How AI is Transforming Social Media and Taking Over the World

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Abstract

Artificial Intelligence is projected to make a significant impact on a global scale. Comprehending the level of transformation that will occur to our economy is key in understanding how to adapt to the changing environment. The ethical concerns surrounding the technology calls into question the legality of some practices.

This paper details the impact of Artificial Intelligence to society, health care, social media, and the economy. AI has impacted social media algorithms, making them more invasive and manipulative. This technology has the opportunity to manipulate humans’ psychology and behavior. Social Media algorithms utilize manipulations to create a never-ending cycle that targets addiction. AI enhances this to a dangerous level, impacting users’ psyche. The sophistication of this technology has drastically increased concerns regarding the overall impact AI will have. Utilization of this technology can create efficiency in the workplace, increase automation, eliminate and create positions, and more. Generative AI, which creates new content, will transform the media industry. AI is also revolutionizing the health care field and improving innovation for operations and treatments. The opportunities for utilization and advancement for Artificial Intelligence are endless and will change the world as we know it.

Keywords: Artificial Intelligence, Social Manipulation, Generative AI, Machine Learning, Deep Learning

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How AI is Transforming Social Media and Taking Over the World

# What is Artificial Intelligence?

Artificial Intelligence has been around for years, yet as of recently we are hearing about it everywhere. Everyday there is a new development in this technology that is broadcasted throughout the news. This technology has made unprecedented advancements in the recent years and will significantly change our world as we know it. Artificial Intelligence is a technology that imitates human intelligence. It can make real time decisions and perform tasks that usually require a human mind.

Machine learning and Deep Learning are both a subset of Artificial Intelligence. Machine learning is where algorithms learn from the data input, and solves problems, makes decisions, and identify patterns without specifically being programed to. Machine learning is being utilized throughout social media. According to one source, “Facebook provides a prime example of machine learning. Over the last few years, the social network has adopted machine learning algorithms to tailor users’ News Feeds to their interests” (Halverson 2019). These algorithms utilized by the media have gotten increasingly more complex in the recent years.

Deep learning consists of interconnected neurons that prosses information. These neural patterns simulate how the human brain thinks. Deep learning is the technology used in autonomous vehicles. These new technologies are being used to make technological, medical, and economical advancements. While many are ecstatic regarding the possibilities AI offers, others have major reservations about this technology.

Some call into questions the ethics of this technology. Others are worried how it will affect different career sectors and if it will eliminate sectors all together. One source discusses the ethical use related to social media, “The collection and use of data from social media can raise legal and ethical concerns. There may be questions around privacy and the legality of collecting certain types of information, and there may also be issues around how the data are stored and used” (Sufi 2023). There are many challenges that will need to be addressed before the significant implementation of AI. Artificial Intelligence can be used in malicious ways, but it can also be used positively. This technology poses a threat to eliminate millions of jobs, but it also has the potential to create millions of new positions. The World Economic Forum investigated these claims, and their findings predict by 2025 AI will eliminate 85 million jobs, while creating 97 million jobs. (Kande 2020). While it will ultimately eliminate some jobs, it will have a greater positive impact on the job market than negative. Unfortunately, this doesn’t stop the growing concerns regarding employment. People are getting worried as we are already seeing layoffs due to new developments in Artificial Technology. While this may be the case, there will also be a positive impact on how employees perform their jobs.

Data analysis will become more efficient, along with an increase in automation. The significant impact AI poses will affect almost everyone in the work force. It will transform media and have a significant impact on creative sectors. Understanding this technology and how to utilize it in the workplace, will impact job security and transition once AI is implemented. It is extremely important to be aware of the implications of this technology. Having a better understanding how AI will transform society will decrease the likely hood of being socially manipulated without your knowledge. Significant knowledge and awareness are the key factors in adaption to the significant impact Artificial Intelligence poses to the world.

