turning to imaginative combinations of software, hardware, and data to create and deliver both new and traditional financial products and services.

2. METHODOLOGY

This research is qualitative in nature. Required data related to societal impact of technology were collected from both primary and secondary sources. Relevant secondary data were collected from books, websites, reports and journals. Primary data were collected from a total 70 students of Jahangirnagar University using a pre-determined questionnaire.

In this study, questionnaire survey has been used. Data has been collected by Google Questionnaire method. The questionnaire has been pretested or verified before making the final questionnaire.

2.1 What is Emerging Technology

The term "emerging technology" is frequently used in discussions of technical progress to refer to innovations that have not yet attained widespread adoption. In terms of creating new theoretical frameworks and putting them into use (Rotolo et al., 2015). In addition to being completely new (both in terms of their applications and their origins), emerging technologies are also characterized by rapid growth, coherence, major influence, uncertainty, and ambiguity. Different academics have used different terminology to characterize emerging technologies, but they all share a commitment to the advancement and diffusion of new ideas. Emerging technologies are those that show promise for considerable social and economic effects and a degree of stability over time. Since the socioeconomic domain(s) shapes the make-up and pattern of interaction between individuals and institutions, it exerts considerable sway over the general domain(s).

Examples of fast-evolving technologies include drones, educational technology, machine learning, autonomous cars, nanotechnology, genetic engineering, robotics, and artificial intelligence (Siddhartha Paul Tiwari, 2022). Better functioning markets, governments, and societies necessitate cutting-edge products, processes, services, technology, literature, and economic models.

Businesses need to keep an eye on "emerging technologies" in their industries and use them as soon as feasible if they want to stay ahead of the competition (Wikipedia Contributors, 2019). Predictions regarding the economic feasibility of several developing and overlapping technologies are all over the place, despite the fact that they are poised to have a substantial impact on society in the not-too-distant future. Emerging technologies are often viewed as the source of the next big technical breakthrough. There will be far-reaching ramifications for society and the quality of life as a result of the advancement of such technologies.

2.2 Historic Relationship of Technology to Social Change
The idea that technology can have an effect on society is not new. Examples of such momentous inventions include the wheel and the steam engine. As time goes on, it becomes increasingly difficult to imagine modern living without the pervasive technology that has become the norm (Loubier, 2021). Domestication, agriculture, industry, and information technology are the four "social revolutions" commonly used to describe the technological developments of the last century.

The vast majority of sociologists, if polled, would likely all agree that we are currently living in the "information age," even if they didn't all use the same terminology to describe it. The importance of information in today's global economy is comparable to that of agricultural products and industrial output. Global cultures have been profoundly impacted by the exponential rise in international trade and social connections brought about by the advent of digital information and communication.

2.3 Impact on Culture and Societal Norms
Without a doubt, technology has helped us accomplish things our forefathers could only have dreamed of. But are the only beneficiaries of technological progress human beings? Or maybe the outcomes of technological progress are muddy.

The beliefs, customs, and values of a group of people are indicators of their culture. Culture studies its own members to get insight into its own thought patterns, behavioral patterns, and creative endeavors (Loubier, 2021). Whether it's language, art, dance, education, or religion, technology has had a profound impact on every facet of human society. New technologies are evaluated in light of a society's cultural norms. Technology's ubiquitous impact dictates the historical trajectory of human cultures. The growth of technology and the preservation of cultural values might come into conflict when the former is not in tune with the latter. In the technical world, age, education, and background are not obstacles to communication when logic and emotion are in harmony (Watts, 2023). People use technology to get what they want, but if there are no limits, norms, or penalties, society could suffer.

2.3.1. Merits of Technology
It's easy to lose sight of how breakthroughs and discoveries promote the progress of humanity as a whole as more and more of our lives go online. Technology, though, is a big assistance, for instance:
- Mechanization and increased automation have allowed farmers to increase their crop yields.

