The new era of breaking news
How social media impacts the dissemination of information

By

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A Master Thesis

From Complex Systems Engineering and Management

Submitted to the Faculty of Technology, Policy, and Management

At the Delft University of Technology

In the process to obtain the degree of Master of Science

To be defended publicly on Friday, June 30th, 2023, at 11:30

Student number: 4932935

Project duration: March 1st, 2023 – June 30th, 2023

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Preface

Here lies the master's thesis titled "The new era of breaking news", which I have written to fulfil the graduation requirements of the Complex Systems Engineering and Management program at Delft University of Technology. I have been immersed in coordinating, researching, and writing this thesis from March 2023 until June 2023.

I wish to express my deep gratitude to all the members of my thesis committee. Your valuable insights and thoughtful consideration throughout this project have been immensely helpful, and for this, I am truly thankful. I would like to begin by expressing my profound appreciation to Dr. Olya Kudina, my first supervisor. Her unyielding support and expert guidance have been invaluable in this process. Her dedication to fostering my academic development, along with her reassuring guidance during difficult phases, served as the driving force behind the completion of this thesis. Thank you, Olya. My second supervisor, Dr. Nadia Metoui, provided helpful guidance during the first half of this thesis. Her fresh perspective and expert advice on key aspects of the content have helped me during the start of this research. When Dr. Metoui had to step away, I was fortunate to have Dr. ir. Mark de Reuver step in as my second supervisor. His willingness to join midway, coupled with valuable insights, provided the continuity needed for this research. I must also extend my sincere gratitude to Dr. Udo Pesch, the Chair of my committee. His leadership and sharp observations have shaped this research in important ways.

I am also grateful to the nine experts who agreed to participate in interviews. Their comprehensive understanding of the topic and willingness to share their insights significantly contributed to the richness of this thesis. Their passion for the subject matter was evident and deeply appreciated. Thank you all. I cannot conclude without expressing my appreciation to my family and friends for their unwavering support. Their encouragement and belief in my abilities, not only throughout this thesis but also during my entire academic journey, have been a source of strength and motivation. Thank you all.

Ivy de Jong
Delft, June 2023

Executive summary

In this research, I delved into the dynamic role of TikTok in shaping democratic practices, with a particular focus on its effects on informed decision-making and activism. The rapid increase in social media usage has dramatically reshaped our lives, bringing several benefits but also significant concerns, especially regarding information spread and its influence on democratic processes. To explore the mechanisms of information dissemination on TikTok and its impacts on democratic practices, I conducted an extensive literature search and performed interviews with experts in the field. The findings present a nuanced landscape where TikTok both empowers and challenges democratic practices.

I discovered that TikTok's unique features like algorithm-driven content discovery and short-form video format create a space for users to voice diverse perspectives, raise awareness, and mobilize for social change. This leads to the democratization of discourse and gives voice to individuals who might have been marginalized or overlooked, particularly in the realm of activism. However, I also identified significant challenges, including the spread of misinformation, algorithmic biases, the creation of echo chambers, manipulation by malicious entities, and many more. These issues pose substantial threats to democratic values and processes, undermining trust in reliable sources and obstructing informed decision-making.

Drawing from these findings, I designed strategies to enhance the informed and ethical usage of TikTok. However, implementing these strategies demands a collective effort from a variety of stakeholders, including TikTok as a platform, its users, regulatory bodies, and wider society. A critical challenge is balancing promoting democratic values and maintaining a user-friendly, engaging environment. Implementing all the suggested strategies may not be feasible due to the platform's profitable objectives and complexity. Therefore, I recommend prioritizing the most critical and impactful measures and committing to continuous research, monitoring, and adaptation in response to the ever-changing social media landscape.

Furthermore, I highlight that the responsibility for fostering a responsible information ecosystem extends beyond TikTok. It calls for collaboration among social media platforms, regulatory bodies, educational institutions, and society at large. With concerted effort, we can envision a future where platforms like TikTok serve as spaces for entertainment, and relaxation, as well as catalysts for positive societal change, informed civic engagement, and potent activism.

As the social media landscape continues to evolve rapidly, further research into this domain is essential. We need to keep exploring and understanding the interaction between technology, legislation, and democratic processes to effectively navigate the challenges and opportunities presented by platforms like TikTok.

Keywords: TikTok, information dissemination, democratic practices, democracy, informed decision-making, deliberation, guiding values, strategies

Table of Contents

1. Introduction and literature review

Social media use has become increasingly prominent over the years and is now deeply integrated into our daily lives. These platforms allow us to maintain contact with friends, family, and acquaintances, while also facilitating the creation of new connections. A significant amount of information is shared on platforms such as TikTok and Twitter, marking a shift in how news and information are disseminated (Ortiz-Ospina, 2019). Social media platforms like TikTok have democratized the access to and exchange of information. This democratic exchange is pivotal as it allows every individual to have a voice and share information, providing a platform that can potentially influence democratic practices and many other aspects of society (Bhandari & Bimo, 2022). Democratic practices are the rules and procedures supporting democratic governance, ensuring that the power to govern is vested in the people, either directly or via elected representatives, and maintaining governmental accountability to the population (Clawson & Oxley, 2016). However, a more detailed analysis of this concept will follow in Chapter 3.

In a democracy, informed decision-making is paramount, and it is contingent on access to accurate and diverse information (Bekker et al., 1999). TikTok, given its substantial influence and real-time information dissemination capabilities, plays a crucial role in shaping this democratic process. By fostering the exchange of ideas and opinions, TikTok has become an essential tool in the information ecology that underpins democratic practices (Bhandari & Bimo, 2022). However, it's important to recognize that despite its substantial role in information dissemination, TikTok, like any profit-oriented organization, prioritizes its business model (Orlowski, 2020). This means that its foremost concern may not necessarily be fostering democratic discourse, but rather promoting engagement and revenue generation.

Navigating the information landscape on platforms like TikTok can present a complex web of challenges. Among these is the difficulty of determining the authenticity of news or other content shared on the platform (Brown, 2020). The platform's algorithm, designed to tailor content to specific user preferences, further adds to this complexity (Madison & Klang, 2020). It may influence the diversity and range of information accessed by directing particular content towards certain audiences. Consequently, while TikTok's algorithmic design facilitates an efficient dissemination of information, it can simultaneously pose potential challenges to the principles of democratic practices by potentially limiting the diversity of viewpoints to which users are exposed.

Through this research, I will look into the impacts of information dissemination through social media, in specific TikTok, on democratic practices, by focusing on its underlying mechanisms. Given TikTok's significant impact on society and its potential to shape democratic practices, it is essential to examine its role in information dissemination and how it affects informed decision-making. Once I've delved into the complexities of TikTok's involvement in information dissemination and its subsequent impact on democratic practices, particularly in relation to informed decision-making and deliberation, it becomes imperative to further explore ways to encourage ethical usage of these platforms. This exploration can involve formulating strategies with the goal of promoting an environment that fosters ethical user behavior.

Although the influence of social media on society has been studied, there is still a demand for a multifaceted exploration of this topic for TikTok specific. To gain a deeper comprehension of information dissemination through TikTok, qualitative studies and ethical considerations are essential. In addition, analyzing social media use from a political philosophy standpoint can provide valuable insights into normative dimensions. However, this will be discussed more elaborately in section 1.2.2.

The impacts of the dissemination of information through TikTok can be considered a complex socio-technical system, with different stakeholders involved with different interests. This complexity makes this problem a typical CoSEM problem, which can be approached with the appropriate tools as provided in the Master's program. The two-year curriculum builds abilities in developing, evaluating, and managing complex systems across a range of industries, including information and communication (I&C). It blends theoretical coursework with hands-on learning opportunities. The problem spans several domains, but in essence, it brings together technology and ethics. The focus on technology, underlying mechanisms, and social media platforms characterizes the I&C domain.

In the following sections, I will first examine the existing literature and identify the knowledge gap. Based on this, I will formulate a research question and associated sub-questions. In addition, I will describe the approach for the research and choose a suitable method for each research question. At the end of this introduction, I will discuss the planning of the thesis using a research flow diagram and a Gantt Chart.

1.1. Literature review process

To find the sources for this literature review, I made use of Google Scholar. Search queries such as "Social media AND fake news", "Social media AND information dissemination", "TikTok AND information dissemination", "TikTok AND activism", and "Social Media AND activism" delivered already a lot of articles. Since this search query provided some intriguing insights into various views, it already produced the majority of the sources for the results. With snowballing, I gained even more insights from these articles. A clustering of the sources in a table can be found in Appendix A.

1.2. Literature review and knowledge gap

In this chapter, I will perform a literature review to explore the nuances of the research topic. Hereby, I aim to identify any potential gaps in literature that provide opportunities for my research.

1.2.1 Literature review

This research explores the impact of information dissemination on democratic practices, with a focus on informed decision-making, within the context of the popular social media platform TikTok. The research touches upon several important themes that will be explored in this literature review chapter.

The use of advanced mechanisms in TikTok raises questions about the role of technology in shaping democratic practices. With the increasing prevalence of social media use in society, it is important to examine how its use can either enhance or hinder democratic practices, such as informed decision-making. Take, for example, the Stop Asian Hate movement that emerged on TikTok in 2021. After a series of anti-Asian hate crimes in the United States, TikTok users began sharing their experiences of racism and discrimination, bringing attention to the rise in hate crimes against Asian Americans (Jacques et al., 2023). Through these videos, viewers were able to see the personal impact of these hate crimes and were encouraged to take action, such as signing petitions, donating to organizations fighting against hate, and speaking out against racism in their communities. These TikTok videos have the potential to influence one's informed decision-making by providing a personal and emotional connection to the issue, encouraging viewers to educate themselves on the history of anti-Asian racism, and taking action to support the Asian American community (Jacques et al., 2023).

The Black Lives Matter movement is another example of TikTok activism. TikTok users began sharing videos highlighting the institutionalized racism and police brutality experienced by Black Americans after George Floyd's passing in May 2020 (Jiang et al., 2022). These videos provided information on how to take action, including contacting local elected officials to

demand change, signing petitions, and donating to groups that support racial justice. Numerous of these TikTok videos became popular after going viral, reaching millions of viewers and sparking important discussions regarding racism and police brutality. As people went to the streets to demand change, the movement also sparked a global wave of protests and demonstrations (Jiang et al., 2022). These TikTok videos provided a platform for people to share their experiences and viewpoints on racism, police brutality, and social justice, which could have an impact on one's informed decision-making. The videos additionally provided users a way to learn about America's past of racial injustice and to take action to support the Black Lives Matter movement, such as donating money to charities or participating in demonstrations (Jiang et al., 2022).

Another interesting example is the MeToo movement. In 2017, the MeToo movement started on social media, where people posted videos about being the victim of sexual harassment and assault (Quan-Haase et al., 2021). Important conversations about consent and the pervasiveness of sexual violence in society were sparked by these videos. The MeToo movement may have an impact on someone's ability to make well-informed decisions by giving victims of sexual assault a platform to share their stories and express their concerns. Additionally, the movement helped to raise awareness of the prevalence of sexual assault and the significance of consent in all kinds of relationships (Quan-Haase et al., 2021). The MeToo movement did have some drawbacks, though. These include the potential for false accusations and the possibility that the movement could be appropriated or turned into a commodity by particular individuals or organizations for their gain (Nutbeam & Mereish, 2021). If misinformation is being shared on this widespread platform, this could lead to false accusations, and the potential of false accusations could be extremely hazardous for those involved. Consider not only the impact on a person or organization's reputation but also any potential legal repercussions that entail (Nutbeam & Mereish, 2021).

Another example of activism on social media is the pro-life debate that is going on at TikTok. Pro-life creators on TikTok share videos that promote their beliefs in the sanctity of life and the protection of the unborn (Duggan, 2022). Personal stories, data, and arguments against abortion are frequently featured in these videos. However, this movement has received considerable criticism and opposition from pro-choice activists. Pro-choice activists claim that reproductive rights are a fundamental aspect of bodily autonomy and that women should be able to choose whether or not to have an abortion. These arguments frequently spark heated debates and disagreements on the platform (Duggan, 2022).

A limitation of TikTok activism is that it sometimes presents incomplete or oversimplified information about complex problems. It can be difficult to convey a thorough and nuanced grasp of complex social and political issues and provide all information in TikTok videos due to their short duration. This might result in misunderstandings or inaccurate portrayals of the problems, which could eventually be harmful to the cause (Madison & Klang, 2020). A further limitation of TikTok activism is that it can sometimes be performative, with users posting videos and hashtags purely for attention or to appear socially conscious, without knowing much about the topic. Although these videos might increase awareness, they might not have any real-world impact, and even worse, they might spread misinformation (Madison & Klang, 2020). And last but not least, there's the issue with TikTok algorithms that could favor some voices or opinions over others, creating echo chambers, which is an environment in which a user only interacts with beliefs or viewpoints that are similar to their own, reinforcing their current beliefs and excluding alternative viewpoints (Madison & Klang, 2020). Overall, while TikTok activism has the potential to be a powerful tool for bringing about change, it is crucial to be conscious of any possible drawbacks and to approach it from a critical and thoughtful standpoint.

The research shows that the benefits of sharing information on social media sites are limited by the dual information credibility problem, which entails the trustworthiness of both the information shared and the information source as the main area of ambiguity around the use

of social media (Osatuyi, 2013). According to research by Bates (2009), around 85% of journalists believed that social media sites' information was less credible than traditional media because there was no fact-checking, no verification, and no reporting criteria. Regardless of whether what is said on these social media platforms, during political and/or ethical debates, etc., is true or not, it will have an impact on how users make their decisions.

Why do people disseminate false information? What drives this behavior? Numerous research has also been done on the psychology of information and social media. For example, Pennycook and Rand (2021) summarize research on the reasons why individuals share or believe fake or seriously deceptive information online. The gap between what people believe and what they post on social media is also rather wide. More so than the deliberate dissemination of false information, inattention is the primary cause of this disconnection. The study conducted by Machete and Turpin (2020) aimed to investigate the use of critical thinking in identifying misinformation. They found that critical thinking is a crucial skill in identifying misinformation and that specific critical thinking strategies such as source verification, fact-checking, and contextual analysis are effective in detecting false information. However, not everybody masters that skill. Academic institutions are advised to teach information literacy and promote critical thinking when accessing online information. University libraries are highlighted as potential resources to assist in teaching information literacy and evaluating the credibility of online information. While some previously mentioned studies claim that information, true or not, through social media, influences users, the study conducted by Tandoc et al. (2019) contradicts this. This study, based on a national poll with 2501 participants from the technologically advanced nation of Singapore, aimed to comprehend the response patterns of individuals towards misinformation on social media platforms. Interestingly, their findings suggest that the majority of Singaporean social media users tend to disregard the misinformation they stumble upon online. This response only changes when the misinformation directly pertains to them or their intimate social circle. In such cases, they actively engage in correcting the misinformation. These findings underline the complex dynamics of misinformation dissemination and response, suggesting that efforts to combat false information should take into account not only critical thinking and information literacy skills but also the context and personal relevance of the misinformation in question.

Overall, this literature review emphasizes the need to critically examine the impact of information dissemination on democratic practices such as informed decision-making, particularly within the context of social media platforms like TikTok. In the next section, I will discuss areas for further exploration.

1.2.2 Knowledge gap

The literature review highlights several themes related to the impact of information dissemination on democratic practices, particularly within the context of TikTok. While the existing research has provided valuable insights, there are certain gaps that need to be addressed to enhance an understanding of the topic. Therefore, this section identifies specific areas that require further exploration and contribute to the existing body of knowledge.

One area that requires further exploration is the ethical implications of social media use. There is a growing recognition that the potential for social media to facilitate the dissemination of misinformation, invade privacy, and amplify harmful speech raises important ethical questions that have yet to be fully addressed, especially when it comes to the increased activism on the platform. By considering the implications of the use of TikTok on democratic practices, I can gain a deeper understanding of the dilemmas faced by users and designers and how they navigate these challenges.

In addition to ethical considerations, there is a need to explore the topic using qualitative studies. While quantitative analyses have provided valuable insights, they are not sufficient to capture the complexity of social media's impact on democratic practices. Qualitative methods

can help us gain a deeper understanding of the experiences and perspectives of TikTok users and provide more nuanced insights into the social and psychological effects of social media use. Even though more qualitative research has already been conducted, the literature review from section 1.2 has shown that no previous research has been conducted into the impact TikTok has on democratic practices, such as informed decision-making.

Finally, a political philosophy perspective can offer valuable insights into the normative dimensions of social media use. The literature review has examined the impact of social media activism and the challenges associated with misinformation. However, there is a need to explore the normative frameworks that guide responsible social media use, particularly from a political philosophy standpoint. By examining questions surrounding the protection of speech on platforms like TikTok and determining what kind of regulation is appropriate for these companies, it is possible to address ethical concerns and strive for a balance between freedom of expression and protection from harm. Integrating the political philosophy perspective into the research will provide a comprehensive understanding of the normative dimensions of social media use and contribute to the development of guidelines and policies that promote responsible information dissemination and democratic practices on social media platforms.

In conclusion, while research on social media's impact on society has made significant strides in recent years, we still need to deepen our understanding of the topic from different angles, including ethics, qualitative studies, and political philosophy. By doing so, we can gain a more comprehensive understanding of social media's impact on society and develop strategies for responsible use that benefit individuals and society as a whole.

In the subsequent section, I will articulate these ideas into a research objective, which will subsequently be used to formulate the guiding research question.

1.3.   Research objective and research question

Having delved into the subject and identified areas for further exploration, I am now able to articulate the research objective. It is important to note that the objective of the research is multifaceted. First and foremost, the aim is to delve deep into the complexity of TikTok, seeking to understand its underlying mechanisms and how they impact the dissemination of information on the platform. The research further aims to explore the implications of information dissemination via TikTok on democratic practices, particularly focusing on aspects such as informed decision-making and deliberation. Ultimately, I aim to design strategies that will promote the ethical and informed use of TikTok. With a nuanced understanding of TikTok's mechanisms and their impacts on democratic practices, the hope is to then translate these insights into actionable guidelines. These strategies will aim to mitigate the potential negative consequences while enhancing the positive elements that TikTok brings into the realm of information sharing and democratic participation.

By shedding light on these aspects, this study will provide an extensive overview of the current situation of TikTok and its implications for deliberative democracy. I aim to address the issue from a distinctive perspective, employing the principles of ethical and political philosophy to understand the ever-changing landscape of social media.

Therefore, to guide this study, I will need to address the following research question:

'How does information dissemination through TikTok affect democratic practices, specifically in terms of informed decision-making, and what strategies can be designed to advance its ethical and informed usage?'.

In the following sections, I will delineate the scope of the research and define core concepts that are used throughout the research.

11

1.4. Defining the scope and core concepts

When embarking on a research project, one of the first steps is formulating a research question to guide the investigation. The research question acts as the foundation upon which the entire project is built, so it is crucial to carefully consider the phrasing and scope of the question.

1.4.1 The scope

To delineate the research, I chose to investigate one social media channel; TikTok. This decision is supported by TikTok's unmatched reputation as a major participant in the global social media landscape, which it has achieved thanks to its 1.5 billion active users worldwide, according to Statista (2023). Remarkably, this amounts to over 20% of the global population actively participating in TikTok, highlighting its immense power and reach. Aslam's (2023) research shows that more than half of TikTok's users fall within the 18 to 24 age categories, which highlights how TikTok's unique structure, which is represented by short-form video content, has led to immense popularity among young adults. Furthermore, an impressive 75% of TikTok users are 19 years of age or older, according to Shepherd's research from 2023, demonstrating the platform's appeal to more mature age groups as well. Although TikTok is a popular platform worldwide, the platform has the largest audience in North America, Europe, and Asia (DataReportal, 2023). Remarkably, Asia is on this list even though TikTok has been banned in China and India (Romero, 2020; Kaye et al., 2020), two countries that counted many users. TikTok has made significant investments to increase its market share and promotional activities in these North America, Europe, and Asia, including partnerships, influencer collaborations, and localized content. As a result, the platform has attracted a large user base in these areas (Gray, 2021). Content localization is another technique that TikTok uses to gain traction, because for each region there may be differences in content preferences (Abidin et al., 2022). TikTok has tailored its content to each region's specific peculiarities of culture and interests. This has made it possible for users to produce and consume the material that is relevant to and meaningful to their native cultures, and demographics of the region, which may differ for each (Abidin et al., 2022). The platform, for instance, might have a greater user base in North America among young adults (Boffone, 2022), whereas, in Europe, it might have a more diverse user base with users of different age groups (Boeker & Urman, 2022). TikTok has a large user base in Asia that includes people of all ages (Iqbal. 2023). The content localization strategy has been beneficial in increasing user adoption and engagement in various areas. However, the TikTok algorithm is made to encourage interesting and shareable material, which frequently produces viral videos that gain popularity very quickly (Abidin et al., 2022). Due to users' ability to produce and share material that appeals to a broad audience, TikTok has become increasingly popular in North America, Europe, and Asia (Iqbal, 2023). An aspect that could be interesting to consider is local regulations. Each region's laws and regulations that apply to TikTok can affect the categories of content that are permitted or prohibited. For instance, there can be stronger laws regarding copyright infringement, user data protection, and privacy issues in North America and Europe, whereas there might be limitations on political and sensitive topics in Asia (Jia & Ruan, 2020).

TikTok is used for entertainment, socialization, and information-seeking (Barta et al., 2023). Presently, TikTok has also become a platform for education, as many creators use it to share information on topics ranging from science and history to personal finance and mental health (Barta et al., 2023). However, at the same time, TikTok has also faced criticism for its potential to disseminate misinformation and propaganda due to its algorithmic content recommendation system, which can amplify unverified or biased content (Medina Serrano et al., 2020). Besides entertainment, socialization and even information-seeking, the app has also been used for activism, with users using it to raise awareness about social and political issues and to organize protests and other events (Compte & Klug, 2021). TikTok has evolved into a platform for users to express their opinions and participate in discussions. As TikTok grows and evolves, discussions about political and ethical issues may continue to take place on the platform (Duggan, 2022). It may also be noteworthy to mention that the typical TikTok user dedicates approximately 95 minutes per day to the platform. Given this significant allotment of time, one

can presume the substantial volume of information that could be potentially absorbed (Aslam, 2023).

By focusing specifically on TikTok during this research, I can provide a more nuanced understanding of how this platform's unique format and content recommendation system, which makes users stick around for hours, affect democratic practices, such as informed decision-making. This understanding can inform policies and interventions aimed at promoting responsible information dissemination and informed decision-making in the digital age.

Further, I chose to focus on the interaction between democratic practices and information dissemination on TikTok, with a particular emphasis on activism. In the context of democracy, activism refers to individuals or groups actively pushing for social, political, or economic change using legitimate and peaceful methods such as protests, campaigns, and (social) media. It includes exercising fundamental democratic rights, promoting democratic principles, and pursuing policy reforms through debate and collaboration. Activism in democratic systems emphasizes public participation, develops civic engagement, and is critical in achieving democratic governance and social transformation (Cammaerts & Carpentier, 2007). Activists are individuals or groups who passionately advocate for social, political, or economic change. They utilize varied strategies, including digital platforms, to promote their causes and address perceived injustices in society. Activists strive to effect change by creating awareness, inspiring action, and influencing policy. Their efforts, which can range from local to global, significantly contribute to democratic processes by emphasizing public engagement and discourse in shaping societal norms and policy (COE, 2023).

By narrowing the scope of my research to activism on TikTok, I aim to investigate how activists use this platform to disseminate information, raise awareness, and inspire others to take action for social and political change. Exploring how TikTok's distinctive features, such as its algorithm-driven content distribution and its visual and interactive nature, affect the dynamics of information dissemination and democratic participation in the context of activism is something I'm particularly interested in.

Also, I made the decision not to define geographical boundaries in the research question. This means that the research will not be limited to a specific geographic area, such as a particular country or region. The reasoning behind this decision is that the subject of the research, TikTok, is a platform that transcends geographical boundaries and has a global reach. In doing so, I will be able to capture the diversity of experiences and perspectives related to TikTok, which is essential for gaining a more comprehensive understanding of the platform's impact. Additionally, not defining geographical boundaries in the research question can help ensure that the findings and insights generated from the research are more relevant and applicable to a global audience.

1.4.2   The core concepts
For this research, I think it is relevant to define what is meant by certain core concepts. Defining core concepts at the start of research is important because it provides clarity and precision to the research question and methodology. Without clear definitions of key terms and concepts, I could risk confusion and misinterpretation, which can lead to inaccurate or unreliable findings.

To create a full understanding, I think it is important to define democratic practices. This concept refers to the principles and actions that uphold and promote democratic values, such as freedom, equality, transparency, and accountability. These practices include the active participation of citizens in decision-making processes, the protection of human rights, the rule of law, and the establishment of democratic institutions that ensure checks and balances in government (UNDP, 2023).

Another term that I think is necessary to explain is informed decision-making, which is perceived as the process of making choices based on a thorough understanding of the relevant information, facts, and evidence available. It involves analyzing and evaluating different options, assessing potential outcomes and consequences, and selecting the best course of action based on the most accurate and reliable information (WHO, 2022). I will provide a more elaborate definition of informed decision-making in section 5.

In addition to making informed decisions, I will also define the concept of deliberation. Within democratic practices, deliberation embodies an inclusive and reflective process in which citizens or groups exchange ideas, assess various viewpoints, and participate in respectful discussions to collectively arrive at decisions. It promotes mutual understanding, educated viewpoints, fair decision-making, civic involvement, transparency, and trust-building (Barabas, 2004).

Dissemination is another term that is used a lot throughout this report. Therefore, I think it is helpful to define it. Dissemination refers to the process of spreading information or knowledge to a wider audience (Cambridge Dictionary, 2023). This can be done through various means. But, when it comes to information dissemination by users through TikTok, disseminating refers to creating and sharing video content with the intent of reaching a wider audience.

Finally, information is also a word that is used a lot throughout this report. Therefore, I will also define this concept. Information is a broad term that refers to any knowledge or data that has meaning or relevance and can be communicated or processed. It can take many different forms, including text, images, audio, video, and numerical data. Information can be factual or opinion-based, and it can be used to inform, educate, entertain, persuade, or facilitate decision-making. In today's digital age, information has become a valuable commodity, with vast amounts of information being created, stored, and shared across the internet and other digital platforms (Madden, 2000).

2. Methodology

In this section, I will elaborate on the research methodology implemented in this study. Initially, I will present a broader research approach. Following that, I will construct sub-questions and propose appropriate methods to provide answers to these sub-questions.

2.1. Research Approach

Qualitative exploratory research is a suitable approach for investigating phenomena that are not yet fully understood or for which there is limited theory or research. According to Creswell & Poth (2013), the approach allows for the collection of rich and detailed data for understanding participants' experiences, attitudes, and behaviors. It allows researchers to adjust their design to capture emerging themes for a broader understanding. According to Miles, Huberman, and Saldana (2014), this approach is particularly beneficial in developing or expanding theories and including diverse perspectives for a nuanced understanding.

In the context of studying the effects of social media on society, a qualitative exploratory approach is appropriate since the phenomenon is complex, multifaceted, and relatively new. According to Kozinets (2015), the use of qualitative methods in social media research enables the exploration of the social, cultural, and political dimensions of social media use. Thus, a qualitative exploratory approach can offer insights into how social media impacts society from a variety of perspectives.

While the qualitative exploratory research method offers numerous benefits, it is also critical to acknowledge its limitations. One significant limitation is the potential for researcher bias, as the researcher's views and experiences can influence data collection and interpretation (Creswell & Poth, 2013). Moreover, because this approach is highly interpretive, it may lack the objectivity and replicability associated with quantitative methods (Miles et al., 2014). Therefore, care must be taken to ensure transparency and reflexivity throughout the research process.

Furthermore, qualitative exploratory research often involves a smaller, more specific sample, which may limit the generalizability of findings (Dudovskiy, 2022). Hence, while it is suitable for uncovering deep, contextualized understandings, it may not provide a comprehensive representation of the larger population's experiences or perceptions.

In summary, a qualitative exploratory approach, while not without limitations, is a valuable tool for investigating intricate phenomena like the impact of social media. By acknowledging and addressing its limitations, this approach can provide robust, socially responsible insights into contemporary issues.

In the following section, I will formulate specific sub-questions. For each of these sub-questions, I will identify a suitable approach to address them effectively.

2.2. Data and research methods

To guide this research, I formulated the following research question: '**How does information dissemination through TikTok affect democratic practices, specifically in terms of informed decision-making, and what strategies can be designed to advance its ethical and informed usage?**'. To answer this research question following a qualitative exploratory approach, I have drafted several sub-questions. The first sub-question aims to define the concepts of informed decision-making and deliberation. It also aims to provide an overview of previous discussions on these concepts in the age of social media.

1. **'How can informed decision-making and deliberation be defined, and what role do they play in the age of social media?'**

Defining key terms and concepts is important in any research project, as it allows one to communicate clearly and precisely. By including this sub-question that focuses specifically on defining the concepts of informed decision-making and deliberation, I can ensure that the research is grounded in a clear understanding of these terms and that I can effectively communicate the findings to the audience. An overview of prior discussions on deliberation and informed decision-making in the age of social media can be given to provide an important broader context for the topic.

To provide an encompassing definition, data is needed from existing literature. Desk research can be carried out to investigate this existing literature; therefore, I will use a literature review as a method. The needed information will come from reports, journal articles, and scientific research. I will utilize Google Scholar and Scopus to find the sources for the data. Here, I will use targeted search queries to find the right articles. Not only will I make use of search queries to find data sources, but snowballing will also be used in articles, to find even more sources with similar information to ultimately conduct as in-depth research as possible.

The following research question mainly focuses on the technologies that play a prominent role in contemporary society.

2. 'How do the mechanisms that underly TikTok affect information dissemination?'

This part of the research aims to identify how the different technologies that underly TikTok, including user interfaces, affect information dissemination. The data that is needed to identify this, is existing literature about this subject. When the goal is to give a broad overview of a subject, in this example, the various underlying technologies and how they affect information dissemination, literature reviews are considered helpful. Moreover, despite remaining fragmented and interdisciplinary, knowledge production in the field of business research is accelerating at a remarkable rate. This makes it challenging to stay abreast of cutting-edge research, to be at the vanguard, and to evaluate the body of evidence in a given field of study. This makes the literature review a more useful research technique than ever (Snyder, 2019).

The data needed to answer the sub-question will be an insight into the technologies that are used by TikTok. It would be beneficial to be aware of the several categories of technologies frequently applied in social media platforms like TikTok. Researching the methods and models employed for content curation, recommendation engines, and user engagement metrics may be necessary for this. Analyzing the content and interaction trends on TikTok might also be beneficial. However, gathering precise information is impossible since TikTok is working with proprietary software, therefore I would need to research third-party sources.

Next, I will determine the impacts of disseminating information through TikTok on democratic practices.

3. 'How does information dissemination through TikTok affect democratic practices in terms of informed decision-making and deliberation?'

This sub-question will focus on the effects of information dissemination through TikTok on democratic practices. The data required for this is existing literature. This time, I will focus on sources that map out the relationship between social media, or in specific TikTok, and society. This literature search will aim to identify the challenges and opportunities of information dissemination through TikTok on democratic practices. Based on these challenges and opportunities, I will identify guiding values in information dissemination. These values serve as a compass and a framework for developing strategies that promote democratic practices, and mitigate the negative consequences associated with social media use. I will identify these guiding values using Value Sensitive Design (VSD). VSD serves as a bridge, linking the designers creating technological systems with those who comprehend the values of the

stakeholders influenced by these systems (Friedman et al., 2002). This approach mandates an expansion of the objectives and standards for assessing technological systems' quality to include the advancement of human values. It signifies that design should not just be about functionality and efficiency, but should also prioritize and incorporate human values (Friedman et al., 2002). By employing VSD, I can interpret the guiding values from the challenges and opportunities presented from the literature search. These guiding values, provide the foundation for creating strategies that encourage ethical and informed TikTok use. They define what 'ethical and informed use' entails and guide the development of relevant features or guidelines. By rooting these strategies in human values, the approach becomes proactive, aiming to foster a healthier digital democracy.

I will also obtain data from the knowledge of experts in this field through an interview. These interviews will be structured, meaning I will prepare the questions ahead of time. However, I will also offer the interviewee the opportunity to discuss and clarify specific concerns (Alsaawi, 2014). I will conduct interviews until I reach saturation. Saturation refers to the point at which new interviews no longer provide significant additional insights regarding the research topic. By continuing the interviews until saturation, I aim to ensure comprehensive coverage of different perspectives related to the guiding values under investigation. Given the project's timeline, the goal is to engage approximately eight participants, a reasonable target to gather relevant information and insights.

