**THE CONSEQUENCES OF THE FOURTH INDUSTRIAL REVOLUTION AND ITS IMPACTS ON IDEALS**

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# ABSTRACT

This paper investigates the role of social media and the algorithms used to exacerbate political polarization in the elections. During the fourth industrial revolution, doors were opened for more public involvement in influencing public opinion and political views. There are many implications in doing this including changing the outcomes of an election and swaying voters. This issue is considered and developed in this study by examining the consequences of this particular industrial revolution, particularly the increasing reliance on social media platforms for information dissemination and political discourse. Using this limited research, the aim is to understand the extent to which these platforms have contributed to many current political divides. Reviews of the influence of social media algorithms on political opinions, explore the potential solutions and future implications for a more constructive political discourse. There are more revelations of governmental interference in many countries that are yet to be exposed. Many media tools easily enable use of these for both positive and negative outcomes.

**Keywords: Social Media, Fourth Industrial Revolution, Political Discourse, Social Influence**

1. **Introduction**

“The Fourth Industrial Revolution” identified in 2016, by the World Economic Forum Founder, Klaus Schwab, in the most significant way, represents human evolution. It is comprised of new innovations that changed the lives of every person on the planet. Advances such as the internet, virtual reality, big data, and artificial intelligence have continued to shape the human experience each year subsequent to 2016. Because these advances have benefited humanity so immensely, the detrimental effects have been readily dismissed or overlooked, possibly to assure or protect continued growth. However, there is the looming argument that the negative impacts generated by The Fourth Revolution, far outweigh the advantages. Building on the ideas presented by Philbeck and Davis (2019),the Fourth Industrial Revolution is more than just the introduction of new technologies; it represents a significant shift in all aspects of industry and society, including the economy, politics, and social values. As with previous industrial revolutions, this revolution is characterized by profound social transformations that go beyond discrete technological capabilities, leading to a restructuring of power systems. Philbeck and Davis (2019) emphasize the interconnectedness of industrial revolutions, demonstrating how each era influenced the subsequent one. They argue that the Digital Revolution, characterized by the rapid exchange of information, served as a catalyst for the Fourth Industrial Revolution, which was built upon the foundation laid by its predecessor. As the digital world becomes an invisible fabric, taken for granted, the disruptive attributes of a new world dependent on cyber-physical systems require us to rethink our relationship with technology and ourselves. This all has the potential to further change our lives, but it also comes with disadvantages that are intertwined within its benefits. How people adapt to these significant changes remains a crucial aspect of the discussion. The ideas provide valuable context for understanding the rapid and immense shift in technology.

# 2. Challenges

Prisecaru (2016) highlights the obstacles of the Fourth Industrial Revolution and emphasizes that while technological advancements can bring significant benefits, they can also introduce various risks and drawbacks. One of the critical challenges identified by Prisecaru is the potential disruption of the labor market, which could result in increased social inequality and a growing divide between high and low-salaried workers based on education levels.

Klaus Schwab (2016) believes that talent, rather than capital, will become the critical factor of production. However, this may lead to an economy that benefits capital providers, such as those providing intellectual, physical, or financial resources, at the expense of workers. The question arises whether technological progress is the source of social inequalities, as Schwab thinks, or if the issue lies in a perverse distribution of income that has hit the middle class, which is already affected by the deindustrialization process.

This, however, may result in an economy that favors capital providers, such as those who give intellectual, physical, or financial resources, at the expense of employees. The dilemma is whether technical development, as Schwab (2016) believes, is the basis of social inequities, or whether the problem is a crooked distribution of income that has hit the middle class, which has already been impacted by the deindustrialization process. An economy that kills the middle class and is based on the ideals of a winner-take-all system and an "every man for himself" mentality could cause substantial societal upheaval. As Prisecaru (2016) points out, the Fourth Industrial Revolution has no decisive outcome. The convergence of several revolutions, however, and the lessons learned from previous experiences suggest that, while society may experience immense benefits, it could also face considerable deficits. This trade-off between advancements in one area and decline in other raises concerns about whether these changes will ultimately serve the greater good or harm overall progress.

# 3. Government Impact on Technological Evolution

Interference from the government can affect technological advancement in both positive and harmful ways. Governments can, on the one hand, promote innovation by putting in place laws that support R&D, safeguard intellectual property rights, and allocate money for training and education initiatives. These actions can encourage investment, collaboration, and assist the workforce to develop the skills needed to keep up with the demands of a technological environment that is evolving quickly.