## Literature Review of Artificial Intelligence and its Impact

### Literature Review on AI Technology

Solos, & Leonard, J. (2022). On the Impact of Artificial Intelligence on Economy. Science Insights, 41(1), 551–560. <https://doi-org.lp.hscl.ufl.edu/10.15354/si.22.re066>

Continuous development and advancement of Artificial Intelligence has a drastic impact on the economy as a whole. As AI is developing faster, this is leading to huge scientific and technological breakthroughs that are and will have a great impact on the economy and society. It is believed that AI will boost productivity along with economic growth. The advancements of AI will decrease the cost of automation and result in replacement of human labor with machines. According to research, these advancements may have a negative and positive effect on employment. While these advancements will cause a temporary decrease in labor demand, they will also generate new employment opportunities. AI will have drastic effects on employment and businesses. It will impact work life balance in a positive way, along with employment structure in the workplace. AI will produce new jobs while altering the employee’s work. The potential economic impact of AI is drastic and is essential to understand.

Xu, G., & Xue, M. (2023). Unemployment risk perception and knowledge hiding under the disruption of artificial intelligence transformation. (2), e12106

It is found that more than 76% of employed individuals in China will be impacted by AI in the next 20 years. The risk of unemployment affects employee’s psychology and behavior. Knowledge hiding will become an issue and will impact individuals’ innovation behavior and team creativity negatively. With job insecurity being a large threat, knowledge hiding will be increasingly more problematic. Because of the advancements of AI, employees risk perception of unemployment effects their judgment. According to the social exchange theory, employees will feel their career is threatened by AI and will feel negatively towards the organization. This will cause them to feel resentful and will be reluctant to make efforts towards the development and innovation of the organization. According to the study, the data shows that in the situation of potential unemployment, employees hide knowledge both to save resources and to address their dissatisfaction with their organizations failure to provide job security and stability. This conclusion proves the impact of knowledge hiding and therefore enhances the explanatory power of social exchange theory.

Smallman, M. (2022). Multi scale ethics-why we need to consider the ethics of AI in healthcare at different scales.*Science and Engineering Ethics, 28*(6), 63. doi:https://doi.org/10.1007/s11948-022-00396-z

AI has the potential to have profound effects on our lives. We are seeing a significant growth in interest and investment in AI in healthcare. AI is having a significant impact on people’s lives which calls into questions the ethical implications of this technology. Current AI ethical guidelines are strongly driven by a rights-based approach. The UNESCO report includes environmental sustainably as one of the key ethical issues for AI, detailing how information technologies are big producers of greenhouse gases and other waste products. They highlight how the pollution produced has the potential to impact people’s health. AI has the power to transform healthcare by improving patient experience, efficiency of treatments, advancements in surgery, and much wider change. While this can impact people’s lives in an extremely positive way, it comes at a great cost. The ethical concerns relating to affordability of healthcare is one of the largest. Additionally, privacy and security of information is a growing concern relating to AI. AI is set to transform healthcare in a significant way, having the potential to have a significant negative impact. There are many ethical issues that are raised due to this technology and should not be overlooked when dealing with AI.

Muhlroth, C., & Grottke, M. (2022). Artificial Intelligence in Innovation: How to Spot Emerging Trends and Technologies. IEEE Transactions on Engineering Management, 69(2), 493–510. <https://doi-org.lp.hscl.ufl.edu/10.1109/TEM.2020.2989214>

In the competitive business environment, technological innovation has become increasingly more complex. In order to find new opportunities for competitive advantages, companies have a strong incentive to recognize emerging trends and topics at a very early stage. These signals are incredibly difficult to detect in a systematic manner and largely detected by chance. This increases the challenge of identifying important insights within the data in an efficient and timely manner. Utilizing an innovative Artificial Intelligence data mining model will help firms detect relevant emerging topics. The model has a modular structure that requires very minimal manual effort. Human minds are only required for the initial definition of the search field. This AI model will support the early detection of emerging technologies and innovation. This artificial technology can help firms adapt to the changing competitive environment. This model detects emerging innovations earlier than traditional approaches. Utilizing the AI model will also improve efficiency in the firm drastically by automating traditionally taxing analysis.