I will analyze the data collected from the interviews using a Qualitative Comparative Analysis. With the data from the expert interviews, I aim to evaluate and contextualize the guiding values in information dissemination. I will do this by categorizing their standpoints for each guiding value. Eventually, I will analyze their viewpoints by finding recurring themes and challenges per guiding value between different interviews. A comparative analysis will help to gain deeper insights into these guiding values. The nature of this approach involves systematically examining and comparing the insights and perspectives provided by expert interviews. By identifying commonalities, differences, and recurring themes, the comparative analysis aims to uncover patterns and nuances within the data (Ragin, 1987). A comparative analysis offers several benefits as a research approach. It enhances understanding by systematically examining and comparing different perspectives or data sets. It validates findings, identifies patterns and relationships, and contextualizes concepts or frameworks. It provides contextual understanding and generates insights for decision-making or policy development. By considering multiple sources or cases, the qualitative comparative analysis adds depth and breadth to research, leading to comprehensive conclusions and new insights for the advancement of knowledge (Rihoux, 2006).

Although a comparative analysis based on expert interviews is a comprehensive methodology, it does come with limitations. One significant issue is its inherent subjectivity since it depends on the researcher's interpretation of the data, which could lead to potential biases in the outcomes. Also, the researcher's preconceptions can substantially influence the selection and interpretation of guiding values. Another limitation is the substantial time commitment involved. The detailed process of extracting common themes, categorizing viewpoints according to guiding values, and interpreting the qualitative data is time-intensive. The cumulative effect of these limitations may affect the overall validity and generalizability of the study's conclusions (Pagliarin et al., 2022). Therefore, the researcher must be cognizant of these limitations while designing and conducting the study and take steps to mitigate their potential impact.

Therefore, this question can best be answered with a combination of a literature review and interviews with experts. The combination of these methods should provide as complete an overview as possible of the effects of information dissemination on TikTok on democratic practices.

Finally, I will identify strategies for the platform, users, and institutions to effectively address and navigate the impacts identified earlier.

> **4. 'How to manage TikTok's impact on democratic practices through responsible design and management strategies?'**

To investigate this research question, I plan to conduct a literature review. The primary focus of this review is to identify strategies that can help manage the impact of information dissemination through TikTok on democratic practices. By exploring existing research and similar cases, a literature review will enable me to identify successful strategies.

The impacts of TikTok on democratic practices must be managed through both responsible design and management strategies. Designers have a critical role to play in improving their contribution to the platform's effects. They must consider the potential negative impacts of their design decisions and be willing to adjust their approach as needed. At the same time, it is crucial to focus on users of the platform and how they can manage these impacts.

The data that is needed to answer this research question is a list of strategies to deal with or overcome the impacts identified in sub-question 3. The sub-questions all together will help answer the main research question.

2.3. The flow of the research design

Having established the guiding sub-questions for this study, it's time to create a research flow diagram. This diagram visually represents the structure and sequential progression of the thesis project, in alignment with the research design. Each phase of the thesis is labeled with a corresponding sub-question, with a clear emphasis on the methodologies that will be used to tackle each sub-question, as well as the outputs or deliverables tied to each phase. Essentially, the design of the diagram illustrates how each phase interconnects, with the output of one sub-question serving as the foundation for the subsequent phase, demonstrating a logical and seamless flow of the research process. The flow diagram for this report can be found in Appendix B.

2.4. Time management

To express the course of the research in terms of time, a Gantt Chart has been drawn up in Appendix C. This chart shows the planning of the entire thesis, covering each part of the project. The chart is divided into phases based on the sub-questions. For each sub-question, the matching methods and their processing have been considered. The last phase mainly focuses on finishing the report and processing the results. By including all aspects of the thesis, I am aiming to realize a plan that is as accurate as possible.

3. Defining informed decision-making and deliberation in the context of social media

In this section, the following sub-question will be answered: *'How can informed decision-making and deliberation be defined, and what role do they play in the age of social media?'*. First, I will provide an overview of the concepts of informed decision-making and deliberation and I will paint a picture of how these concepts play a role in the age of social media.

To acquire a deeper perspective on informed decision-making and deliberation, I think it would be prudent to first briefly outline how I regard democratic practices. The principles, processes, and procedures that support democratic governance are referred to as democratic practices. These practices are designed to guarantee that the people, either directly or through duly elected representatives, hold the power to govern and that the government is accountable to the people (Clawson & Oxley, 2016). Democratic practices include but are not limited to free and fair elections, citizen participation, the rule of law, transparency, and accountability.

According to Diamond and Morlino (2004), free and fair elections entail that elections are a fundamental aspect of democratic practices. They provide citizens with the opportunity to choose their leaders and hold them accountable for their actions. Elections must be conducted in a free and fair manner, without coercion or intimidation, and with transparent and impartial procedures. Another fundamental aspect of democratic practices is citizen participation. This means, in a democratic society, citizens must be allowed to participate in decision-making processes that affect their lives. This can take many forms, including voting, peaceful protests, and public consultations. Further, democratic practices are based on the rule of law, which means that everyone, including the government, is subject to the law. The rule of law ensures that citizens have legal protections and that the government cannot act arbitrarily. And finally, democratic practices require transparency and accountability from the government. This includes providing citizens with access to information, allowing the media to operate freely, and establishing mechanisms for citizens to hold the government accountable for its actions (Diamond & Morlino, 2004). To ensure that the government is responsive to the needs and wishes of its citizens, these practices are crucial to the functioning of a democratic society. They are crucial for fostering stability and peace as well because democratic practices offer a framework for peacefully resolving disputes without resorting to violence.

An example of democratic practices is informed decision-making. This is the process of making decisions after carefully considering all available information and data, as well as understanding the potential repercussions and outcomes of each option. This decision-making strategy ensures that decisions are based on a comprehensive understanding of the situation rather than on incomplete or biased information (Bekker et al., 1999). I found during the literature search that making an informed decision includes several factors. How the factors influence the decision will depend on the situation at hand. However, the factors that I consider to be important in this research I will discuss in the following paragraph.

The first factor that plays a crucial role in informed decision-making is information and its availability. Collecting and analyzing relevant information plays an important role in making an informed decision (Bekker et al., 1999; Acquisti & Grossklags, 2005). And perhaps even more important is the accessibility to this data. This concerns conducted studies, expert opinions, raw data, etc. With the help of information, one is capable of making a well-considered decision (Edwards et al., 2013). Besides information, context is also an important factor when it comes to making an informed decision. This means that one understands the broader context in which the decision is being made, including the social, economic, and political factors that may influence the decision. It is therefore critical that when making an essential decision, you have access to understanding the context in which the decision is being made (Bekker et al., 1999).

In addition, I think it is important that when a decision is made, one understands the risks and benefits associated with each decision. Because evaluating these potential risks and benefits of each option is essential to making informed decisions (Petrova et al., 2015). This includes considering short-term and long-term consequences, as well as potential unintended consequences. Without this knowledge, it is extremely difficult to make an informed decision (Bekker et al., 1999; Edwards et al., 2013). Therefore, it is also important to be aware of the existing alternatives concerning the situation. In this way, different alternatives can be weighed against each other based on risks and benefits. Examining all possible alternatives is important to ensure that the decision-maker has considered all options and selected the best course of action (Petrova et al., 2015). Not only do considering alternatives and weighing risks and benefits play a role in making an informed decision, values and ethics of the decision-maker are also relevant. Considering personal values and ethical principles is essential to making decisions that align with the person's beliefs and standards (Acquisti & Grossklags, 2005). When you make an important decision, this decision must be in line with your beliefs. Someone's personal beliefs can therefore influence how this person makes a decision and therefore also what decision he makes (Bekker et al., 1999).

Overall, informed decision-making is a critical process that requires an in-depth analysis of all relevant factors as well as a comprehension of the potential outcomes and consequences of each available option. Individuals and organizations can make well-informed choices that correspond with their goals and values and have the potential to produce positive outcomes and benefits by following this process. However, as acknowledged in the studies by Bekker et al. (1999) and Acquisti & Grossklags (2005), the idea of considering all relevant factors at all times is often unrealistic. Real-world decision-making often requires swift actions, meaning that individuals and organizations must often prioritize certain factors over others due to time and resource constraints.

Furthermore, I will define deliberation. In the context of democratic practices, deliberation refers to a process in which individuals or groups participate in thoughtful and inclusive debates, exchange of ideas, and careful evaluation of different perspectives and information before coming to collective decisions (Barabas, 2004). Deliberation highlights the necessity of citizens or stakeholders engaging in educated and reasonable conversation, active involvement, and respectful engagement in influencing public policy or making decisions that affect the community or society as a whole (Goodin, 2000). Deliberation in a democratic system entails open and inclusive forums where citizens can express themselves, present their points of view, listen to others, and engage in critical thinking. Deliberative methods frequently include multiple perspectives and voices, as well as opportunities for fact-checking, evidence-based reasoning, and constructive dialogue (Barabas, 2004). The purpose of deliberation is to promote mutual understanding, create educated viewpoints, and achieve fair, legitimate, and responsible collective decisions. Deliberation is frequently considered an instrument to strengthen democracy by encouraging civic involvement, enhancing transparency, and building trust among individuals and between citizens and their institutions (Goodin, 2000). It can be used in a variety of democratic practices, including public hearings, citizen assemblies, stakeholder consultations, and other types of participatory decision-making. The rationale behind the inclusive and informed debate is that it can lead to better policy decisions, strengthen democratic legitimacy, and promote social values such as tolerance, respect for diversity, and reasoned dialogue (Barabas, 2004).

Although deliberation is described as a crucial component of democratic practices, which emphasizes inclusive, informed, and respectful discussions among citizens, there is also a critique of deliberation. Sanders (1997) believes that deliberation is not part of the democratic decision-making process. The author questions the widely accepted notion that deliberation is always beneficial to democratic governance. His research analyzes numerous arguments against deliberation, such as concerns that it will perpetuate existing power imbalances, suppress dissent, and favor efficiency above inclusivity.

Sanders (1997) argues that deliberation can reinforce existing power inequities within society. Those who have more assets, abilities, or social capital may have an advantage in deliberative contexts, leading to the marginalization of less privileged perspectives. Instead of encouraging genuine democratic involvement, this might lead to an uneven distribution of power and establish existing imbalances. According to the author, deliberation can also silence dissenting voices or minority opinions. There may be pressure in some deliberative environments to conform to the dominant position or seek consensus, which can discourage the expression of alternative viewpoints. This can suppress dissenting voices and hinder the possibility of inclusive decision-making. Finally, Sanders (1997) criticizes deliberative methods that prioritize efficiency above inclusivity. Deliberation frequently seeks to obtain a consensus or an appropriate decision as quickly as possible, which can favor the interests of the majority of the most compelling participants over ensuring that all perspectives are considered equally. This can lead to decisions that do not effectively represent all members of a society's different interests and requirements.

Overall, Sanders (1997) challenges the idealized idea of deliberation as a rational, cooperative, and consensus-oriented process. The author contends that this approach does not always accurately reflect the reality of political decision-making, which can be complex, difficult, and filled with conflicts of interest. Overemphasizing discussion as the ideal democratic process, he argues, may miss the importance of other democratic activities such as contestation, protest, and confrontation.

Therefore, I conclude that achieving a balance between the critiques and advantages of deliberation is essential for optimal democratic decision-making. While deliberation may promote rational debate, cooperation, and consensus-building, as well as opportunities for inclusive participation (Barabas, 2004; Goodin, 2000), it has limitations. Sanders' (1997) concerns should be acknowledged and addressed. To achieve an optimal solution, the benefits of deliberation must be balanced against these critiques. This can be accomplished by ensuring that deliberative processes are inclusive, transparent, and accessible to all members of society, as well as by prioritizing other democratic behaviors alongside discussion, such as contestation and confrontation. Approaching discussion critically and nuancedly can assist to mitigate its limits and build a more inclusive and robust democratic decision-making process (Sanders, 1997).

In the age of social media, informed decision-making and deliberation are essential components of democratic practices. These principles are crucial because they ensure that decisions are made with a full understanding of the relevant facts along with various viewpoints and that they reflect the will of the people. In modern democracies, social media has emerged as an essential tool for political debate and information dissemination (Stieglitz & Dang-Xuan, 2013). However, because of its inherent characteristics such as the rapid spread of information, the prevalence of misinformation, and the emergence of echo chambers where like-minded individuals reinforce their beliefs without engaging in diverse perspectives, social media presents unique challenges to informed decision-making and deliberation. These difficulties have the potential to have an impact on the quality of democratic activities. Misinformation is currently a significant challenge in the age of social media. Without being thoroughly verified for authenticity, false or misleading material can effortlessly grow viral on social media, changing public opinion and influencing decision-making. This can lead to ill-informed decisions and policy choices that are not founded on reliable information. Therefore, individuals must critically examine the information from social media and seek out trustworthy sources to make informed decisions (Moran, 2020). Another challenge, as indicated by Madison & Klang (2020), is the echo chamber effect, which occurs when social media algorithms and users' self-selection bias create filter bubbles, isolating individuals from alternative viewpoints and strengthening their existing ideas. This can limit exposure to alternative points of view and hinder deliberation, resulting in polarization and division within society. To overcome this problem, individuals must actively seek out diverse sources of

information and engage in considerate conversations with those who hold opposing views (Madison & Klang, 2020).

In conclusion, informed decision-making and deliberation require individuals critically evaluate information, fact-check sources, and actively engage with other perspectives. It also encourages users to use social media responsibly, as well as initiatives by social media platforms, politicians, and civil society organizations to improve information transparency, accuracy, and diversity. By sustaining informed decision-making and deliberation principles in the digital era, democratic processes can thrive and ensure that decisions reflect the informed will of the people.

4. Understanding TikTok's Information Dissemination Mechanisms: An Overview

In this section I will answer the following sub-question *'How do the mechanisms that underly TikTok affect information dissemination?'.* To answer this question as best as possible, I will present an overview of the mechanisms that drive TikTok, related to information dissemination.

Before I start with this exploration, it is important to note that TikTok's algorithm remains a closely guarded secret, as the company has not publicly disclosed extensive details about how it works. However, TikTok has published general guidelines on its website for content creators to follow to maximize their chances of having their content recommended, which provides some insight into the types of content that may perform well on the platform (TikTok, 2020). Furthermore, there have been third-party studies and research conducted by experts and organizations outside of TikTok that aim to understand the platform's algorithm. For example, the research by The Wall Street Journal (2021), by Ma (2021), or Lin (2021) that I will later discuss in this Chapter. Although not explicitly validated by TikTok, this research may provide insights into the likely mechanics of TikTok's algorithm.

4.1. Content curation and recommendation engines

In this section, I will explore how TikTok content curation mechanisms work and which methods they use to recommend content to its users. Understanding this process is integral to the research as it illuminates how TikTok shapes information dissemination on the platform.

4.1.1. Content curation

TikTok's algorithm calculates users' personalized information distributions by examining the substance of each video and observing users' preferences for an endless and extremely appealing video stream (Kang & Lou, 2022). The platform incorporates AI-powered features into various aspects of social media, such as information and content consumption, content creation, and networking (Ma & Hu, 2021). This is achieved through the "For You" feed, personalized for each user, which utilizes algorithms that consider past engagement activities like viewing time, liking, commenting, sharing, and following. By leveraging this information, TikTok curates tailored, inspiring content for its users, continually suggesting related, shareable, and expandable content to put its idea into effect and provide an engaging user experience (Kang & Lou, 2022). Dale (2014) states that content curation is the process of selecting, compiling, and presenting content from diverse sources in a relevant and useful manner to a particular audience or community. Platforms carefully select and compile relevant content from a variety of creators, present it in a coherent and well-organized format, and then provide it to their audience (Dale, 2014). The 'For You' feed is a perfect example of this. Kang & Lou (2022) claim that TikTok uses Natural Language Processing (NLP) to recommend videos by identifying textual and audio elements, computer vision, and analyzing hashtags and captions associated with videos, also called metadata (Mage, 2022). With computer vision, TikTok can assess facial characteristics and various traits in individuals and objects, facilitating rapid comprehension of a video's content. This technology categorizes each unique feature of the video to enhance its classification. Subsequently, NLP is utilized to transcribe and interpret the video's audio content (Mage, 2022). The algorithm is remarkably powerful and even capable of learning a user's interests and
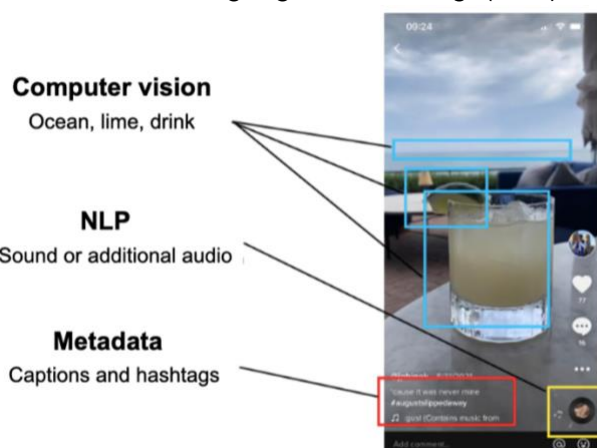

Figure 1: Visualization of TikToks techniques (Mage, 2022)

vulnerabilities in under forty minutes. The core technology of TikTok's algorithm relies on computer vision to infer user interests and engagement patterns, resulting in personalized and individualized user experiences (Kang & Lou, 2022).

Yogish et al. (2019) state that Natural Language Processing (NLP) is a field of artificial intelligence (AI) that tries to enable computers to understand, interpret, and change human language like that of humans. NLP techniques typically rely on machine learning algorithms, which are trained using extensive volumes of text data. This extensive training is crucial due to the inherent ambiguity of human language (Yogish et al., 2019). These algorithms discover patterns and relationships in text data that help computers understand human language. NLP has a wide range of applications, including natural language interfaces, virtual assistants, text summarization, machine translation, sentiment analysis, and many others (Crowdhary, 2020).

According to Kang & Lou (2022), NLP is utilized to evaluate and comprehend the textual and auditory parts of videos, as well as the hashtags and captions linked with them. NLP is used to find trending sounds, hashtags, and filters, which are subsequently used to recommend content to users based on their preferences and engagement behaviors (Mage, 2022). NLP additionally helps in the creation of tailored and individualized user experiences by identifying users' interests and engagement patterns, as well as supporting content creators in the creation of viral videos (Saquete et al., 2022). Overall, NLP is a key component of TikTok's algorithm, allowing it to provide users with relevant and engaging content based on their language preferences and interests (Kang & Lou, 2022). While NLP contributes to creating a highly personalized and engaging experience on TikTok, it also raises several ethical considerations that must be addressed. According to Kang & Lou (2022), the use of NLP for personalizing content can lead to the creation of "echo chambers". By continually serving content that aligns with a user's existing preferences and beliefs, TikTok might contribute to the narrowing of perspectives and promote polarizing content. This phenomenon can impact a user's worldview and influence public discourse on important societal issues (Brown, 2022). Second, Kang & Lou (2022) raise a concern about fairness and bias in the NLP algorithms. They may learn and perpetuate the biases present in the data they are trained on. This could lead to unfair treatment or misrepresentation of certain user groups, particularly those from minority or marginalized communities. Lastly, the authors claim that NLP might also be utilized in spreading misinformation or harmful content, as the popularity of a post, which could be based on controversial or sensational content, might get favored by the algorithm, thus promoting its visibility (Kang & Lou, 2022).

According to WSJ (2021), the TikTok algorithm to recommend content is the same as that from other platforms, such as YouTube, except these algorithms are less aggressive. The Wall Street Journal (WSJ) performed research in which they created dozens of automatic accounts, also called 'bots', to investigate how the TikTok algorithm works. TikTok claims its algorithm targets four components; the videos you watch, share, like, and the accounts you follow. However, according to the Wall Street Journal, TikTok only needs one indicator: how long you watch it. Everyone's TikTok experience begins in the same way. TikTok first offers the account a selection of very well-liked videos that have been approved by app moderators. However, the app tracks you every time you pause or rewatch. Through this one significant signal, TikTok can uncover your deepest interests and feelings, opening you to a world of content that is perfectly tailored to your needs. The Wall Street Journal provided the bots an age, a location, and a list of particular interests, only utilized to select the videos that the bot watched; they were never entered into the app. The bot searched each video in its feed for relevant hashtags or AI-identified visuals. When watching these videos, it would pause scrolling and replay a few of them. The study discovered that the number of popular videos and their view counts decreased in favor of those that were narrowly focused on the indicated interests (WSJ, 2021). However, TikTok introduced a new tool in December of last year to offer more transparency around how videos are put into a user's feed. Users can press the "Why this video?" question mark icon in the share section for any video. So far, it seems like extremely

general explanations, like "This video is popular in the United States". But the company indicated that they will expand to more detailed explanations over time (TikTok, 2022b).

Understanding the nuances of TikTok's algorithms and the role of NLP in shaping user experiences is paramount to understanding how information is disseminated on the platform. The personalized nature of TikTok's 'For You' feed, designed through intricate analysis of user behavior and content engagement, is central to determining which content reaches which users. As such, activism on TikTok is significantly influenced by these underlying mechanisms. The platform's propensity to amplify popular sounds, hashtags, and filters may support activist movements that effectively utilize these features. However, the potential for creating 'echo chambers' can limit the diversity of views presented to users, potentially isolating them within their ideological groups. Similarly, biases in the NLP algorithms can disproportionately affect the visibility of activist content from marginalized communities. Furthermore, the algorithm's capability to promote sensational content could inadvertently contribute to the spread of misinformation within activist circles. Therefore, activists must understand these dynamics to effectively navigate TikTok's platform, optimize their content for wider reach, and combat potential ethical concerns related to bias, echo chambers, and misinformation.

4.1.2. User-trained algorithmic content curation

According to Schellewald (2022), people's perceptions of TikTok as an algorithmic environment are influenced by their evaluation of the algorithm's precision and the "personalized" content it recommends. Users became aware of the algorithm when it started displaying items they had intentionally marked with a "like" to see more of. This awareness led users to change their app-related behavior over time, becoming much more conscious of their "like" decisions, how quickly they scrolled past content they didn't immediately love, and which accounts they followed. The TikTok algorithm was believed to offer recommendations 'For You', and users actively contributed to the construction of their 'For You' feed through their behaviors and practices, as noted by Schellewald (2022). Some users went to great lengths to understand how the algorithm worked to influence their TikTok experiences. Kang & Lou (2022) discovered that some users even created three accounts to have an account with a well "trained" algorithm. By actively managing their 'like' decisions, scrolling behavior, and following choices, users sought to shape their TikTok experience and exert some level of control over the algorithm's recommendations (Kang & Lou, 2022).

Understanding how TikTok's algorithm impacts information dissemination, specifically around activism, involves recognizing user behavior. According to Schellewald (2022) and Kang & Lou (2022), users actively manage their engagement behaviors to influence the 'For You' feed. This conscious control could significantly impact what information, including activism-related content, is seen and shared. Therefore, users' engagement behaviors play a significant role in shaping the informational landscape they experience on TikTok.

4.1.3. Recommendation engines

In addition to content curation, recommendation engines also play a crucial role in the dissemination of information on TikTok. Ma (2021) has researched the recommendation algorithms used by Douyin, which is the Chinese version of TikTok that is only used in China. The platforms are completely separate from each other, meaning users of TikTok and Douyin cannot find each other on any of the platforms. However, the interface and technology of the platforms are broadly the same. The designers made a conscious choice to separate the platforms because the Chinese government regulations had never accepted expanding the platform beyond the border (Lin, 2021). For this reason, this research conducted on Douyin by Ma (2021) is also relevant for better understanding TikTok since they roughly use the same techniques.

Douyin and TikTok utilize an algorithm to generate a hierarchical set of interest labels based on content topics and then calculate the relevance of each interest label. This method involves

generating a tree diagram, as shown in Figure 2, where the starting point, or the root, represents all content. The first layer of this tree shows big categories like sports, technology, and entertainment. These categories can then be broken down into more specific areas. How further someone ends up in the tree, the more specific the content.
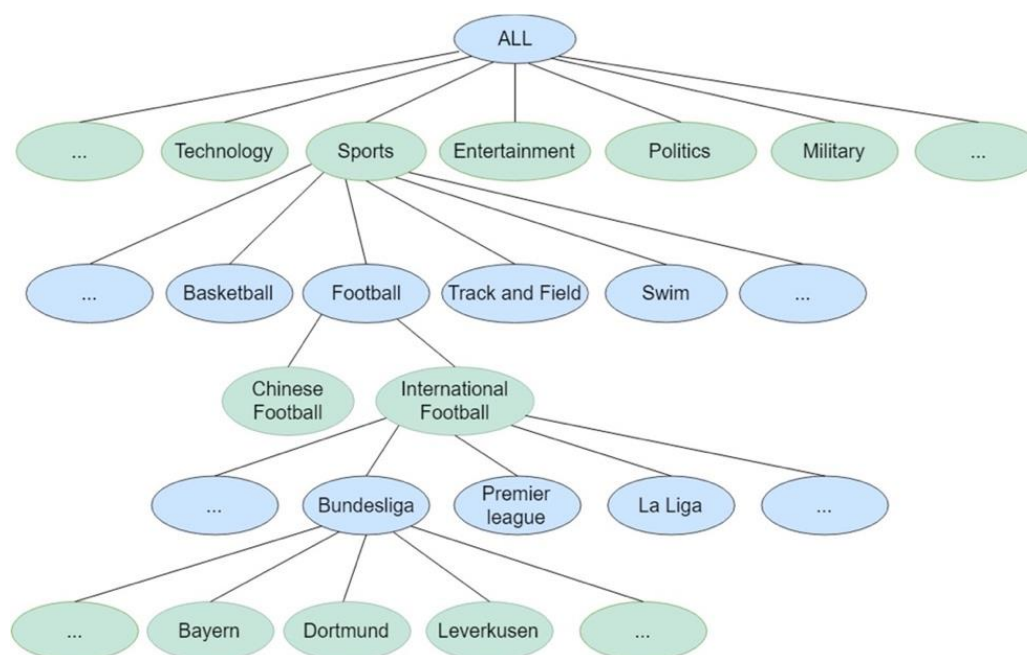
Figure 2: Interest labels tree diagram by Ma (2021)

Ma (2021) describes the recommendation algorithm as multiple machine learning algorithms that are employed in collaboration to achieve superior performance. The key to their success is, according to Ma (2021), how these machine learning algorithms can automatically find complex interactions behind human actions, which might be hidden in data and hard to find manually. The recommendation algorithm's general architecture begins by gathering features from the content and the user. These features are then reduced into simpler vectors for quicker calculations. Different details about the content and the user are collected and used for training. The final result is created by combining various trained models, each with different importance for each feature, to make the matching result more reliable. The training set includes not just the features but also the right match result based on user feedback. Through lots of training instances, the model learns to reduce the difference between predicted and actual results. Once trained, the model is used to suggest content to users in the test group (Ma, 2021).

The model is constantly updated based on the most recent samples in the online training to keep up with changes in user needs and perform real-time modifications. The precise matching of content and users, along with the careful grouping of content and users, makes sure that users are happy with the recommended content. This creates an engaging experience on Douyin and TikTok. The expectation and curiosity for the next video are amplified, keeping users engaged and making it difficult for them to leave (Ma, 2021).

To launch new content, Douyin and TikTok divide users into small random groups called 'data buckets'. The platform evaluates the performance of the content based on metrics such as views, likes, replays, shares, and completion rates. Successful content is subsequently promoted to larger groups of users or even the whole platform. This multi-layer screening strategy helps make sure the platform's content is of good quality (Ma, 2021).

The understanding of Douyin and TikTok's algorithms, as delineated by Ma (2021), offers insights into the nuanced dynamics of information dissemination on these platforms. These

algorithms are designed to curate content that resonates with users' interests, which can extend the reach of diverse narratives, including activism. However, the same personalization mechanism might restrict these narratives within certain interest groups. Therefore, considering the subtle and extensive influence of these algorithms is crucial when exploring the information dissemination landscape in digital societies.

4.2. Moderation policies

In addition to content curation and recommendation systems, the policies governing moderation play a significant role in the distribution of information on TikTok. The platform acknowledges the increased risk and impact of misleading information, especially in times of crisis. As a result, the platform is continuously enhancing its safety and security measures and working diligently to ensure that people can freely express themselves and share their experiences while protecting themselves from potential danger (TikTok, 2023).

4.2.1. Community Guidelines

TikTok's community guidelines serve as a framework for what constitutes appropriate platform behavior and content. They are critical in ensuring that all users, regardless of their backgrounds or beliefs, have a safe, positive, and inclusive environment. The guidelines address a wide range of issues that affect the overall user experience, including the prohibition of harmful or dangerous content, hate speech and discrimination, nudity and sexual content, bullying and harassment, intellectual property infringement, and misinformation. TikTok aims to prevent the spread of inappropriate content, safeguard users from harmful behavior, and promote an encouraging and inclusive community by tackling these challenges.
To enforce these guidelines, TikTok uses a combination of techniques that will be explained in the following paragraphs. By maintaining these guidelines and enforcing them effectively, TikTok aims to establish a platform that is safe, positive, and inclusive for all users. This, in turn, can lead to increased user engagement, more significant user retention, and the expansion of the overall user community (TikTok, 2023a; TikTok, 2023b).

While TikTok's community guidelines provide a framework for appropriate behavior and content, users sometimes find ways to bypass these guidelines. For example, the age requirement of being at least 13 can be circumvented by using other people's information, for example, an older brother or sister, to create an account (Barbovschi et al., 2015). However, TikTok needs to monitor these guidelines and detect any violations. The challenge lies in staying vigilant as users constantly find new methods to evade the guidelines.

Understanding the platform's community guidelines and enforcement strategies is crucial. As activism often involves sharing information that might challenge established viewpoints or seek change, the platform's rules can both facilitate or limit the extent of its reach. For instance, if the content aligns with the guidelines, it could reach a vast audience. Conversely, if it is perceived as violating the guidelines, such as by being classified as misinformation or harmful content, it may be suppressed or removed. Thus, TikTok's community guidelines and enforcement significantly influence how information is disseminated on the platform.

4.2.2. Exploring TikTok's (shadow) banning strategy

A way for TikTok to enforce its community guidelines is through suspensions and bans, which restrict or deactivate a user's account either temporarily or permanently. The severity depends on the nature of the violation. While these measures demonstrate TikTok's commitment to maintaining a safe platform, users are not without recourse. The platform offers an appeal process, allowing users who believe they've been unfairly penalized to contest the decision (TikTok, 2023c). While explicit suspensions and bans are more visible in their implementation, the platform allegedly also employs a subtler form of restriction known as a 'shadow ban'.

According to Gagliardi (2023), shadow banning is executed by limiting a user's reach without their awareness, which is an attempt to mute potentially disruptive behaviors by rendering their posts visible only to themselves (Gagliardi, 2023). However, the algorithms responsible for identifying such violations aren't perfect, sometimes leading to instances of seemingly harmless content being shadow-banned due to potential misunderstandings (Gagliardi, 2023).

The effectiveness of shadow bans, however, is a complex issue, being perceived differently depending on the viewpoint. From the standpoint of the platform, shadow banning is a compelling mechanism for managing content that breaches community guidelines (Savolainen, 2022). It's an effective way to limit the spread of potentially harmful content without using drastic measures like suspensions or bans. It's particularly useful for content that approaches the boundaries of acceptability without necessarily crossing the line (Savolainen, 2022). Shadow banning also serves as a behavioral tool, since a drop in engagement may encourage users to adjust their content. However, shadow banning has its challenges. Its biggest issue is the lack of transparency, which can cause confusion and frustration among users who don't understand why their engagement decreases (Fowler, 2022). Furthermore, the risk of misuse due to algorithmic errors or biases in content moderation can lead to innocent users being unjustly penalized, undermining the platform's perceived fairness (Fowler, 2022). Lastly, the practice may inadvertently create a chilling effect. Fear of invisible penalties could lead to self-censorship, suppressing user creativity and freedom of expression, and ultimately reducing the vibrancy and diversity of the platform's content (Fowler, 2022).

While 'shadow-banning' is a popular term, there's no definitive proof that it exists on TikTok or other platforms. While many users have observed unexpected declines in engagement or visibility, these can also be attributed be due to algorithm changes, audience behavior shifts, or other non-suppressive factors. Hence, despite indications, the actual occurrence of shadow banning remains unverified due to insufficient direct evidence (Savolainen, 2022).

In conclusion, the effectiveness of shadow banning presents a paradox. This practice can help mitigate harmful content, but also has the potential for misuse and could dampen free expression due to its lack of transparency. The question arises as to how such mechanisms on TikTok affect information dissemination, particularly in the sphere of activism. The potential existence of shadow banning could constrain the dissemination of activist content, thereby modifying their effect. Alternatively, it could serve as a barrier to the distribution of harmful content, thus maintaining the integrity of platform discourse.