But governments may occasionally use the advancement of technology for their own gain, which can have unexpected bad effects. Governments might, for instance, monitor and manage their citizens through data collecting and surveillance technology, thereby violating privacy rights and restricting individual liberties. Governments may also give priority to investments in certain industries or technologies that fit with their political agendas, which could stifle innovation in other fields or lead to an imbalance in the distribution of resources. Furthermore, as governments may favor certain businesses or industries over others, excessive market intervention by the government may result in the formation of monopolies or oligopolies. This might impede creativity, limit competition, and eventually lessen the potential advantages of technological advancement for society as a whole.

# 4. Smart Technology

Tasks that were deemed normal years ago, even mundane or routine, are now obsolete. For instance, if you are too busy to sweep your floor or vacuum, simply purchase a Roomba (automated vacuum cleaner) to do it for you. Innovations like this have “swept” the nation, but while these items stand to ease people’s lives, are they producing a benefit? Have these innovations changed our lives for the better, or have they progressed us in the way of technology but moved us backward within the confines of the human aspect. We have seen great strides toward a better, stronger tomorrow, while simultaneously experiencing societal counter-effects.

Technology has enhanced production, decreased the need for physical work, and provided new opportunities in industries including medical, communication, and transportation. These breakthroughs have the potential to produce a more wealthy and sustainable future while also addressing some of the world's most serious issues, such as climate change, resource shortages, and inequality. Nonetheless, the high speed of technological growth has had some unintended consequences. This advancement has left some people behind, leaving their talents and knowledge outdated. Friedel (2007) This transition has resulted in employment losses and increased the disparity between the haves and the have-nots. Furthermore, our growing reliance on technology has created concerns about privacy, security, and the risk of dehumanization. We risk losing interpersonal skills and empathy that uniquely makes us human as we become increasingly reliant on technology and algorithms.

Through an historical lens, Friedel (2007) demonstrates the progression of technology from early innovations like "plows and horses" to the computer age, bringing both remarkable benefits and challenges. The development of technology has reshaped the way people view the world, their relationship with the past and the future, and how they adapt to change. The author showcases a symbiotic relationship between the past and the present and highlights both the advantages and disadvantages of technological advancements. He argues that there is an imbalance in the world due to the human ego, as technology has become a pursuit of power over nature. To maintain a symbiotic relationship between the past, present, and future, the human ego must be controlled. Inventors, thinkers, and creators must understand that no single idea is superior to the last, but rather, different ideas can be combined for innovation. Every innovation comes with potential consequences, and those consequences are inevitable if we fail to acknowledge that there are forces greater than ourselves. By learning from the past and understanding the implications of our technological advancements, we can create a more balanced and sustainable future. It is crucial to maintain a holistic view of its impact on society. We must strive for progress while mitigating the negative consequences of rapid technological advancement. This approach involves fostering collaboration among diverse fields of expertise, encouraging a culture of improvement that is sensitive to the needs of all individuals, and ensuring that technological advancements serve the greater good of humanity.

There is a complex relationship between technology and humanity. As we navigate the challenges, it is essential to learn from our past experiences and adopt a balanced approach that acknowledges both the benefits and potential pitfalls of technological advancements. By doing so, we can work towards a future that maximizes the potential of technology while preserving the qualities that make us uniquely human.

Smart technology has been a massive contributor to the way the Fourth Industrial Revolution has shaped society. Products such as the Amazon Echo, Ring Doorbells, Smart Speakers, etc. have all contributed to the success of this revolution. The entire point of the existence of smart products is based around security and aiding the ways of living at home or in public. These strategies include fostering effective multi-stakeholder dialogues, encouraging actionable empathy, providing educational opportunities for current and future stakeholders, developing next-generation foresight capabilities, transforming approaches to risk, and investing in public-private partnerships. By implementing these strategies, society can work towards eliminating potential problems and ensuring a balanced and sustainable approach to technological advancement. In manufacturing, robots are increasingly replacing human workers on assembly lines, leading to job displacement and a loss of traditional manual skills. In the retail industry, self-checkout machines and automated inventory management systems are reducing the need for human employees, while in transportation, the advent of autonomous vehicles and drones threatens jobs in trucking, taxi services, and delivery sectors. Similarly, customer service has seen the rise of chatbots and virtual assistants, which can handle multiple customer inquiries simultaneously, further reducing the demand for human agents. Additionally, promoting innovation in fields that complement rather than replace human labor, fostering a culture of lifelong learning, and implementing social safety nets for those affected by job displacement can help mitigate the negative impacts of technological advancements.