- Transportation innovations like airplanes, cars, and ships have made long-distance travel a breeze.
- Through their ability to bring people together from all over the world, online platforms, video calling, and 5G technologies have revolutionized the art of communication.
- People all across the world are increasingly relying on radios, televisions, and other forms of electronic media for their news and information needs.
- People from all walks of life and all corners of the globe now have easier access to higher education because of online learning environments, electronic curricula, and digital learning management systems.

2.3.2. Demerits of Technology
Unfortunately, not all advances in technology end up being beneficial. Some instances are as follows:

- Negative consequences on mental health have been linked to overuse of social media, smartphone addiction, and not spending enough time interacting with real people in person.
- Due to the lack of non-verbal cues, miscommunication and violations are commonplace in online conversations.
- Those whose primary social outlet is online may find that this has unintended consequences for their relationships with others.
- Teenagers who spend an unhealthy amount of time glued to their phones and other electronic devices may develop social skills and lose the motivation they need to connect with their peers in the real world.
- Many gamers get sick from spending days in front of their screens, which is bad for their health.
- Teens who spend too much time on social media platforms like Instagram and TikTok may develop serious mental health issues if they constantly compare themselves to the unrealistic standards of beauty they see there.
- Some people do their research using AI technology and paraphrasing app which are immoral.

2.3.3 The Psychological Impact of Technology
One's own free will determines whether or not one will make constructive use of technology. When people rely too much on their gadgets, they run the risk of becoming dependent on them. Our reliance on technology puts our economy and way of life at risk. Those who are addicted to their phones, computers, or other electronic devices often experience anxiety, depression, and a desire to isolate themselves (Bhagat & Sharma, 2021). Addiction is prevalent among anxious young people. Addiction to technology produces endorphins and dopamine and disrupts biological and hormonal processes, making it similar to addiction to alcohol and drugs. When teenagers are denied access to their electronic devices or the internet for a lengthy period of time, they may exhibit withdrawal symptoms such as rage and restlessness (Baker, 2023). Anonymity and a lack of interest in once-enjoyed activities are common among those who are addicted to the Internet. Many victims who are struggling with shame, powerlessness, or concern about seeking professional help turn to self-medication as a means of coping. Many modern children and teenagers rely on technological devices to combat feelings of loneliness

and isolation (Younes & Al-Zoubi, 2015). In today's internationally interdependent and competitive sphere, this is of paramount importance. A student's long-term performance in school may suffer if he or she spends too much time engaged in technological activities and becomes dependent on things like video games.

2.4 FinTech and its Impacts on Society

The term "fintech" is frequently used to describe how advancements in information technology and computer science have improved and computerized financial services for both individuals and corporations (Walden, 2020). The abbreviation "fintech" means "financial technology." Products and services within the realm of financial technology have many mechanisms. Recent innovations in areas as disparate as credit risk prediction and hedge fund management share common threads in using machine learning algorithms, blockchain technology, and data science. In order to help businesses like fintech navigate the complex regulatory landscape, a subset of regulatory technology (regtech) has been developed (Subhedar, 2023). Apps for payments, peer-to-peer lending, investing, and digital currencies are all examples of fintech. Some of the financial technology that has an impact on society are as follows:

Mobile Banking

Many banking services are now available on mobile apps for customers of banks and other financial institutions. Regardless of where they happen to be, app users can manage their finances and make payments with ease (Chen et al., 2020b). With mobile banking, you can easily manage your finances, including opening new accounts, transferring funds, and making payments. Many customers, especially those who rely on smartphones, are on the hunt for easy and convenient remote banking access.

Digital Payments

In a digital payment, one person sends money to another via a digital device, such as a smartphone. The UPI and other forms of digital payment are increasing in use (Khaitan, 2022). This category includes the likes of credit cards, debit cards, prepaid cards, bank transfers, and mobile money.