4.2.3. Understanding TikTok's state-affiliated media labeling policy

Understanding TikTok's moderation policies, particularly those regarding state-controlled media, is key to comprehending the platform's role in information dissemination and its influence on public discourse. In response to the Ukraine war, TikTok expedited its state media policy (TikTok, 2022a), which labels accounts managed by entities whose editorial output or decision-making process is susceptible to government control or influence. The aim is to provide users with transparent context when interacting with content that could express a government's perspective. TikTok (2023a) claims to have consulted more than 60 media specialists, political scientists, academics, and representatives from international organizations and civil society to define and inform their approach to state-controlled media. Contributions stressed the importance of understanding diverse political, legal, and social contexts in news media, indicating no single approach fits all state-affiliated media and the rising significance of user education on government influence in news reporting (TikTok, 2023a).

Based on this feedback, TikTok's policy labels state-controlled media, defined as entities with clear state-directed editorial control. When providing a label, TikTok evaluates an organization's mission, editorial policies, leadership, governance, and editorial decisions. They also scrutinize entities that rely heavily on governmental assistance directly or through ads,

loans, and subsidies. Based on this assessment, TikTok labels the entity's profile and content accordingly. (TikTok, 2023a).

The policy plays a role in information dissemination, shaping the platform's landscape in nuanced ways. For instance, how activism manifests on TikTok could be impacted by the presence or absence of these state-affiliated media labels. The labels assigned by TikTok may enhance or undermine the perceived authenticity of specific content, and consequently shape (political) discourse on the platform.

4.2.4. TikTok's transparency practices

Delving into the role of TikTok's moderation policies, it becomes crucial to analyze the platform's transparency and accountability regarding its use of AI in content moderation and recommendation. The research by Grandinetti (2021) shows there's a need for social media platforms to provide transparency and accountability about their use of AI. TikTok has taken some measures toward greater transparency, including the publication of whitepapers and blog postings regarding their AI practices (Grandinetti, 2021). While these transparency initiatives are a step in the right direction, there is still an opportunity to improve transparency and accountability, particularly in terms of how TikTok's algorithms shape the content that users see and the potential biases that may be embedded in these algorithms. Concerns have been expressed, for example, concerning TikTok's algorithms' ability to perpetuate racial and gender biases or to prioritize specific categories of content over others depending on characteristics such as user engagement. Furthermore, a lack of transparency about AI methods could increase concerns about data privacy and national security. TikTok can address these issues and even avoid regulatory action by being transparent about its AI practices (Grandinetti, 2021).

According to Grandinetti (2021), transparency is essential for several reasons. First of all, it enables users to comprehend how their data is being utilized and how their user experience is being created, which can enable users to make informed decisions. Second, transparency helps mitigate the possible risks of AI, such as algorithmic bias and discrimination. By making their AI practices transparent, platforms such as TikTok can be held accountable for any potential biases or discriminatory outcomes that their algorithms may produce. Third, enhancing transparency could shed light on the intentions behind content creation, thus aiding users in discerning and interpreting the information presented more accurately. Finally, transparency can help in ensuring that social media platforms use AI ethically and responsibly. TikTok can show its commitment to employing AI in ways that are in line with ethical principles and values by being transparent about its AI practices (Grandinetti, 2021).

By examining TikTok's transparency practices and understanding how the platform communicates its AI practices, researchers can gain valuable insights into the platform's algorithmic decision-making processes. Transparency measures, such as the publication of whitepapers and the establishment of content advisory councils, provide valuable information about TikTok's AI practices and policies. This information can help researchers evaluate the potential biases or discriminatory outcomes that may arise from the platform's algorithms. It can also shed light on how TikTok prioritizes or suppresses certain types of content, based on characteristics such as user engagement.

4.2.5. TikTok's official partners in fact-checking

TikTok's moderation policies have another key aspect, the implementation of official fact-checking mechanisms. TikTok has partnered up with official fact-checking organizations. While machine learning models contribute to the detection of potential disinformation, the platform's approach is for its moderation team to analyze and validate infractions of its misinformation policies (Westlund et al., 2022). TikTok has trained misinformation moderators who use certain tools and skills to address misinformation. They also have direct access to the platform's fact-checking partners, which assists them in determining the accuracy of the content. For safety

reasons, content that is under fact-checking or cannot be verified through fact-checking is not recommended for the 'For You' feeds (Keenan, 2022). According to Keenan (2022), TikTok has made certain key investments to continuously improve detecting and removing disinformation, including continued investment in machine learning models and improved capacity to iterate on these models quickly, given the fast-changing nature of misinformation. They have also a database of previously fact-checked claims to assist misinformation moderators in making quick and accurate judgments (Keenan, 2022).

Keenan (2022) states that TikTok has detected 33 new misleading claims in only a few months, resulting in the removal of 58,000 videos from the platform. While violations of TikTok's integrity and authenticity regulations account for less than 1% of total video removals, the platform's ongoing investments have resulted in advancements in proactive detection and enforcement of these policies (Keenan, 2022).

TikTok's fact-checking mechanisms significantly impact the dissemination of information, also for activists. These mechanisms ensure the authenticity of content but also require activists to adhere strictly to these guidelines. Any misinformation or guideline violations could limit their reach and influence. Therefore, these systems shape the potential and challenges of using TikTok as a tool for activism, having a direct impact on the ways activists spread their content.

4.2.6. Warning labels as a strategy for flagging misleading content

The research by Ling et al. (2022) shows that TikTok uses another moderation policy; warning labels as banners or indicators on videos to indicate them as possibly containing misleading or deceptive information. They provide users with additional context and may link them to accurate information from reliable sources. TikTok allows users to add warning labels to videos that contain potentially hazardous or deceptive content. These could include videos about elections, health, conspiracy theories, violence, or other sensitive topics (Escandon, 2021). TikTok's policies on warning labels and content control are dynamic and open to change as the site evolves. The study by Ling et al. (2022) evaluated the use of COVID-19 warning labels on TikTok videos. When a video is flagged with a warning label, TikTok places a banner at the bottom of the video that states, "Learn the facts about COVID-19". This banner also provides a link to the World Health Organization (WHO) website for up-to-date COVID-19 information. While the introduction of warning labels is a step in the right direction, Ling et al. (2022) believe it may not be enough to fully combat the spread of misinformation on TikTok. They suggested that TikTok improves its approach by providing users with more context and information about why a video was labeled with a warning label, as well as more reliable information from trusted sources.

Warning labels, as described in this section, provide an immediate intervention into the flow of information, especially in polarizing topics such as health and politics where misinformation can be harmful. Besides, it's important to note how TikTok's approach can contribute to activism. Activists rely on the accurate and timely flow of information to carry out their advocacy work effectively. TikTok's warning labels can, therefore, serve as a vital tool to protect activists and their followers from misinformation. Moreover, by linking users to authoritative sources, TikTok empowers them to engage more effectively with the issues at hand, fostering a more informed and discerning activist community. However, as Ling et al. (2022) suggest, the platform can enhance this functionality to provide users with a deeper understanding of why specific content is flagged, further enriching the quality of information dissemination.

4.3. Virality

Another aspect of TikTok that impacts how information disseminates across the platform is the concept of virality. Research by Ling et al. (2021) shows that in the context of TikTok, virality refers to a video that quickly gains a huge number of views, likes, comments, and shares, frequently resulting in the video being shared with a big audience and being widely popular. When a TikTok video becomes viral, it can greatly boost the creator's visibility, reach, and

engagement, resulting in additional followers and potential monetization opportunities. Going viral can be important because it can promptly distribute a message or concept to a large audience, increasing the possibility that it will be heard or seen by individuals who would not have heard or seen it otherwise (Ling et al., 2021).

Take for example activism, going viral can be a powerful tool for activists for raising awareness and driving social change. A viral video can bring attention to a specific issue, potentially increasing involvement and support from a larger audience (Ling et al., 2021). This heightened scrutiny may also put pressure on policymakers to act or amend their policies. An example of such a situation is the MeToo movement, which started in 2017 as a hashtag on social media, quickly went viral and sparked a global conversation about sexual harassment and assault (Quan-Haase et al., 2021). Millions of individuals used the hashtag, with many sharing personal stories about their experiences. This raised awareness and understanding of the prevalence and consequences of sexual harassment and assault, as well as pressure on individuals, organizations, and legislators to take action to address the problem. The movement has resulted in the downfall of some high-profile individuals accused of sexual assault, demonstrating the power of social media and virality in bringing about societal change (Quan-Haase et al., 2021).

Going viral has become a desirable reward for content creators in the age of social media (Compte & Klug, 2021). But what triggers a video to go viral? While there are no guarantees, Ling et al. (2021) list several characteristics that have been shown to increase the likelihood of a video's success on TikTok. One of the most important factors is the creator's number of followers. This makes sense since their videos are automatically shared with more people, boosting the possibility of views and engagement. Creators with larger followings are also more likely to have their content shared by others, expanding their reach even further. The shot in which the video is shot is also an essential factor. Close-up and medium-shot scales are the most popular, as they allow viewers to see the subject clearly without being too distant. These shots also contribute to a more intimate connection between the viewer and the creator, as they provide a feeling that they are in the same room. Another essential factor is the lifespan of the video. Recently uploaded videos have a higher chance of going viral as they are more likely to be seen by early adopters and trendsetters. As a video gathers traction, it might hit a tipping point and begin spreading quickly. The presence of text in the video is another factor that can increase its potential for virality. People prefer to see text in videos because it adds context and can make the subject more engaging. Text can also be utilized to emphasize important points, add humor, or communicate emotion. Finally, the point of view is an important consideration. The most popular is a second-person perspective, in which the creator talks directly to the camera. As a result, the viewer has a more intimate and engaging experience, as if they are conversing with the creator (Ling et al., 2021).

While no single characteristic can guarantee virality, a combination of these factors can increase the likelihood of a video's success. Creators that pay attention to these indicators and apply them to their content strategy may see their videos go viral more often (Ling et al., 2021).

The virality of content on TikTok could have both positive and negative effects on information dissemination. However, I will first discuss the positive effects. Virality serves as a helpful tool for raising public awareness about social issues and educating individuals on societal concerns, especially on platforms like TikTok that support short-form videos. Activists can leverage this platform to create content that can reach an expansive audience when it becomes viral (Compte & Klug, 2021). For instance, the Black Lives Matter movement effectively used TikTok to circulate information regarding police brutality and institutional racism, which garnered significant attention (Lee & Abidin, 2023).

Besides, virality raises the visibility of underrepresented and marginalized groups' voices (Ling et al, 2021). TikTok has evolved into an environment for people from underrepresented and

marginalized communities to share their experiences and viewpoints, and when these voices go viral, they can help amplify important messages and bring attention to issues that may have been overlooked. TikTok, for example, has been used by activists to express their experiences with discrimination and to promote social justice, which can help raise awareness and drive change (Compte & Klug, 2021).

Virality also increases an activist's sense of community. When TikTok content goes viral, it can bring people together around common interests or concerns (Compte & Klug, 2021). This can help people connect with others who share their interests and values, fostering a sense of community. TikTok, for example, has been used by activists to establish challenges that promote positive social change, such as the #trashtag challenge, which pushes people to clean up their neighborhoods (Nace, 2019).

Finally, according to Compte & Klug (2021), viral content can provide activists with inspiration and motivation. When a TikTok video goes viral, it can serve as a source of inspiration and incentive for viewers to participate and take action. Videos promoting the usage of environmentally friendly products, or encouraging people to take public transportation instead of driving alone, can encourage people to make positive changes in their own lives and contribute to the greater good (Compte & Klug, 2021).

As mentioned before, virality also has downsides. First of all, virality can lead to the spread of misinformation. The algorithm of TikTok encourages content that generates engagement, such as likes, comments, and shares. This can encourage content creators to create sensational and misleading content to increase views and engagement, regardless of whether the information is accurate or not (Corbu et al., 2021). During the COVID-19 pandemic, for example, there were multiple viral videos on TikTok supporting virus conspiracy theories or suggesting unproven remedies (Corbu et al., 2021). Also, virality can lead to oversimplification of complex issues. The short-form video format of TikTok encourages the simplification and reduction of complex issues into bite-sized pieces of content. This can result in oversimplification and the loss of critical nuances and context (Blake, 2020). For example, videos advocating for social justice may not fully represent the complexity of the subject or provide a true representation of the underlying causes. Furthermore, virality has the potential to commodify activism. TikTok influencers and content creators may exploit viral activism video trends to establish their brand and gain followers rather than to promote social change. As a result, activism may become a commodity that is utilized for personal advantage rather than for the greater good (Lodewijck, 2020). This could also lead virality to result in performative activism. It could be easy to create activism-related content on TikTok that is superficial or performative rather than substantive or impactful, this is also referred to as 'slacktivism' (Lodewijckx, 2020). For example, someone may make a viral video of themselves participating in a social justice challenge or utilizing a popular hashtag, but they may not take any significant action to promote social change (Lodewijckx, 2020).

In conclusion, virality has a profound impact on information dissemination. On one hand, the virality of TikTok videos can drive a beneficial amplification of awareness, education, and voices, fostering community, and inspiring and motivating people to take action. This dynamism has evolved TikTok into a powerful platform where viral content can contribute to meaningful social change, particularly in the sphere of activism. On the other hand, the very same virality can bear negative implications. It can catalyze the spread of misinformation, lead to the oversimplification of complex issues, and inadvertently prioritize entertainment over crucial social issues. Moreover, it can foster the commodification of activism, promoting performative rather than substantive engagement. These negative aspects highlight the critical need for responsible and informed use of TikTok.

4.4.   The platforms' business model

The final factor influencing the spread of information on TikTok is the platform's business model. In the documentary, "The Social Dilemma" (2021), a critical light is cast on the underlying business models of social media platforms. The experts in the documentary state, in essence, that these platforms are focused on a singular goal: keeping users' attention and keeping them online. Brown (2021) also declares that social media platforms constantly rely on user attention and engagement, which they often achieve through notifications that lure users back to the app. The concept is simple yet insidious. Social media platforms sell the attention of their users to advertisers; more accurately, they sell the ability to change their minds (Orlowski, 2020). The strategy is embedded in the algorithm of the platform. O'neill (2021), an expert appearing in 'The Social Dilemma' documentary, dispels a common misconception, clarifying that algorithms are not, in fact, objective entities as often presumed. Algorithms are essentially opinions encoded in code. They are optimized to achieve a certain definition of success, and in the realm of commercial enterprises, that definition is usually tied to profit. According to Palihapitiya (2021), this business strategy is founded on three central goals: engagement, growth, and advertising. The three goals represent the essential pillars of most social media platforms' business strategies.

Palihapitiya (2021) explains that the first objective is to keep users engaged with the platform for as long as possible. More engagement means that users are actively interacting with the content, whether through liking, sharing, commenting, or simply viewing. The algorithms are designed to show users content that they find most appealing, encouraging them to stay on the platform longer. This increases the chances of users seeing and interacting with more advertisements, which leads to higher revenues for the platform.

The second objective is to expand the user base. The more users a platform has, the more attractive it is to advertisers. It's also about the network effect, which means that the value of the platform increases as more people join and interact. Social media platforms often use various strategies to promote growth, such as suggesting friends to add, groups to join, or viral content to check out. The platforms may also offer incentives or bonuses for inviting friends to join (Palihapitiya, 2021).

The final objective, as stated by Palihapitiya (2021), is centered on advertising. Social media platforms are, in essence, advertising companies. They generate revenue by selling ad space to businesses. The more targeted the ad, the more valuable it is.

The process through which these platforms achieve their objectives is far from straightforward. As indicated in the previous sections, social media platforms function through complex algorithms that are designed to curate and present information that will keep users engaged. To make these predictions, they track everything, mining invaluable insights about user personalities, emotional states, and preferences. The data collection extends to every video you've watched, the duration of your viewing, your search terms, and beyond. Every interaction is useful for these platforms to build an increasingly accurate model of user behavior (Van De Sand et al., 2020). The predictions then determine what content is presented to each user, how it's presented, and when. Platforms also sell predictions to advertisers (Orlowski, 2020). However, the complexities of these algorithms, and the high volume of data they process, means that only a select group of people, typically those with advanced expertise in data science, machine learning, and related fields, have a comprehensive understanding of how these mechanisms work. As noted by Sandy Parakilas, an expert featured in 'The Social Dilemma' documentary, even the ability of these specialists to accurately forecast the precise impact or outcome of a particular piece of content is constrained, given the multitude of variables at play. For instance, how a particular piece of content will spread and impact users are influenced not just by the characteristics of the content itself, but also by the dynamic interactions of users (who sees it, who shares it, and how they react to it), which are in turn influenced by countless other factors (the time of day, current events, other content being viewed, etc.). This makes the exact outcome incredibly difficult to predict with accuracy. This

high degree of complexity and unpredictability leads to a sense of diminished control over these systems (Orlowski, 2020). Moreover, since these algorithms decide what information we see, a decision based not on what is most truthful or important, but on what is likely to keep us engaged, it can feel as though these systems have a significant degree of control over us, shaping our information environment and potentially influencing our thoughts, beliefs, and behaviors.

The research by Bond et al. (2012) shows that Facebook has performed large-scale experiments to manipulate user behavior. One example was their attempt to use subliminal cues on their platform to encourage more users to vote in mid-term elections. Subliminal cues are signals or messages designed to pass below the normal limits of perception. These cues are often embedded in media or content and are not consciously noticed by the receiver. For example, in advertising, a brief image or a message could be inserted into a video that is too brief to be consciously perceived but might still be processed subconsciously by the viewer. The aim is often to influence behavior or attitudes without the individual being aware they are being manipulated. In the context of social media platforms, as mentioned in "The Social Dilemma", subliminal cues could include design choices, specific phrasing, or how information is presented, all subtly constructed to influence user behavior and maintain engagement. Their findings revealed they could affect real-world behavior and emotions without ever triggering the user's awareness (Bond et al., 2012).

One significant challenge these platforms face is the conflict of interest between user protection and profit. Interestingly, misinformation or unconventional content often generates higher engagement on the platform, which invariably benefits their business model. According to Vosoughi et al. (2018), misinformation travels even six times faster on social media platforms than accurate news. They are stuck in a dilemma between wanting to protect their users from potentially harmful content and the allure of increasing profits. This conflicting interest underscores the complex ethical landscape that these platforms, and users, must navigate (Orlowski, 2020).

The business model of social media platforms, which relies heavily on engagement, growth, and advertising, can have a profound impact on information dissemination. Algorithms curate content that increases engagement, potentially favoring sensational or controversial information over accuracy. The focus on growth can lead to rapid information spread, regardless of its truthfulness. Additionally, targeted advertising utilizes collected user data, presenting content based on user preferences. This combination of engagement-driven content curation, rapid spread, and preference-informed presentation profoundly shapes the information landscape on these platforms, influencing what users see, share, and believe.

5. Effects of information dissemination through TikTok on democratic practices

Having delved into the fundamental TikTok mechanisms that drive the dissemination of information, I will now shift focus to explore how information dissemination via TikTok affects democratic practices. In this section, I will answer the following sub-question: '**How does information dissemination through TikTok affects democratic practices in terms of informed decision-making and deliberation?**'. To fully understand the impact of TikTok on informed decision-making and deliberation, it is essential that I first analyze how information is disseminated on the platform. TikTok's unique characteristics, such as customized recommendations, its engaging culture, and its collaboration capabilities make it a powerful tool for disseminating ideas and content to a wide audience. By analyzing the dissemination of information on TikTok, I ensure to gain valuable insights into its potential to shape perspectives and inspire meaningful action. But before delving into TikTok's impact on informed decision-making and critical thinking, it's necessary to explore how information is exchanged and received on the platform.

5.1. TikTok as a platform for political engagement and social change

First of all, it's crucial to acknowledge the role of TikTok's recommendation algorithms in shaping users' experiences. The mechanisms behind the platform's content dissemination provide a powerful tool for guiding the user journey (Kang & Lou, 2022). These algorithms are designed to learn from users' behaviors, their likes and dislikes, and over time, curate a personalized feed based on these preferences. However, it's important to understand that TikTok itself doesn't create the content; it serves as a stage for its users to perform. TikTok's role lies in the facilitation of this creation process and the subsequent sharing of these creations through its platform. The platform's recommendation systems, coupled with its community guidelines, create a unique, engaging, and regulated user experience. However, this dynamic also leaves room for potential manipulation and influence, as we will explore further.

In essence, the high level of personalization that is possible on social media platforms can be used to influence the thoughts, feelings, and behaviors of users. This raises significant concerns about the impact on democratic societies (Orlowski, 2020), where free thought, open discourse, and access to unbiased information are crucial (Bekker et al., 1999). According to Winkelstein (2023), the very nature of TikTok's content delivery system can foster an insidious form of emotional manipulation, affecting users' perceptions and actions without them even realizing it. TikTok leverages the power of short, captivating videos that are designed to elicit strong emotional responses from viewers. This emotional engagement enhances users' receptivity to the messages being conveyed, often bypassing their critical thinking and making them more susceptible to influence. The algorithmic nature of TikTok's content recommendations complicates users' ability to discern when they are being targeted with persuasive content. Its algorithms are designed to learn users' preferences and behaviors over time, tailoring the content they see accordingly. This allows for the delivery of targeted content intended to manipulate views and behaviors. More concerningly, TikTok's algorithm is capable of amplifying content that is designed to mislead or deceive users, including conspiracy theories, false information, and propaganda. This dissemination of distorted information can significantly impact public opinion and behavior, creating a ripple effect in the wider societal and political context (Winkelstein, 2023).

Another concern tied to TikTok's recommendation algorithm is the creation of echo chambers. These echo chambers, formed by personalized algorithms, represent a significant impediment to informed decision-making in democratic societies. They expose users to a continuous stream of information that echoes their existing beliefs, thereby shielding them from a variety of perspectives and limiting the diversity of discourse (GCF Global, 2023). This skewed

information landscape can lead to distorted perceptions of reality and foster polarization, both of which inhibit robust democratic debate and informed decision-making.

Simultaneously, according to Brown et al. (2022), the issue of "rabbit holes" can exacerbate the impact of echo chambers. This phenomenon, guided by recommendation algorithms, begins with users consuming a piece of content that aligns with their interests, which then spirals into a cascade of similar or increasingly extreme content. Over time, users may find themselves absorbed in a highly polarized or fringe content stream that amplifies their initial beliefs and potentially introduces more extreme views. Rabbit holes and echo chambers not only reinforce existing beliefs but can also lead to entrenchment, making users less open to alternative viewpoints and decreasing the quality of public discourse. This can have substantial implications for democratic practices, particularly in terms of informed decision-making and deliberation, as both processes rely heavily on the availability and consideration of diverse perspectives. Moreover, this can create a societal divide, as communities become more ideologically isolated and less willing to engage in productive discourse with those holding differing views (Brown et al., 2022).

As I delve further into specific case studies in the subsequent sections, the issues I discussed in this section will be explored in greater depth to illuminate the ways TikTok may be affecting users' perceptions, actions, and democratic processes.

5.2. The role of activism in today's political landscape

Having delved into how TikTok's recommendation algorithms shape user experiences, I will now focus on the realm of activism on the platform. In recent years, TikTok has become a platform where activism is increasingly popular and capable of real-world change. Despite the skepticism often associated with social media activism, there are real-world impacts of movements led by TikTok users. For instance, research by Hosie (2021) shows that 77% of TikTok users have reported expanding their understanding of social justice and political issues through the platform. Creators on TikTok are leveraging the platform to instigate important conversations, educate, and share information on a variety of issues. The popularity of such content is a clear indicator of the audience's thirst for knowledge and their willingness to partake in meaningful discourse (Hosie, 2021).

This section aims to delve into the dynamics of how activism on TikTok has been instrumental in disseminating crucial information, influencing political discussions, and steering decision-making processes. I will explore specific cases where social media activism has played a pivotal role in shaping public sentiment and triggering tangible changes in society. However, it is important to note that the exploration is guided by a spirit of cautious optimism. I recognize that while TikTok has been a powerful platform for social change, it is not without its challenges and criticisms. Hence, in the exploration, I will not only celebrate the triumphs but also critically examine the pitfalls and complexities associated with using TikTok for activism. This balanced approach will provide a comprehensive understanding of the nuances involved in digital activism on TikTok. In the following sections I will study the TikTok activism cases of the Tulsa rallies, the Black Lives Matter movement, the COVID-19 pandemic, the climate change movement, and the mental health movement. I decided to investigate these particular cases as they collectively provide a comprehensive summary and effectively demonstrate the dual-edged nature of TikTok activism, with both its advantageous and detrimental consequences for democracy. The selection of these cases fosters a balanced viewpoint.

5.2.1. The Tulsa rallies

In the lead-up to the 2020 US Presidential Election, TikTok users showed the power of social media activism by organizing to sabotage a Trump rally in Tulsa, Oklahoma. The rally was supposed to be a significant campaign event for then-President Trump, but it didn't go exactly as planned (Lorenz et al., 2020). TikTok users mobilized social media to encourage people to

reserve free rally tickets with the intention of not attending (Lorenz et al., 2020). The goal was to deceive the campaign into believing there would be a massive turnout, only to find the arena mostly empty on the day of the event. The campaign fell for the prank, with officials boasting that they had received more than one million ticket requests. However, it became evident that something was wrong when the turnout was much below expectations and many seats remained empty during the event (Bandy & Diakopoulos, 2020). The impact of the prank was significant, with some events being canceled due to low attendance. The incident emphasized the power of social media in shaping public opinion and mobilizing people around a cause (Bandy & Diakopoulos, 2020). In the end, the prank was seen as a victory for those who oppose Trump and his policies. It showcased the potential of young people to organize and mobilize through social media, as well as how seemingly insignificant actions may have a huge impact on the political landscape (Lorenz et al., 2020).

The TikTok platform, given its algorithm that encourages viral content and trends, proved instrumental in allowing the younger demographic to mobilize and communicate about the Tulsa Rallies. The short, accessible videos provided an effective way for ideas to be spread and actions to be organized. Nevertheless, the event also drew attention to potential challenges associated with information dissemination on the platform. The incident may have been perceived as a form of manipulation or interference in political events, which raises ethical concerns. Moreover, the use of the platform for such a large-scale mobilization exposed the potential for misuse by malicious actors, a risk that requires careful navigation and consideration.

5.2.2. The Black Lives Matter movement

The Black Lives Matter movement on TikTok has grown into a powerful social change force, raising awareness about systemic racism, encouraging activism, and offering a platform for marginalized voices to be heard (Jiang et al., 2022). The movement has been essential in holding authorities accountable for police brutality and securing critical reforms in policing and other industries (Jiang et al., 2022).

In the wake of George Floyd's murder in May 2020, TikTok users began to share videos and posts about the case, using hashtags like #JusticeForGeorgeFloyd and #BlackLivesMatter to raise awareness and demand for action. Many of these videos featured powerful visuals, music, and personal experiences, and were widely shared and viewed by millions of users on the platform (Jiang et al., 2022). As the protests and activism around the case of George Floyd grew, TikTok users began to organize and participate in protests and other kinds of activism in their local communities. TikTok has established a platform for black creators and activists to express their perspectives on institutional racism and police brutality, as well as to amplify their voices and make their messages more accessible to a wider audience (Jiang et al., 2022). The movement has inspired people to take action and contributed to the promotion of activism and social change. The widespread sharing of videos, images, and information about cases like George Floyd's murder helped to mobilize people across the country and around the world, sparking protests and calls for justice (Jiang et al, 2022). Overall, the Black Lives Matter movement on TikTok and other social media platforms has had a considerable impact on real-world change, including the prosecution of Derek Chauvin and the passage of police reform measures in many cities and states (Jiang et al., 2022). The movement has provided a powerful tool for advocacy and activism and has helped to bring attention to issues of systemic racism and police brutality, promoting greater accountability and change (Lee & Abidin, 2023).

The role of TikTok in spreading awareness and action points for the Black Lives Matter movement was pivotal (Lee & Abidin, 2023). The platform's algorithm amplified voices calling for social justice, making it easier for these messages to reach a larger, global audience. Furthermore, the creative and succinct nature of TikTok videos allowed complex issues surrounding racial justice to be made accessible and easily understandable. However, this also revealed the platform's limitations. The simplification of such intricate matters may

inadvertently lead to misinformation or lack of depth in understanding. Also, the algorithm could potentially create echo chambers, where users only encounter content aligned with their existing beliefs, thus suppressing nuanced discussions and diversity of thought on racial issues.

5.2.3. The COVID-19 pandemic

During the COVID-19 pandemic, social media platforms such as TikTok played a significant role in disseminating both accurate and incorrect information about the virus, its origins, and its impact (Li et al., 2021). Unfortunately, some TikTok users have promoted misinformation and conspiracy theories regarding the epidemic and vaccines, which has led to public confusion and skepticism (Basch et al., 2021). Misinformation can contribute to vaccine hesitancy, which is a serious concern for public health. Additionally, vaccine hesitancy can lead to decreased confidence in vaccines in general, which could have serious consequences for public health beyond COVID-19 (Basch et al., 2021). The spread of misinformation on TikTok and other social media platforms has also led to confusion and mistrust of authorities, including governmental organizations and public health officials. When people are exposed to conflicting or false information, it can be difficult for them to know whom to trust and what actions to take to protect themselves and their communities. This confusion and skepticism can lead to lower compliance with public health measures like wearing masks and getting vaccinated, which can prolong the pandemic even further (Basch et al., 2021). The consequences of COVID-19 misinformation on TikTok and other social media platforms are especially concerning given their reach and influence. TikTok has over a billion active users, who may be susceptible to misinformation and conspiracy theories. This means that misinformation communicated on TikTok has the potential to have a significant impact on public health and the worldwide response to the pandemic (Li et al., 2021).

TikTok and other social media platforms have taken steps to combat the spread of COVID-19 misinformation in response to these concerns. This includes promoting accurate information from trusted sources, removing content that violates community guidelines, and partnering with public health organizations to promote vaccine education and awareness (Basch et al., 2021).

TikTok's rapid dissemination of information during the COVID-19 pandemic could be considered a double-edged sword. On one hand, its virality and the creative medium of the platform allowed important health measures and updates to reach a global audience swiftly. This was crucial during such an unprecedented health crisis. However, the same speed and accessibility also enabled the spread of misinformation about the virus, which potentially exacerbated panic and led to dangerous behaviors. Furthermore, the platform's algorithms may create echo chambers, limiting users' exposure to diverse viewpoints and encouraging biased perceptions about the pandemic. Therefore, while TikTok's role in information dissemination during the pandemic was significant, it also underscores the challenges and risks of relying on social media for critical health information.

5.2.4. The climate change movement

The climate change movement is a social and environmental movement that advocates for collective action to address the causes and effects of climate change (Hautea et al., 2021). According to Hautea et al. (2021), the movement has gained momentum in recent years as scientific evidence of climate change's negative impacts, such as rising sea levels, extreme weather events, and biodiversity loss, has grown. Social media platforms such as TikTok, Twitter, and Facebook have proven to be important in raising awareness and rallying people around the problem (Hautea et al., 2021). The effects of the climate change movement on society are multifaceted. On the one hand, the movement has done its part to raise awareness about climate change, drawing attention to the issue and putting pressure on governments and corporations to act. This has resulted in growing investments in renewable energy, increased energy efficiency, and the development of environmentally friendly technologies (Hautea et al., 2021). Additionally, the movement has fostered a sense of community among those who care

about the environment and are working to address climate change. This has led to the formation of grassroots organizations and initiatives, such as community-based renewable energy projects, climate strikes, and campaigns to reduce waste (Hautea et al., 2021).

The plastic bag ban in Kenya is one example of the climate change movement's impact on society. Kenya imposed one of the world's strongest plastic bag bans in 2017, outlawing the production, distribution, and utilization of plastic bags in the country (UNEP, 2018). A Kenyan environmental activist named James Wakibia shared a video on social media calling for a ban on plastic bags in Kenya. The video went viral and helped to spark a nationwide conversation about the issue. The advocacy by Wakibia and other activists who raised awareness about the damaging impact of plastic bags on the environment and human health resulted in the ban (UNEP, 2018).

The research by Omondi & Asari (2021) shows that Kenya's plastic bag ban has had a lot of positive consequences on society. For starters, it has reduced plastic pollution because people have switched to using alternate bags or reusable bags made of fabric or other materials. This has benefited the environment by reducing the harm caused by plastic pollution to wildlife and ecosystems.

Second, the prohibition of plastic bags has opened up opportunities for organizations and entrepreneurs, particularly in the creation of alternative bags. This has contributed to economic growth and the creation of employment, particularly in the informal sector (Omondi & Asari, 2021).

Finally, the plastic bag ban has helped to raise awareness about the environmental and human health consequences of plastic waste. This has sparked a broader discussion about sustainable consumption and production, as well as prompted individuals and businesses to embrace more ecologically friendly methods (Omondi & Asari, 2021).