Jaime Morgan (2019), *Will We Work in Twenty-First Century Capitalism? A Critique of the Fourth Industrial Revolution*, encapsulates the future implications of what the technological revolutions can bring to society, particularly in the context of the capitalist system that we currently live in. In this system, everyone has their own job and serves as a cog in the machine of capitalism. However, with technology advancing at such an accelerated rate, there is a growing threat to the job market. Morgan (2019) highlights various markets and how they can be completely shifted from manual labor to technology completing tasks more reliably and efficiently. With technology's capacity to perform without error compared to humans, this can discourage people from seeking jobs or even result in the elimination of jobs altogether. This, in turn, positions workers and responsibility for future employment, reducing the urgency of calls for wider societal preparation. Public understanding and policy are thus affected and along with them the future of work.

By conveying that the future is virtually unclear, and humanity, with what it knows now and what potentially lies in wait in the foreseeable future, must wield it responsibly. Developing comprehensive strategies that incorporate the perspectives of policymakers, industry leaders, and individuals alike, will be key in navigating the challenges and opportunities presented by the Fourth Industrial Revolution (4th IR).

**5. Advantages and Disadvantages of Emerging Technology**

These technological leaps have enabled unprecedented access to information and resources, making it possible for individuals to learn, grow, and communicate with each other in ways never before imagined. Cybersecurity is a crucial concern in the 4th IR, as our reliance on technology and digital systems increases. As security measures improve, so do the skills and tactics employed by hackers, making it essential for both the public and private sectors to collaborate in developing robust security solutions. By approaching these challenges with a united front, society can better safeguard the technological advancements that have the potential to improve our lives significantly. Because of this current revolution, the quality of life for people has improved in many ways and has driven productivity to excessively new heights. Technologies such as the internet, smartphones, and even AI have aided this massive upswing. To shed light on the extent of technology-based human consumption, with smartphones and internet alone, more than 90% of the world’s population owns a smartphone and thus has direct access to the internet. With said access, people have the capacity to share, communicate, connect, network, etc. with people all over the world, which ultimately creates more sharing, communication, connection, and networking that evolves into powerfully propelled productivity. One of the key benefits of the 4th IR is the increased efficiency and productivity it brings to various industries. Automation and the use of advanced technologies such as AI and the internet allow for the automation of repetitive tasks, freeing up human workers to focus on more complex and higher value tasks. This results in increased productivity, as well as improved product quality and consistency. There seems to be active avoidance regarding the downside of the Fourth Industrial Revolution’s innovations and advancements, but they do in fact exist. First and foremost, anything in excess has the potential to become dangerous; it is no different with global growth and progress. Factors like human interaction, social skills, addiction, and mental health are either suffering or are clear issues as a result of these advancements. Perhaps it is because of the extreme speed with which these advancements emerged. With gradual development, people have a chance to consider, cope with, and acclimate to the changes. Government interference exacerbates these issues, often ignoring the negative effects of rapid technological advancements in pursuit of wealth and power. Some of the consequences include further political polarization and social divisions, as people struggle to adapt to the changes and the growing inequality fueled by the revolution. The area of social media and algorithms is one significant place where these difficulties manifest. The impact and influence of these digital tools have expanded tremendously as technology improves, altering the way people communicate, share information, and form opinions.

# 6. The dominance of social media and algorithms

The genesis of social media carried one purpose, to create a space for people to share pieces of their lives harmlessly and authentically. With people and their excessive use, social media morphed into something that skewed the human condition. This metamorphosis was the result of social media outlets developing strategies that fed on the vulnerabilities of people, thus creating a mass population of addicted users. Social media has skewed the human condition by fostering comparison and envy, reducing attention spans, eroding privacy, and enabling cyberbullying. Furthermore, it has diminished deep relationships, contributed to mental health issues, encouraged addiction, and facilitated the spread of misinformation. These factors have altered human behavior, relationships, and mental wellbeing in profound ways. In 2006, the social media platform Facebook introduced the first algorithm that was applied to social media. Algorithms are essentially data collecting programs that filter users’ feeds, by taking data from their accounts (their interests, and behaviors) applying this to to their feeds, and bombarding them with this data on their feeds. This implementation revolutionized social media which opened many new doors, but simultaneously created hidden tunnels for very dark things to pass through as well. Humans have been altered by this implementation, interfering with the ways humans are supposed to function. Children are now bound to their phones watching TikTok and other entertainment apps, teens are determined to keep up with the latest trends, and adults are consuming celebrity and political drama. Our attention spans have been reduced significantly from this, making us constantly seek instant gratification, and dopamine rushes from artificial things. These tendencies are now becoming ingrained in the younger generations, and the consequences will show in the decades to come.