Johnson, E., Parrilla, E., & Burg, A. (2023). Ethics of Artificial Intelligence in Society. American Journal of Undergraduate Research, 19(4), 3–12. <https://doi-org.lp.hscl.ufl.edu/10.33697/ajur.2023.070>

Artificial Intelligence is becoming increasingly prevalent in today’s society. As the impact of this technology is increasing, so is the urgency to understand its failures and shortcomings to further prevent them. AI doesn’t have the same emotional capabilities for ethical decision making as humans do. The potential for AI to unintentionally violate ethical boundaries is always prevalent. There are nine principles regarding how ethics should be approached in AI. These principles are explored and pose new ways to prevent AI violating these ethic principles. The ADC ethical model can be used to help categorize ethical and unethical elements of a situation. This model can be applied to AI to help further ethical development. There are plenty of examples of ethical failure of AI, shown by multiple case studies. One study showed AI projecting significant negative bias towards women when evaluating resumes. Artificial Intelligence calls into question whether this technology can remain ethical. There are distinct failures shown in AI and ethical decisions. Keeping ethical principles in mind during the growth and development of AI, will help prevent ethical failures in the future.

Jovanovic, M., & Campbell, M. (2022). Generative Artificial Intelligence: Trends and Prospects. *Computer (00189162)*, *55*(10), 107–112. <https://doi-org.lp.hscl.ufl.edu/10.1109/MC.2022.3192720>

Generative AI uses generative modeling and advances in deep learning to product creative content. Generative models offer great improvement over various NLP tasks, but they can also generate language with bias, stereotypes, and harmful content. This requires proactive communication to reduce these risks and threats. There is also a risk regarding ethical decision making. Firms must take great action before utilizing these programs to prevent unintended unethical behavior. This technology can make powerful artifacts when utilized at scale. It can also provide great improvement in many tedious tasks. While there are many positives to this technology, there are many challenges that still need to be overcome. Reliability and consistency in this technology is still a major concern. Many firms fear putting great trust into Artificial Intelligence models. Understanding the mechanisms of the deep neural network will help identify these risks and further prevent them.

Hong, G., Smith, M., & Lin, S. (2022). The AI Will See You Now: Feasibility and Acceptability of a Conversational AI Medical Interviewing System.*JMIR Formative Research, 6*(6)<https://doi.org/10.2196/37028>

Health care professionals are facing challenges and are often limited in their ability to collect a detailed medical history. This can cause missing data or poor quality due to the lack of time. Information gaps can lead to errors and puts patients at risk. Researchers have created a web-based AI medical interviewing system. This program converts speech to text and takes the patient through a series of questions and provided appropriate responds and follow ups. While some may be worried about the ethics of this program, The Stanford University Institutional Review Board reviewed it and exempted it. This conversational AI will help medical professionals have a better understanding of their patient’s history, and therefore allow for better care.

Ramessur, R., Raja, L., Kilduff, C. L. S., Kang, S., Li, J. O., Thomas, P. B. M., & Sim, D. A. (2021). Impact and Challenges of Integrating Artificial Intelligence and Telemedicine into Clinical Ophthalmology.*Asia-Pacific Journal of Ophthalmology (Philadelphia, Pa.), 10*(3), 317-327. <https://doi.org/10.1097/APO.0000000000000406>

Artificial Intelligence & telemedicine have revolutionized the face of health care. Recent breakthroughs via deep learning have improved AI’s ability to perform tasks. Combining the two technologies can improve healthcare overall. An AI assisted telemedicine platform has an 99.96% accuracy for diagnosing cataracts. These technologies have not only improved diagnosis and patient care, but have extreme cost savings and higher return. Although this technology has a positive effect, some patients are concerned about data security and some practices are concerned about liability for adverse effects. AI integrated with telemedicine could be the future of health care, but we must ensure we set regulatory guidelines and standards to protect the patients, health care providers, and clinics.

How e-commerce can boost business performance: Artificial intelligence holds the key. (2022). *Strategic Direction, 38*(7), 10-12. <https://doi.org/10.1108/SD-06-2022-0056>

Ecommerce has transformed the way companies do business. The constraints of location no longer significantly affect them, opening them up to a world of potential consumers. Studies have shown that the impact of ecommerce on performance can be significantly greater when utilized in conjunction with AI. AI can be used to facilitate better decision making, product improvement, increased automation, increased accurate insight, and more efficient internal business operations. AI has proven it can significantly increase businesses performance.