In conclusion, the climate change movement has had a huge impact on society, increasing awareness about climate change and mobilizing people from around the world to take action. TikTok's unique features significantly contributed to the #climatechange movement. Its algorithm, which promotes virality, can quickly spread content related to climate change, reaching a diverse and global audience. The short video format, coupled with the creative expression it allows, enables users to present complex climate data and solutions in a more accessible and engaging manner. However, these same features also pose challenges. For instance, the short-form content may oversimplify complex climate issues, leading to potential misunderstanding or misinterpretation. Moreover, the algorithm, while beneficial in spreading content, may also create echo chambers, thereby limiting exposure to varied perspectives on climate change and potentially leading to polarized deliberation. Thus, while TikTok has undoubtedly been instrumental in pushing climate change to the forefront of global discourse, it also brings to light the challenges associated with using such platforms for social activism.

5.2.5. The mental health movement

One example of activism through TikTok that led to double-sided consequences is the mental health movement. The movement started as an initiative for people to share their trauma experiences and push for mental health awareness and support (Dastagir, 2021). The movement gained traction on TikTok, as users shared videos of themselves revealing their trauma and mental health issues. While the mental health movement's goal was to raise awareness about important issues and create an environment for people to express their experiences, it also had unforeseen repercussions as indicated in the study by Dastagir (2021). Some individuals began publishing graphic content about their trauma experiences, which could be triggering or harmful to viewers. The movement has resulted in a tendency of people to self-diagnosing mental health illnesses based on their trauma experiences, which can be harmful and lead to inadequate or inappropriate therapy (Dastagir, 2021).

Moreover, talking about sensitive topics like suicide on social media platforms such as TikTok can be dangerous if done irresponsibly (Robinson & Smith, 2023). Suicide discussions may result in harmful or triggering content, and unverified information might be communicated, potentially resulting in harmful or even life-threatening scenarios (Robinson & Smith, 2023). Relying on social media platforms as a substitute for official mental health support and resources can also be dangerous (Basch et al., 2022). While social media can be used to share experiences and issues, it should not be the main source of assistance and support. It is essential to encourage responsible behavior and ensure that the information shared is fact-checked and correct. Seeking out official mental health resources can provide access to skilled specialists and evidence-based treatment, both of which are important in avoiding suicide and promoting mental health (Basch et al., 2022). Furthermore, the mental health movement received criticism for fostering a culture of victimhood and perpetuating harmful stereotypes about mental health and trauma. Some argued that the movement encouraged people to define themselves primarily through their experiences with trauma, rather than seeking out healing and growth (Basch et al., 2022).

As indicated in the previous chapter, TikTok's algorithm has the potential to create an "echo chamber" in which users are only exposed to content that endorses their existing beliefs or interests. In the case of videos on suicide, depression, anxiety, and other mental health issues, this could result in users being fed a steady stream of such videos, thereby exacerbating their mental health issues (Carville, 2023). This is particularly concerning considering the prevalence of mental health issues among young people. Research has shown that exposure to negative or harmful content on social media can have a significant impact on young people's mental health, potentially leading to feelings of anxiety, depression, or even suicidal ideation (Robinson & Smith, 2023). Take for example the death of Chase Nasca, a young TikTok user who took his own life in 2021. His death has raised concerns about the potential impact of social media platforms on mental health. Many people believe that the TikTok algorithm contributed to an echo chamber that reinforced Chase's pre-existing struggles with depression and anxiety by exposing him to a constant stream of content about these topics (Carville, 2023). While it is impossible to know for certain the extent to which TikTok or its algorithm may have played a role in Chase's death, the tragedy highlights the need for greater awareness and discussion of the potential impact of social media on mental health (Carville, 2023).

Overall, while the movement attempted to raise awareness about critical problems such as mental health and trauma, it also highlighted the potential negative effects of viral social media movements. TikTok played a pivotal role in amplifying the reach of the mental health movement. The platform's virality, fueled by its algorithm, allows individuals' experiences and stories to reach millions worldwide, thereby highlighting the importance of mental health. However, the nature of the platform also brings about significant challenges. The lack of context in short videos may inadvertently lead to self-diagnosis, a potentially harmful practice, and the indiscriminate spread of triggering content. Furthermore, the algorithm, designed to personalize user experience, may expose vulnerable individuals to an excessive amount of distressing content, contributing to the deterioration of their mental health. Echo chambers, a known issue in algorithmic content curation, may further exacerbate these issues by continuously exposing users to similar content, potentially reinforcing negative mental states and stiffening open discussion. As we dive deeper into the benefits and risks of social media platforms like TikTok, these points underscore the need for careful navigation and consideration of how we engage with these platforms for mental health advocacy.

5.3.   Balancing the benefits and risks of social media
The cases from the previous section illustrate the potential of social media platforms, such as TikTok, to have major impacts on the real world. It has enabled activism to flourish on the platform and has started whole movements that have led to real-world changes. The cases of the Tulsa Rallies, the Black Lives Matter movement, the COVID-19 pandemic, the climate change movement, and the mental health movement are examples of how activism can lead

to great changes, such as the plastic bags ban in Kenya, contributing to a better world. However, it is important to be cautious when sharing and receiving information through these platforms. The COVID-19 pandemic has illustrated how harmful it can be to consume misinformation about serious topics, which can eventually be hazardous to an entire nation. The mental health movement has shown us that the formation of echo chambers can also be dangerous to individuals. Movements that start as a form of activism to improve the world can be disastrous if not done carefully, especially when sensitive topics are involved.

In terms of informed decision-making, social media can be both helpful and harmful. It provides a wealth of information that can be useful in making informed decisions, but it can also be a source of misinformation that can lead to poor decision-making. Therefore, it is important to be critical of the information shared on these platforms and to fact-check where possible.
In terms of deliberation, social media can also have both positive and negative effects. On one hand, it can provide a platform for diverse perspectives and ideas to be shared and discussed, leading to more informed and nuanced deliberation. On the other hand, it can also contribute to the formation of echo chambers, where individuals only hear and engage with ideas that reinforce their existing beliefs, leading to less informed and more polarized deliberation.

In conclusion, social media platforms like TikTok have the potential to make a significant impact on the world, both positively and negatively. It is important to approach information sharing and consumption with caution, fact-check where possible, and critically evaluate the information being presented. It is also important to be aware of the potential for echo chambers and to actively seek out diverse perspectives and ideas to inform informed decision-making and deliberation.

5.4. Challenges and opportunities

In this section, I will focus on the specific challenges and opportunities that arise from the dissemination of information through TikTok for democratic practices, with a focus on activism. After these are identified, I will design guiding values in information dissemination that can guide in developing strategies to promote the ethical and informed use of TikTok.

The cases from the previous section, especially the COVID-19 case and the mental health movement, have shown that one of the challenges presented by TikTok is the risk of misinformation. With the abundance of user-generated content on the platform, there is a significant risk of false or misleading information being shared. Misinformation can be particularly dangerous during times of crisis, such as the COVID-19 pandemic, when accurate information is essential for making informed decisions (Basch et al., 2021).

Another challenge is algorithmic biases which refer to the tendency of algorithms to produce results that systematically and unfairly favor or discriminate against certain groups of people or types of content (Grandinetti, 2021). In TikTok, this could prioritize certain content or viewpoints, leading to echo chambers and spreading misinformation. This impacts informed decision-making and democratic practices (Brown et al., 2022). Speaking of echo chambers, this forms another challenge. TikTok's algorithm is designed to show users content that it thinks they will like based on their previous interactions with the app. While this can lead to a personalized user experience, it can also result in users being exposed only to content that reinforces their existing beliefs, leading to less informed and more polarized deliberation (Brown et al., 2022).

Another challenge is the lack of context in videos. TikTok's short-form videos can present challenges for providing sufficient context and this could lead to oversimplification of complex situations (Blake, 2020). Due to the brevity of the platform, creators can find it challenging to offer a complete and nuanced understanding of complex issues, resulting in videos that lack important context. As the mental health case has shown, this can lead to a shallow and

potentially misleading understanding of the topic, ultimately resulting in less informed decision-making and the spread of misinformation.

Furthermore, as the Tulsa rallies have shown, one of the challenges TikTok faces is manipulation by bad actors, which refers to the potential for individuals or groups with malicious intent to use the platform to spread false information or manipulate public opinion (Winkelstein, 2023). Such manipulation can distort the public discourse and undermine democratic practices, as it prevents individuals from making informed decisions based on accurate information (Winkelstein, 2023). The challenge for TikTok is to identify and mitigate the risks of manipulation by bad actors while promoting open and free expression on the platform (Winkelstein, 2023).

The manipulation by bad actors is fostered by the following and last challenge; a lack of transparency. This refers to the limited access users have to information about the platform's algorithms, data collection practices, and content moderation policies (Grandinetti, 2021). This can lead to uncertainty and mistrust among users, as they may not understand why certain content is promoted or removed (Winkelstein, 2023). Additionally, it can create opportunities for bias and manipulation, as bad actors can exploit the lack of transparency to spread false information or manipulate public opinion (Winkelstein, 2023).

Despite these challenges, TikTok also presents opportunities for democratic practices. On one hand, the platform provides a space for users to engage in political discussions, express their opinions, and share information about current events (Li et al., 2021). This can contribute to informed decision-making by fostering open dialogue and allowing individuals to learn from different perspectives. TikTok's ability to reach a vast audience and generate viral content also offers a powerful tool for political activism, enabling users to raise awareness and mobilize support for social justice causes (Li et al., 2021).

In conclusion, although TikTok offers opportunities for democratic engagement and activism, it is crucial to approach the platform with caution, critically evaluate the information presented, and actively seek out diverse perspectives to mitigate the challenges it poses to democratic practices.

5.5. Guiding values in information dissemination

The identification of guiding values is a fundamental step in addressing the complex challenges that arise from information dissemination on TikTok. By defining guiding values, I can establish a framework that outlines the values and ideals necessary to navigate these challenges effectively. These values serve as a compass for developing strategies that promote democratic practices, foster informed decision-making, and mitigate the negative consequences associated with social media use.

Inspired by the Value Sensitive Design (VSD) approach, I have developed guiding values for information dissemination on TikTok, taking into account the complexities of human values in technology and their implications. VSD is a methodology that integrates the study of human values into the technological design process. This approach is advantageous in this context as it acknowledges that technology is not neutral, but rather embodies certain values and can therefore significantly impact society and individuals (Friedman et al., 2002). The value identification process was centered on the principle that the values identified should be able to address the challenges and harness the opportunities identified during the literature search. To do this, I considered each challenge, and by interpretation, I linked it to a corresponding value that would serve to mitigate it, and I linked each opportunity to a value that would serve to enhance it. For example, the challenge of misinformation I could link to accuracy, and the opportunity for democratic engagement I could link to empowerment. This led to the identification of the following six guiding values:

1. Transparency
2. Accuracy
3. Diversity
4. Contextualization
5. Accountability
6. Empowerment

In the following section, I will take a comprehensive approach to validate and evaluate these guiding values through interviews with experts in the field. This process of validation will provide valuable insights and perspectives, which allows us to evaluate and contextualize the guiding values. By combining the findings from the literature review with the expertise and experiences of these experts, I aim to develop a nuanced understanding of the challenges and potential solutions related to information dissemination on TikTok.

The first guiding value is *transparency*, which entails that information and content on TikTok should be open and clear about its sources, origins, and intent. Users should be able to easily understand the purpose and meaning of the content they are engaging with. For instance, during the 2020 U.S. Presidential election, there were concerns about the spread of misinformation and disinformation on social media platforms, including TikTok. Some individuals and groups were sharing false information about the voting process, candidates, and election results in an attempt to manipulate public opinion and interfere with the election.

Accuracy means that all information that is shared on TikTok should be as factually correct as possible. Users should be able to trust that the information they are consuming is based on reliable and accurate sources. An example of how accuracy is crucial in promoting activism on TikTok can be seen in the controversy over misinformation surrounding the COVID-19 pandemic. Some users on TikTok have been spreading false information and conspiracy theories about the virus, vaccines, and public health measures. Because of the lack of sources, this has led to confusion and mistrust among users who rely on TikTok for accurate information.

Diversity is about TikTok fostering diverse perspectives and opinions. This means that content creators from different backgrounds and with different views should be encouraged to participate on the platform. An example is echo chambers, where users are exposed to content that reinforces their existing beliefs and values. This can lead to a lack of diversity in the perspectives and opinions users encounter on the platform. For instance, if a user frequently engages with content that promotes a particular ideology, TikTok's algorithm may prioritize this content and show them similar content. Over time, the user may be less likely to encounter content that challenges their beliefs, resulting in a narrow and potentially inaccurate understanding of complex issues.

Contextualization means that TikTok should provide context and background information for the content that is shared on the platform. This helps users to better understand the meaning and implications of the content they are engaging with. For example, during the Black Lives Matter protests, there were many viral TikTok videos showing police officers and protesters clashing. While these videos provided important footage of the events taking place, they often lacked sufficient context. Without additional information or background on the specific circumstances surrounding the encounters, viewers may have been left with a limited understanding of the situation, potentially leading to incomplete or even inaccurate interpretations of the events.

Accountability entails that TikTok holds users and content creators accountable for their actions on the platform. This includes enforcing community guidelines and providing consequences for violating them. An example of accountability on TikTok is the platform's enforcement of community guidelines. These guidelines set clear expectations for user behavior and content standards. For instance, TikTok prohibits hate speech, harassment, and

graphic violence. When a user violates these guidelines, TikTok can remove their content or even suspend their account. Accountability not only helps maintain a safe and respectful community, but it can also enhance other guiding values like transparency and accuracy. When users know that they will be held accountable for their actions, they are more likely to think carefully about what they post and consider the impact it might have on others.

Empowerment involves TikTok empowering users to make informed decisions and take action based on the information they consume on the platform. This means providing users with the tools and resources they need to engage in meaningful and productive discussions. An example is the case of #metoo. This movement used social media platforms to raise awareness and facilitate discussions about sexual harassment and assault. These platforms provided a space for victims to share their stories and connect with others who had similar experiences. The use of hashtags such as #metoo also helped to amplify the message and create a sense of solidarity among survivors. Through these actions, victims were empowered to speak out and take action against sexual violence.

Defining guiding values in information dissemination is crucial in addressing complex challenges related to TikTok and social media. These values provide a framework for developing effective strategies to promote democratic practices and address negative impacts on society. The identified guiding values include transparency, accuracy, diversity, contextualization, accountability, and empowerment. I will validate and evaluate these values through expert interviews to contextualize and improve my understanding of them. Through this process, I aim to establish a common language and a shared understanding of the issues at hand, which is vital for developing effective solutions to promote responsible information dissemination on TikTok.

5.6. Expert interviews

In this section, I delve into the evaluation, validation, and contextualization of the six guiding values derived from the literature search. To achieve this, I conducted a comparative analysis of the different viewpoints of the experts against each value. For a detailed execution of the comparative analysis, please refer to Appendix E.

In conducting this analysis, I interviewed 9 experts from both the academic and industrial sectors. Their areas of expertise and respective clusters are detailed in Table 1. These experts add an impressive range of skills and insights, offering interesting perspectives within their respective domains. Their distinctive expertise in ethics, technology, and regulatory matters is greatly helpful in the process of evaluating the previously drafted guiding values. Alternating between ethical and technical viewpoints is of great value, as I believe it contributes to a comprehensive overview. The interviews were conducted over a nearly three-week period, stretching from May 9th, 2023, to May 25th, 2023.

Table 1: Clustering of experts

Interviewees	Expertise	Domain	Area
Interviewee 1	Ethics/Philosophy	Technology ethics	Academia
Interviewee 2	Engineering/Technology	Innovation sciences	
Interviewee 3		Network science	Industry
Interviewee 4		AI & Data management	
Interviewee 5	Ethics/Philosophy	Political studies	Academia
Interviewee 6	Information/Media	AI, media and democracy	
Interviewee 7	Law/Regulation	Information Law	
Interviewee 8	Information/Media	Social media marketing & communication	Industry
Interviewee 9	Law/Regulation	Geography	Academia

In the following sections, I will discuss the insights from the interviews and the comparative analysis for each of the guiding values.

5.6.1. Transparency

Starting with the first value, transparency, it becomes apparent that interviewees 1, 4, 8, and 9 emphasized the crucial importance of comprehending the sources, origins, and intent of content to effectively combat misinformation. These insights reflect users' desire for reliable information and their need to assess the credibility of the content they consume.

Furthermore, interviewees 2 and 6 raised concerns regarding the lack of transparency in content manipulation and the selection process on TikTok. Their perspectives shed light on the potential for certain viewpoints to be either promoted or misrepresented, thereby impeding a fair and balanced information ecosystem.

To address transparency, interviewees 3, 5, and 7 specifically emphasized the need for platforms, like TikTok, to be transparent about their algorithms. These algorithms exert significant influence over the content users are exposed to. By providing transparency in algorithmic operations, platforms can enable users to better comprehend why certain content is displayed, while mitigating potential biases and manipulation.

In conclusion, the insights obtained from these interviews have provided valuable perspectives on the critical role of transparency in TikTok's information dissemination. The concerns expressed by field experts regarding the origins, intent, and selection processes of the content encountered on the platform underline the significance of transparency as a vital element in fostering trust, combating misinformation, and ensuring a fair and well-informed user experience. The alignment between expert perspectives and the value of transparency further reinforces its relevance in the context of TikTok. Therefore, it becomes evident that transparency holds significant importance in addressing the challenges associated with information dissemination on TikTok, as highlighted by the insights obtained from the interviews.

5.6.2. Accuracy

For the second value, accuracy, I found that interviewees 1, 4, 5, 6, 7, and 9 share a common perspective on the importance of factually correct information on TikTok. Interviewee 1 emphasizes the necessity for factually correct information, while interviewee 4 implies the significance of accuracy by advocating for precise communication. Interviewee 5 raises concerns about the impact of misinformation on internet activism, indicating the need for accurate information. Interviewee 6 underscores the importance of accurate information and user trust in reliable sources. Interviewee 7 implies that accuracy is vital to maintain credibility and avoid negative outcomes. And interviewee 9 raises concerns over the potential spread of misinformation and inauthentic content. Collectively, these viewpoints emphasize the crucial role of accuracy in promoting reliable and trustworthy content on TikTok.

Interviewees 3 and 8 draw attention to the prevalence of sensational content and misinformation on TikTok. Interviewee 3 points out the influence of the platform's business model, which often prioritizes sensational content over accuracy. Interviewee 8 echoes this concern, emphasizing the harmful effects of sensationalism and misinformation. Their viewpoints intersect on the need to combat sensationalism and promote accurate, thoughtful content on TikTok.

Based on these overlapping viewpoints and the insights provided, it is evident that accuracy is a significant concern for TikTok's information dissemination. Experts express the need for factually correct content and highlight the negative impact of misinformation. The existing definition of the value aligns well with these insights. However, the viewpoints of interviewee 2 raise an important perspective to consider. This interviewee suggests the importance of

45

balancing accuracy with other values and perspectives. This indicates that while accuracy is crucial, it should be weighed against the need for diverse viewpoints and a balanced information ecosystem. It may be valuable to incorporate this perspective into the value by highlighting the importance of accuracy while considering the broader context and diverse perspectives.

In conclusion, the insights from the interviews support the relevance of the accuracy value. Experts emphasize the need for factually correct information, highlight the negative impact of misinformation, and advocate for trustworthy content on TikTok. Incorporating the perspective of balancing accuracy with other values and perspectives could contextualize the definition of the value and provide a more comprehensive understanding of its implementation in the context of TikTok.

5.6.3. Diversity

For diversity, I found that interviewees 1 and 2 both emphasize the importance of varied content creators and diverse perspectives on TikTok. Interviewee 1 advocates for maintaining a diverse and non-linear feed, while interviewee 2 highlights TikTok's capacity to accommodate a range of voices and perspectives. These viewpoints converge on the significance of diversity in content and representation on the platform.

Interviewees 3, 5, 6, and 8 express concerns about the potential for echo chambers on social media platforms like TikTok. Interviewee 3 mentions the possibility of platforms promoting polarizing content, interviewee 5 voices concerns over the potential isolation of users by algorithms, interviewee 6 mentions the potential for echo chambers on TikTok, and interviewee 8 highlights the risk of users being isolated from diverse viewpoints. These viewpoints converge on the need to counteract echo chambers and promote exposure to a wider range of perspectives.

Finally, interviewees 4, 7, and 9 emphasize the value of diverse perspectives and the importance of healthy debates. Interviewee 4 underscores the necessity of diverse perspectives, while interviewee 7 highlights the benefits of inter-disciplinary collaboration. Interviewee 9 recognizes TikTok's ability to foster diverse perspectives and experiences. Their viewpoints converge on the significance of diverse perspectives in fostering constructive discussions and addressing societal challenges.

Overall, the insights provided by the interviewees validate the significance of the diversity value. It becomes clear that TikTok should actively strive to diversify its content creators, encourage varied perspectives, and take measures to counteract echo chambers. By taking these measures, TikTok can create an inclusive and diverse information ecosystem that represents the wide range of perspectives and experiences of its users. Based on these insights, it can be concluded that the diversity value is highly relevant and should be upheld as an essential aspect of TikTok's information dissemination. The existing definition of the value aligns well with the perspectives shared by the interviewees.

5.6.4. Contextualization

For the value of contextualization, I found that interviewees 1, 2, 4, 6, 8, and 9 share a similar viewpoint regarding the importance of content context and avoiding misunderstandings. Interviewee 1 emphasizes the necessity of context to avoid misunderstandings, interviewee 2 highlights the issue of videos being taken out of context, interviewee 4 advocates for clear communication and implies the importance of providing context, interviewee 6 emphasizes the need for sufficient background information and context, interviewee 8 stresses the importance of avoiding oversimplification and providing balanced communication, and interviewee 9 reinforces the need for meaningful and genuine content that users can connect with. These viewpoints converge on the significance of providing accurate and comprehensive context to ensure content is properly understood and interpreted.

Interviewees 3 and 5 express concerns about sensationalism, polarizing messages, and algorithmic manipulation. Interviewee 3 raises concerns about sensational or polarizing messages over nuanced ones, while interviewee 5 voices concerns about algorithmic manipulation and its potential impact. Their viewpoints converge on the theme of the algorithm's influence and the need for contextualization within the algorithmic processes of TikTok.

Interviewee 7 warns against comparing TikTok content with thoroughly researched news articles, indicating the importance of considering the distinct context of TikTok content separately from traditional news sources. This viewpoint highlights the need to approach TikTok content with a different lens and not hold it to the same standards as rigorously researched news articles. It emphasizes the unique nature of TikTok as a platform and suggests that contextualization should be applied within its specific context.

Based on the insights obtained from the interviewees, it appears that the contextualization value remains relevant in its current form. The viewpoints expressed by the interviewees align with the existing definition of the value, emphasizing the importance of providing accurate context, avoiding misunderstandings, addressing algorithmic biases, promoting diverse perspectives, countering echo chambers, and recognizing the distinct context of TikTok content. However, there is room for contextualization and clarification within the definition of the value to incorporate the specific concerns and aspects highlighted by the interviewees. This could include explicit mentions of addressing sensationalism and polarizing messages. Therefore, the definition of the contextualization value should be contextualized by incorporating the specific concerns raised by the interviewees. This will ensure a more comprehensive and nuanced understanding of the value and its application within the context of TikTok's information dissemination.

5.6.5. Accountability

For accountability, I found that interviewees 1, 2, 4, and 6 share a similar viewpoint regarding the importance of responsibility, respect, and adherence to community guidelines. Interviewee 1 supports the enforcement of community guidelines, interviewee 2 emphasizes responsibility and accountability in social media platforms, interviewee 4 underscores the responsibility of creators, and interviewee 6 mentions TikTok's community guidelines and the enforcement of standards for user behavior. These viewpoints converge on the significance of responsible behavior and adherence to guidelines, aligning with the accountability value.

Interviewees 3, 5, 7, 8, and 9 hold a common viewpoint regarding the need for regulations, regulatory oversight, and holding platforms accountable. Interviewee 3 expresses hope for new regulations, interviewee 5 highlights the need for social media platforms to be held accountable, interviewee 7 supports upcoming regulations, and interviewee 8 advocates for increased regulatory oversight of TikTok's algorithms. However, interviewee 9 points out challenges in regulating content and holding creators accountable, expressing concerns over the viability of national-level regulations on a global platform. These viewpoints converge on the importance of regulatory frameworks, oversight, and accountability for platforms like TikTok.

Overall, the overlapping viewpoints validate the relevance and significance of the accountability value within TikTok. The platform should prioritize responsible behavior, enforce community guidelines, support regulatory oversight, and be accountable for the impact of its platform. The existing definition of the accountability value effectively captures these perspectives, although it could benefit from explicitly mentioning the importance of regulatory oversight and adherence to guidelines for clarity and comprehensiveness. Therefore, the definition of this value should be contextualized so it provides valuable guidance for fostering a safe, respectful, and accountable environment on the platform.

5.6.6. Empowerment

Interviewees 4, 5, 6, 7, and 8 share a common viewpoint regarding TikTok's potential for empowering users, enabling social change, and amplifying user voices. They emphasize the role of TikTok in fostering activism, providing a platform for expression, and driving positive action. These viewpoints strongly align with the empowerment value, as they recognize and support TikTok's capacity for empowering users and facilitating social and political engagement.

Interviewees 2, 3, and 9 acknowledge TikTok's potential for empowerment but raise concerns about misinformation and existing limitations. They emphasize the need for responsible practices and the importance of addressing these concerns to ensure meaningful empowerment. These viewpoints align with the empowerment value by recognizing the importance of responsible use and considering the balance between empowerment and responsible information dissemination.

Interviewee 1 stands alone in suggesting that TikTok is primarily used for entertainment rather than intellectual discourse, indicating minimal empowerment. This viewpoint offers a contrasting perspective to the other interviewees, questioning the extent of empowerment on TikTok. However, it is worth noting that this viewpoint does not directly oppose the empowerment value but rather highlights the need to further explore and promote intellectual discourse on the platform.

Based on these insights, the existing definition of the empowerment value remains relevant. It captures the essence of empowering users, enabling expression, fostering activism, and driving positive change. However, it may be valuable to incorporate explicit mention of responsible practices, addressing concerns about misinformation, and fostering intellectual discourse within the definition for greater clarity and comprehensiveness.

In conclusion, the evaluation of the empowerment value based on overlapping viewpoints affirms its significance within the TikTok context.

5.7. Contextualized guiding values

After evaluating the insights gathered from the interviewees in the previous section, I have contextualized the guiding values in information dissemination to provide a comprehensive overview of TikTok's impact on democratic practices. The contextualized values are as follows:

Transparency: Information and content on TikTok should be open, clear, and transparent about their sources, origins, sponsorship, intent, and any potential conflicts of interest. Users should be able to easily understand the purpose and meaning of the content they engage with, including clear disclosure of sponsored content. Platforms should provide clear information about their content policies, algorithms, and data practices to users, enabling them to understand how information is disseminated and make informed decisions.

Evaluation: The interviewees highlighted the need for platforms to be transparent about their content policies, algorithms, and data practices. Users expressed concerns about the lack of transparency in how content is circulated, the role of algorithms, and the potential manipulation of information. Transparency is crucial for users to understand the mechanisms at play and make informed choices about their engagement. This value remains relevant and should be retained.

Accuracy: TikTok should prioritize the dissemination of accurate and factually correct information, taking measures to combat the spread of misinformation, disinformation, and inauthentic content. Users, on their part, should critically evaluate content, fact-check information before sharing, and engage in responsible information-sharing practices to combat misinformation and ensure accuracy.

Evaluation: The interviewees emphasized the responsibility of users to critically evaluate content, fact-check information, and refrain from sharing false or misleading content. Users play a vital role in promoting accuracy and combating misinformation on TikTok. Therefore, it is essential to include users' roles and responsibilities in ensuring accurate information dissemination. This value aligns with the insights shared and should be retained.

Diversity: Platforms should actively foster and promote diverse perspectives, voices, and experiences, while users should actively seek out and engage with diverse content and viewpoints. This includes encouraging content creators from different backgrounds and with different viewpoints to participate on the platform and taking steps to avoid echo chambers and algorithmic bias, ensuring users are exposed to a broad range of perspectives.

Evaluation: The interviewees emphasized the importance of diverse perspectives, experiences, and voices on TikTok. They raised concerns about echo chambers, polarization, and the potential isolation of users. While platforms should actively encourage diverse content, it is equally important for users to actively seek out and engage with diverse perspectives. Both platforms and users should work together to promote diversity. This value remains relevant and should be retained.

Contextualization: TikTok should provide sufficient context and background information for the content shared on the platform, while content creators should also play a role in offering this information. This helps users better understand the meaning, implications, and limitations of the content they engage with, promoting a nuanced understanding and avoiding misunderstandings or misrepresentations. Users, in turn, should actively seek context to enhance their understanding of the content and contribute to a more informed and meaningful discourse on TikTok.

Evaluation: The interviewees emphasized the importance of context to avoid misunderstandings, promote nuanced understanding, and combat the potential spread of misinformation. Content creators have a responsibility to provide context, and users should actively seek context to enhance their understanding. Both parties play a role in ensuring meaningful and accurate information dissemination. This value aligns with the insights shared and should be retained.

Accountability: TikTok should enforce clear community guidelines that regulate harmful content, hold both users and content creators accountable for their actions on the platform, and provide transparent processes for reporting and addressing violations. This includes prohibiting hate speech, harassment, and other harmful behavior. Users, in turn, should take responsibility for their behavior and engagement on the platform, actively adhering to the community guidelines and recognizing the consequences for violating them.

Evaluation: The interviewees discussed the importance of community guidelines, holding platforms accountable, and addressing ethical concerns related to content moderation and user behavior. Platforms should enforce guidelines and regulations, while users should take responsibility for their actions and behavior on the platform. Both platform accountability and user accountability are crucial for promoting ethical information dissemination. This value remains relevant and should be retained.

Empowerment: TikTok should empower users by providing tools, resources, and opportunities for meaningful engagement, self-expression, and activism, enabling them to participate in activism, drive social change, and amplify their voices. It should enable users to make informed decisions based on the information they consume, avoid emotional manipulation, and actively shape the content and discussions on the platform. Platforms should actively facilitate user empowerment and provide opportunities for activism, while users should actively engage in meaningful activism and utilize the platform to amplify their voices.

Evaluation: The interviewees recognized the potential of TikTok to empower users for activism while acknowledging limitations and potential risks. Platforms should provide tools and opportunities, while users should actively engage in activism and utilize the platform to amplify their voices. Both platform facilitation and user engagement are important for promoting empowerment. This value aligns with the insights shared and should be retained.

These guiding values provide a framework to evaluate how TikTok's information dissemination practices impact democratic processes, including informed decision-making, civic engagement, and the quality of public discourse. They help assess the **platforms** and **users'** role in promoting transparency, accuracy, diversity, contextualization, accountability, and empowerment, ultimately contributing to a deeper understanding of the complex relationship between TikTok and democratic practices.

The comparative analysis of expert interviews has provided valuable insights into the guiding values related to information dissemination on TikTok and its impact on democratic practices. Through a careful examination of the interviewees' perspectives, the existing guiding values have been validated and affirmed as relevant in capturing the complex dynamics at play. The analysis has not only confirmed the importance of these values but has also led to contextualized definitions that address the challenges and concerns raised by the interviewees. The comparative analysis has shed light on the need to consider both platform-related factors and user behaviors in promoting the ethical and informed use of TikTok for activism. These insights will serve as a solid foundation for the subsequent chapter, where strategies will be formulated to address the identified challenges and leverage the opportunities inherent in the platform. By conducting a comprehensive comparative analysis, we have gained a deeper understanding of the values at hand, laying the groundwork for developing effective approaches to navigate the evolving landscape of TikTok and its impact on democratic practices.

6. Developing strategies

In this chapter, I will develop strategies that align with the guiding values, identified in the previous chapter, for information dissemination on TikTok. These guiding values serve as a compass, providing direction to navigate the complex challenges and harness the opportunities presented by information dissemination through TikTok. By embracing transparency, accuracy, diversity, contextualization, accountability, and empowerment, as indicated in the previous Chapter, I can effectively address the issues surrounding information sharing on TikTok. The strategies aim to promote democratic practices, foster informed decision-making, and mitigate the negative consequences associated with social media use. Each guiding value is examined in depth, exploring its significance in navigating the complexities of information dissemination and presenting actionable approaches to enhance its implementation. Through this exploration, I aim to contribute to the creation of an ethical and responsible information ecosystem within the TikTok platform.

6.1. Increasing transparency

Transparency is a guiding value that holds immense importance in information dissemination, ensuring that users can easily understand the content they engage with and make informed decisions. To address the concerns raised in the previous sections and promote transparency, regulatory measures such as the upcoming AI Act and Digital Services Act have been proposed. By implementing these regulations, the negative impacts associated with information dissemination on platforms like TikTok can be mitigated effectively. In this section, we will delve into the AI Act and the Digital Services Act, exploring their purpose, key features, and potential implementation to address the need for transparency. These regulatory frameworks are designed to provide clear guidelines for platforms, requiring them to disclose content policies, algorithms, and data practices. By doing so, users can gain a better understanding of how information is disseminated and make informed choices about their engagement. The introduction of these acts represents a significant step toward fostering transparency in the digital landscape and ensuring a more trustworthy and accountable information ecosystem.