According to a study entitled Media Trust under Threat: Antecedents and Consequences of Misinformation Perceptions on social media by Stubenvoll et al. (2021), the use of social media platforms has resulted in a threat to media confidence. A major facet of the decrease in media trust was algorithms. Algorithms on social media have become a vital part of our everyday lives, influencing how we consume information and connect with people online. These algorithms, however, can be harmful in a variety of ways. One of the most serious risks posed by social media algorithms is the development of “filter bubbles” (GCF Global). These algorithms are meant to offer users material that they are likely to engage with, thus users are more likely to view content that validates their previous thoughts and attitudes. This can contribute to the spread of disinformation and a lack of exposure to varied opinions by creating a filter bubble in which users are exposed to a restricted variety of perspectives and information. These filter bubbles add fuel to the fire, forcibly condemning people to only one viewpoint rather than enabling them to explore other perspectives. This isn’t a choice users make, it’s a choice the algorithm makes based on the material they interact with.

For example, if you go on TikTok and view 3 videos of kittens, your “For You Page” will consist of further videos heavily dominated by kittens.

Social media algorithms, along with government interference with social media giants, have had a significant impact on promoting political polarization. In the article, *Exposure to Opposing Views on Social Media Can Increase Political Polarization*,” by Chris Bail (2018), the author conducted an experiment in which participants affiliated with either Democratic or Republican views were incentivized to follow political Twitter bots with opposing views. The article highlights how social media sites contribute to political polarization and their various hypotheses of how the study could possibly play out. Political polarization is also exacerbated by social media algorithms. The study found that participants exposed to opposing political views on Twitter became more entrenched in their original beliefs. This occurs because people tend to counter-argue conflicting messages using motivated reasoning, which amplifies perceived differences and strengthens their commitment to preexisting beliefs. People become more prone to believing misinformation because of the trust they put into their political beliefs, so when they see something that they support or agree with that is misinformation, their beliefs are confirmed by the source that provided that misinformation.

Social media's influence on political polarization is further intensified by government interference with social media giants, which can promote biased or polarizing content. This results in a more divided society where individuals are less likely to consider alternative perspectives. Although the study conveyed interesting results, the authors noted that the study couldn’t be used to generalize about the US population, rather more on Twitter users. The study then concluded that the views of both sets of participants aligning with their party became slightly more extreme than prior to participating in the study. “People who are exposed to messages that conflict with their own attitudes are prone to counter argue them using motivated reasoning, which accentuates perceived differences between groups and increases their commitment to preexisting beliefs.” In other words, when confronted with opposition, a person’s own position becomes more cemented during their defense. Social media exacerbates this through rapid and aggressive posts that aim to bolster their own views while slandering the adverse perspective.

The communicative rapport and behavior demonstrated through social media directly contribute to political polarization because it confirms that political views shared on social media create disdain and aggressive push back from oppositions that quite possibly wouldn’t have existed without this platform. Political polarization exists because of social media platforms and their accessible yet private opportunity to be vocal without accountability. Furthermore, government involvement with the largest social media platforms may amplify the spread of biased or polarizing content, further dividing the population and entrenching extreme beliefs. As a result, the combination of algorithmic influence and government involvement in social media platforms perpetuates and exacerbates political polarization in today's society. This can also further polarize society as people become more fixated on their existing beliefs and less likely to consider other perspectives. Moreover, social media algorithms can exaggerate extremist viewpoints by prioritizing content that is expected to elicit interaction, such as likes, shares, and comments. This can result in the growth of echo chambers as well as the spread of hate speech and disinformation. Stubenvoll et al. (2021) argue that social media algorithms can also perpetuate prejudices by reinforcing existing preconceptions and discrimination. The development of social media algorithms has transformed the way we consume information and connect with people online. While they have opened up many new doors, the consequences of their use, as highlighted by Stubenvoll et al. (2021), have shown that they can be harmful in a variety of ways, including the development of filter bubbles, exaggeration of extremist viewpoints, and perpetuation of prejudices. It is crucial to recognize the risks posed by social media algorithms and implement measures to mitigate their negative effects.