Sitaula, C., Grooby, E., Kwok, T. C., Sharkey, D., Marzbanrad, F., & Malhotra, A. (2023). Artificial intelligence-driven wearable technologies for neonatal cardiorespiratory monitoring. Part 2: artificial intelligence.*Pediatric Research, 93*(2), 426-436. <https://doi.org/10.1038/s41390-022-02417-w>

The leading cause of mortality in neonatal infants relates to cardiorespiratory conditions, making cardiorespiratory monitoring extremely important. Wearable technology enables constant monitoring at the hospital and at home. When used with AI, it offers early detection and provides the best possible outcome for newborns. The use of AI for neonatal monitoring has great potential, but has not yet been studied significantly. This technology will have to undergo more research studies before it is widely accepted and utilized. AI heart monitoring for infants has the possibility to save many lives and will revolutionize neonatal cardiorespiratory monitoring in the future.

Pereira, S. W., Fishman, E. K., & Rowe, S. P. (2022). The Future Is Now: How Technology and Entertainment Are Transforming Education in the Artificial Intelligence Era.*Journal of the American College of Radiology : JACR, 19*(9), 1077-1078. <https://doi.org/10.1016/j.jacr.2022.06.015>

Over the next decade, AI will completely transform education. We will be seeing revolutionized ways of teaching thanks to AI. Adopting AI into education can overall round out children’s education. It can teach life skills not traditionally taught in school such as kindness and confidence. By infusing entertainment with education, children can learn skills more easily and enjoy it. In the coming years AI will heavily affect our education systems and have an overall impact on teaching methods.

Yellapantula, K., & Ayachit, M. (2019). Significance of Emotional Intelligence in the Era of Artificial Intelligence: A Study on the Application of Artificial Intelligence in Financial and Educational Services Sector.*Ushus Journal of Business Management, 18*(1), 35-48. <https://doi.org/10.12725/ujbm.46.3>

Artificial Intelligence has become a part of our everyday life. The level of automation it provides for certain tasks often brings up the question of the necessity of human presence in these jobs. AI can facilitate a better classroom environment, along with enhancing the learning experience. In the financial environment, AI is changing the way the industry works. AI has the ability to create more efficiency and greatly reduce costs. Recent advancements have enabled AI with the ability to detect fraud, risk management, and more.

Redden, J., Aagaard, B., & Taniguchi, T. (2020). Artificial Intelligence Applications in Law Enforcement: An Overview of Artificial Intelligence Applications and Considerations for State and Local Law Enforcement., 10. <https://login.lp.hscl.ufl.edu/login?url=https://www.proquest.com/scholarly-journals/artificial-intelligence-applications-law/docview/2677045889/se-2>

With the new advancement within AI technology, opportunities for utilizations within law enforcement have become more available. This technology has the potential to impact a wide range of internal and public facing law enforcement operations. It can help make decisions and perform task, along with improve efficiency and analyzation. AI is already being utilize by law enforcement for license plate readers, video surveillance, and more. With more innovations AI could improve law enforcement practices significantly.

Zhang, J., Oh, Y. J., Lange, P., Yu, Z., & Fukuoka, Y. (2020). Artificial Intelligence Chatbot Behavior Change Model for Designing Artificial Intelligence Chatbots to Promote Physical Activity and a Healthy Diet: Viewpoint.*Journal of Medical Internet Research, 22*(9), 1. <https://doi.org/10.2196/22845>

Utilizing AI powered chatbots can influence healthier habits and behaviors. Physical inactivity and an unhealthy diet are one of the leading risk factors for noncommunicable diseases. The use of AI has become a new frontier in expanding the range of health care and interventions for lifestyle modification. These chatbots have created opportunities for delivering personalized behavioral change programs for disease prevention and a healthier lifestyle. Ethical guidelines for AI within health care would need to be integrated within these programs. With more advancements and innovation, these programs are bound to significantly help people develop a healthier lifestyle.