6.1.1. The AI Act and the Digital Services Act

The AI Act is designed to regulate artificial intelligence usage in the European Union and was just recently approved by a committee of lawmakers in the European Parliament. The Act is set to come into force near the end of 2023 (Houthoff, 2023). It's the first legal framework of its kind, focusing on AI systems and their users. The regulations propose several obligations depending on the risk level associated with the AI system. High-risk AI systems are subject to strict rules before they can enter the market, including transparency and accountability requirements. For example, systems should be designed in a way that respects human oversight, ensuring that outputs can be reviewed and understood by human users. The act also includes rules on data governance.

In the context of information transparency on platforms like TikTok, the AI Act could be used to regulate the algorithms that determine which content users see. This might involve requiring companies to provide more information about how these algorithms work, making them more transparent and understandable (Browne, 2023).

The Digital Services Act (DSA) aims to create a safer and more open digital space, with European values and rules at its core. The Act is set into force at the start of 2024 (MHC, 2023). It's focused on large online platforms and is designed to address the impact these platforms have on society, including how they handle illegal content and protect their users' fundamental rights. The DSA will create obligations for transparency about content moderation policies, ad placements, and the use of algorithms. It also aims to provide better protection for consumers and their fundamental rights online and to establish a powerful transparency and oversight system (Lekatis, 2023).

The DSA could help address the lack of transparency in information dissemination on platforms like TikTok by requiring them to provide clear information about their content policies, algorithms, and data practices. It might also create a more effective oversight mechanism for ensuring that these requirements are met (Lekatis, 2023).

Although the AI Act and the Digital Services Act are both pieces of legislation aimed at regulating the digital landscape, they have distinct focuses and objectives. The AI Act is primarily concerned with the realm of artificial intelligence. Its purpose is to establish a legal framework that directly addresses the unique challenges and risks that AI presents. This includes crucial issues such as transparency, accountability, and the necessity for comprehensive oversight of high-risk AI systems. The Act categorizes AI systems based on the level of risk they pose, from unacceptable risk to high risk to minimal risk, and puts forward different requirements for each category. Think of the AI Act as a kind of product safety legislation specifically tailored for AI, establishing the rules and standards that AI systems need to meet before they can be deployed.

On the other hand, the Digital Services Act sets its sights on the broader landscape of online platforms and intermediary services, irrespective of whether they utilize AI. Its primary aim is to modernize the existing legal framework for digital services, which originates from the early days of the internet, to accurately reflect the realities and challenges of today's digital age. The Act addresses issues such as illegal content, transparency of online ads, and transparency in the use of algorithms. It puts forth new obligations for large online platforms, mandating that they take greater responsibility for handling illegal content and safeguarding the fundamental rights of their users online.
In essence, while the AI Act focuses on AI systems and their inherent risks, the Digital Services Act takes a broader view, focusing on the societal impacts of online platforms. Although there's some overlap between the two acts, especially in areas like algorithmic transparency, each one targets different facets of the digital landscape.

With both Acts coming into force soon, TikTok must understand their implications. For instance, the AI Act puts the spotlight squarely on TikTok's content recommendation algorithms. These AI-driven systems personalize each user's content feed, influencing behavior and engagement. This influence could be construed as manipulative or exploitative, particularly if it disproportionately impacts certain vulnerable groups.

6.1.2. The response to new regulations
In response to these new regulations, TikTok will need to make significant changes to its AI-driven systems. The goal would be to ensure they don't distort user behavior in subliminal or manipulative ways, or exploit the vulnerabilities of specific groups.

Prevention of echo chambers
An essential part of this process involves preventing the formation of echo chambers, where users are continuously served content that reinforces their existing beliefs and perspectives. Echo chambers can polarize communities, fuel misinformation, and create a distorted view of reality (GCF Global, 2023). To combat this, TikTok should aim to incorporate a diverse range of perspectives into its recommendation algorithm. Interviewee 7 suggested that while this is a challenging task, it's not impossible. This would require TikTok to invest in more sophisticated training of its algorithms, focusing on fostering a balanced mix of views and promoting a diversity of content. For example, TikTok can ensure that the training data used for its algorithms represent a wide array of perspectives. By pulling data from a diverse array of sources and types of content, the resulting AI system would be more adept at handling and suggesting varied viewpoints. At the same time, it's crucial to recognize that AI systems can inadvertently replicate the biases present in their training data. To mitigate this, TikTok should incorporate techniques to detect and lessen these biases during the development process. This way, they can prevent the algorithm from unduly favoring certain perspectives over others.

Another approach involves training the algorithm to optimize multiple objectives simultaneously. For instance, balancing user engagement, content diversity, and fairness can help counteract the tendency of these algorithms to primarily recommend content that the user is likely to interact with. In doing so, the system could expose users to a wider range of content (Alatawi et al., 2021).

Actively seeking out new and underrepresented perspectives is another potential strategy. Instead of relying solely on the perspectives already encountered in its training data, TikTok's algorithm could be designed to actively discover and recommend content from lesser-known or less-represented sources. TikTok could also provide more curation control to the users themselves. By offering options to adjust the balance of content they see, follow certain topics, or explore different viewpoints, users can have a more active role in diversifying their content feed. Lastly, the performance of the algorithm should be regularly reviewed to assess its effectiveness in promoting diverse perspectives. TikTok could then update its algorithm accordingly, improving its capacity to handle and recommend a wider array of content.

Making this a priority is not just about regulatory compliance; it's also about creating a healthier and more balanced social media environment. It's about ensuring that TikTok serves not just as a platform for entertainment but also as a platform for diverse ideas, perspectives, and meaningful discourse. This is a significant challenge, but it's one that TikTok must rise to meet in light of the new legislation.

Explaining content recommendation

The Digital Services Act is demanding a significant shift in the way TikTok manages its platform. Specifically, users should understand the reasoning behind content recommendations, necessitating additional transparency measures from TikTok.

A crucial step TikTok should undertake involves explaining how content is disseminated across the platform. This presents a daunting task, even for the platform's designers and engineers, owing to the multitude of influencing factors that govern content distribution. The intricate interplay of factors such as user preferences, trending topics, location, and timing make it challenging to accurately trace or predict a content's reach (Orlowski, 2020). TikTok must enhance its internal understanding of how content spreads within the platform. This improved understanding would be an essential precursor to effectively communicate the same to users. Without this comprehensive insight, it's impossible to clearly and accurately explain the workings of the platform's content distribution system to its users. The current complexities may not allow a perfect understanding, but striving for more knowledge about the dynamics involved is the right step forward. Such internal comprehension should involve interdisciplinary approaches to model the interplay of factors that influence the spread of content (Orlowski, 2020). This knowledge could then form the basis for developing comprehensive guidelines and explanatory features for users.

With the DSA coming into force at the start of 2024, TikTok already introduced a new feature to enhance transparency around video recommendations. By clicking the "Why this video?" icon in the share section for any video, users can get an idea of why a particular piece of content was suggested to them. However, the explanations tend to be quite general. Explanations could be for instance, "This video is popular in the United States". While this feature is a promising start, TikTok has indicated that more detailed explanations will be provided over time (TikTok, 2022b). Indeed, the key to enhancing the utility of this feature lies in providing more detailed insights. General explanations may not sufficiently inform users about the complex interplay of factors leading to a particular video's recommendation. To fully meet the requirements of the Digital Services Act, TikTok should strive to make these explanations as detailed and transparent as possible. For example, TikTok could consider informing users about the individual factors that influence the algorithm's recommendations. This might include the user's past interactions with similar content, the popularity of the video

among similar users, the user's location, or the time of day. TikTok could also give more insights into the overall operation of its recommendation system, such as how it weighs different factors and how it learns from user feedback. However, to implement this, TikTok would need to be cautious about privacy concerns and only disclose non-sensitive user data. Importantly, they must ensure the explanations are clear and easily understood, potentially using plain language and visual aids.

Given that users don't have explicit control over where their content is distributed on the platform, they must exercise discretion and mindfulness while sharing their messages. As indicated by multiple interviewees, they must recognize the potential reach of their content, knowing that it could be viewed and potentially scrutinized by a global audience, including those who may hold different opinions or beliefs. User-generated content has an inherent capacity to cross boundaries and engage with wide-ranging, and sometimes conflicting, audience groups. Therefore, a thorough understanding of this dynamic is integral to managing expectations and mitigating potential backlash or misinterpretation.

Ultimately, these efforts should aim at making the platform a more transparent and comprehensible space for its users, while simultaneously adhering to the values of privacy and data security. Such steps would not only meet regulatory requirements like the Digital Services Act but also foster trust and accountability for the users.

Improving content moderation

As we look ahead to the enforcement of the new regulations, content moderation emerges as a critical area for TikTok. The platform would need to fortify its moderation capabilities, introducing a swift and efficient system for users to report illegal content and acting expeditiously on such reports. However, it's not just about the speed of response; transparency is equally, if not more, important. Being transparent about content moderation decisions is a multifaceted challenge. It includes being open and clear about the rules that govern what content is not allowed on the platform. TikTok should make its community guidelines easily accessible and comprehensible, specifying the types of content that violate these guidelines and the potential consequences of such violations (Ling et al., 2022). But transparency shouldn't stop at the community guidelines. When a video is deleted, TikTok should provide detailed information to the content creator about the reasons behind this decision. This should include the specific violations that led to the deletion, as well as a clear explanation of how these violations were identified. Providing such information can not only clarify the reasoning behind individual decisions but also help educate users about the platform's rules and expectations.

Another issue is the practice of shadow banning, where content is subtly suppressed without the user being informed. If TikTok is using this practice, it should reconsider. All content that complies with community guidelines should have the same chance of being viewed. If a video is suppressed, the reasons for this should be clearly communicated to the user.

Providing clarity around advertisements

With the Digital Services Act, platforms like TikTok are expected to conform to strict regulations regarding advertising. TikTok would be required to ensure that advertisements are clearly labeled, information about the advertisers is provided, and sensitive user data isn't utilized for ad targeting. This regulatory change has significant implications for branded content on TikTok, which is defined as content promoting goods or services in exchange for something of value, such as an endorsement, partnership, or other promotional opportunities. The introduction of the branded content toggle, a tool that clearly communicates the presence of a commercial relationship, serves as one example of compliance. Users posting branded content on TikTok are required to enable this branded content toggle, which adds a disclosure (for example, #Ad) to the description of the post. This mandatory disclosure is part of TikTok's response to the transparency requirements mandated by the DSA. Importantly, all branded content is subject

to review by TikTok's moderation team to ensure it meets their branded content policy (TikTok, 2023d, TikTok, 2022c).

The practicality of this disclosure method, however, can be questioned. While it may work efficiently for paid advertisements that show up in user feeds or on the search page, designated clearly with a 'Sponsored' or 'Ad' icon, it falls short in the case of sponsored content posted by influencers. Despite influencers making up a substantial part of TikTok (Barta et al., 2023), their posts do not carry the 'Sponsored' or 'Ad' icons, relying on hashtags to indicate sponsored content instead. This method can be missed or misinterpreted by users.

Considering this, TikTok could think about extending the use of the branded content toggle and the 'Sponsored' or 'Ad' icon to all paid or sponsored content, including posts from influencers. This change would mean enforcing more rigorous rules for influencers to use these tools while posting sponsored content. By implementing such modifications, TikTok could enhance transparency and avoid any potential user confusion about the commercial intent of the content they're interacting with. However, the appeal of influencer marketing lies in its organic and engaging nature. Overly explicit advertising mechanisms could potentially hamper this, making the content feel less authentic and more like a traditional advertisement. To preserve this authenticity while ensuring transparency, it's crucial to find a delicate balance. Influencers could be encouraged to weave the disclosure naturally into their content, acknowledging the sponsorship in a way that aligns with their style and the expectations of their followers. This approach might include verbal acknowledgments during the video or creative uses of text and graphics that don't disrupt the overall feel of the content.

For identifying sponsored content, TikTok would need a combination of measures. Relying on manual identification would be too labor-intensive, given the volume of content generated on the platform. Automatic detection methods using AI and machine learning could be developed to recognize signs of sponsored content, such as specific keywords, hashtags, or patterns in the video or text. These systems could then flag potentially sponsored content for manual review, allowing human moderators to make the final call. This would ensure accuracy while reducing the workload compared to manual review alone.

However, a significant part of the solution should also involve encouraging influencers and brands to disclose their partnerships voluntarily. TikTok could work on strengthening the guidelines around sponsored content and provide clear instructions for influencers on how to disclose these relationships. Building a culture of transparency and trust around influencer marketing on the platform can help ensure that sponsored content is appropriately labeled, even as TikTok continues to refine its automatic detection and moderation capabilities.

6.1.3. The financial incentives of the business model

To create a more democratic and less problematic environment, social media platforms could consider several changes to their business model. As indicated in Chapter 4.4, TikTok's current business model is fundamentally based on selling predictions about user behavior. These predictions are shaped by the trove of data the platform collects from its users, encapsulating their online actions, preferences, and interactions. The more detailed the data, the more accurate the predictions can be, and the more valuable they become to advertisers (Orlowski, 2020). However, this data-driven approach could change if TikTok were able to diversify its revenue sources. By generating income from other streams, the platform could lessen its reliance on user data and the sale of behavioral predictions (Hasan, 2021).

As interviewee 3 indicated, this could involve transitioning towards a subscription-based model. By directly charging users for the service, platforms could alleviate the pressure to optimize for maximum user engagement, thereby reducing the spread of potentially harmful or sensational content that often garners more attention. Alternatively, platforms might introduce a system of microtransactions, where users pay small amounts for specific features, content,

or virtual goods. This has been successfully implemented in many gaming contexts and could diversify the platforms' income.

A more radical shift in the business model might involve enabling users to sell their data directly to advertisers. This opt-in system would allow users to explicitly consent to share certain data in return for compensation, potentially empowering users and making the data collection process more transparent. Additionally, social media platforms could offer premium services or features for a fee, introducing another source of revenue. These could encompass enhanced privacy settings, ad-free experiences, exclusive content access, or more advanced customization options.

Building on these potential shifts in TikTok's business model, another significant opportunity to foster a more responsible platform use lies in implementing stricter content moderation policies. While data collection and ad targeting strategies are central to TikTok's operations, the content that circulates on the platform is equally vital. With stricter content moderation, TikTok could ensure that the information disseminated on its platform is trustworthy, and respectful, and promotes healthy discourse. This shift would not only make TikTok a safer space for users but could also increase its value to advertisers. Brands would have more confidence that their ads are not being shown next to harmful content and that they are reaching an audience in a positive, respectful environment.

Challenges for an ethical business model
Each of these approaches offers unique benefits and challenges, and a mixture of these strategies may be the best route for many platforms. Nevertheless, these changes could significantly help in shifting the focus from maximizing user engagement to fostering a healthier and more democratic online environment. However, there are notable challenges and criticisms inherent in shifting towards a more ethical business model for social media platforms. Foremost among these is the potential for decreased user engagement. As interviewee 3 indicated, many users engage with these platforms for light-hearted entertainment and escape from everyday stressors. A platform burdened with rules and limitations, geared towards serious political discourse and strictly ethical content, may not resonate with a vast majority of users. The risk is that such a platform may be seen as "dull" and less appealing, causing users to disengage.

Moreover, if platforms were to switch to subscription models or introduce paywalls, this would increase costs for users, some of whom might be unwilling or unable to pay. There is a significant risk that users would simply migrate to another platform that remains free to use. As a result, the problem wouldn't necessarily be solved but rather moved to a different platform.
With the proposed monetization of user data, there is the potential for resistance. Some users may see this as an unacceptable commodification of personal information. Others may embrace it, but overall, it could lead to controversy and further division among users. This could add yet another layer of complexity to the evolving social media landscape.

Finally, there's the potential for accusations of bias and challenges to freedom of speech. As platforms implement stricter controls on content, they may face backlash from users who perceive this as a form of censorship or restriction on freedom of speech. Balancing the need for ethical guidelines with maintaining an open platform could prove to be a delicate and contentious task.

Strategies to achieve an ethical business model
Although these are significant challenges, they are not unconquerable. As we shift from outlining potential hurdles, let's delve into the concrete strategies that could guide TikTok toward a more democratic and ethical business model.
Firstly, it is important to retain the engaging and entertaining aspects of the platform while implementing stricter content moderation policies. This could involve developing sophisticated

AI algorithms and employing a robust human moderation team to identify and manage problematic content. Rather than imposing rigid rules and limitations, the focus should be on promoting healthier discourse and reliable content. While it is inevitable that there may be some backlash, with effective communication and transparency, users can be made aware of why such steps are being taken and how they contribute to a safer and more respectful platform. To mitigate the risk of decreased user engagement due to a more 'serious' platform, TikTok could incentivize users to create a blend of education and entertainment. This type of content can be both engaging and informative, promoting informed decision-making and deliberation without compromising user enjoyment.

In terms of diversifying revenue streams, a careful assessment of the platform's user base is needed. For instance, introducing a subscription model or paywalls may deter some users. However, offering premium features alongside a basic, free-to-use version of the platform could strike a balance, catering to both users willing to pay for enhanced experiences and those who prefer the free model.

The idea of users selling their data directly to advertisers could be explored cautiously. While there might be controversy, some users could find value in this. It's essential to be fully transparent about what this entails and offer strict privacy controls so users feel in control of their information. The key is providing options and allowing users to choose how they interact with the platform.

As TikTok navigates this transformation, continued user feedback and engagement is critical. By involving users in these changes, possibly through surveys, beta testing of new features, or open forums for discussion, TikTok can create a sense of community involvement and collective decision-making. While no single strategy can address all the challenges, a mix of these methods, tailored to TikTok's specific context and user base, could help the platform move towards a more democratic and ethically sound business model.

6.2. Enabling accuracy
In the following section, I will discuss strategies that enable accuracy in information dissemination on the platform.

6.2.1. Promoting fact-checking among users
Incentivizing users to fact-check their content before uploading it onto TikTok is a proactive strategy that fosters accuracy and authenticity right from the source. It revolves around the idea that every user is responsible for the accuracy of the content they share, requiring them to scrutinize and validate their information before it enters the digital ecosystem of TikTok.

Achieving this involves incorporating educational resources into the platform that demonstrate the importance and techniques of fact-checking. TikTok could develop a library of resources including short videos, infographics, and guides explaining how to fact-check. This could cover areas such as how to identify reliable sources, how to cross-verify information, and how to discern between facts and opinions. These resources should be easily accessible, and possibly integrated into the user interface. To make fact-checking easier for users, TikTok could explore the development of fact-checking tools. These could be in the form of interactive guides or embedded features that help users check the credibility of their sources and the accuracy of their information. This would involve collaboration with tech developers and possibly fact-checking organizations to ensure the tools are effective and user-friendly (Li & Chang, 2022).

TikTok can also implement a reward mechanism, like reputation points or badges, to recognize users who consistently upload fact-checked, accurate content. Implementing a reward mechanism could motivate users to fact-check their content. Users who consistently upload

fact-checked and accurate content could be rewarded with reputation points, badges, or other forms of recognition. This would necessitate developing a system to monitor and verify the accuracy of users' content, which could be a combination of AI technology for initial screening and human fact-checkers for final verification. Their existing partnerships with independent fact-checking organizations could provide additional support to this initiative. These organizations could assist in creating educational resources, developing fact-checking tools, and even participating in the verification process for the reward system. They could also engage with users and answer their fact-checking questions.

However, this strategy isn't without its challenges. The primary challenge is that fact-checking requires time and effort that users may be unwilling or unable to invest. Secondly, depending on the content's nature, verifying information might be complex, requiring an understanding of certain subjects or access to specific information sources.

The reality is that fact-checking can be a time-consuming process, and not every user might be willing to invest that much time and effort before sharing content. To tackle this, TikTok could design and incorporate intuitive fact-checking tools that simplify the process and reduce the time it takes to verify information. For instance, a tool could help users search for similar content on the internet to verify the information or provide links to credible sources related to the topic of the content. Moreover, by gamifying the fact-checking process with the reward mechanism, users might be more motivated to spend time fact-checking.

Fact-checking becomes increasingly difficult with the complexity and ambiguity of information, especially when it relates to specialized or contentious subjects. In such cases, a partnership with fact-checking organizations could be beneficial. They could provide resources or even create interactive Q&A sessions specifically focused on challenging topics. Furthermore, TikTok could develop a directory of reliable sources for different categories or topics, guiding users on where to find trustworthy information for their fact-checking. This would require careful evaluation of sources by TikTok to ensure they are indeed credible and authoritative.

Implementing this strategy would require significant resources and efforts from TikTok, but it could greatly contribute to promoting accuracy and combating misinformation on the platform.

6.2.2. Implementing information labeling

Implementing an information labeling strategy involves adding tags or labels to content to provide users with context and additional information about its credibility and nature. This system is an extension of TikTok's state-affiliated media policy, in which they label accounts managed by entities whose editorial output or decision-making process is susceptible to government control or influence (TikTok, 2023). With the information labeling strategy, labels can indicate a range of attributes, such as whether the content is verified, sourced from a reputable entity, or whether it's an opinion, satire, or factual information. For example, a fact-checked and verified piece of content might bear a 'Verified Information' label, while content from a well-established news agency could have a 'Reputable Source' label. On the contrary, content that hasn't been fact-checked or whose accuracy is disputed might carry an 'Unverified' or 'Disputed' label.

The implementation of this strategy involves several steps. Firstly, TikTok needs to establish criteria for each label that clearly defines what content qualifies for it. This involves defining what constitutes a reputable source, verified information, disputed facts, etc. After that, an evaluation process needs to be put in place to assess the content and assign the appropriate labels. This could involve a combination of AI technology for initial evaluation and human reviewers for final verification. Further, TikTok needs to educate users about what each label means and how they should interpret it. This could be done through in-app guides, notification pop-ups, or educational content about the labeling system.

The primary challenge in implementing this strategy is accurately assessing and labeling the content. With the volume of content being uploaded on TikTok, ensuring every piece of content is appropriately labeled can be a daunting task. Another challenge lies in the nuances of information. Labeling content as factual or disputed is not always clear-cut, as different sources might have differing viewpoints, and some content might fall into gray areas. Lastly, there's the challenge of user perception. Users might interpret labels differently, misunderstand them, or not pay attention to them at all. Ensuring users understand and trust the labels is crucial for this strategy to be effective.

To handle the challenge of content volume, TikTok could invest in developing advanced AI technology capable of efficiently evaluating and labeling content. However, because AI is not foolproof, a team of human reviewers should also be in place to review AI-based decisions, particularly for sensitive or disputed content. For handling the nuances of information, clear and comprehensive criteria for each label are essential. TikTok could also introduce additional labels for gray area content or content with differing viewpoints among reliable sources. To ensure users understand and trust the labels, TikTok should put significant effort into user education. This involves not just explaining what each label means, but also being transparent about the evaluation process, the criteria for each label, and how disputes or errors in labeling are resolved. Furthermore, TikTok could regularly gather user feedback on the labeling system and make adjustments based on that feedback. This not only helps in improving the system but also builds user trust by demonstrating that TikTok values their input.

6.2.3. Hosting media literacy campaigns

Hosting media literacy campaigns on TikTok involves conducting targeted efforts to educate users about media consumption and creation, focusing on the understanding and critical evaluation of media content. This includes teaching users how to discern between reliable and unreliable sources, fact-check information, distinguish between different types of content (like news, opinions, and advertisements), and recognize biases or manipulative tactics in media. The goal of these campaigns is to equip users with the knowledge and skills they need to navigate the digital media landscape responsibly and discerningly, reducing the spread and impact of misinformation (Bulger & Davidson, 2018).

To achieve this, TikTok could collaborate with educational institutions, media literacy organizations, and experts in the field to develop a series of media literacy content. This could include videos, infographics, quizzes, interactive guides, and live sessions that educate users about various aspects of media literacy. TikTok could dedicate a specific period for the campaign, during which this content would be highlighted on users' feeds, and users would be encouraged to participate in various activities like quizzes, discussions, or challenges related to media literacy. Additionally, TikTok could integrate elements of this campaign into the user onboarding process, ensuring that new users are introduced to the concepts of media literacy from the start.

In May 2021, TikTok took the first step and launched the #FactCheckYourFeed campaign in the UK as part of its broader #LearnOnTikTok initiative. This campaign aimed to promote media literacy among users, teaching them how to critically engage with content and identify misinformation. Through a series of educational videos, produced in collaboration with creators, public figures, and digital media literacy charity The Student View, users were guided on topics such as critical thinking, recognizing fake news, and balancing news consumption (TikTok, 2021a).

One challenge of such a campaign is ensuring the content of the campaign is engaging and accessible to a broad user base with diverse backgrounds and abilities. Making complex concepts understandable and appealing to a wide audience can be difficult. Another challenge is user engagement. Not all users might be interested in media literacy or willing to spend time learning about it. Convincing users about the importance of media literacy and motivating them

to engage with the campaign is crucial for its success. Lastly, measuring the impact of the campaign can be tricky. While it's easy to track engagement with the campaign content, assessing whether the campaign effectively improved users' media literacy skills and behaviors is more complex.

To ensure the campaign content is engaging and accessible, TikTok could work with experts in education and content creation to design the campaign content. User feedback could also be regularly gathered and used to improve the content. For the accessibility of such a campaign, it's important to note that the need for media literacy and critical thinking extends across all geographical regions. Misinformation is a global issue, and users worldwide could benefit from similar campaigns. Therefore, it would be beneficial for TikTok to expand such initiatives also outside the UK, ensuring they reach users in all territories where the platform operates. By doing so, TikTok can continue its efforts to combat misinformation and promote responsible content creation and consumption globally. To increase user engagement, the campaign could incorporate interactive and fun elements, like challenges or competitions. A reward system could also be implemented, where users earn points or badges for engaging with the campaign content or demonstrating good media literacy practices. To measure the impact of the campaign, TikTok could conduct surveys or tests before and after the campaign to assess changes in users' knowledge and behaviors. They could also track changes in the spread of misinformation on the platform following the campaign.

Overcoming these challenges will require continuous efforts, adaptability, and commitment to user education. But if executed well, a media literacy campaign could contribute to promoting accurate information dissemination and combating misinformation on TikTok.

6.2.4. Establishing partnerships with news organizations

Creating partnerships with news organizations is a strategy where TikTok would collaborate with trusted news organizations to disseminate accurate information. This might involve news organizations producing specialized content such as news videos or live sessions with journalists that are tailored for the TikTok platform. The main goal of this strategy is to enhance the reliability of the information on the platform while promoting a culture of accuracy and fact-checking. Currently, news sites are already active on the platform. These existing news sites on TikTok operate independently, creating and managing their content. However, an official partnership with TikTok would offer these organizations a more collaborative relationship with the platform. TikTok could provide these organizations with additional resources and support to help them better adapt their content to the platform's unique user base and preferences. (Newman, 2022)

To execute this strategy, TikTok would first need to identify reputable news organizations that align with its objective of promoting accurate information. Once these potential partners are identified, agreements outlining the partnership specifics would need to be negotiated. This could entail the production of TikTok-specific content by the news organizations, ensuring that the format and style align with user preferences on the platform.

Several challenges might arise in implementing this strategy. One key challenge is the evaluation process to ensure that the chosen news organizations are indeed reputable and unbiased. Each organization has its unique editorial stance and standards, making it a resource-intensive task to verify its consistency in delivering unbiased and accurate news. Another challenge is negotiating agreements that protect the interests of both parties. For instance, news organizations might have concerns about maintaining their reputation and integrity while adapting their content to a new format (Newman, 2022). A further challenge stems from TikTok's nature as an entertainment platform, which could make serious news content less appealing to users.

Interviewee 7 raised a concern about news organizations becoming financially reliant on social media platforms, such as TikTok. Meese and Hurcombe (2021) indicate this dependence arise as these organizations lean heavily on social media for website traffic and, ultimately, revenue. However, it brings about potential challenges. News organizations might feel compelled to tailor their content to cater to the platform's policies or user preferences, which could potentially compromise their journalistic independence and integrity. This dynamic also risks creating a power imbalance where social media platforms wield substantial influence over the type and nature of news disseminated, thus posing significant implications for information accuracy and diversity.

Therefore, there is a need to overcome these challenges. Ensuring that partnered news organizations are reliable could be achieved through a rigorous vetting process, potentially involving third-party media monitors or an in-house team dedicated to this task. In terms of preserving the reputation and integrity of news organizations, TikTok could offer support and resources to help these organizations adapt their content to the platform's format without compromising their journalistic standards (Newman, 2022). To keep users engaged with news content, TikTok could use strategies such as featuring news content on the 'For You' feed and integrating it into the main feed. This strategy will simultaneously maintain user engagement and ensure they receive accurate information about trending news topics.

The potential dependency of news organizations on social media platforms is a more complex issue to address. One approach could be for TikTok to support a diverse range of news organizations, thus encouraging a wider spread of traffic and lessening dependency on a single platform. However, the ultimate solution might lie in finding a sustainable balance between generating income through social media platforms and other sources, such as subscriptions or paywalls (Meese & Hurcombe, 2021).

6.2.5. Enhancing AI monitoring

Another strategy that could enable accuracy is AI monitoring. This strategy involves two key elements: improving the current AI systems that monitor content on TikTok and integrating a stronger human review component into the process. The idea is to create a robust, dual-layered system that combines the speed, scalability, and efficiency of AI systems with the discernment, understanding, and judgment of human reviewers. While TikTok already employs both AI and human reviewers in its content monitoring, there is potential for enhancement. Specifically, improvements could focus on better detection of misinformation, increased responsiveness, and a more nuanced understanding of context, language, and cultural nuances. Achieving this would likely involve a dual-faceted approach. First, TikTok could invest in further development and refinement of the existing AI algorithms, training them on a larger and more diverse dataset to improve their ability to detect potential misinformation. This would involve machine learning techniques, where AI learns and improves over time based on feedback (NATO, 2022).

Second, TikTok needs to expand and upskill the human review team. This could be achieved through additional hiring, training on fact-checking and content analysis methods, and using their collaborations with fact-checking organizations even more.

Several challenges could arise in the implementation of this strategy. AI, despite its sophistication, does not inherently understand the difference between truth and falsehood, it can only make judgments based on patterns in data it's been trained on. As a result, its ability to detect misinformation may be limited and prone to errors (NATO, 2022). Moreover, while human reviewers bring valuable discernment and judgment to the process, their work is more time-consuming and less scalable than AI. They also may be subject to their own biases or errors in judgment, especially when dealing with complex or ambiguous information.

To address the limitations of AI, continual refinement and updating of AI algorithms would be necessary, ideally based on ongoing feedback from human reviewers and users. TikTok could also explore collaborations with academic researchers or tech companies specializing in AI to leverage the latest advancements in the field. As for the challenges with human review, ongoing training, and support could help enhance the skills and judgment of reviewers. Diversity within the review team could also help to mitigate potential biases. Furthermore, TikTok could implement measures such as double-checking of content decisions, regular reviews, and a clear process for appealing content decisions to ensure fairness and accuracy in content monitoring.

In this way, the integration of enhanced AI monitoring and human review could help TikTok achieve a more robust and nuanced system for combating misinformation while leveraging the strengths and mitigating the weaknesses of both AI and human review.

6.3. Promoting diversity

In this section, strategies are developed that contribute to the promotion of diversity in information dissemination on the platform. Initiatives from both designers and users are considered.

6.3.1. Improving content tagging and classification

Improving content tagging and classification aims to enhance the accuracy and specificity of how content is categorized and labeled on TikTok. The primary goal is to create a more refined system that captures the diverse range of subjects, perspectives, and cultural contexts within the content available on the platform. Currently, TikTok relies heavily on user-generated hashtags to categorize content. However, this approach can be limited, as hashtags can be broad and inconsistent, leading to difficulties in discovering content that aligns with specific interests or perspectives. By implementing a more advanced tagging system, TikTok can use AI models to automatically analyze and label content based on various elements. These elements could include the subjects discussed, the tone or sentiment of the content, and the cultural or social context in which it exists. The purpose of this strategy is to enable TikTok's algorithm to better understand the content beyond popular trends and surface a wider range of perspectives and experiences to users. It aims to break down echo chambers and instead foster a more diverse and inclusive environment (Belém et al., 2017).

Developing such a system would involve training AI models on a large dataset of TikTok content, ideally annotated by human reviewers to ensure accuracy. These reviewers would be trained to understand and identify a wide range of issues and perspectives, helping to ensure that the AI models are capturing the necessary nuance. Over time, the AI models could learn to accurately and consistently tag content with the necessary details, making the content easier to categorize and surface to users.

