

ARTIFICIAL INTELLIGENCE AND DIGITAL REVOLUTION ARE NOT AS USEFUL AS THEY SEEM

Excellent
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I- Introduction

II- Deciphering Artificial Intelligence and Digital Revolution
How AI and Digital Revolution are ~~as~~ useful as they seem.

III- The Beneficial Impacts of the AI and Digital Revolution

1- Medical Revolution

- i- AI algorithms interpreting reports ✓
- ii- Magnetic Resonance Imaging ✓
- iii- Computed-Tomography Scan ✓
- iv- Positron Emission Tomography Scan. ✓
- v- Decreasing health-sector burden. ✓

2- Booming Industrial Sector

- i- Fast computational activities. ✓
- ii- Flawless and aggrandized output ✓
- iii- Robots: tireless beings ✓
- iv- Philips: case study ✓

3- Technological advancements

- i- Satellite-aided images ✓
- ii- Television broadcast ✓

The Internet

- iv- Global Positioning System ✓
- v- Geo-Information System. ✓
- vi- Remote sensing. ✓

- 4 - Comforting mundane endeavours.
- i - Electronic devices for washing, cooking, cleaning.
 - ii - Advanced security systems.
 - iii - Innovative lights' systems.
 - iv - Alexa: A robot.

- 5 - Decisive Public Opinion
- i - Polls.
 - ii - Surveys.
 - iii - Social media.
 - iv - Influencing public policies.
 - v - Arab Spring 2011.

- 6 - Online voting system.
- i - Biometric record of NADRA.
 - ii - Electronic voting system.
 - iii - Compiling results speedily.
 - iv - Mitigating rigging allegations.
 - v - Foreign-residing citizens; Inclusive democracy.

- 7 - Educational Prospects.
- i - Spreading education to the remote areas.
 - ii - Outreach to far-flung regions.
 - iii - Zoom, Google Meet.
 - iv - ChatGPT; an aid for students.
 - v - Shunning away Need for travelling for miles.

- 8 - Aiding Climate Change Adaptation
- i - Horrific projections materialized in a video by AI.
 - ii - Weather forecast.
 - iii - Helping in strengthening Both Hard and Soft measures to mitigate Disaster Management.

IV-How AI and Digital Revolution are not useful.

- i- Advanced weaponry.
 - a- security dilemma.
- ii- Space militarization.
 - a- ^{The} USA, the UK, Russia and India on moon.
- iii- Ethical Implications.
 - a- Sexual gratifications by robots.
- iv- Literature theft.
- v- cyber crime on the rise.

V- Measures to propagate beneficial AI and Digital Revolution and mitigate its harmful impacts.

- i- Regulation of AI and Digital Revolution arena.
- ii- Impeding the ethical dilemma.
- iii- mitigating copyright issues.
- iv- Adequately addressing the cyber security.

VI- Conclusion.

Man at last succeeded in inventing the beings superior to him, having superfast task accomplishing capabilities and human-induced intelligence, endowing him with comforts and serenity of leisure time and bliss of revolutionized life. The digital revolution squeezed the globe into a small village where everything became accessible and just a click away. It blessed man with technological inventions and innovations that revolutionized the medical, educational, industrial, social media and technology. It aided man in viewing

the world while sitting in his own room, enabled him to get enlightened with the recent activities by just searching for it in his computer or laptop. Its beneficial impacts benefitted the mankind in almost every domain but a surprising thing was yet to come. The invention of Artificial Intelligence startled its ~~masters~~ masters, declaring it to be the most significant invention of ^{the} 21st century, by its incredible potential and advantageous prospects. The artificial intelligence and digital revolution are useful because of their beneficial implications encompassing not only mundane activities but also specialised sectors, blessing his masters with ease, comforts, proficiency and efficiency in all fields of life. Its beneficial impacts must be materialized while shunning away its adverse impacts.

The Artificial Intelligence (AI) is attributing robots with human-like intelligence enabling them to make learned decisions and carry out the tasks, once done by human-beings, adequately. Its introduction and invention in the technological arena is a marvel in itself. It is a branchchild of digital revolution which has touched upon every field and every sector and imparted its advantageous impacts in them ensuing in productivity in efficiency. The digital revolution is the technological advancement that has brought everything in its ambit by placing everything online and in access of everyone; at a distance of just a click away. The internet technology served as an aid into its widespread dissemination.

The AI and digital revolution have benefitted various domains. One of them is the medical field in which it has helped in establishing diagnosis and inventing new drugs and technologies to help the ailing humanity. The AI-algorithms hold the capability of interpreting the investigations fed into it and aid in diagnosing the patient. Further, the technologies like

Magnetic Resonance Imaging; Computed Tomography (CT-Scan); Positron Emission Tomography Scan (PET scan) enable the advanced machines to pick up the vibrations of the molecules in the body and detect the radiations to carve out an image - without any invasive procedure - to give an idea to the depecting physician regarding internal abnormalities and pathologies. Further, the new advancement in this domain is the AI-fed algorithms able to develop an X-ray or any other radiological report. Hence, helping in reducing the overwhelming burden on the health sector whereby a doctor - patient ratio is a big problem especially in developing countries.

Furthermore, the AI and Digital revolution have caused a booming industrial sector by increasing its productivity and output manifolds. This wonderful revolution also has the ability of performing fast computational activities that have reduced the burden of human beings a lot. Also, the robotic creatures have little probability to make errors resulting in not only flawless but also enhanced output both in number as well as efficiency. The efficacious production is also due to their untiring potential as machines are tireless creatures so are robots. Philips, a renowned company, has incorporated robots to enhance their productivity and achieved profitable aggrandizement in this domain.