Felmingham, C., MacNamara, S., Cranwell, W., Williams, N., Wada, M., Adler, N. R., Ge, Z., Sharfe, A., Bowling, A., Haskett, M., Wolfe, R., & Mar, V. (2022). Improving Skin cancer Management with Artificial Intelligence (SMARTI): protocol for a preintervention/postintervention trial of an artificial intelligence system used as a diagnostic aid for skin cancer management in a specialist dermatology setting.*BMJ Open, 12*(1)<https://doi.org/10.1136/bmjopen-2021-050203>

Artificial Intelligence can potentially be used as a diagnostic aid for skin cancer detection and management in the future. It is hoped that AI may reduce the workload for tele-dermatologists in the future. There is a need for clinical trials to validate the performance and evaluate the accuracy of these tools. If the diagnostic tool is proven safe and effective, this technology could save and help a lot of people.

Redden, J., & Banks, D. (2020). Artificial Intelligence Applications for Criminal Courts: An Overview of Artificial Intelligence Applications for Prosecutors and Associated Considerations for the Criminal Court System., 11. <https://login.lp.hscl.ufl.edu/login?url=https://www.proquest.com/scholarly-journals/artificial-intelligence-applications-criminal/docview/900614681/se-2>

With AI becoming more prevalent within society, it raises the question if AI can help improve the court system. AI could significantly improve court operations, along with the processing and management of digital information. It could improve evidence management, witness and juror management, security and cyber-security, and more. AI is also significantly improving case management that has significantly improved the efficiency of legal research. AI could also potentially help inform litigation strategies. This technology has an impact to transform how the court system runs.

McGovern, A., Bostrom, A., Davis, P., Demuth, J. L., Ebert-Uphoff, I., He, R., Hickey, J., Gagne,David John,,II, Snook, N., Stewart, J. Q., Thorncroft, C., Tissot, P., & Williams, J. K. (2022). NSF AI Institute for Research on Trustworthy AI in Weather, Climate, and Coastal Oceanography (AI2ES). Bulletin of the American Meteorological Society, 103(7), 1658-1668. https://doi.org/10.1175/BAMS-D-21-0020.1

Artificial Intelligence has demonstrated the ability to predict and understand many environmental science phenomena. Unfortunately, there is often a lack of trust by environmental scientists towards AI. Developing a program that is trustworthy and useful for environmental risk management is extremely important. The NSF AI Institute for Research on Trustworthy AI in Weather, Climate, and Costal Oceanography is a national institution that conducts research focused on creating a trustworthy AI program. By researching and developing these methods, it will revolutionize understanding and prediction of high impact atmospheric and ocean science phenomena. This will significantly improve reducing risks to society and early detection of environmental events.

Tuyls, K., Omidshafiei, S., Muller, P., Wang, Z., Connor, J., Hennes, D., Graham, I., Spearman, W., Waskett, T., Steel, D., Luc, P., Recasens, A., Galashov, A., Thornton, G., Elie, R., Sprechmann, P., Moreno, P., Cao, K., Garnelo, M., . . . Hassabis, D. (2021). Game Plan: What AI can do for Football, and What Football can do for AI. The Journal of Artificial Intelligence Research, 71, 41-88. https://doi.org/10.1613/jair.1.12505

Recent developments of Artificial Intelligence have created the opportunity for data analysis to be utilized within sports. AI techniques have recently been applied to football. Teams have utilized AI to analyze individual and team data, to improve overall. AI can be applied to statistical learning, game theory, and computer vision. AI can analyze opponent play, compare it with the teams play and create the best statical strategies to beat that specific opponent. Utilizing AI to analyze analytics can significantly improve comprehension on a teams play. At a high level, the process of winning the championships can be cast as a sequential decision-making problem. By utilizing AI and adjusting play accordingly, you can increase the likelihood of winning significantly.

Arora, A., & Arora, A. (2022). Generative adversarial networks and synthetic patient data: current challenges and future perspectives. Future Healthcare Journal, 9(2), 190-193. <https://doi.org/10.7861/fhj.2022-0013>

Generative AI has functions to create fake data after learning properties of real data. Utilizing this function, Generative AI can create fake patient data that has the potential to revolutionize clinical research and protect patient privacy. This data can also be shared more freely for research and training, since it is artificial. It can also analyze data and will allow health care professionals to make more accurate diagnosis, by identifying patients who are at risk for particular conditions. This technology has the opportunity to enhance medical research and education, with the ultimate goal of improving patient care.