# 7. Mass Suppression and Censorship

When social media becomes as powerful as it is today, it can be manipulated and contorted to suit the needs of the elites. As time progressed, social media has become the leading contributor to delivering information to the masses. Facebook being the most prevalent, has undergone multiple alterations to dictate what people can and can’t see. In other words, it is suppressing information that people have the right to know. On Nov 2nd, Yahoo news reported that the government has the ability to go through Facebook to suppress user content stating that its to combat the spread of disinformation. This possibility was built through Facebook itself, creating a “portal” for government officials to request posts to be diverted or suppressed. On Facebook, using a portal called the Content Request System, The Intercept reported, government officials from DHS as well as law enforcement officers can directly submit reports about posts that were deemed subversive or suspicious. Though it is unclear when the portal was created or what criteria must be met for a post to be removed, The Intercept reported posts about COVID-19, the withdrawal from Afghanistan and the war in Ukraine were targeted. (Tangalakis-Lippert, 2022). Ever since the COVID pandemic, the government has targeted “misinformation” deeming it a national security threat, yet the term is merely subjective. As it has been reported, “social media companies are collaborating with the Department of Homeland Security’s initiative against online misinformation” (Tangalakis-Lippert, 2022) . They claim it’s to protect America, but is it? Starting with the COVID vaccine, “misinformation” spread rapidly regarding the vaccine and its negative effects. These claims were heavily denied by the CDC and the government, labeling these claims as misleading and misinformative. In turn, this contributed to COVID becoming political. Many believed that the vaccine was safe and effective, condemning anyone who attempts to say otherwise, while others believed it wasn’t safe, and forcing the populous to receive it was considered an infringement on our human bodily rights. Debate between the two affiliations transpired across all of social media, resulting in terminations of accounts, heated arguments, doxing (publishing private or identifying information about a particular individual on the internet, typically with malicious intent).

This manipulation of information by both social media platforms and government entities has far-reaching consequences. Not only does it infringe upon individuals' rights to access and disseminate information, but it also fosters an environment where trust in authoritative sources and institutions is eroded. As social media continues to play a significant role in shaping public opinion and facilitating communication, the issue of mass suppression and censorship remains a crucial concern that must be addressed to preserve the integrity of democratic discourse and the protection of individual liberties. Intertwining the government and big tech does not go hand in hand. Social media was intended to be a platform for people to freely exchange thoughts and information, not a platform where the government is the arbiter of truth. People should have the right to speak their minds, not get silenced by the government. There isn’t a need to deem this information inaccurate when in reality it's true. The DHS even stated that "false information that is deliberately spread with the intent to deceive or mislead" (Tangalakis-Lippert, 2022), yet they are deliberately labeling this information with the intent to deceive and mislead.

Expanding upon the ideas presented in Bail et al.'s article, the role of social media in political polarization becomes increasingly evident. The study shows that exposure to opposing views on social media platforms such as Twitter can result in individuals becoming more ingrained in their own beliefs rather than being open to considering alternative perspectives. This phenomenon can be attributed to the way social media algorithms are designed to cater to users' existing interests and preferences, creating echo chambers that amplify and reinforce their pre-existing beliefs. As a result, users become more susceptible to confirmation bias, wherein they selectively accept information that supports their views and dismisses or discredit information that challenges them. Moreover, the anonymity and instant gratification provided by social media platforms contribute to a lack of accountability for one's actions and statements. This, in turn, fosters an environment where users are more likely to engage in aggressive behavior, trolling, and harassment of those who hold opposing views. Such hostile interactions only serve to further divide individuals along ideological lines, exacerbating the issue of political polarization. To mitigate the negative effects of political polarization driven by social media, it is crucial to promote digital literacy and critical thinking skills among users. Encouraging users to diversify their media consumption and engage in open dialogue with others who have differing views can also help counteract the effects of echo chambers and foster a more inclusive online environment. Furthermore, social media companies and governments must work together to establish regulations and policies that promote transparency, accountability, and responsible content moderation. By addressing the underlying factors contributing to political polarization on social media, we can work towards creating a more unified and democratic society. Building on the insights provided by Stubenvoll et al. (2021), it becomes evident that the erosion of trust in media and the proliferation of misinformation on social media platforms pose significant challenges for individuals and society at large. The ease with which misleading information can be shared and propagated online has fueled a climate of skepticism and uncertainty, making it increasingly difficult for people to discern the truth and engage in meaningful discourse. In this context, the role of social media can promote news literacy among users, providing tools and resources that empower individuals to identify reliable sources and critically assess the content they encounter online. People are entitled to know the truth of what is being put out all across social media and should not have to guess whether or not what they are viewing is factual or an illusion. However, these content moderation systems must work accurately or else they can possibly become another threat to the truth. Collaboration between individuals, media organizations, social media platforms, and governments is essential in tackling the adverse effects of misinformation on media trust and social cohesion. By working together, these stakeholders can create an information ecosystem that is more transparent, reliable, and conducive to democratic discourse. In doing so, they can not only restore trust in media outlets but also help society navigate the complex landscape of information in the digital age, ultimately mitigating the detrimental consequences of social media.

