TITLE: AI-DRIVEN DIGITAL MEDIA TECHNOLOGIES' GENERATION, AND SPREAD OF DELETERIOUS DISINFORMATION: SOLUTIONS THROUGH MULTI-FACETED APPROACH OF AI TOOLS & SOCIAL MEDIA INDUSTRIES, REGULATIONS AND DIGITAL LITERACY

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ABSTRACT

The present paper will discuss how AI-driven DMTs play harmful and negative roles in distracting social harmony and a potential threat to the world peace by proliferation of disinformation and fake news. Today world is the world of digital connectivity, digital creation, digital spread, digital consumption and digital assistance in almost every field of life. But unfortunately, this entire digitalization has also grey areas which have deleterious effects. These grey areas include the generation, spread and consumption of disinformation. The purpose of this paper is to seek the possible solutions, and analyze to what extent the concerned regulatory laws have addressed these grey areas of DMTs, along with the recommendations, how AI Algorithms and digital literacy can mitigate the deleterious impacts of disinformation and fake news.

INTRODUCTION

The understanding of the difference in disinformation, and misinformation will remain supportive throughout the discussion so, let us have a short look on this difference. "Disinformation is the false, inaccurate, or misleading information deliberately created, presented and disseminated, where "mis-information" is false or inaccurate information that is shared unknowingly and is not disseminated with the intention of deceiving the public (Wardle and Derakshan, 2017) Lesher, Pawelec and Desai, 2022.

With the emergence of Artificial Intelligence, Digital Media Technologies (Synthetic Media, Deep Fakes, Runway ML, Deep Art, Chat GPTs, NLP, GANs, Computer Vision, and Lumen5, etcetera) have expanded their vibrant roles in almost every field of life. Undoubtedly, these DMTs have brought a very positive revolution in

the present digital world but they also have some grey areas. George Krasadakis writes "digital fake news is becoming a major threat, partly due to the ease of creating, diffusing and consuming content".

But modern societies prefer to use DMT platforms for their information. George Krasadakis isof the opinion that "the times when something was perceived as true, just because it was seen on TV, or in a Photo or in Video, are gone." Now the minds who want to proliferate digital propaganda, for their dubious purposes, can do it easily as "with right tricks and timing, a false story can go viral in hours. More specifically, the' fake news' industry takes advantage of thefollowing 'flaws 'or our online reality". Katrina Kertysova writes in her article 'Security and Human Rights' that "false inaccurate, or misleading information, designed, presented, and promoted to intentionally cause

public harm or for profit". Similarly, the ongoing wars in theworld may be a potential threat to the world peace as in the context of Russia Ukrine war, and Gaza war. This phenomenon puts deleterious impacts on social harmony, wellness and peacein general and a potential threat to the world peace. So, AI- driven DMTs deleterious spread of disinformation and solution through the algorithms and regulatory will be examined.

Deleterious Disinformation

The negative impacts of DMTs on the social fabric of society are associated with the outcomes of disinformation, misinformation and fake news, being proliferated on social media platforms like Facebook, Instagram, YouTube, and X etc. For example, the "Facebook Depression" term has been engaged with the negative roles of DMTs with creating a low self-esteem of those adolescent girls, who spend more time on social media. This disinformation is crafted on DMTs like, Deep Fake, Deep Art, Chat GPTs, NLP, and GANs etc. Similarly, another negativity lies in Cyber bullying. It is not merely a problem of teen-age children but the students of colleges and universities are also guilty. They use social media and are engaged in cyber bullying behaviors as well. The social media platforms spread disinformation in the form of propaganda Likewise, the women who are using social media sites are, also being harassed by internet trolls. And this phenomenon is weakening the social fabric of values, ethics, traditions, norms and cultural etiquettes.

In an article, "Countering Fake News" the six co-authors write an insightful impact of the fakenews on the social fabric of society, " The impact of fake news is amplified through (i) internet platforms which publish content with significantly lower cost, wider reach, and rapid circulation ,(ii) social media, which enables more people and groups of various persuasions to interact even as they consume, produce and re-circulate content; and(iii) artificial intelligence (AI) agents that automate the work of human propagators".

Another negative impact is the deficit of trust among the different units of society. This trust deficit is caused by different perspectives of the same information and the same news. The over flow of news and information is so large that an actual piece of chunk is hidden within, but only the headline at the surface is eyed. Similarly, for one segment of society, the same news is real and for the second, it is fake.