McGowan, B. S. (2022). World Health Organization’s Early AI-supported Response with Social Listening Platform (WHO EARS). Journal of the Medical Library Association, 110(2), 273–275. https://doi-org.lp.hscl.ufl.edu/10.5195/jmla.2022.1398

The World Health Organization is utilizing AI to provide a social listening site that provides real time information surrounding COVID-19. It allows users to explore conversations throughout the world. They utilize Artificial Intelligence to gather data and information as they become available. This data is automatically categorized by AI and sorted throughout the site into graphs, sections, and more. This site is a great resource for health information professionals to see the most recent information all at once.

#### Literature Review How AI is Impacting Social Media

Leonard, J. (2023). Computing - incisive media: Social media: What happens when AI takes over?*Computing,*Retrieved from <https://login.lp.hscl.ufl.edu/login?url=https://www.proquest.com/trade-journals/computing-incisive-media-social-what-happens-when/docview/2776439195/se-2>

Social Media algorithms are designed to keep users engaged on the platform for as long as possible. It is a never-ending cycle that targets surges of dopamine to keep users addicted. With AI becoming increasingly more advanced, it is soon to transform the world of social media. With AI based algorithms, social media will become increasingly more invasive. AI recommender algorithms will be more effective, but also more manipulative. Currently algorithms don’t understand the complexity of human minds. Creating an AI algorithm will be far more effective in these tactics due to the sophistication of this technology. This will impact social media significantly and has the potential to become incredibly dangerous to society.

Nantheera, A., & Bull, D. (2022). Artificial intelligence in the creative industries: A review.*The Artificial Intelligence Review, 55*(1), 589-656. doi:https://doi.org/10.1007/s10462-021-10039-7

AI has impacted content creation across media in both supporting the creative process and creation on its own. AI has been used to write scripts, stories, create music, create new digital imagery, and more. There have also been attempts to interpret an image or video to them generate captions for social media based on its content. We have already seen AI impact features on social media. Specifically, Twitter has applied an automatic image cropping feature to showcase the most important part of the image on user’s feed. AI can also generate new images based on text, creating a new content creation opportunity. AI has shown the ability to analyze large amounts of complex data. Social listening, analytics, advertisement data and more will be transformed by AI’s ability to analyze the data almost instantaneously. It will create more efficiency in the workplace and social media platforms. Additionally, AI can be used for a wide range of complex photo and video editing. In the near future, AI is likely to be adopted as an assistant to creation, production, delivery, and as a creator outright. AI will have a large impact on the creative industry altogether.

Maathuis, C., & Kerkhof, I. (2023). *Social media manipulation awareness through deep learning based disinformation generation*. Reading: Academic Conferences International Limited. Retrieved from https://login.lp.hscl.ufl.edu/login?url=https://www.proquest.com/conference-papers-proceedings/social-media-manipulation-awareness-through-deep/docview/2790105671/se-2

Social media manipulation has become more advanced in recent years. Efforts have been taken by some social media platforms to limit, control, and prevent social manipulations using AI. Platforms like Facebook use Machine Learning to remove bots, identify explicit content, and eliminate trolls. AI provides tools for countering social manipulations, while also having the techniques to facilitate the development and spread of social manipulation. Researchers are aiming to build and enhance social media security awareness and prevention for AI technology. While AI can be used in a malicious way to further social media manipulation, it can also be used as a deterrence against the manipulation.

Prem, E. (2022). A Brave New World of Mediated Online Discourse: Is artificial intelligence up to the task of managing online discourse in social networks? Communications of the ACM, 65(2), 40–42. <https://doi-org.lp.hscl.ufl.edu/10.1145/3471929>

Algorithms are tasked with content moderation throughout social media platforms, due to the massive number of users. Social Media has become an essential part of society regarding the transfer of information. Whether this be related to opinions or news, social media has become the key influences, thus making it perennate that information is monitored for legality and authenticity. AI is being used to moderate content to keep discussions factual, friendly, and to remove illegal and harmful content. While AI can be extremely helpful, its moderation can also be unfair. Arguments are arising if it is smart to trust AI with moderating content, due to potential discrimination. Addressing the issues and utilizing human moderation as a second defense, will limit issues regarding AI moderation.