Blockchain

"Blockchain" is short for "blockchain technology," which describes a decentralized, distributed, immutable digital ledger used to record transactions between computers. Communication between the blocks allows the data to be preserved in a more secure environment. Blockchain, a distributed ledger, can be used to record and transfer digital assets (IBM, 2023). Since Bitcoin is widely used in blockchain transactions, its rising popularity can be linked to the development of the fintech sector generally.

Insurtech

The term "insurtech" refers to the application of information and communication technology to the insurance sector. The use of the phrase "insurtech" has skyrocketed in the past few years (Marano et al., 2020). You can purchase insurance without leaving your house, as many

companies now offer their services online. Electronic claim submission is also available to the general public.

Personal Finance Management

Consumers with varying financial knowledge have benefited from fintech's increased ease of use. The user-friendly solution provided by the fintech company simplifies budgeting and budget analysis (Peek, 2020). Users can also gain from enhanced budgeting resources.

2.4.1 Societal Impact of Fintech

The traditional banking system and society at large have been profoundly impacted by the growth of financial technology. The modern financial services provided by fintech companies include online banking, peer-to-peer lending, and digital payments. Instant and straightforward monetary dealings are now possible because of the proliferation of mobile phones and the Internet (Beck, 2020). The ease with which money can be transferred is a major selling point of today's internet buying. Money transfers between bank accounts are prompt and inexpensive. The effects of the blockchain on the banking and finance industries may be far-reaching. Banks and other financial institutions have been accepting deposits and lending money for a very long time. However, with the support of the fintech industry, significant progress has been achieved towards financial inclusion. Improvements in financial technology have sped up and simplified the process of exchanging one currency for another. Banks are being disrupted by financial technology (fintech) companies that make it simpler for users to complete a variety of banking activities online. At first, many were resentful of traditional remittances since they were inconvenient, time-consuming, and costly. Organisations can potentially benefit from the internal and external streamlining services of financial technology providers (Bulger & Rouen, 2022). As a result, the organisation can continue operating regularly despite having fewer physical locations.

Many financial institutions are merging branches as a result of the rising demand for omnichannel banking. Nowadays, the term "neobank" is synonymous with "online bank" in the minds of the general public. One indicator of the expansion of Fintech financial services is the stratospheric rise of e-wallets. Popular examples of digital currency are PayPal and Apple Pay. These wallets can be used for a wide variety of purposes, including online shopping, bill payment, and international money transfers. The meteoric success of e-wallets has spurred financial institutions to recognize a chance to collaborate on the introduction of innovative technology.

For startups and one-man operations, the advent of FinTech marks a turning point. It is notoriously challenging for fledgling businesses to secure loans from well-established financial institutions. However, fintech has made a significant impact, especially in helping small and medium-sized businesses (SMEs) streamline financial operations and keep credit lines open.

2.5 How to Reduce Negative Effects of Technology

- We shouldn't rush to digitize everything without carefully weighing the costs and benefits.
- Every effort should be made to reduce the time spent in front of a screen, therefore monitoring tech use is essential.

- A lot of time may be saved by adopting an all-in-one solution that includes email and instant messaging rather than downloading and using a dozen different programs for different purposes.
- Instead of wasting time indoors with computer games or social media, find an interesting paper book and spend some time reading it outside. You can tend to your garden or spend time with your family instead of sitting inside watching television.

2.6 Data Analysis
Q1. How much time do you spend on social media daily? (i.e. Facebook, YouTube, Instagram, and others)

How much time do you spend in social media daily? (i.e. Facebook, YouTube, Instagram, and others)
70 responses