Another aspect of fake news is its alarms to the world peace. Reuters, has uploaded the Max Hunder's article on August 1, 2024, Russia vs Ukrine: ' The biggest War of the fake news era' By Max Hunder " Disinformation and propaganda, long mainstays of war, have been digitallysupercharged in the battle for Ukraine, the biggest conflict the world has seen since the adventof smartphones and social media" It is Due to the threat of enemy encirclement, we urge the civilian population of Kharkive to leave the city by April 22" said one alert, which bore the logo of the State Emergencies Services of Ukraine and mapped out safe escape routes on a slick infographic. And this news was proved fake later on.In an essay, " A Slippery slope to world war iii ?" John Feffer writes in PPIF website on June 5, 2024," Putin can't be trusted, certainly not on issues related to Ukraine. He has clearly stated that he holds Western powers in contempt and has no use for international law, if it does notserve his purposes. He thumbed his nose at the Budapest Memorandum" Furthermore, when we see the disastrous role of fake news in the context of the Israel- Palestine conflict, the essay " The War on Gaza: A master class in disinformation" by Danylo Hawaleshka on November 9, 2023 at online 'Aljazeera' opens our eyes to see how disinformation and fake news is playing havoc to the world peace. He writes" Israel's hard- right government has a credibility problem. It has said things that aren't true-things like howAI Jazeera reporter Shireen Abu Akleh was supposedly killed by Palestinian Crossfire in 2022 when, actually, the government later admitted an Israeli soldier likely shot her".

Impacts:

After assessing the deleterious nature of the grey areas of DMTs, it is simple to understand that DMTs are like double- edged- swords. The impacts on social fabric means the impacts onall the units of society. And these units have their social, domestic, ethical, psychological,

educational, religious, conjugal, familial, political and friendship connections' aspects. In the present digital world, no aspect of human society is left unimpacted by the proliferation of disinformation, misinformation and propaganda based fake news. After being impacted, people's behaviors are compromised, their ethics are infringed, their familial life is in divisions, their educational strengths are seeking eases, their psychological self- esteem images are damaged, and the friendship connections are doubted.

Unluckily, this negativity is not limited to the societies only. It has engulfed the peaceful nations as well. Today, the world is facing a threat to the world peace in the forms of ongoingwars. The Russia Ukrine war and the Gaz war. In the international scenario, the internation peace is connected with the peace of nations. And when peace becomes war, potentially it may expand further as others nations interests are also associated with. But the ongoing twowars start and lingering on is because of the disinformation and fake news spread online. As a result, only the people of the direct in war countries suffer but the threat to the world is increased until war is finished. And same is the world facing in the existing two wars.

Recommended Solutions:

The three- fold recommendations can mitigate the deleteriousness of AI-driven DMTs. They include, the universal digital literacy, the regulatory laws and the DMTs collaboration, include the the measures of social media industries, and AI algorithms. Dr. Alexander Klimburg, the Director of the Cyber Policy and Resilience Program at The Hague Center for Strategic Studies, has given his input that "at tackling the body of cyber is just a detour to attacking the mind, (the human being)" which sets a tract of digital literacy at educational institutes to make thepeople aware of the disinformation harms. So, the "increasing media and digital literacy may be one of the most efficient and powerful tools to restore a healthy relationship to information and increase the resilience"

Secondly, there is further need of further regulations and implications for the disinformationcreators and spreaders to regulate the matter. Some countries have made result - oriented regulations and have mitigated the spread of disinformation like Singapore, Malysia Germany,USA and EU, but it is not enough. But global is the nature of DMTs so global or co-regulation is more desirable governance system which is more fit in the global context of nature of the problem. A relevant example of EU, Code of Practice on Disinformation is a good model example for the other regions as well.

But the most important and effective recommendation is the collaborated efforts of AI-driven DMTs' algorithms and the Social Media Industries. George K writes about this integration that" the objective is to quantify the problem extract patterns and share the derived knowledge with all the involved parties". Katrina K is of the opinion that "According to the latest figures published by the Duke Reporters'- Lab, there are 194 fact checking projects active in more than 60 countries". And another AI technique lies her in these words" AI Techniques have also been successful in screening for and identifying fake bot accounts- techniques known as bot-spotting and bot-labelling". Sarah Kreps writes in an article, 'The role of technology in online misinformation' "one of the best ways to resolve the problem of Tech-based misinformation is through Tech itself. The main mechanism for identifying inauthentic text is to use the sameAI text generator. Since neural networks generate synthetic text, they are also familiar with the texts habits, quirks, and traits, which may also make them well- suited to detecting content that emerges from those networks" She further writes, " the Allen institute for AI built a model named Glover which not only generates neural fake news but also spots its fake news and that of other AI generators' studies of fake news detection found that it had 92 % accuracy in terms of detecting human -versus machine -written news". Lastly, some fact- check soft wares like,PolitiFact, Media Bias, Hoaxy, News Guard, Full Fact, and Claim Buster etc should be so common that every social media platform must connect them with their information spreading tools. The algorithms training should be modernized to filter the disinformation from the accurate information at the generation stage.

Conclusion:

In conclusion, the rapid evolution of AI-driven media technologies has immensely amplified both the reach and impact of disinformation, presenting complex challenges to societies worldwide. While AI itself contributes to the generation and spread of misleading information through sophisticated algorithms and deep fake capabilities; it also holds the potential to combat such issues through advanced detection and regulatory enforcement tools. But technology alone cannot provide a comprehensive solution. This requires a balanced approach toward AI-powered regulatory frameworks and successful digital literacy initiatives to empower all to critically engage with media and distinguish fact from fiction. So, we can counteract the negative impact of AI-enhanced information and potentially create a healthier, more informed digital environment.

This multi-faceted approach holds most promise for reducing the kind of harm that fake information causes society and for ensuring accountable use of digital media technologies in the AI age.

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