There are, however, significant challenges with implementing this kind of system. One of the most significant is ensuring the accuracy and fairness of the AI models. There's a risk that the models could inadvertently reinforce existing biases, for instance by mislabeling content or failing to recognize certain perspectives. To address this, it's essential to ensure that the training data used for the AI models are diverse and representative and that the models are regularly audited for fairness and accuracy. Another challenge is managing the complexity of the tagging system. With a more nuanced and granular system, there could be potentially hundreds or thousands of tags to manage, which could be overwhelming for both the platform and its users. To address this, the system would need to be carefully designed to be user-friendly, with clear explanations and guidance on how to use the tags (Belém et al., 2017). For instance, TikTok could provide recommendations or auto-suggestions based on the content being posted, helping creators to accurately label their content. However, it's important to manage user expectations about the tagging system. Users need to understand that while the

system is designed to improve the diversity of content, it's not perfect and may sometimes make mistakes or fail to surface certain perspectives. Regular feedback and updates from users will be crucial in refining the system and ensuring it meets the needs of the users.

6.3.2. Diversify 'For You' recommendations

This strategy aims to address the issue of echo chambers and limited exposure to diverse perspectives on the platform. As indicated earlier, the 'For You' feed on TikTok showcases content based on a user's past interactions, preferences, and engagement. However, this can create a feedback loop where users are predominantly exposed to content that reinforces their existing interests and beliefs, potentially leading to polarization and limited exposure to diverse viewpoints. According to interviewee 7, TikTok can take steps to introduce content that falls outside a user's typical interaction patterns to diversify 'For You' recommendations. The idea is to expand the range of perspectives, topics, and experiences that users encounter on their feeds. This can be achieved through a combination of algorithmic adjustments and user preferences. One approach to achieving this diversification is to enhance the algorithm's understanding of content diversity. Currently, the algorithm prioritizes content similar to what a user has engaged with in the past. By incorporating additional factors such as content diversity, the algorithm can be fine-tuned to present a more varied range of content. To achieve this, TikTok can implement algorithms that analyze the content itself, rather than solely relying on user behavior. These algorithms could assess the subjects discussed, the sources of the content, and the perspectives represented to determine the diversity and range of the content. By incorporating these insights into the recommendation system, TikTok can actively introduce users to a broader array of content and viewpoints.

However, there are implications and challenges to consider with this strategy. One challenge is striking the right balance between personalization and diversity. TikTok must ensure that while diversifying content recommendations, it doesn't completely disregard a user's preferences or interests. The platform should avoid overwhelming users with content that feels irrelevant or uninteresting to them. Another challenge is accurately defining and measuring diversity in content recommendations. Determining what constitutes diverse content and developing algorithms that reliably identify and present such content can be complex. It requires carefully defining diversity criteria, establishing diverse data sets for training algorithms, and regularly evaluating and refining the algorithms' performance.

To address these challenges, TikTok can adopt a user-centric approach. This involves actively seeking feedback from users to understand their preferences, perceptions of diversity, and the effectiveness of recommendations. Regular user surveys, focus groups, and direct feedback channels can provide valuable insights to refine and improve the recommendation system. Moreover, TikTok can collaborate with external experts and organizations specializing in diversity and inclusion. These partnerships can offer guidance on defining diversity criteria, ensuring fair representation, and identifying potential biases in recommendation algorithms. Collaborations can also involve regular audits and evaluations to address any unintended consequences and biases in content recommendations.

By combining algorithmic adjustments, user preferences, and user feedback, TikTok can effectively diversify 'For You' recommendations, providing users with a more inclusive and broad range of content. This strategy aims to break users out of their echo chambers, promote exposure to diverse perspectives, and encourage active engagement with a variety of content creators on the platform.

6.3.3. User tools for personalized diversity

Tools for personalized diversity empower TikTok users to have control over the diversity of content they see in their feeds. It recognizes that individuals have different preferences and interests, but also encourages them to actively seek out and engage with diverse perspectives and content. To implement this strategy, TikTok can provide users with tools and options to

customize the diversity of their feeds based on their preferences. This entails giving users the ability to adjust settings that influence the balance between familiar content and content that is new or from different perspectives.

TikTok recently introduced a new feature called 'Refresh', which allows users to reset their content recommendations as if they were new to the platform. By activating this feature, users can start with a clean slate, free from the influence of their past interactions. This means they can explore and engage with content outside their usual interests. The Refresh feature encourages users to step out of their usual content circle and discover the vast variety of content that TikTok has to offer. It allows users to redefine their TikTok experience based on their evolving tastes. By temporarily disregarding their past interactions, TikTok provides a space for users to explore new topics and communities that they may not have encountered otherwise (Hareem, 2023).

This feature, however, represents just the beginning of TikTok's journey toward personalized diversity. While Refresh offers a valuable starting point, there is potential for even more effective customization through the implementation of a 'diversity slider' or similar tools. This slider could allow users to determine the proportion of diverse content they want to see in their feed. By adjusting the slider, users can prioritize exposure to content outside their typical interests, thereby actively seeking out diverse perspectives. Additionally, TikTok can offer users more granular options to specify the types of content or perspectives they are interested in exploring. This could involve customizable filters or preferences where users can select specific topics, themes, or communities they want to engage with. To achieve this, improved content tagging and classification as proposed in paragraph 6.3.1 is needed. By tailoring their preferences, users can have a more personalized experience while still being exposed to a wider range of viewpoints. Achieving this requires the development of user-friendly and intuitive interfaces within the TikTok app. The platform can introduce settings or preference menus where users can easily access and adjust their diversity settings. Clear explanations and guidance should be provided to help users understand the impact of their settings and make informed choices.

One implication of this strategy is striking the right balance between personalization and diversity. TikTok should ensure that users have the freedom to define their preferences while also encouraging them to explore content beyond their comfort zones. It requires careful design and user research to provide users with enough control to curate their feed while avoiding excessive customization that hampers exposure to diverse content. Another challenge is fostering awareness and encouraging users to actively engage with diverse perspectives. Users may be accustomed to consuming content that aligns with their existing interests, and breaking out of that comfort zone requires a shift in mindset. TikTok can address this challenge by implementing educational initiatives or campaigns to raise awareness about the importance of diverse content consumption and provide tips on how to engage with a broader range of perspectives.

Just as with the other strategies, regular user feedback and iterative improvements are essential to address any challenges and refine the user tools for personalized diversity. TikTok can actively seek feedback from users through surveys, interviews, or feedback channels within the app. This feedback can help identify usability issues, understand user preferences, and guide further enhancements to the customization features.

In conclusion, this strategy empowers TikTok users to have agency over the diversity of content they see in their feeds. By offering tools like diversity sliders and customizable preferences, TikTok encourages users to actively engage with diverse perspectives while still respecting their individual preferences. Clear interface design, user education, and continuous user feedback are crucial to successfully implementing and refining this strategy.

6.3.4. Promote diverse creators

Promoting diverse creators aims to actively uplift and highlight creators from diverse backgrounds and perspectives on TikTok. It recognizes the importance of representation and seeks to foster a more inclusive platform by showcasing a wide range of content creators. This strategy entails implementing various initiatives and features that actively promote diverse creators.

An approach to promote diverse creators on TikTok is through programs or campaigns that highlight and honor creators from underrepresented communities. For instance, TikTok can introduce a recurring "Creator of the Week" series where they showcase and celebrate a creator who belongs to a marginalized group or offers unique perspectives through their content. This initiative would not only provide a platform for these creators to gain visibility but also serve as a recognition and appreciation of their contributions to the TikTok community. By regularly featuring and celebrating diverse creators, TikTok can foster a more inclusive environment that values and uplifts underrepresented voices. To achieve this strategy, TikTok needs to establish strong partnerships with external organizations and experts in diversity and inclusion. Collaborating with these organizations can provide valuable guidance on identifying and promoting diverse creators, ensuring fair representation, and avoiding tokenism.

However, there are implications and challenges to consider with this strategy. One challenge is the potential risk of performative diversity. TikTok must ensure that its efforts to promote diverse creators are genuine, substantive, and not merely token gestures. It requires a commitment to long-term inclusion and representation, rather than short-lived campaigns. Another challenge is the selection and evaluation process for promoting diverse creators. TikTok needs to develop fair and transparent criteria for selecting creators to feature or support. This process should consider various factors, including the quality and creativity of the content, the uniqueness of the perspectives represented, and the potential positive impact on the TikTok community.

Addressing these challenges requires ongoing communication and collaboration with TikTok users. It is important to actively seek feedback from users and creators to understand their expectations, perceptions, and concerns regarding diversity initiatives. This can be done through user surveys, focus groups, or direct feedback channels within the app. Regular evaluation and iteration based on this feedback will help refine the strategy and ensure its effectiveness. Moreover, TikTok should maintain open lines of communication with diverse creators and community leaders. Engaging in meaningful dialogue and actively listening to their experiences, suggestions, and concerns will contribute to fostering an environment that supports and uplifts diverse voices.

6.3.5. Diversifying the developmental teams

Orlowski (2020) highlights that technical industries have their own set of challenges and shortcomings. He indicates that one of these challenges lies in the lack of diversity within the developmental teams of technical industries. This lack of diversity does not just refer to racial or gender diversity but also includes diversity in thought, background, and experience. Lack of diversity can lead to algorithmic bias, which is unintended but unavoidable with homogeneous development teams (Kuhlman et al., 2020). If the entire team is composed of individuals who share the same perspective, the algorithms they create can unintentionally echo their shared biases, which can result in unintended discrimination or harm (Kuhlman et al., 2020). For example, an AI model trained mostly on datasets that include one demographic can inaccurately or unfairly categorize other demographics due to a lack of diverse training data.

Diversity in a development team is crucial to foster inclusion, as the products and services developed by the team are more likely to cater to a wider range of users (Kuhlman et al., 2020). This is because a diverse team will be more aware of the different needs and expectations of various user demographics. With a more diverse team, a broader range of perspectives can

mitigate the risk of algorithmic bias, as the team will be more likely to identify and address potential biases before they become problematic (Kuhlman et al., 2020).

Therefore, tech companies should make concerted efforts to ensure that their development teams are diverse and inclusive and adequately represent society. A diverse team is more likely to understand and anticipate the needs of a wide range of users, leading to the creation of products that are both innovative and inclusive. By reflecting on the diversity of society in their teams, tech companies can mitigate algorithmic biases and cultivate an environment of innovation that benefits all users.

6.3.6. The active role of users

To ensure a responsible and informed use of TikTok, users themselves play a crucial role in actively seeking out diverse viewpoints. This proactive engagement with diverse content not only helps to break free from echo chambers but also fosters a deeper understanding of different perspectives and promotes a more inclusive digital environment. Following creators and engaging with content that challenges one's own beliefs and opinions is an essential step toward broadening one's understanding. Interviewee 4 emphasizes the importance of intentionally following people with whom one may disagree. By doing so, users can create a feed that consists of alternating viewpoints, ensuring exposure to diverse content and preventing the formation of an echo chamber. Actively seeking diverse viewpoints can be achieved by employing a few strategies. Firstly, users can deliberately explore content outside their comfort zone. This can involve intentionally searching for topics or hashtags that they may not typically encounter, engaging with content from creators with different backgrounds, and exploring trending topics that span various perspectives.

Additionally, users can leverage TikTok's discovery features to actively find diverse content. This includes utilizing the 'Explore' sections of the app, where a range of trending and popular content from different genres, cultures, and perspectives is showcased. By regularly exploring these sections, users can expose themselves to a broader array of content and ensure a more varied and inclusive feed. Engaging in constructive conversations is another essential aspect of actively seeking diverse viewpoints. Users can participate in comment sections, respectfully share their perspectives, and engage in discussions with creators and other users who may have different opinions. This not only allows for the exchange of ideas but also encourages critical thinking, empathy, and a deeper understanding of different viewpoints.

It's important to acknowledge that actively seeking diverse viewpoints may initially challenge one's beliefs or comfort zone. However, by embracing this discomfort, users open themselves up to personal growth and an enriched TikTok experience. It is crucial to approach this process with an open mind, a willingness to listen and learn, and a commitment to respectful dialogue. Ultimately, users who actively seek diverse viewpoints contribute to a more inclusive and informed TikTok community. By consciously curating a feed that offers a wide range of perspectives and engaging in respectful conversations, users play an integral role in breaking down echo chambers, fostering empathy, and promoting a platform that values the diversity of thought and experience.

6.4. Enhancing contextualization

The following section emphasizes the ways in which designing specific strategies can enhance the contextualization of information dissemination on the platform.

6.4.1. Refine content curation systems

Refining content curation systems essentially involves leveraging TikTok's algorithms to prioritize and promote content that provides robust contextual information. The strategy relies on a dual-faceted approach: encouraging content creators to tag their videos with metadata that provides context, and allowing users to rate the contextual adequacy of the content they consume.

The first aspect, metadata tagging, entails creators labeling their content with relevant tags that offer information about the content's background or context. These tags could include details about the geographical location, historical period, cultural references, or any other pertinent information related to the content. This information can then be incorporated into TikTok's content recommendation algorithm. The algorithm can then take into account not just the popularity of the content, but also the richness of its contextual information when recommending it to users. To implement this strategy, TikTok would need to develop a tagging system that allows creators to easily add relevant metadata to their content. It could also provide guidelines or training to creators on how to effectively use these tags to provide context. Over time, the algorithm would learn to identify content that offers a more nuanced understanding of a subject, thereby incentivizing creators to provide richer contextual information in their videos.

The second aspect, user rating, involves users rating the contextual adequacy of the content they consume. This feedback can be collected through a rating system incorporated into the platform. This user-generated data can provide valuable insights to the recommendation algorithm, helping it learn over time to better identify and recommend content that provides more comprehensive context.

However, implementing this strategy is not without its challenges. One key challenge is the potential for misuse of the tagging system. Creators could inaccurately tag their content or use popular tags to gain more visibility, even if those tags don't accurately represent the content's context. To address this, TikTok could implement a verification system that checks the accuracy of tags and penalizes intentional misuse. The platform could also incorporate user feedback in this process, encouraging users to flag content that has inaccurate or misleading tags. Another challenge is the potential for bias in user ratings. Users might rate content based on their personal beliefs or preferences rather than its contextual adequacy. To mitigate this, TikTok could provide clear guidelines on how to rate content based on context and could employ machine learning algorithms to identify and account for bias in user ratings. Furthermore, implementing this strategy would require significant technological resources and expertise. Building a sophisticated algorithm that can incorporate and learn from metadata and user ratings is a complex task that would likely require significant investment and ongoing refinement.

Overall, the refinement of TikTok's content curation systems could significantly enhance the depth and quality of content on TikTok. By prioritizing and promoting content that provides rich contextual information, TikTok can encourage more responsible and informed content consumption. It's a complex strategy that requires significant resources and ongoing refinement, but the potential benefits for the platform and its users could be substantial.

6.4.2. Implement a context annotation system

Implementing a context annotation system is an approach for TikTok to improve the context and understanding of the content shared on the platform. It involves developing a system that allows content creators to add annotations or tags to their videos to provide additional context. The fundamental idea behind this strategy is to supplement the visual and auditory information in the video with text-based annotations that can provide additional insight. These annotations could highlight important aspects of the video, explain complex ideas, or provide background information that might not be immediately clear from the video content itself. This could greatly help users understand the content in a more nuanced way and also reduce the chances of misinterpretation or misinformation.

Achieving this would involve several steps. First, TikTok would need to develop an annotation tool integrated into the content creation and editing process. This tool should be easy to use and flexible enough to allow creators to add a variety of annotations to their videos. Next, TikTok could provide training or guidelines to creators on how to effectively use this tool to

provide context. This could involve creating tutorial videos. Over time, as more and more creators start using this tool, users will start to expect and appreciate the additional context provided by these annotations.

However, this strategy is not without its challenges. One potential issue is that some creators might misuse the annotation tool, either by adding misleading information or by overloading their videos with annotations to the point where it becomes distracting rather than helpful. To mitigate this, TikTok could implement a moderation system to review and approve annotations. This could involve automated tools that flag potentially problematic annotations for human review, as well as community-based moderation where users can report misleading or inappropriate annotations.

Another challenge could be the extra effort required from creators to add these annotations. Some creators might resist this change, especially if they feel it adds too much complexity to the content creation process. To address this, TikTok could provide incentives for creators to use the annotation tool. This could be in the form of greater visibility for videos with annotations, or even direct rewards for creators who consistently use annotations to provide context.

Although a refined content curation system and a context annotation system both aim to improve the quality and understanding of the content on TikTok, they do so in different ways and at different stages of the content consumption process. In essence, the content curation system operates at the platform level, changing the way TikTok promotes and delivers content to users. The context annotation system, on the other hand, operates at the content level, enabling creators to embed more contextual information within their videos. Therefore, to execute a context curation system, a context annotation system is needed. Both strategies aim to improve the contextual richness of content on TikTok, but they do so through different mechanisms and at different stages of the content lifecycle.

6.4.3. Acknowledging the role of users

Content creators play a crucial role in information dissemination. They are not just content producers but also educators, influencers, and thought leaders. Creators need to integrate context directly into their content. They should aim to provide enough background information within their videos so that any viewer, regardless of their prior knowledge, can understand the content. This could involve briefly explaining the necessary background information, using visual aids, or adding text overlays and captions. Creators should also engage proactively with their audience. Responding to comments and questions can provide additional context and stimulate a more comprehensive discourse. Furthermore, creators could encourage their viewers to seek additional information on the topic, fostering a culture of curiosity and responsible content consumption.

Users, as active consumers and participators in the TikTok community, have a significant role to play in promoting the culture of contextualization. Users need to understand that all content, especially on social media, should be consumed critically. They should be encouraged to actively seek additional context when consuming content on the platform. This might involve researching a topic more deeply, asking content creators for more information, or even discussing it with other users. Users should also be part of the platform's moderation system. They can flag content that lacks proper context or report misleading information. This kind of community moderation encourages users to engage with content responsibly and promotes a healthier and more informed discourse on the platform.

However, there are some potential challenges. For content creators, one of the challenges is the potential increase in the amount of time and effort needed to create content. Adding context to their videos, whether it's through in-video explanations, visual aids, or text overlays, requires additional planning and execution time. This might be especially challenging for creators who are accustomed to creating shorter, less complex content. Another challenge might be that not

all creators possess the necessary skills or resources to provide the desired level of contextual information. Providing comprehensive and accurate context requires a good understanding of the topic and the ability to convey this understanding clearly and engagingly.

To overcome these challenges, TikTok could provide resources and tools to help creators incorporate context into their content more easily. This could include editing tools for adding text overlays or visual aids, or even educational resources on effective ways to provide context. TikTok could also offer incentives, such as increased visibility or other rewards, to creators who consistently provide comprehensive context in their videos.

For users, a potential challenge lies in changing their content consumption habits. Users might be accustomed to passively consuming content, rather than actively seeking additional context. Encouraging them to change these habits could require considerable effort. Moreover, while involving users in the moderation process has its benefits, it could also lead to challenges. Users might not always accurately identify content that lacks proper context or is misleading. There's also a risk of the system being misused for personal or political disputes.

To address these challenges, TikTok could launch educational campaigns to raise awareness about the importance of contextualization and guide users on how to actively seek context. The platform could also implement measures to ensure the reliability and fairness of its user-based moderation system. This could involve cross-checking user reports with automated moderation tools or expanding their team of human moderators that review flagged content. Overall, while these challenges are significant, they can be addressed through careful planning, providing adequate resources and tools, and fostering a culture of critical content consumption and responsible content creation on the platform.

6.5. Improving accountability

While previous discussions on the responsible use of TikTok touched upon accountability in relation to other guiding values, it's important to highlight the need for further exploration. Accountability interlinks with transparency, accuracy, diversity, and contextualization. Despite previous discussions pointing towards strategies that increase accountability, we recognize that there is room for further enhancements. Therefore, more strategies will be discussed in this section.

6.5.1. Community guidelines education

Community guidelines education is an essential strategy that involves educating TikTok users about the platform's rules and fostering a safer environment. It entails providing guidelines in an easily digestible manner and creating interactive content, like instructional videos to promote learning and positive interactions. Achieving this can be facilitated by regularly reminding users about the guidelines and placing educational content in high-traffic areas on the platform. However, there are challenges, including creating engaging content, catering to a diverse user base, and overcoming possible user resistance.

Engaging content can be created by leveraging TikTok's strength in short-form videos and infusing them with creativity and humor to deliver messages effectively. The diversity of users can be addressed by providing content in multiple languages and formats, catering to various learning preferences. User resistance can be mitigated by clearly communicating the importance of these educational efforts and giving users the option to provide feedback on the materials and methods, allowing the platform to refine its approach based on user experience. This strategy thus contributes to promoting the responsible use of the platform.

6.5.2. Developing transparency reports

Transparency reports are about making the operations of a platform like TikTok more transparent to its users, the general public, and regulatory bodies. They provide insights into

how the platform enforces its community guidelines, how it uses technology and human intervention to moderate content and the scale and types of issues it's dealing with. This report is not just a handy tool for maintaining transparency with users and associated parties but is also a requirement mandated by the DSA, which will be enforced starting in early 2024 (Houthoff, 2023). For TikTok, a comprehensive transparency report might include several key areas. Firstly, it should detail the number and types of content removed, flagged, or suppressed for violating community guidelines. This might be further broken down into categories such as hate speech, harassment, misinformation, or explicit content. It should also report on actions taken against user accounts for guideline violations, including warnings issued, temporary suspensions, or permanent bans.

Secondly, the report should disclose information on the decision-making process, both in terms of technology and human moderation. This would involve providing insights into how TikTok's AI and algorithms operate in terms of identifying potentially harmful content, how human moderators play a role in this process, and how they collaborate with the technology.

To achieve this level of transparency, TikTok would need to invest in systems and processes that can track and analyze the vast amounts of data involved. This could involve advanced data analytics capabilities, possibly leveraging AI and machine learning to extract meaningful insights from the raw data. Additionally, TikTok would need to develop internal policies and procedures to ensure that the data collected is reliable, accurate, and up-to-date. However, there are several potential implications and challenges. One major challenge is balancing transparency with user privacy. TikTok will need to ensure that any data released in its transparency reports is adequately anonymized and aggregated to prevent any potential identification of individual users. Another challenge is managing the potential reputation implications. Revealing the extent of harmful content or user behavior on the platform may harm TikTok's reputation. However, this risk could be mitigated by a strong emphasis on the proactive measures taken by TikTok to address these issues.

Addressing these challenges requires careful planning and execution. To maintain user privacy, for instance, TikTok could engage data privacy experts to ensure the data presented in the reports is sufficiently anonymized and aggregated. To manage potential reputation issues, it could emphasize its commitment to user safety and the continuous improvements it's making to its moderation systems. By taking these steps, TikTok can ensure that it's not just meeting its obligations under the Digital Services Act, but also building trust and credibility with its users and the wider public.

6.5.3 Clarifying violation procedures

Violation procedures are systematic processes that address violations of community guidelines. For TikTok, this would start from the detection of a violation, through to the platform's response, and finally to the user's right to appeal any actions taken. Interviewee 5 indicated that to ensure fairness and avoid 'shadow banning', TikTok explicitly needs to communicate the reasons for any actions taken and provide an easily accessible appeals process. Achieving this involves developing a detailed classification of violations with proportionate penalties, effectively communicating these to users, and setting up a user-friendly appeals process, which should include a review by a human moderator to ensure fair consideration.

Implementing this poses several challenges. The volume of content and users on TikTok makes managing this process complex. Ensuring consistency in identifying violations and deciding penalties is also a challenge, as is maintaining updated and relevant guidelines in the face of evolving online discourse. Lastly, TikTok must balance the tension between freedom of expression and maintaining a safe and respectful environment.

To navigate these challenges, TikTok could use AI for initial reviews and then escalate complex cases to human moderators. To ensure consistency, moderators could undergo extensive

training, with regular evaluations to improve decision-making. Collaboration with outside experts, NGOs, and users can help keep guidelines and procedures relevant and ensure a broad consensus, safeguarding both safety and freedom of expression. By committing to an explicit and transparent escalation procedure, TikTok demonstrates accountability and respect for users, fostering trust and promoting responsible behavior on the platform.

6.5.4 Third-party audits

Third-party audits refer to an independent assessment of the platform's adherence to community guidelines, content moderation policies, and compliance with the Digital Services Act and the AI Act. This audit provides external verification of TikTok's claims regarding its commitment to safety, accountability, and transparency. In terms of the process, the audit would involve a thorough investigation of TikTok's policies, practices, and systems. Auditors would review the platform's community guidelines to ensure they align with regulatory standards and provide adequate protection for users. They would also look at how these guidelines are enforced in practice, reviewing anonymized data on content moderation decisions and actions taken against users (ASQ, 2023). Further, the audit would scrutinize TikTok's AI systems, ensuring they're transparent, fair, and in compliance with the AI Act. They would assess how these systems are used for content moderation, flagging harmful content, and how decisions made by AI are reviewed or overridden by human moderators.

TikTok has taken concrete steps toward ensuring the safety, security, and privacy of its users. The platform has been officially certified under ISO 27001, one of the most globally recognized information security standards, in the US and UK. This certification signifies a strong commitment to implementing and maintaining an effective Information Security Management System (ISMS). To earn this certification, TikTok underwent an extensive audit process conducted by independent third-party auditors. This involved a rigorous examination of the company's global security, risk, and controls operations to ensure they met the highest industry standards. Particular focus was given to how TikTok protects its platform's infrastructure, development, operations, and services (TikTok, 2021b).

However, as significant as these steps are, they represent just the beginning of TikTok's journey towards achieving comprehensive, global security and privacy standards. Currently, the ISO 27001 certification covers only the US and the UK, leaving other countries out of its purview. To truly establish itself as a global leader in user security, TikTok should aim to expand its third-party auditing and certification to all countries where it operates. Furthermore, the scope of TikTok's current third-party auditing efforts, though substantial, is somewhat limited, focusing largely on security aspects. As a comprehensive digital platform, other crucial areas merit external scrutiny. It would serve TikTok well to widen the scope of its audits to include other practices such as privacy policies, transparency measures, marketing practices, the accuracy of information shared on the platform, and data management protocols. This approach would not only enhance trust among users and regulators but also provide TikTok with a broader perspective on areas for improvement, helping them achieve the highest standards across all facets of their operations.

To achieve a successful third-party audit, TikTok should first seek out reputable organizations that specialize in auditing digital platforms. They should have expertise in areas such as digital rights, data privacy, AI ethics, and online safety. The chosen auditor should be given complete access to all necessary data and personnel to conduct their assessment. However, implementing third-party audits is not without challenges. One significant challenge is the potential reluctance of TikTok to expose its internal workings, proprietary algorithms, and other confidential business information to an external party. This is particularly relevant in the technology sector, where a company's algorithms and data management practices are often closely guarded secrets that give them a competitive advantage. This apprehension can stem from a fear of revealing business strategies, competitive advantages, or potentially disclosing

vulnerabilities that could be exploited. There might also be legal implications related to data privacy and intellectual property rights.

However, to navigate this challenge, TikTok and the auditing organization can sign a non-disclosure agreement to ensure the confidentiality of proprietary information. The auditors should also be required to adhere to ethical guidelines that respect the privacy and intellectual property rights of the organization they're auditing. Furthermore, the audit can be designed to focus on the effectiveness and fairness of the outcomes, rather than the specific details of the algorithms or processes. For example, auditors could examine aggregated and anonymized data about content moderation decisions, user complaints, and appeals, instead of the specific coding of the AI systems (RSI Security, 2020).

Once the audit is complete, the results should be shared with users and stakeholders comprehensively and understandably, likely as part of TikTok's transparency report. Any shortcomings or areas for improvement identified during the audit should be acted upon promptly, demonstrating TikTok's commitment to accountability and continuous improvement. By embracing third-party audits, TikTok can strengthen its relationship with its user base, earn the trust of regulators, and set a positive example for other platforms in the industry.

6.6. Empowering users

This section explores how initiatives from the platform, institutional bodies and the users themselves can contribute to the empowerment of users.

6.6.1. The initiative from the platform

TikTok, as a platform, plays a significant role in shaping the user experience and can therefore adopt several strategies to promote responsible usage, informed decision-making, and user empowerment.

Firstly, the development of user tools on TikTok would entail the creation of features that assist users in assessing the credibility and reliability of the content they consume. As indicated in the previous sections, this could include providing detailed information on the source of the video, employing flagging tools to report the information shared, and implementing a content-rating system based on the reliability of the data provided. These tools could help users understand the provenance and accuracy of the information, promoting informed decision-making. Achieving this would require a strong commitment from TikTok to invest in the necessary technological infrastructure and human resources. Algorithms could be developed to analyze the content and context of videos, while partnerships could be formed with reputable supporting organizations. Yet, this approach poses challenges. Balancing user privacy with the need for transparency and accuracy could be difficult. Also, the sheer volume of content uploaded to TikTok every day could make it difficult to ensure every video is adequately analyzed.

These challenges could be addressed by adopting a risk-based approach, prioritizing the analysis and rating of videos that gain significant traction or relate to sensitive topics. User privacy could be preserved by ensuring any source information is shared on a strictly voluntary basis, with clear communication about how the information will be used.
Further, TikTok could emphasize the promotion of activism together with earlier-mentioned strategies to ensure a healthy environment. This would mean curating or highlighting content related to social activism and ensuring significant issues gain visibility on the platform. TikTok could create designated hashtags or channels for crucial social topics, making it easier for users to find related content and join the conversation. Achieving this would involve TikTok actively managing its trending algorithms and content promotion mechanisms to ensure important social activism content is not drowned out by more light-hearted or entertainment-focused content. The challenge lies in ensuring a fair and balanced approach that respects

freedom of speech and doesn't favor certain causes over others. Addressing this would necessitate clear guidelines and processes to ensure transparency and impartiality in how content is promoted. Feedback mechanisms could also be implemented to allow users to report perceived bias or unfair practices.

Another feature TikTok could incorporate are algorithms that detect and flag emotionally manipulative content. As interviewee 9 pointed out, many content creators often resort to sharing videos charged with emotional elements to sway viewers toward their perspectives. This technique can be seen as a form of emotional manipulation and can negatively impact the health of democratic discourse. This strategy would require the development of advanced AI systems capable of recognizing subtle emotional cues and patterns often used in manipulative content. Achieving this is a technological challenge, as emotional manipulation is nuanced and context-dependent.

To overcome this challenge, TikTok needs to clearly define what constitutes 'emotional manipulation' within the context of its platform. This could involve collaborating with experts in media, psychology, ethics, and digital communication to establish a well-rounded definition that takes into account the nuances of emotional manipulation in digital content. Transparency and open dialogue with the user community should be a key aspect of this process. With this defined, the company can then develop AI models that can detect patterns and markers of such manipulative content. These AI models will need to be trained using diverse datasets and continually updated based on user feedback and evolving trends in content. To ensure this works effectively, a robust feedback mechanism should be established, allowing users to flag content they feel is manipulative, which can help refine the AI models. However, AI is not infallible, and there may be instances where it either misses manipulative content or falsely flags innocent content. To address this, a human moderation team should be employed as a final check against the AI's decision. This would ensure a balance between automated moderation and human judgment, which is particularly important given the nuanced nature of emotional manipulation.

Lastly, it's important to acknowledge that detecting manipulative content is just one part of the solution. TikTok should also invest in educating users about emotional manipulation and how to recognize it. This could be accomplished through in-app guides, informative content, or partnering with educational institutions for broader digital literacy initiatives.

In essence, these platform-level strategies aim to provide users with the tools and environment necessary to engage in meaningful activism, make informed decisions, and mitigate the risk of emotional manipulation. By doing so, TikTok can truly empower its users, fostering an informed and active digital community.

6.6.2. How users can empower themselves

One of the key strategies at the user level is participating in media literacy training. As indicated in Chapter 6.2, media literacy is the ability to access, analyze, evaluate, and create media in a variety of forms. For TikTok users, this means understanding the motivations behind content creation, being able to evaluate the reliability of the sources, and recognizing emotionally manipulative content. Enhanced media literacy empowers users to make informed decisions about the information they consume and share, mitigating the spread of misinformation and manipulation. Achieving widespread media literacy among TikTok users requires active engagement and practice. Users need to understand the importance of media literacy, including evaluating sources, recognizing emotional manipulation, and making informed decisions (Bulger & Davidson, 2018). TikTok can raise awareness through notifications and targeted content, providing educational resources like videos, articles, and quizzes.