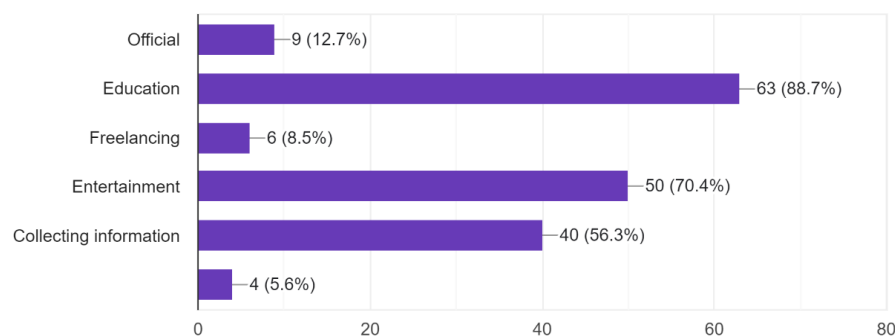

- 1-3
- 3-6
- 6-10
- More than 10 hours

Interpretation: In the sample out of 70 students, 57.1% of students were observed to be using social media for 1-3 hours a day. 28.6% of students said that they spend 3-6 hours on social media in a day. 8.6% of students said that they spend 6-10 hours on social media in a day. And 5.7% of students said that they spend more than 10 hours on social media in a day.

Q2. What are the purposes of your use of the internet?

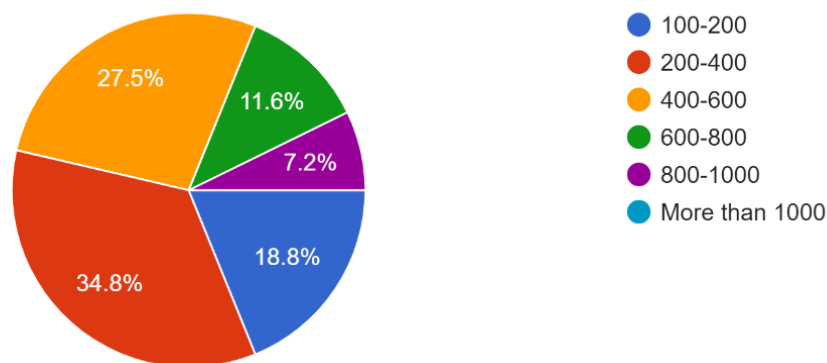What are the purposes of your use of internet?
71 responses

Interpretation: In the sample of 71 students, 63 students said that they use the internet for the purpose of education. 50 students said that they use the internet for entertainment. 40 students said that they use the internet to collect information. 9 students said that they use the internet for official purposes. 6 students said that they use the internet for the purpose of freelancing. And 4 students use the internet for other purposes.

Q3. How much you spend on broadband and cellular network in a month? (In Taka)

How much you spend on broadband and cellular network in a month? (In Taka)
69 responses

Interpretation: In the sample of 69 students, 34.8% of students said that they spend 200-300 taka on broadband or cellular networks in a month. Out of 69 students, 27.5% students said that they spend 400-600 taka on broadband or cellular networks in a month. 18.8% of students said that they spend 100-200 taka on broadband or cellular networks in a month. 11.6% of students said that they spend 600-800 taka on broadband or cellular networks in a month. 7.2% of students spend 800-1000 taka on broadband or cellular networks in a month.

3. CONCLUSION AND RECOMMENDATION

Changes in lifestyle and economic status are inevitable results of the spread of innovative technologies. This breakthrough has several potential benefits, including the potential to combat global problems including pandemics, natural disasters, and health crises. Now, more than ever, consumers are willing to give new technologies a shot. Regarding issues like human responsibility, equity, trust, and security, we have no idea what this implies.
But it's not hard to foresee the far-reaching effects of technological development. Preparing the application's release in advance can boost compliance, transparency, and ethical standards. The public effects of these technological developments need more research.
Because of technological advancements, we have grown acclimated to a fictitious world at the expense of the real one. The more time we spend on social media, the more dependent we get on our phones. Those of the next generation who learn to effectively employ technology without sacrificing their humanity will be the most successful. Despite concerns about the potential psychological implications of technology on individuals and society, we still need to find ways to lessen our reliance on the internet.

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