GoCharlie: A Marketer's Best Friend—The First Multimodal Generative AI Engine for Social Media Marketing: AI developed with social media marketers’ needs in mind helps brands turn their audience into customers. (2022, May 03). NASDAQ OMX's News Release Distribution Channel <https://login.lp.hscl.ufl.edu/login?url=https://www.proquest.com/wire-feeds/gocharlie-marketers-best-friend-first-multimodal/docview/2658549566/se-2>

GoCharlie is a new multimodal generative AI that is tailored to marketing. It allows users to draft optimal social media marketing content. This AI can generate ready to post content in seconds curated to your account’s brands. It can also analyze your data, respond to comments, and more. This AI could change the way brands run their social media accounts. It will make tasks extremely more efficient, making marketers have more time to do other things.

Laacke, S., Mueller, R., Schomerus, G., & Salloch, S. (2021). Artificial Intelligence, Social Media and Depression. A New Concept of Health-Related Digital Autonomy. American Journal of Bioethics, 21(7), 4–20. <https://doi-org.lp.hscl.ufl.edu/10.1080/15265161.2020.1863515>

Utilization of Artificial Intelligence within the medical field brings to light fundamental ethical issues. Interest in researching this technology within social media is rapidly growing. Social Media is a rich data source for developers to utilize for the application of AI. Data from social media platforms are already being used to reveal health information at the individual and population level to gain different insights into habits, trends, treatments, and to identify and predict risks and illnesses. Predictive screening models are being developed for identification of markers in social media data for mental health issues. While there are some concerns regarding the accuracy of these predictions, research is showing great benefits and results. Scientists are utilizing AI to focus on depression, since it is one of the most prevalent mental disorders in society. Depression also influences communication behaviors of the individual, making AI able to predict depression from individual’s social media behaviors.

KALINOVÁ, E. (2022). Usage of Artificial Intelligence on Social Media in Europe. Ad Alta: Journal of Interdisciplinary Research, 12(2), 330–333. <https://doi-org.lp.hscl.ufl.edu/10.33543/1202330333>

AI is becoming incredibly prevalent in the utilization in social media. It is being used in a variety of different ways like, detecting harmful behavior, data analysis, and even strategy marketing. The use of AI is creating a competitive advantage that will soon be necessary in the competitive environment. Development of AI chat bots have changed communication with users on social media. Companies are also using AI for early detection of harmful bots that can cause severe image damage. Data analysis is another huge opportunity for AI to be utilized. AI is also being used to determine the best way to sell products and creating a strategy for social media. Utilization of AI within social media can improve business strategy and have a positive impact overall.

Xuan Wei, Zhu Zhang, Mingyue Zhang, Weiyun Chen, & Dajun Zeng, D. (2022). Combining Crowd and Machine Intelligence to Detect False News on Social Media. MIS Quarterly, 46(2), 977–1008. <https://doi-org.lp.hscl.ufl.edu/10.25300/MISQ/2022/16526>

The spread of false news throughout social media has an extreme effect on many areas related to politics, economics, and more. In 2013, a false tweet stating Barack Obama was injured in an explosion, eliminated $130 billion in stock value within minutes. False news can have detrimental effects, and the spread of false news has significantly increased since COVID-19. Currently machine learning is being used to detect false news. By combining AI and human intelligence, it will improve performance and early detection. Research shows the implementation and results of creating a model that combines the two is extremely successful. The model will provide valuable insights for social media platforms to continue to develop and modify their techniques. With this further development of AI implemented into social media, false news will be eliminated significantly faster.

Mehta, H., & Passi, K. (2022). Social Media Hate Speech Detection Using Explainable Artificial Intelligence (XAI). Algorithms, 15(8), 291. <https://doi.org/10.3390/a15080291>

Hate speech in social media has become an increasingly more problematic. AI is used in social media to detect these posts and quickly remove them.

Explainable AI (or XAI) is a new dimension of Artificial Intelligence, where we can seek answers to “why” questions. XAI has the potential to significantly improve hate speech detection in social media. XAI is necessary to understand AI results, trust the decisions of the algorithm, and manage results. It also can make ethical decisions, thus improving the program. Research shows this model will significantly improve hate speech detection throughout social media.