The Center for Humane Technology is a nonprofit organization dedicated to addressing the societal impact of technology and advocating for the ethical and responsible design of digital

platforms. Their mission is to create a world where technology serves humanity's best interests, fostering well-being, mental health, and meaningful human connections. Users can utilize the resources provided by the Center for Humane Technology to educate themselves about the potential risks and challenges associated with technology, including social media platforms. The organization offers various tools, guides, and educational content that promote digital well-being and empower individuals to make informed decisions. Through the Center for Humane Technology's website, users can access resources such as articles, research studies, and podcasts that shed light on the attention economy, persuasive design techniques, and the impact of technology on mental health. These resources help users understand the tactics employed by social media platforms to capture and retain their attention. Additionally, the Center for Humane Technology provides practical tips and strategies for managing technology use. Users can learn about setting healthy boundaries, practicing digital detoxes, and establishing intentional habits to reduce the negative impact of technology on their lives. By engaging with the Center for Humane Technology's resources, users can gain a deeper understanding of the challenges posed by social media platforms and empower themselves to take control of their digital experiences. Education provided by the organization equips users with the knowledge and tools to make conscious choices about their technology use, prioritize their well-being, and foster more mindful and intentional relationships with social media platforms (CHT, 2023).

Users must actively access and engage with these resources, taking notes, practicing strategies, and regularly revisiting materials. However, challenges arise from the volume of content and user resistance. To address content overload, users can focus on critical analysis of trending or significant topics and unknown sources. Overcoming resistance involves making media literacy engaging, such as using popular creators for educational content. The application of media literacy skills is crucial. Users should critically analyze videos, cross-check information, and be mindful of emotional manipulation. TikTok can support this by integrating media literacy tips into the platform and recognizing users who demonstrate high media literacy with points or rankings.

Users can also empower themselves by intentionally putting off social media notifications, as mentioned by interviewee 4. Social media platforms rely on constant user attention and engagement, often achieved through notifications that lure users back to the app (Brown, 2021). By disabling or limiting these notifications, users regain control over their time and attention. They can choose when and how often they engage with social media, prioritizing their well-being and productivity. Though there may be initial challenges, such as the fear of missing out or breaking the habit of constant checking, recognizing the benefits of reclaiming attention and exploring alternative engagement methods can help users maintain a healthier relationship with social media.

The final user-level strategy is active participation in activism on the platform. This involves users creating and sharing content related to social issues they care about, utilizing the platform as a tool for driving change. Users have a significant role in shaping the discourse on the platform, and their active engagement in activism could amplify important voices and causes. Encouraging active participation could involve creating a supportive environment for activism on TikTok. This might entail curating content that inspires activism, highlighting the positive impact of activist content, and offering resources or guides on how to use TikTok effectively for activism.

However, promoting active participation brings challenges. Ensuring a respectful and safe environment for activism could be complex given the diversity of views and potential for conflict. Furthermore, there is the risk of 'slacktivism', where users might engage in activism in superficial ways without affecting real-world change. Addressing these challenges would involve enforcing strong community guidelines to maintain respectful discourse. TikTok could

also guide how to move beyond 'slacktivism', offering resources on how to translate online activism into meaningful real-world actions.

6.6.3. Institutional action

Finland serves as a compelling example of how educating children on dealing with social media is crucial and how it can be integrated into school programs worldwide. The Finnish education system recognizes the impact of social media on students' lives and aims to equip them with the necessary skills to navigate these platforms responsibly. The importance of this education lies in empowering students to become critical thinkers, active participants, and responsible digital citizens. By incorporating media literacy and social media education into the curriculum, Finnish schools acknowledge that social media is a prominent aspect of students' lives, and it is crucial to provide them with the knowledge and skills to engage with it responsibly. Integrating social media education into school programs globally is imperative, as social media has become a ubiquitous part of society in many countries. Schools in all geographical areas can follow Finland's example by incorporating media literacy education into existing subjects or offering specific courses focused on social media and digital citizenship (Unesco, 2021).

However, several challenges need to be addressed to effectively implement social media education in schools worldwide. One challenge is the rapid pace of technological advancements, which often outpaces educational curricula. To overcome this, continuous professional development for teachers is essential. Educators should receive training and resources to stay updated on the latest social media trends, risks, and strategies to guide students effectively. Another challenge is the diverse cultural and societal contexts in which schools operate. Social media use and its impact can vary across regions, making it necessary to tailor educational approaches to specific cultural norms and challenges. Collaboration with local experts and adapting curriculum content can help address these variations. Additionally, funding and resource constraints may pose challenges in implementing comprehensive social media education programs. Governments, educational institutions, and relevant stakeholders should prioritize allocating resources for teacher training, curriculum development, and technological infrastructure to ensure the effective integration of social media education.

To overcome these challenges, international collaboration and sharing best practices are essential. Governments, educational organizations, and experts from different countries should collaborate to develop comprehensive guidelines, frameworks, and resources for social media education. This would facilitate the adaptation and implementation of effective programs tailored to the specific needs of each country.

In conclusion, Finland's emphasis on educating children on dealing with social media provides an important model for integrating social media education into school programs worldwide. By recognizing the significance of social media and promoting media literacy, schools can empower students to navigate social media responsibly. While challenges exist, such as technological advancements and cultural variations, collaboration, continuous professional development for teachers, and resource allocation can help overcome these hurdles and ensure the effective integration of social media education globally.

7. Discussion

In this discussion, I will critically reflect on the research by exploring the feasibility of implementing the strategies, highlighting the limitations of the research and provide recommendations for further research

7.1. Feasibility of the strategies

One of the most important insights gained from this research is the recognition of the complexity of the topic at hand. This research has served to fill a critical knowledge gap, offering a comprehensive exploration of the ethical implications of information dissemination through TikTok. It provides a significant contribution by examining this contemporary issue from a unique perspective, integrating insights from political philosophy and qualitative research, rather than the more typical quantitative approaches. The research shows that understanding TikTok's impact on information dissemination and activism is a complex endeavor, with various factors at play that challenge any simplistic, comprehensive solution. This complexity is partly driven by the fact that the challenges faced are not static but dynamically interact with the ever-evolving digital landscape, consumer behavior, and global socio-political trends.

Central to the effective implementation of these strategies is TikTok. Like all commercial organizations, TikTok is fundamentally driven by profitable objectives. Its primary goal is not to advance democratic values or promote certain types of activism, but rather to secure financial success. This profit-driven focus affects how TikTok interacts with activist movements. The platform's model doesn't discriminate between democratic or non-democratic activist movements. As long as a movement generates user engagement, it becomes beneficial for the platform, given that increased user engagement translates into more opportunities for ad placements and, by extension, higher revenue (Orlowski, 2020). Therefore, any empowerment of activists, regardless of their agendas, is largely a repercussion of the platform's primary commercial goal, which is, according to Palihapitiya (2021), to stimulate user engagement and growth.

The intricate relationship between commercial goals and ethical responsibilities of platforms such as TikTok becomes evident when discussing the feasibility of the proposed strategies. Given that TikTok, like any other business, is primarily motivated by profit, it's essential to question whether these strategies align with their business model or whether their implementation could potentially disrupt their commercial objectives. The strategies suggested in this research, while beneficial from an ethical standpoint, may pose significant operational or financial challenges to TikTok. For example, if a strategy involves substantial changes to the platform's algorithm, it could require considerable financial investment, technical expertise, and time. Additionally, these changes might affect user engagement or ad revenues, both of which are critical to the platform's profitability. Thus, it becomes essential to determine whether TikTok can realistically put into action the proposed strategies without compromising its commercial interests.

It's important to note that it's unlikely that all the strategies can be adopted simultaneously, given the operational complexities and resource constraints. Therefore, it's critical to prioritize the most effective measures when considering the implementation of these strategies. As indicated in the conclusion, the solution hinges on adopting a pragmatic approach. TikTok and its stakeholders ought to focus on the most consequential and influential strategies, considering aspects such as feasibility, user experience, and long-term sustainability. However, even with the identification of the most effective and feasible strategies, the platform's willingness to implement these strategies remains a crucial factor. Will TikTok, as a commercial entity, agree to integrate strategies that may not immediately contribute to their

profit objectives? The intersection of ethical responsibility and commercial interests often presents complex dilemmas for businesses such as TikTok.

So, what if implementing the strategies by TikTok is not feasible? Could we include users in the solution? The idea of user responsibility and empowerment is a prevalent theme in discussions about navigating the challenges posed by social media platforms. Chapter 6 of this research touches on the concept of user empowerment as a potential part of the solution to these issues. However, I deliberately limited the focus on this dimension within the study. It's worth noting that the responsibility of addressing the issues surrounding information dissemination and the impact on democratic practices is multifaceted and should not be shifted solely onto the users. Too often, the narrative of user-responsibility is promoted by major social media platforms and regulatory institutions. It's an appealingly simple idea: users should guard themselves against the negative impacts of their social media consumption. However, this perspective risks oversimplifying the issue and placing undue responsibility on users, who may lack the awareness or tools to navigate these challenges effectively.

Take, for instance, the challenge of emotional manipulation on these platforms. Through carefully tailored content designed to evoke specific emotional responses, users can be subtly guided towards certain behaviors or beliefs. The insidious nature of such practices means that users are often completely unaware of their occurrence. In this context, asking users to protect themselves becomes an unrealistic expectation.

This is not to say that user education and empowerment should be entirely dismissed. They form an essential part of a holistic approach to addressing these challenges. However, the emphasis should not be solely on individual users to navigate these issues. It is a shared responsibility, with platforms and institutional bodies playing an integral role in safeguarding the digital landscape.

Revisiting the question of TikTok's willingness to adopt these strategies, various incentives could motivate TikTok to contemplate the implementation of one or more of the suggested strategies. First of all, it is important to highlight long-term business effects. Strategies that initially seem costly or disruptive might actually benefit TikTok in the long run. For example, if adopting these strategies improves the platform's reputation, it could attract more users or increase user engagement over time. Moreover, by proactively addressing these issues, TikTok might avoid future regulation that could be even more disruptive or costly. Another incentive that could be pivotal is pressure from advertisers. Advertisers are a key source of revenue for TikTok (Orlowski, 2020). If they demand certain changes, for example better content control to ensure their ads aren't displayed alongside harmful content, TikTok might be more inclined to implement the suggested strategies. And lastly, if TikTok can be convinced that these strategies will open up new partnership opportunities, the platform might be more willing to adopt them. For instance, non-profit organizations, educational institutions, or government bodies might be more willing to collaborate with a platform that demonstrates commitment to ethical and responsible content dissemination.

Determining additional incentives and assessing their effectiveness would require further exploration, which will be explained in section 8.2.

7.2. Limitations and future research
In the following section, I will reflect on the limitations that influenced this study and outline potential areas for further research.

7.2.1   The limited timeframe
The time constraints imposed on this research project substantially impacted the depth and breadth of the investigation. Embarking on a study of such a complex and multifaceted issue

as the impact of TikTok on information dissemination and activism necessitates a vast exploration to achieve a comprehensive understanding. However, the restricted timeframe required a level of condensation in the scope and detail of the analysis. With more time, a more extensive analysis of the variables involved could have been performed, potentially leading to more nuanced findings.

7.2.2 The limitations posed by the rapid changing social media landscape

The rapidly changing nature of social media platforms like TikTok is another limitation. The dynamic nature of the social media landscape, regulations, and technology can be considered as a limitation because social media platforms, like TikTok, are in a constant state of innovation. These changes can drastically alter the ways in which information is disseminated, the behavior of users, and how activist movements leverage the platform. Therefore, although an attempt is made to keep this research as up-to-date as possible the rapid rate of change in the field could potentially compromise the accuracy or applicability of certain strategies or findings.

In view of the rapid evolution of social media platforms like TikTok, continued research is imperative to remain up-to-date with their transformative influence on information dissemination. As technology and user behavior evolve, so too should our strategies and understanding, making ongoing research crucial for maintaining relevancy and effectiveness in addressing the challenges that such platforms present in the democratic process.

7.2.3 Limitations of the interviews

Given the limitations of time, the number of expert interviews conducted for this study was necessarily constrained. It's important to recognize that each additional interview adds depth and breadth to the research findings, potentially offering new perspectives, confirming established insights, or shedding light on areas of contention or disagreement. Although the interviews reached a level of saturation, expanding the pool of expert interviews would potentially have increased the representativeness of the research. This means that a wider variety of viewpoints and experiences could have been captured, making the results more generalizable to the broader field of experts. Furthermore, an expanded interview pool might have included more professionals from different areas of expertise, geographical locations, or professional roles. Such diversity could yield richer, more nuanced insights, allowing for a more complex understanding of TikTok's impact on information dissemination.

A potential for future research could be to enrich the understanding of the complexities surrounding TikTok's impact on information dissemination and activism by incorporating a broader range of perspectives. This could be achieved by interviewing a larger quantity of experts, which might include social media analysts, data scientists, ethicists, policy makers, and maybe even activists who utilize TikTok. The interviewees could be drawn from diverse backgrounds and regions to ensure a multi-faceted perspective. These interviews could dive deeper into the details of the topic, potentially revealing new themes, areas of contention, or novel solutions.

7.2.4 The limited focus on user empowerment

As indicated in section 8.1, I deliberately chose not to focus too much on user empowerment. I made this decision because I think that the responsibility of addressing the challenges surrounding information dissemination and the impact on democratic practices is multifaceted and should not be shifted solely onto the users. However, there is a potential for further research that could delve deeper into exploring user perspectives to enrich the understanding of the effects and effectiveness of the strategies proposed. The users could provide invaluable first-hand feedback about their experiences and perceptions, particularly after implementing these strategies.

Surveys, feedback forms, and focus groups can be potent instruments in achieving this objective. They can be designed to assess a broad spectrum of aspects ranging from the ease of use, to the perceived impact on information dissemination, to the overall satisfaction with the platform post-implementation. These methods allow for data collection from a wide range of users, and can capture a comprehensive view of the user experience. They can be strategically designed to probe specific facets of the user experience, including whether the proposed strategies have impacted the diversity of information users encounter, how they perceive changes in platform functionality, and whether they believe their activism efforts are being helped or hindered. By centering user perspectives in this way, future research can provide a more nuanced understanding of the effects of these strategies, help identify unforeseen issues, and ultimately contribute to their ongoing refinement and improvement.

7.2.5   Geographical limitations

Another notable limitation of this study pertains to its geographical scope. While it provides a comprehensive exploration of TikTok's impact within the legislative context of the European Union, its findings may not be as applicable or reflective of the social media platform's impact in other geographical regions. Different parts of the world possess unique regulatory frameworks, cultural norms, societal values, and even digital literacy levels, all of which can influence how social media platforms like TikTok are used and perceived, and the consequent effects on information dissemination and democratic practices (Abidin et al., 2022). Therefore, the strategies proposed in this study, designed with the EU regulatory environment and cultural context in mind, might not be directly applicable or effective in different geographical contexts.

Building upon this, future research could broaden its scope to include other geographical areas. This would diversify perspectives, considering varying societal norms, and legal environments. By doing so, it not only enhances the generalizability of the research but also adapts strategies to be more representative and effective across diverse regions, thus ensuring a comprehensive global understanding of TikTok's role in information dissemination and democracy.

7.2.6   Limitations concerning the underlying workings of TikTok

The underlying workings of TikTok's algorithm also pose a limitation. TikTok has not publicly disclosed extensive details about how its algorithm works, making it challenging to fully understand its impact on information dissemination and democratic processes. While TikTok has provided some general guidelines and high-level information, the specifics of the algorithm remain closely guarded. External sources, such as third-party studies and research, offer valuable insights into the potential mechanics of the algorithm, but their findings are not explicitly validated by TikTok.

Adding to this, future research could be aimed towards creating a more reliable understanding of TikTok's algorithm operations. Studies might utilize a combination of reverse-engineering, user experience analysis, and collaboration with digital media experts. The ultimate goal would be to provide a more transparent view of TikTok's algorithm, allowing for better-informed strategies in tackling its impact on information dissemination and democratic processes.

7.2.7   Limitations of Qualitative Comparative Analysis

The methodology of Qualitative Comparative Analysis based on expert interviews, which was employed in this research, comes with its own set of challenges and limitations. The most significant issue is the intrinsic subjectivity inherent in this approach. As a researcher, personal interpretations can significantly influence the research process and outcomes. This includes the identification and extraction of common themes, the categorization of diverse viewpoints, and the formation of ultimate conclusions.

This subjectivity manifests in several ways. For example, in the categorization of viewpoints, my interpretations could have played a significant role. When faced with a range of diverse perspectives, the researcher's own biases, conscious or unconscious, can shape the classification process. These biases might skew the data, placing undue emphasis on certain viewpoints over others. However, as indicated in the methodology section, I had a clear understanding of these potential pitfalls beforehand. To mitigate the effects of these inherent risks, I made a concerted effort to uphold an objective stance throughout the process. This meant consciously avoiding the imposition of my interpretations while summarizing the interviews, as well as during the identification and categorization of differing viewpoints based on values.

In addition to subjectivity, the methodology of qualitative comparative analysis is time-intensive. The meticulous nature of this method, from conducting in-depth interviews to processing and analyzing the data, requires a substantial commitment of time. This time commitment could have had implications for the research process, particularly concerning the constrained timeline.

7.2.8 Further recommendations for future research

As indicated, it's impossible to address all challenges at the same time. Therefore, further research is vital to understand the trade-offs involved when choosing which strategies to implement. This research could involve assessing each strategy's potential impact, feasibility, cost, and alignment with TikTok's commercial objectives. By evaluating these dimensions, researchers could better understand the implications of choosing one strategy over another. This research could also explore the ethical dimensions of these trade-offs. For instance, how do we balance the pursuit of profitability with the need to ensure democratic values and activism are supported? Leveraging insights from fields like ethics and decision-making theory could assist in navigating these complex decisions, thereby enabling a balanced approach to progress.

And finally, future research should delve into understanding TikTok's motivations and determining the financial consequences of implementing suggested strategies. This involves detailed interviews with TikTok's decision-makers to reveal their strategic objectives and how they perceive their role in information dissemination and activism. This approach can help identify potential incentives that align with the company's goals. Additionally, a cost-benefit analysis is recommended to consider both the immediate costs and long-term benefits of proposed strategies, including potential increases in user engagement, revenue, enhanced reputation, and trust from users and partners. By doing so, we could better comprehend the feasibility and potential impact of these strategies for TikTok within the wider context of optimizing social media platforms for promoting information dissemination and activism.

In conclusion, this research offers a valuable examination of the ethical implications and political philosophy underpinning TikTok's role in information dissemination and activism, representing a significant step forward in filling the knowledge gap identified. However, the study's limitations indicate paths for further inquiry. Future research should strive to illuminate these areas, fostering a more comprehensive understanding of TikTok's dynamic impact on democratic processes. With this continued exploration, it's possible to navigate the complexity of the digital landscape and guide the platform towards ethical and responsible operations.

8. Conclusion

In this final chapter, I come full circle to provide a conclusion that encapsulates the findings of the comprehensive exploration of TikTok's influence on democratic practices and potential strategies for its ethical usage. The research embarked upon was guided by the main research question:

'How does information dissemination through TikTok affect democratic practices, specifically in terms of informed decision-making, and what strategies can be designed to advance its ethical and informed usage?'.

To address this question, I first delved into the underlying mechanisms of TikTok that govern information dissemination, looking at the systems that shape the platform's content landscape. After this, I explored how these mechanisms impact democratic practices, focusing on the role of information dissemination in shaping informed decision-making, and the inherent complexities and challenges this process brings about in the context of TikTok.

Finally, drawing on the insights from this exploration, I focused on the design of strategies that could help navigate the challenges posed by information dissemination through TikTok on democratic practices. These strategies aim add the ethical responsibility of the platform in fostering democratic discourse and responsible information sharing.

8.1. How information dissemination impacts democratic practices

The comprehensive exploration of TikTok's impact on information dissemination and activism reveals a complex landscape where the platform simultaneously presents both opportunities and challenges for democratic practices. On one hand, TikTok has emerged as a powerful tool for civic engagement, serving as a space where users can raise awareness, share diverse perspectives, and mobilize for social change. The platform's features, such as its algorithm-driven content discovery and short-form video format, have enabled users to leverage their creativity and reach vast audiences, leading to the amplification of critical social justice causes. This newfound potential for engagement can reshape traditional power dynamics, democratize discourse, and inspire meaningful action among individuals who might have previously been marginalized or overlooked. However, this analysis also uncovers pressing concerns related to misinformation, algorithmic biases, echo chambers, manipulation by bad actors, and many more. While the platform enables individuals to engage in positive actions and foster social change, these challenges have the potential to undermine democratic values and processes. The spread of misinformation can erode trust in reliable sources and hinder informed decision-making. Algorithmic biases and echo chambers may reinforce existing beliefs and limit exposure to diverse perspectives, hindering open dialogue and the exchange of ideas. The manipulation of public opinion by bad actors can distort democratic processes and impede the formation of a well-informed public. Recognizing the potential harm that these challenges pose is crucial.

8.2. Reflecting on the guiding values in information dissemination

After exploring the complex array of opportunities and challenges that TikTok's role in information dissemination presents to democratic practices, the next step was to formulate guiding values for information dissemination. Drawing inspiration from the Value Sensitive Design (VSD) approach, I identified guiding values specific to information dissemination on TikTok. VSD, which emphasizes the integration of human values into the technological design process, was an appropriate approach in this context, as it recognizes that technology inherently embodies certain values with substantial societal and individual impacts.

The identification of these guiding values was a central process. Each value was derived by taking into account the challenges and opportunities highlighted during the literature search.

For each challenge, I associated a value that could potentially counteract it, and for each opportunity, I tied a value that could further enhance it. This process led to the identification of six fundamental guiding values: transparency, accuracy, diversity, contextualization, accountability, and empowerment. These values collectively aim to address the multifaceted challenges of information dissemination on TikTok while capitalizing on its potential benefits.

However, to ensure the relevance and applicability of these guiding values, it was crucial to subject them to further evaluation and contextualization. This was accomplished through expert interviews and the application of Qualitative Comparative Analysis, that provided diverse perspectives and invaluable insights. The findings reaffirmed the comprehensiveness of the guiding values. Nonetheless, to better align them with the specific context of TikTok, it became necessary to refine their definitions.

The process of identifying and evaluating these guiding values played a vital role in tackling the complex challenges associated with TikTok's influence on information dissemination. By establishing these values, I laid the groundwork for the design of strategies that promote democratic practices and informed decision-making, while restricting the negative implications of social media use. These guiding values, thus, served as the ethical compass directing the development of strategies for a more responsible and democratic use of TikTok.

8.3. The implementation of strategies

While the numerous strategies outlined in this research present potential avenues for enhancing the informed and ethical usage of TikTok, it is crucial to acknowledge the challenges associated with implementing all of these measures. The immense scale and complexity of the platform, along with its diverse user base and the ever-changing dynamics of social media, create a formidable challenge in fully addressing all the issues at hand. The implementation of these strategies requires not only technological advancements but also a collective effort from TikTok as a platform, its users, regulatory bodies, and society as a whole. It demands a fine balance between preserving the creative and entertaining aspects of TikTok while also ensuring responsible information dissemination and fostering civic engagement.

However, during this research I found, just as mentioned by interviewee 3, that it is difficult to create a responsible platform for political discourse that would gain the same level of traction as TikTok. The interviewee argued that users primarily turn to social media for relaxation and entertainment, and the introduction of stringent regulations and restrictions might deter users from engaging with the platform. Striking the right balance between promoting democratic values and maintaining a user-friendly environment is undoubtedly a delicate challenge. Therefore, while it may not be feasible to implement all of the suggested strategies in their entirety, the key lies in pursuing a realistic approach. TikTok and its stakeholders should prioritize the most critical and impactful measures, taking into account feasibility, user experience, and long-term sustainability. Incremental changes and continuous improvements can contribute to the responsible and ethical use of TikTok, gradually addressing the identified challenges and aligning the platform with democratic practices. To further support the responsible and ethical use of TikTok, stakeholders must prioritize ongoing research, monitoring, and adaptation. The landscape of social media platforms is constantly evolving, and strategies must be agile and responsive to new challenges that may emerge. This requires a commitment to continuous learning, evaluation, and improvement.

Ultimately, the responsibility for fostering a responsible information ecosystem extends beyond TikTok alone. It requires collaboration among social media platforms, regulatory bodies, educational institutions, and society as a whole. By working together, we can strive towards a future where TikTok and similar platforms can coexist as spaces for entertainment and relaxation while also being catalysts for positive societal change and informed civic engagement. Together, we can navigate the challenges and seize the opportunities presented

by TikTok and other social media platforms, forging a path toward a more democratic, inclusive, and responsible digital landscape.

8.4.　Societal relevance

The societal relevance of this research is multi-faceted and significant. It seeks to address some of the most pressing concerns of the digital age, where social media platforms like TikTok have become influential entities of information dissemination. In the context of democratic practices, the manner in which these platforms operate can deeply affect how individuals perceive the world, make decisions, and engage in political activities.

Firstly, this research contributes to our understanding of how TikTok's information dissemination impacts democratic processes, particularly informed decision-making. By revealing both the opportunities and challenges presented by TikTok, this research paves new avenues for scholars, policymakers, and practitioners who are invested in the intersection of technology, society, and democracy. It provides them with a nuanced perspective on the democratic implications of information dissemination through TikTok.

Secondly, the guiding values and strategies developed through this research could potentially serve as a roadmap for TikTok and other social media platforms, regulators, and policymakers seeking to mitigate the risks and harness the benefits of social media use. By identifying guiding values such as transparency, accuracy, diversity, contextualization, accountability, and empowerment, this research proposes a value-driven approach to managing information dissemination on social media platforms. These values and strategies can guide platform design and policy development, thereby fostering a more responsible and democratic digital information ecosystem.

Thirdly, the research offers practical insights for TikTok and similar platforms. The strategies developed through this research provide a balanced approach, focusing on both technological advancements and the engagement of the platform's users. The strategies can serve as a catalyst for enhancements and creative solutions by the platforms, fostering ethical and well-informed social media usage.

Finally, this research underscores the necessity of collaboration among various stakeholders, including social media platforms, regulatory bodies, educational institutions, and society at large, in fostering a responsible information ecosystem. It reinforces the notion that safeguarding democratic practices in an era of rapid digital transformation is a collective responsibility that requires concerted efforts.

In conclusion, this research provides insights that could aid in shaping a digital landscape where entertainment, information dissemination, and democratic engagement can coexist harmoniously, fostering a more informed, inclusive, and responsible society.

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Appendix A – Cluster of sources from literature search

Table 2: Clustering of sources

Cluster	Author	Year	Title
Literature into different activism movements on social media	Duggan, J.	2022	Using TikTok to teach about abortion: combatting stigma and miseducation in the United States and beyond
	Jacques, E. T., Basch, C. H., Fera, J., & Jones, V.	2023	#StopAsianHate: A content analysis of TikTok videos focused on racial discrimination against Asians and Asian Americans during the COVID-19 pandemic
	Jiang, Y., Jin, X., & Deng, Q.	2022	Short Video Uprising: How #BlackLivesMatter Content on TikTok Challenges the Protest Paradigm.
	Quan-Haase, A., Mendes, K., Ho, D., Lake, O. K., Nau, C., & Pieber, D. A.	2021	Mapping #MeToo: A synthesis review of digital feminist research across social media platforms.
Research into the implications of social media activism	Bates, D.	2009	Social Media & Online Usage Study
	Madison, N., & Klang, M.	2020	The Case for Digital Activism
	Nutbeam, M., & Mereish, E. H.	2021	Negative Attitudes and Beliefs Toward the #MeToo Movement on Twitter.
	Osatuyi, B.	2013	Information sharing on social media sites.
Studies into critical thinking	Machete, P., & Turpin, M.	2020	The Use of Critical Thinking to Identify Fake News: A Systematic Literature Review.
	Pennycook, G., & Rand, D. G.	2021	The Psychology of Fake News.
	Tandoc, E. C., Lim, D., & Ling, R.	2019	Diffusion of disinformation: How social media users respond to fake news and why.

Appendix B – Research flow diagram

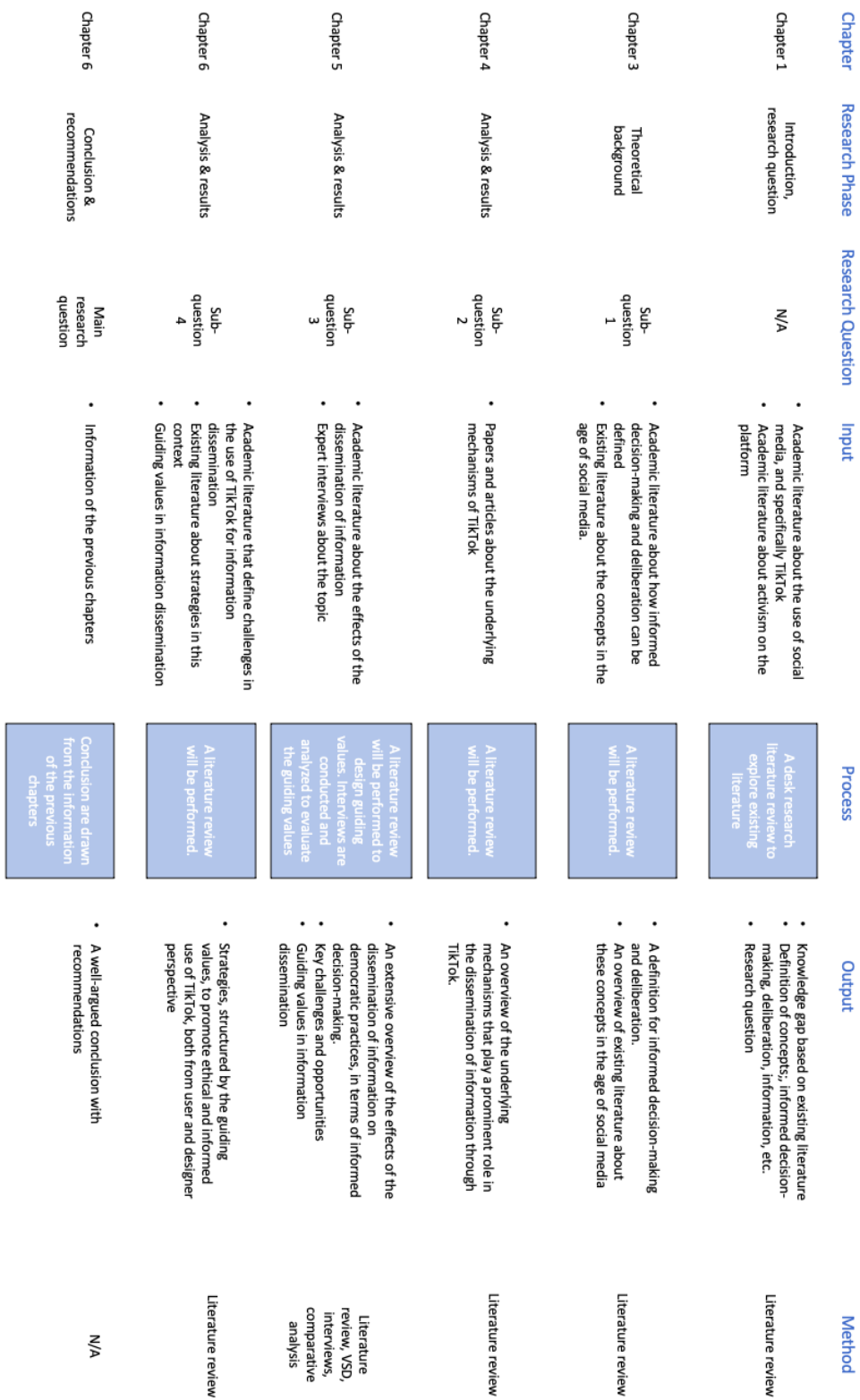| Chapter	Research Phase	Research Question	Input	Process	Output	Method
Chapter 1	Introduction, research question	N/A	• Academic literature about the use of social media, and specifically TikTok • Academic literature about activism on the platform	A desk research literature review to explore existing literature	• Knowledge gap based on existing literature • Definition of concepts; informed decision-making, deliberation, information, etc. • Research question	Literature review
Chapter 3	Theoretical background	Sub-question 1	• Academic literature about how informed decision-making and deliberation can be defined • Existing literature about the concepts in the age of social media.	A literature review will be performed.	• A definition for informed decision-making and deliberation. • An overview of existing literature about these concepts in the age of social media	Literature review
Chapter 4	Analysis & results	Sub-question 2	• Papers and articles about the underlying mechanisms of TikTok	A literature review will be performed.	• An overview of the underlying mechanisms that play a prominent role in the dissemination of information through TikTok.	Literature review
Chapter 5	Analysis & results	Sub-question 3	• Academic literature about the effects of the dissemination of information • Expert interviews about the topic	A literature review will be performed to design guiding values. Interviews are conducted and analyzed to evaluate the guiding values	• An extensive overview of the effects of the dissemination of information on democratic practices, in terms of informed decision-making. • Key challenges and opportunities • Guiding values in information dissemination	Literature review, VSD, interviews, comparative analysis
Chapter 6	Analysis & results	Sub-question 4	• Academic literature that define challenges in the use of TikTok for information dissemination • Existing literature about strategies in this context • Guiding values in information dissemination	A literature review will be performed.	• Strategies, structured by the guiding values, to promote ethical and informed use of TikTok, both from user and designer perspective	Literature review
Chapter 6	Conclusion & recommendations	Main research question	• Information of the previous chapters	Conclusion are drawn from the information of the previous chapters	• A well-argued conclusion with recommendations	N/A

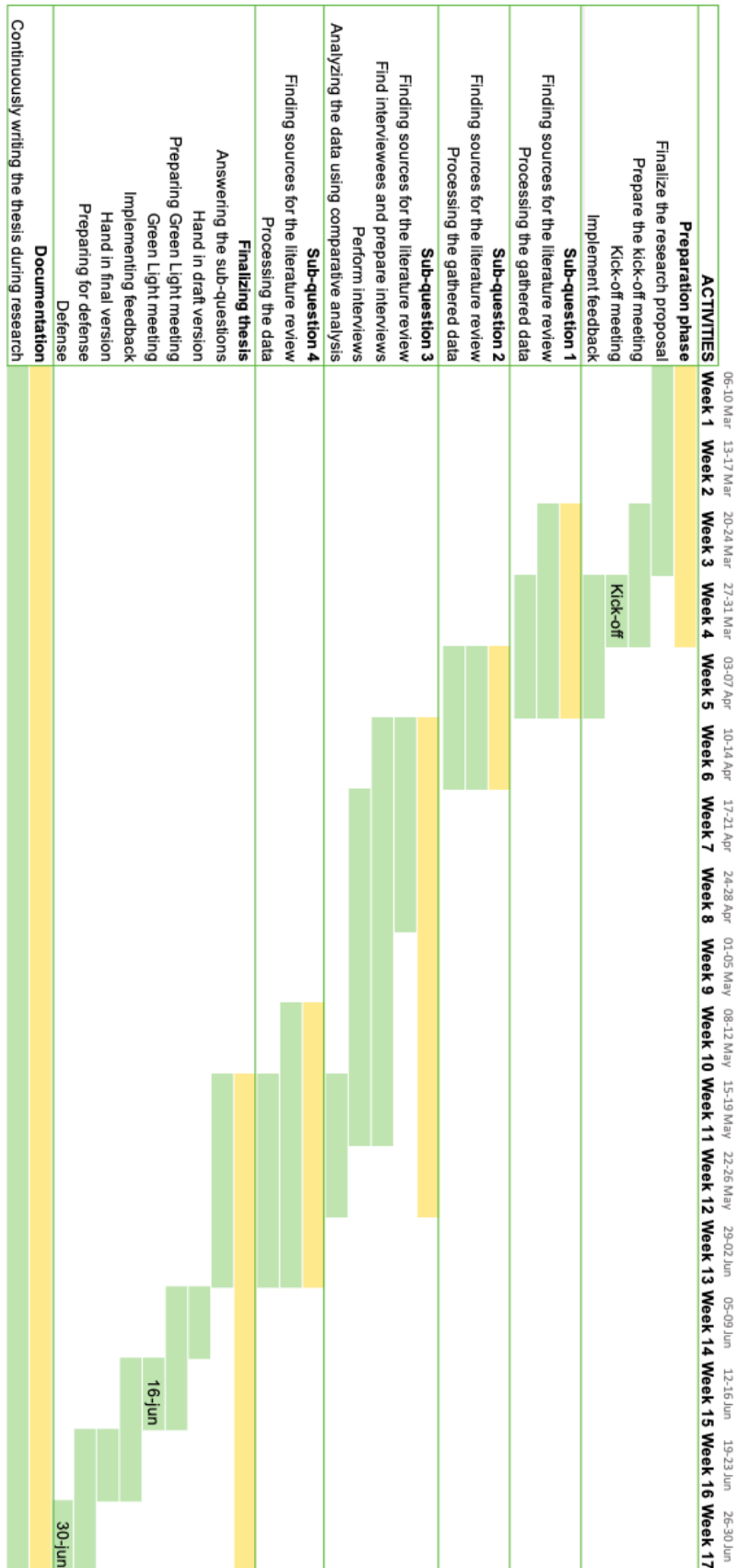*Figure 3: Flow diagram*

Appendix C – Gantt chart

Figure 4: Gantt chart

Appendix D – Interviews

In this Appendix, I provide summaries of all conducted interviews, which have been anonymized to safeguard the participants' identities. Anonymization is essential for maintaining the privacy of the interviewees, encouraging them to speak openly and honestly without fear of personal identification. This protection extends to the decision not to provide full transcripts of the interviews. Detailed transcripts could inadvertently reveal identifiable characteristics of the interviewees, potentially compromising their privacy. Instead, I offer concise summaries that capture the main points and insights from each interview while upholding the highest standards of confidentiality. This approach ensures both the integrity of the research process and the protection of the participants (Saunders et al., 2015).