# 8. Search Engine Manipulation Effect

Search engines were originally designed to aid people who were looking for anything online. This is a tool that serves the ultimate purpose of giving users the ability to find relevant information on the internet by processing and indexing billions of websites. Users can type virtually anything into the search bar, and then receive results in mere seconds, getting suggestions while typing, and ranking the sites by popularity and user ratings. In today's world, this has been taken advantage of, manipulating search engines to give users what the company believes the users should see. This manipulation is referred to as the search engine manipulation effect.

The search engine manipulation effect is a phenomenon where the order and ranking of search results presented by a search engine can significantly impact the opinions and beliefs of users. This effect occurs when a biased or manipulated search algorithm influences the user's perception of a topic, leading them to form opinions or beliefs based on the information presented to them by the search engine. As defined and observed by Robert Epstein and Ronald Robertson (2021), in their study of the search engine manipulation effect (SEME) and its possible impact on the outcomes of elections. They found out that the United States in fact utilized this during their 2020 election citing “The results showed a liberal bias of over 0.125 for Google searches and a conservative bias of over 0.025 for non-Google searches. When conservative voters saw the Google homepage on election day, they received reminders to vote just over 40 per cent of the time, compared to more than 50 per cent for liberals and more than 70 per cent for moderates” . This stunning correlation conveys the fact that there is a way to manipulate Google search algorithms that can benefit one side and prevent the other from reaching potential supporters. An important point is that biased search rankings can shift the voting preferences.

This is only one serious aspect of manipulation of search engines data that can potentially harm democracy by jeopardizing election integrity. Search engine manipulation can be used to impact public opinion on political candidates by concealing potentially harmful material or magnifying potentially beneficial information. Search engine tampering can be the deciding factor in determining the outcome of a tightly contested election. The fact that search engines are privately owned and not subject to government supervision raises worries about the possibility of misuse.

# 9. Influenced Election Outcomes

Leaning left or right should be left up for the individual to decide. Influencing the way people think is an abuse of authority and a reach into the privacy of Americans across the country. Through Epstein's study, he found that big tech companies utilize the “Search Engine Manipulation Effect. (SEME)” This results in shifting “voting preferences for the undecided by 20 per cent, and as high as 80 per cent for some demographics” (Epstein, 2021). He also stated If that number of people who can be shifted invisibly is a lot larger than the projected win margin, then we say, okay, the outcome of this election is actually in the hands of Big Tech, primarily Google. It is an attack on the minds and in societies, especially the people trying to educate themselves. Many countries around the world are dealing with this manipulation.   
It is important to emphasize media literacy and critical thinking skills in our education system, empowering citizens to navigate the digital landscape with confidence and discernment. This involves teaching individuals to identify reliable sources, recognize misinformation, and engage in respectful dialogue with those who hold differing viewpoints. More deliberate action should be taken by governments to protect against misinformation and deliberate manipulation.

**10. Conclusions**

In many ways, the world is very dependent on technology and the use of it in many avenues of life. This paper has exposed many aspects of the development of the Fourth Industrial Revolution, and its impacts on society particularly analyzing the role of social media and its algorithms in the ongoing political polarization occurring. Through a thorough analysis of the positives and negatives of this revolution, it became evident that social media has played the most significant role in the ever-expanding evolution of the political divide, especially in politics. Truth is much more subjective, not always fact. Furthermore, this paper highlighted the normalization of publicly sharing political opinions on social media, the algorithms keeping people in echo chambers, the government using algorithms to push their narratives, and ultimately censorship. Overall, this has contributed to the ongoing conversation on political polarization and its correlation with the Fourth Industrial Revolution, emphasizing that people must become more aware of the things they say, the content they absorb, and what is happening behind closed doors while they are immersed and pulled down the social media rabbit holes.

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