Flores, L., & Young, S. D. (2022). Ethical Considerations in the Application of Artificial Intelligence to Monitor Social Media for COVID-19 Data. Minds and machines, 32(4), 759–768. <https://doi.org/10.1007/s11023-022-09610-0>

Researchers are utilizing AI to analyze social media data for public health surveillance. AI has raised multiple ethical concerns regarding the protections of user’s online data. Methods of epidemiology and statistical analysis on case reporting can benefit significantly from the use of AI. Utilizing AI to monitor social media platforms for COVID-19 keywords, may have the capacity to detect outbreaks earlier than traditional surveillance systems. Utilizing social media data provides insights on risk perceptions and emotive responses. This surveillance strategy also detects misinformation being spread regarding the pandemic. The utilization of AI in COVID-19 social media data, increase the need of ethic committees to evolve and create practices to protect users’ data. Once the ethical concerns and potential harms are addressed, the utilization of AI social media data will be extremely promising.

##### **Reflection**

Social Media will be significantly impacted by Artificial Intelligence. We will see AI controlled algorithms throughout social media. We will also see the rise of AI generated social content. An article published in the Yale Journal of Law and Technology states, “The World Economic Forum was told in August 2017, that Artificial Intelligence has already “silently [taken] over democracy” through the use of behavioral advertising, social media manipulation, bots and trolls” (Manheim 2019). It was also stated that, “Advances in AI herald not just a new age in computing, but also present new dangers to social values and constitutional rights. The threat to privacy from social media algorithms and the Internet of Things is well known” (Manheim 2019). AI will impact the security of user’s data, as well how that data is utilized. AI will significantly increase the effect of social media manipulation through its algorithm and moderation techniques. Social Media will become more addicting to users due to this manipulation. AI will also impact the creative industry and how content is created and marketed throughout social sites. Social Media will transform completely due to the impact of AI.

Social Media is constantly changing to keep up with users demands. Gen Z has an extremely short attention span and gets bored if platforms aren’t constantly changing and adding new features. I believe Artificial Intelligence will be impacted by social media in a few ways. First, there will be the expectation for new AI programs constantly. This will impact the speed in which technological advancements happen. When students were asked by an author for the HULT International Business School Blog what future do they see in the age of AI, “90% were enthusiastic about the changes AI could bring” (Schofield 2021). Gen Z is the first generation to be almost completely saturated in technology from a young age. Due to this, they expect significant advancements that will improve their lives and provide entertainment. I believe AI will be impacted by social media, specifically their users, in a way that demands new advancements. Since social media is always changing, this will impact AI as well. For this technology to stay relevant it will have to be ahead of the changes. Users might demand an AI tool to manage their accounts or expect new programs to make their experience better. Social Media will impact AI in that way as well.

##### **Conclusion**

Artificial Intelligence has the power to significantly change social media as we know it. We will begin to see a transformation that closely mimics futuristic movies & shows like, *Ready Player one* and *Black Mirror.* AI will alter the algorithms utilized on these sites and create a more invasive and manipulative program. We will see AI specifically target the surge of dopamine to keep users engaged and addicted longer. AI will also become the main moderator, controlling the spread of fake news, illegal activities, and other harmful content. I believe we will also see a significant shift related to how businesses approach content creation and promotion. AI will transform the way marketing is done and how it is received.

Artificial Intelligence has the power to impact people’s health in an extremely positive way. Researchers have begun to utilize social media to evaluate users’ data for public health monitoring and mental health analyzation.

AI has caused many ethical concerns regarding the implementation within social media due to the intrusive nature of the technology. Social Media already collects an enormous amount of user’s personal data, but with AI that will significantly increase. Not only are health care professionals able to identify potential mental health issues based on our social media habits, but they can also predict a user’s risk to COVID-19.

The future of social media is one that is controlled by Artificial Intelligence. The global phenomenon that is AI will completely transform society as we know it. The opportunities and possibilities for technological innovation, economic growth, marketing techniques, and more is significantly due to the advancement of AI. Artificial Intelligence has taken the world by storm, in the next 5 years things will change significantly. As technological advancements continue, the potential impact continues to increase. In 5 years, the world might be a significantly different place all because of Artificial Intelligence. Only time will tell.

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