Moreover, the technological advancements also unravel the benefits of AI and Digital Revolution, for

example, the images obtained by the help of satellite enable man to view whole world from bedroom. The television broadcast of the match in Argentina can be seen in Pakistan by just a click of remote ~~or laptop~~ away. Similarly, the marvellous technology of internet has compressed the globe into a laptop, giving man an access to variegated data from variety of sources.

Also, similarly, the applications of technology in the form of Global Positioning system to guide regarding the road maps; the GIS system that is Geo-Information system and Remote Sensing enable mankind to survey the areas otherwise inaccessible or dangerous to access; they also have helped in detecting the underground natural resources in hard to access areas.

In addition to that, this marvellous technology of AI as well as digital revolution has eased out man in his everyday activities. For example, electric and electronic devices helping in washing, cleaning and cooking. The advanced security systems have granted him a peace of mind that operate only through the mediums of face ID recognition and fingerprints. Also, the intelligent man have invented innovative lights systems that has the capability of responding to the verbal commands. He also invented Alexa, a robot, that holds the capability of performing all mundane activities.

Similarly, it has made public opinion a decisive force through the strong platform of social media. The polls conducted on Facebook, Instagram and X (formerly twitter) not only reveal the national public opinion but also project them internationally. The surveys also enable the authorities to know the inclination of the masses and make them formulate policies by keeping in view the opinion of the populace. The strength of public opinion and powerful platform of social media unravelled itself in the Arab Spring in 2011 where

the general public mobilized the higher echelons and shunned away the long tenures of the dictators in the Middle East.

Moreover, the online voting system is another endowment of the digital revolution. This technology has also enabled NADRA to establish a biometric system that helps it to approach a data of a citizen by just entering the ID-card number of the citizen. This biometric system paved the way for online electronic voting system that not only aids in compiling the results speedily but also enables mitigating the rigging allegations by ensuring transparency in vote count and results. It also gives the leverage to the foreign-based citizens to become a part of the electoral process and choose their candidate, this opportunity inculcates in them the foundation feeling that they are a part of an inclusive democracy.

Furthermore, the AI and digital revolution have benefitted the educational domain and helped in spreading universal and free education for all keeping in view Article 25-A of the constitution of Pakistan, to the remote areas of the country. It has also ensured its outreach to the far-flung areas. The applications of Zoom and Google Meet have erased the distances and enabled dissemination of information and knowledge across the globe. Moreover, ChatGPT, the AI launched bot is helping the deserving students in accomplishing their tasks and assignments. This online classroom innovation has shunned

away the need to travel miles away for gaining this basic right.

Additionally, the AI and digital revolution have gathered the capability to aid in climate change adaptation and mitigation measures.

- The AI-launched application carries the ability to create a video through imaged projections of the fast-rising menace of the climate change. The digital revolution has also caused interpreting the climatic variables and giving the weather forecast. The technological advancements that are the bliss of this marvellous digital revolution enables human beings to craft both soft and hard measures for mitigating as well as adapting to the climate change.
- Also, these advancements help in prediction of the upcoming natural disaster by calculating the weather variables like humidity, winds, pressure, temperature and tidal waves and enables mankind to take preventive and adaptive measures for disaster risk management.

However, there are a few adverse impacts of the AI and digital revolution like advanced weaponry as a result of technological advancements, this technology has sowed the seeds of security dilemma among the states that have augmented their arms, nukes and nuclear armaments. Also, the outreach to space enabled mankind to fulfill his wish of maintaining his hegemony over the fellow beings and this endeavour led him to step onto the task of militarization of the space. This led to the space exploration projects in which the USA, the UK, Russia and India have succeeded so far. Further, it also carries ethical implications as a few of the robots are also utilized for the sexual gratification which is threatening the family unit of the society and its norms. Similarly, the application of Chat GPT accesses data from varied sources and there is a threat of literature theft and issues of copyrights may arise in future. Furthermore, the cyber crime is on the rise as the advanced technologies have also

strengthened this domain and granted its muscles which can unfold itself in the form of adverse implications as well.

The AI and digital revolution are a double edge sword. Its better utilization while mitigating its harmful impacts is the need of the hour. As Stephen Hawking who himself is technology dependent warned of the adverse impacts of it. The regulation of the AI and digital revolution arena must be done to contain its disastrous impacts. Further, steps must be taken to impede the ethical dilemma propagated as its offshoot. The copyright and literature theft issue must be governed by the book; and the problem of cyber security must be adequately strengthened and appropriately addressed to reap the benefits of these beneficial technological advancements.

The AI and digital revolution are beneficial to mankind because of their useful implications encompassing a plethora of sectors and endowing man with comforts and blisses in his life. Its beneficial impacts must be utilized while mitigating its harmful implications. These technologies have both good and bad side and the user decides which surface of the coin to be revealed by his utilization of its impacts. These advancements have revolutionized the life and enabled mankind to adorn his life with innovations, inventions and leisure time. The need of the hour is to subdue his servants by adequate

regulatory policies. The silver lining in the cloud is that the tech-giants are ~~realizing~~ this need and engaging in the efforts to overcome their assistants to gain maximum benefits of them while mitigating their adverse impacts for a prosperous, peaceful and advanced humanity.