D.1 Interviewee 1 – Academia

Interviewee 1 has strong insights about the usage of TikTok and its potential for activism. While she has not used TikTok herself, her experience and analysis of other social media platforms provide a valuable perspective on this issue.

She is somewhat skeptical about TikTok's suitability as a platform for activism. This skepticism is largely based on her view that the current user base of TikTok is mostly young and not primarily interested in political or democratic activities. She also voices concerns about the character of the platform, seeing it as more of a space for dancing and entertainment than intellectual engagement.

In terms of the relationship between TikTok (or social media in general) and democratic practices, the interviewee believes it is somewhat limited. She sees social media as a tool that facilitates one-way interactions more than fostering deep, two-way discussions. This, she suggests, is particularly true for platforms like TikTok and Instagram. She does note that social media can be used for educational purposes, but again, she sees the majority of TikTok users as more interested in entertainment than education.

When considering the main challenges related to TikTok and activism, the interviewee points to the platform's constraints. For instance, the limited video length might not provide enough context for meaningful activism. This, combined with her view that the platform encourages one-way communication, limits its potential for fostering democratic engagement or activism.

As for promoting the ethical and informed use of TikTok for activism, the interviewee stresses the importance of mindfulness about personal data usage. She warns that personal data posted on these platforms can be used by others, and therefore advises individuals to be mindful of what they post and to ensure that their social media profile is not too linear or revealing. She also suggests that users think twice before posting or commenting, as the lack of face-to-face interaction can sometimes lead to impolite or inappropriate behavior.

Looking toward the future, the interviewee is uncertain about TikTok's longevity. She believes that just as users moved away from Facebook over time, young users of TikTok may also switch to other platforms in the future. Despite this, she acknowledges the potential of social media for political communication, particularly in introducing and facilitating democratic practices. However, she does not foresee TikTok itself playing a significant role in this regard in the long term.

D.2 Interviewee 2 – Academia

This interviewee sees TikTok as a potentially potent medium for activism, but she also acknowledges its limitations and the challenges it poses. The platform, according to her, is a vehicle for content that ranges from light-hearted to politically charged. She uses the example of the COVID-19 pandemic to illustrate how content is sometimes manipulated or taken out of context to serve certain narratives or viewpoints. This manipulation, she suggests, can be seen as a form of activism against established policies or norms, highlighting how the platform can be weaponized for ideological conflicts.

In terms of the relationship between TikTok and democratic practices, the interviewee suggests a complex and nuanced connection. On one hand, she acknowledges that TikTok, like other social media platforms, enables a wide variety of voices to be heard, which can help foster democratic discourse. On the other hand, she highlights the potential for misinformation, framing of narratives, and polarization, which can undermine the quality of democratic dialogue and even manipulate public opinion.

When discussing the primary challenges concerning TikTok and activism, the interviewee emphasizes the difficulty of maintaining respect and understanding among diverse viewpoints. She believes that even activists should show a minimum level of respect for others, an ideal that can be hard to uphold in the face of strong convictions or controversial issues. The interviewee also admits that there may be a need for extreme viewpoints to spur societal progress, suggesting a tension between the need for respect and the push for radical change.

Regarding the promotion of ethical and informed use of TikTok for activism, the interviewee offers a somewhat counterintuitive perspective. She suggests moving away from an exclusive focus on truth and adopting a broader perspective that encompasses other values. She commends efforts aimed at combating racism and hate speech, asserting that these initiatives align with the ethical use of the platform. However, she does not provide explicit guidelines or best practices, indicating perhaps a belief in the complexity of the issue and the need for a multifaceted approach.

As for the future, the interviewee does not offer a specific forecast. Nonetheless, her comments imply that she would welcome a shift toward a more respectful and nuanced discourse on TikTok and other social media platforms. She indicates a desire to move away from an overemphasis on truth and to focus on a broader range of values and concerns. This perspective suggests a belief in the importance of a more holistic approach to information sharing and dialogue on social media platforms, one that transcends the binary of true vs. false and encompasses the richness and complexity of human interaction and society.

D.3 Interviewee 3 – Academia

Interviewee 3 recognizes the importance and growing influence of platforms like TikTok in today's digitally dominated world and has a certain amount of experience with the platform himself. Regarding TikTok's role in activism, he acknowledges its potential but points out that it's not the ideal tool for every type of activism. For instance, while it is effective for spreading a message quickly due to its algorithm-driven nature favoring viral content, he suggests that it may not be as effective for coordinating organized groups compared to other platforms like Twitter or WhatsApp.

He believes there is undoubtedly a link between social media platforms like TikTok and democratic practices. For him, such platforms could affect democratic processes and political behaviors, both positively and negatively. Social media could stimulate political engagement and participation, yet it could also lead to destructive participation if not managed carefully.
The interviewee identifies two key challenges in using TikTok for activism. The first challenge revolves around the platform's lack of transparency. TikTok, like many other social media platforms, is a private entity with proprietary algorithms that determine what content users see.

As a result, it's hard to gain a full understanding of how information and content are circulated, which groups form on the platform, and what types of activism are gaining momentum. This opacity can be a problem because it hinders users' ability to evaluate the extent and impact of the activism efforts, potentially making it difficult to optimize campaigns for social change.

The second challenge the interviewee points out is the platform's business model, which is fundamentally engagement-based. As such, it naturally favors content that is sensational, polarizing, or otherwise designed to provoke a strong reaction from viewers. This model can distort the discourse around activism efforts, over-emphasizing dramatic or polarizing messages over more nuanced or collaborative ones. The interviewee cautions that this could lead to the promotion of harmful or misleading content, exacerbating societal divisions and potentially undermining the intended goals of the activism efforts.

The interviewee's advice for promoting ethical and informed use of TikTok for activism centers around staying true to the message rather than catering to the algorithm. He urges individuals and organizations to resist the pressure to create content purely for engagement. He also advises maintaining transparency wherever possible, even if the platform limits this.

Looking into the future, the interviewee holds a cautiously optimistic view. He sees the potential for positive change, particularly with the advent of new regulations like the Digital Services Act. This Act aims to increase transparency and accountability for digital platforms, which the interviewee believes could lead to a more informed and equitable digital public sphere. However, the implementation and effectiveness of such regulations remain to be seen.

Moreover, he expresses hope for new platforms to arise, based on business models that prioritize ethical considerations and democratic discourse over mere engagement. Such platforms could provide more fertile ground for effective and constructive activism efforts.

Finally, the interviewee calls for current platforms like TikTok to change their practices, moving towards greater transparency and ethical consideration. This, he suggests, could involve revealing more about their algorithms, making efforts to promote reliable and balanced information, and taking a more proactive role in moderating content to discourage polarization and misinformation.

The interviewee's perspective underscores the complexities of using platforms like TikTok for activism. It highlights the urgent need for transparency, ethical conduct, and thoughtful regulation in our evolving digital landscape to truly harness the power of social media for positive societal change.

D.4 Interviewee 4 – Academia

This interviewee acknowledges the influential role of TikTok as a platform for activism. She notes its potential as a tool to advocate for causes and initiate social change. However, she highlights the importance of maintaining a balanced and receptive approach to varying viewpoints. The interviewee points out that being an activist is not just about projecting one's views but also about being open to listening to different perspectives. This idea becomes particularly significant considering the global reach of social media platforms, which brings together a diverse range of voices and opinions.

Discussing the relationship between TikTok and democratic practices, the interviewee sees these platforms as competitive spaces contesting for users' digital attention. The decision on where to direct energy and attention, though, remains at the discretion of the users. This view puts the responsibility of maintaining a healthy democratic discourse on the users themselves. They are the ones to decide whose content gets their attention and how they interact with it.

Speaking about the challenges related to TikTok and activism, one of the most profound concerns she discusses is the emotional underpinning of online activism, which can sometimes be tied to personal traumas. People often feel compelled to fight for causes that personally resonate with them. However, when these issues are linked to unprocessed personal traumas, it can lead to activism fueled more by personal emotional baggage than by a measured understanding of the issue.

Further, the interviewee stresses the pitfalls of tunnel vision in online activism, which is another significant challenge. In the quest to advocate for their cause, activists can sometimes become blind to opposing viewpoints and alternative perspectives. This openness to dialogue and disagreement can be a challenge in the highly polarized environment of social media platforms. The rapid spread of information can amplify this effect, creating an echo chamber that reinforces one's own beliefs while drowning out contrasting opinions.

Moreover, the interviewee emphasizes the responsibility that comes with producing content for mass consumption. She describes a certain carelessness in how people sometimes express their opinions online, without due consideration of the potential repercussions. Therefore, one of the challenges is encouraging content creators to take more responsibility for their output, to be thoughtful and precise with their words, and to be ready to engage in healthy, respectful dialogue even with those who may disagree.

Lastly, a significant challenge that the interviewee discusses refers to the changing landscape of digital communication with the advent of new technologies like generative AI. This emerging technology can blur the line between human-generated and AI-generated content, raising concerns about the authenticity of the information, intellectual property rights, and even ethical issues such as the faking of expertise

When it comes to promoting the ethical and informed use of TikTok for activism, the interviewee stresses the importance of thoughtful communication. She encourages users to consider the potential ripple effects their words can have. Clarity and accuracy in messaging are crucial, and acknowledging that there will always be varying viewpoints is part of the healthy discourse. From the interviewee's perspective, understanding that disagreement is not the same as hostility forms a critical part of ethical online behavior.

Looking toward future developments, the interviewee is interested in how generative AI technologies might be integrated with social media platforms. In her view, the rise of AI could lessen the importance of content creation, as it could be easily done by AI. The focus then may shift to reviewing and refining AI-generated content. This transition brings forth new ethical considerations, such as intellectual property rights in the context of AI-generated content. Additionally, the interviewee shows interest in the advancements in the field of quantum computing and the impact it could have on digital platforms.

In conclusion, the interviewee's insights paint a picture of a rapidly evolving digital landscape that requires mindful engagement and continuous adaptation to maintain ethical and democratic practices.

D.5 Interviewee 5 – Academia

The interviewee recognizes the significant role TikTok and similar platforms play in activism due to their extensive reach and capacity to mobilize vast audiences. However, she has concerns due to ethical considerations and these platforms' monopolistic tendencies. She believes these tendencies can potentially harm democratic practices, creating a complex relationship between social media platforms such as TikTok and democracy.

While these platforms indeed provide a space for dialogue, activism, and the sharing of diverse perspectives, they are often tightly controlled by a select few, which she views as a limitation

on the democratic exchange of information. Furthermore, the interviewee discusses how these platforms often prioritize profit over user privacy, leading to additional ethical quandaries. This concentration of power is particularly problematic in her view, as it's evident in the cases of Twitter's acquisition by Elon Musk and Meta's ownership of Facebook, Instagram, and WhatsApp.

The interviewee identifies several key challenges when it comes to activism on TikTok. One central issue is the ethical tension of supporting platforms that may exploit user data for profit and contribute to anti-democratic practices. The platforms' algorithmic controls, which decide what content users see and who sees their content, create a predicament for activists seeking to use these tools for advocacy. These algorithms can distort the natural spread of information and potentially isolate activists from their intended audiences.
Safety is another concern the interviewee raises, given that the visibility that comes with online activism may expose individuals to potential dangers. This concern is especially relevant for activists who take on powerful entities or discuss contentious issues.
Lastly, the interviewee discusses the problem of finding alternative social media platforms that could serve as effective tools for activism. While alternative platforms may align better with activists' ethical considerations, they often lack the broad user base of mainstream social media sites, making it difficult for activists to reach as wide an audience as they could on platforms such as TikTok.

These challenges demonstrate the complex relationship between digital activism and the constraints and opportunities presented by various social media platforms. While the interviewee does not have a definitive answer to these dilemmas, she believes that increased awareness and ongoing conversation about these challenges are crucial for activists navigating these spaces.
In terms of promoting ethical and informed use of TikTok for activism, the interviewee doesn't provide concrete advice. Instead, she advocates for increased awareness and a critical approach to the platform's potential downsides. While acknowledging the existing challenges, she maintains that it's still worth trying to create content and mobilize people around issues of importance. She suggests that being aware of the ethical implications of using such platforms might allow users to navigate them in a more ethically responsible way.

Looking towards the future, the interviewee envisions social media needing to become more democratic and decentralized. She calls for the development of platforms that prioritize users' needs and safety over the desires of a few powerful entities. She cites ongoing discussions about potential regulatory efforts as a method to counteract the monopolistic tendencies of large tech companies. In the interviewee's perspective, through regulatory initiatives and increased user engagement, we can, and should, move towards democratizing social media platforms. She's hopeful about ongoing efforts to create open software platforms developed collectively by internet users, even though she recognizes that these can be more technically challenging to use. Her ongoing research continues to explore this tension and the ethical challenges posed by the current state of the internet and its influence on activism.

D.6 Interviewee 6 – Academia
The interviewee believes that TikTok can be a platform for activism, as people use it to express their political beliefs and participate in actions aligned with their activism. However, she notes that not all activists may choose to use TikTok due to concerns about security risks or the platform not meeting the traditional threshold of activism.
When discussing the relationship between TikTok and democratic practices, the interviewee believes that TikTok, like other information-sharing mediums, has an impact but does not fundamentally change democratic practices. She draws parallels to historical advancements in communication technology, such as books and newspapers, which also influenced politics and democratic action. While TikTok changes the accessibility, quantity, and speed of

information, she cautions against making the conclusion that TikTok alone is responsible for significant changes in politics.

The interviewee identifies several challenges when it comes to using TikTok for activism. Firstly, TikTok's entertainment-focused nature can make it difficult for activists to be taken seriously. Finding ways to effectively communicate their message within the platform's casual and humorous content environment becomes crucial. Additionally, the lack of control over the audience and unintended viewers poses a challenge. Activists need to be mindful of their content, avoiding alienating unintended audiences and refraining from sharing sensitive or identifying information without consent. Another challenge she highlights is the potential for misinformation to spread on TikTok. She advises against sharing misinformation and recommends not repeating false information when creating commentary videos, as this may inadvertently contribute to its spread.

To promote the ethical and informed use of TikTok for activism, the interviewee suggests several best practices. Utilizing captions in videos enhances accessibility and ensures the message can be understood even without audio. Being mindful of hashtags and keywords can increase visibility and reach on the platform. She also advises activists to limit criticism to public figures and maintain a constructive approach in discussions unless the content creator engages in harmful or extreme behavior.

Regarding future developments, the interviewee notes that the influence of social media platforms on democratic practices and activism is difficult to predict. She brings up the example of the Metaverse, which has not yet seen widespread adoption. She suggests that future developments could involve the integration of social media platforms like TikTok with governmental functions, such as public opinion polls if a significant shift occurs where social media becomes more formally used. However, she also expresses the view that entertainment and politics are often perceived as separate entities in society. She believes that people do not necessarily want to think about politics all the time. Instead, political awareness and identity are shaped by a combination of factors, including personal experiences, family influences, and offline communities.

In conclusion, the interviewee recognizes the potential of TikTok as a platform for activism but stresses the importance of mindful and ethical engagement to ensure meaningful impact and responsible information sharing. TikTok's influence on democratic practices should be understood in the context of broader political engagement, both online and offline.

D.7 Interviewee 7 – Industry

The interviewee provides a thoughtful perspective on the role of social media platforms like TikTok in activism, and the intersection of these platforms with democratic practices. She acknowledges that while these platforms have the potential to be spaces for activism, they also present a set of unique challenges.

The interviewee recognizes the substantial influence that platforms like TikTok have on information dissemination, particularly concerning news. Official news organizations frequently become dependent on these platforms' traffic for revenues. The dynamic of being reliant on such platforms could inadvertently provide them with significant control over the spread of news and information.

Speaking to the relationship between TikTok and democratic practices, the interviewee notes that this is a complex issue. The power of algorithms used by these platforms to determine what content users see and interact with can be leveraged to mobilize individuals for activism. However, this power also poses ethical and transparency questions. She emphasizes the need for multidisciplinary collaboration among teams working on these platforms to promote democratic practices more effectively.

The interviewee highlights several challenges associated with the use of TikTok for activism. Firstly, she notes the trend towards sensationalism, as the platform's algorithms typically favor content that elicits strong reactions, potentially promoting a cycle of negativity or controversy. This often results in complex issues being oversimplified for the sake of virality.

The second challenge relates to the platform's opaque algorithms. Users typically lack insight into the inner workings of these algorithms, raising ethical questions about how they shape public opinion and whether they might inadvertently suppress certain viewpoints or promote others.

A third challenge arises from the dependence of traditional media organizations on social media platforms like TikTok. As these platforms drive a significant portion of their traffic, there's a risk of news organizations compromising their journalistic integrity to cater to what performs well on these platforms.

Finally, the dependence of activists on these platforms poses a risk. This power dynamic leaves movements vulnerable to changes in platform policies or algorithms, which can drastically affect the reach and effectiveness of activism efforts, raising questions about their sustainability.

As for promoting the ethical and informed use of TikTok for activism, the interviewee suggests that individuals and organizations should strive to maintain balanced and truthful communication. They should resist the temptation to follow trends of hype and sensationalism that are often seen in social media activism. Instead, they should create content that may not immediately go viral but is factual and considered. She also backs the introduction of more rigorous regulations and guidelines from authorities to ensure social media platforms are held accountable for the impact of their algorithms.

Looking to the future, the interviewee sees increased regulation and accountability for social media platforms on the horizon. She hopes that regulators, such as the European Commission with its upcoming AI Act, will enforce greater transparency around the functioning of these algorithms. She also believes in the need for a more holistic collaboration between technical teams, social scientists, philosophers, and other experts to understand the effects of these platforms on society. In addition, she expects a gradual shift from ad revenues to subscription-based models in the media industry. This shift will reduce the dependency of these industries on platforms like TikTok, leading to a healthier balance of power.

D.8 Interviewee 8 – Industry

The interviewee has a complex stance on TikTok's role in activism. She acknowledges its power as a tool for engaging large audiences and driving rapid action. However, she maintains a level of caution given the inherent ethical considerations, such as concerns around data privacy and the algorithm's propensity to perpetuate sensationalism and misinformation.

In considering the link between TikTok and democratic practices, she emphasizes its double-edged nature. While the platform can promote democratic ideals by giving voice to diverse perspectives and facilitating open dialogues, its algorithmic design can also contribute to polarization and the creation of echo chambers, potentially undermining democratic discourse.

The interviewee identifies key challenges when using TikTok for activism. She pointed out a key challenge: the platform's bias towards sensational content which encourages oversimplification of complex issues for virality. Another concern she highlighted was the lack of transparency around TikTok's algorithms. These influence user behavior and public opinion, but their workings are largely unknown, posing ethical questions about their potential to suppress or promote certain viewpoints. Lastly, she emphasized the risky reliance of activists

on platforms like TikTok, as changes in platform policies or algorithms could dramatically affect the reach of activism efforts, raising concerns about their long-term sustainability.

Reflecting on promoting the ethical use of TikTok in activism, the interviewee emphasized the importance of a cautious, thoughtful approach. She argued for the need to maintain integrity and engage respectfully with others on the platform, given the potential for TikTok's algorithm to amplify sensationalized and divisive content. Also, she highlighted the importance of fact-checking and critically evaluating information before sharing it to curb the spread of misinformation, a prevalent concern on TikTok and similar platforms.

Discussing the future of social media platforms like TikTok, she underlined the significance of evolving user understanding and interactions. With more critical engagement, she believes users can push these platforms toward greater social impact. She expressed hope for regulatory efforts aimed at increasing the transparency and accountability of such platforms, emphasizing the need to counterbalance the platforms' current monopolistic tendencies. However, she also stressed the unpredictability of these developments given the fast-paced evolution of technology and the wider digital landscape.

D.9 Interviewee 9 – Academia

This interviewee presents a nuanced perspective on the use of TikTok for activism. She appreciates the democratizing potential of the platform, highlighting its capability to give voice to everyone and foster the creation of content grounded in personal experiences. However, alongside these potential benefits, she also expresses significant concerns. Specifically, she fears that the platform may be misused to propagate disinformation or content that is emotionally charged but may lack grounding in reality.

In exploring the relationship between TikTok and democratic practices, the interviewee acknowledges a double-edged sword. On the one hand, she underscores the platforms' potential to promote democratic practices by providing a venue for a diversity of voices and experiences. On the other hand, she warns of the platforms' susceptibility to being exploited for less democratic ends, such as the dissemination of misleading or inauthentic content with the potential to undermine democratic processes.

The interviewee identifies several primary challenges tied to the intersection of TikTok and activism. Among these, she raises the issue of the potential domination of the platform by professional content producers. This domination, she fears, could diminish the authentic voices of individuals that originally defined the platform's appeal. She also highlights the difficulty in distinguishing sponsored content from genuine creative expressions, creating a blurry line between authentic storytelling and advertisement.

Further complicating this landscape is the risk of inauthentic content, particularly in the realm of politics, where such content can be weaponized to manipulate public sentiment. Adding another layer of complexity is the issue of regulation enforcement. Given the global nature of platforms like TikTok, implementing a universally effective regulatory framework poses a significant challenge. The challenge is further increased by the fact that what might work in one jurisdiction might not be applicable or acceptable in another.

Despite these obstacles, the interviewee suggests strategies for promoting the ethical and informed use of TikTok for activism. At the core of her advice is the assertion that users should draw their content from their own lived experiences, rather than constructing narratives based on the perceived experiences of others. By doing so, users can resist the lure of ungrounded, emotionally charged content and contribute more authentically to the platform's discourse.

Looking to the future, the interviewee anticipates a challenging path ahead. She foresees a trend towards increased professional content, with potential implications for the balance

between user-generated and sponsored content. Additionally, she perceives ongoing issues around the monetization of the platform and the challenge of clearly marking sponsored content. Perhaps most critically, she anticipates an ongoing struggle against the arrival of foreign, inauthentic content designed to manipulate democratic systems.

Finally, the interviewee underscores the potential pitfalls of regulation. While she acknowledges the necessity of safeguards to protect users and democratic processes, she recognizes the difficulty of implementing effective regulations on such a sprawling, global platform. Even more importantly, she cautions against the risk that regulations intended to protect could inadvertently stifle the cross-border exchange of knowledge, which is one of the intrinsic benefits of social media platforms.

Appendix E – Qualitative Comparative Analysis

In order to gain a comprehensive understanding of the guiding values related to information dissemination on TikTok and their impact on democratic practices, I will conduct a comparative analysis. This analysis aims to examine the insights provided by expert interviews and extract meaningful patterns and observations.

The comparative analysis begins by carefully reviewing and synthesizing the insights shared by each interviewee. These insights are categorized and organized in Table 2 based on their relevance to the guiding values under investigation, namely transparency, accuracy, diversity, contextualization, accountability, and empowerment. By systematically examining the viewpoints of multiple interviewees, a holistic picture of the various perspectives and nuances emerges. Throughout the analysis, particular attention is given to identifying overlapping viewpoints and recurring themes, as can be found in Chapter 5.6. This involves identifying similarities and differences in the viewpoints expressed by the interviewees and examining the emphasis placed on specific topics or issues. By identifying overlapping viewpoints, it becomes possible to identify areas of consensus and agreement among the interviewees. The comparative analysis also involves evaluating the alignment of the identified viewpoints with the existing definitions of the guiding values. This evaluation helps determine whether the values remain relevant in light of the interviewees' insights or if there is a need for contextualization and adjustment. The analysis considers whether the existing definitions adequately captured the challenges and concerns raised by the interviewees or if modifications are required to ensure a comprehensive understanding of the values.

The comparative analysis is an iterative process, involving careful consideration of each interviewee's insights, comparing and contrasting them, and drawing meaningful conclusions. The analysis provided valuable insights into the guiding values, highlighting their significance and affirming their relevance in the context of TikTok and its impact on democratic practices.

Table 3: Comparative analysis

# of the interviewee	Transparency	Accuracy	Diversity	Contextualization	Accountability	Empowerment
1	Underscores the need for a clear understanding of content sources, origins, and intent to combat misinformation.	Emphasizes the necessity for factually correct information on TikTok	Advocates for more varied content creators and maintaining diverse and non-linear feeds.	Notes the importance of content context to avoid misunderstanding.	Supports the enforcement of community guidelines to maintain a safe and respectful community.	Believes TikTok is largely used for entertainment rather than intellectual discourse, so empowerment is minimal.
2	Implies concern over a lack of transparency due to the manipulation or out-of-context use of TikTok content to serve certain viewpoints.	Questions the 'truth-oriented' approach to TikTok content, suggesting a need to balance accuracy with other values and perspectives.	Emphasizes TikTok's capacity to accommodate a range of voices and perspectives.	Highlights the issue of videos on TikTok being taken out of context, presenting it as a significant challenge in using TikTok for activism.	The interviewee's emphasis on maintaining respect in activist contexts suggests a belief in the importance of responsibility and accountability on social media platforms.	Acknowledges TikTok's potential for empowerment by giving voice to diverse perspectives, while also recognizing the platform's potential to spread misinformation.

3	Highlights the need for increased transparency from platforms like TikTok, especially in their algorithms.	Emphasizes the business model of the platform that thrives on sensational content, rather than accuracy.	Platforms have the potential to promote polarizing content and exacerbate societal divisions.	The concern about sensational or polarizing messages over nuanced ones implies a need for better contextualization.	Has hope for new regulations in the near future, since current accountability legislation has room for improvement.	Infers the potential for platforms to empower users for activism, but current practices may limit their effectiveness.
4	Emphasizes the importance of transparency in contents' origins and intent.	Implies the importance of accuracy in content by advocating for precise communication.	Highlights the necessity of diverse perspectives and healthy debates.	The advocating for clear communication implies the importance of providing context to contents.	Underscores the responsibility of creators about their content and maintaining respectful dialogues.	Emphasizes its potential to initiate social change.
5	Values transparency, particularly concerning the workings of social media algorithms and content control.	Expresses concerns about misinformation's impact on internet activism.	Stresses diversity by voicing concerns over the potential isolation of users by algorithms.	Implies the importance of contextualization by expressing concerns about algorithmic manipulation.	Suggests the need for social media platforms to be held accountable, highlighting the importance of regulating these platforms.	Underscores the need for user empowerment, emphasizing the potential of social media for activism.
6	Mentions concerns about TikTok's algorithm as a black box and lack of transparency in content selection.	Highlights the importance of accurate information and the need for users to trust that the information they consume is based on reliable sources.	Mentions the potential for echo chambers on TikTok, indicating the importance of diversifying the perspectives on the platform.	Expresses the importance of providing sufficient background information and context for videos.	Mentions TikTok's community guidelines and the enforcement of standards for user behavior.	Highlights the #MeToo movement as an example of empowering users to share stories and take action.
7	Believes platforms need to be transparent about how their algorithms work.	Implies accuracy is vital to maintain credibility and avoid negative outcomes.	Emphasizes diversity through the call for inter-disciplinary collaboration.	Warns against comparing TikTok content with thoroughly researched news articles, indicating the importance of the context.	Supports upcoming regulations to hold platforms accountable for their actions.	Recognizes that social media platforms like TikTok give users the power to voice their concerns.
8	Calls for increased transparency in TikTok's algorithms, highlighting ethical concerns due to their opaque nature.	Emphasizes the importance of factual and considered content to combat sensationalism and	Highlighted concerns about echo chambers on TikTok, she indicates it may limit exposure to diverse	Stresses the need for avoiding oversimplification of complex issues and providing balanced, truthful communication.	Advocates for increased regulatory oversight of TikTok's algorithms.	Recognizes TikTok's potential for empowering users to engage large audiences and drive rapid action.

		misinformation on TikTok.	perspectives on the platform.			
9	Advocates for clear distinction between sponsored and genuine content.	Raises concerns over potential spread of misinformation and inauthentic content.	Recognizes TikTok's ability to foster diverse perspectives and experiences.	Emphasizes importance of content reflecting creators' real experiences.	Points out challenges in regulating content and holding creators accountable, with concerns over the viability of national-level regulations on a global platform.	Highlights potential for user empowerment, while warning against emotional manipulation.

Appendix F – Interview questions

Throughout the interview process, I adhered to a curated set of questions designed to provide a comprehensive understanding of the interviewees' perspectives. I began each conversation with simpler, more personable inquiries and gradually transitioned towards more complex topics. In practice, I found that the majority of interviews unfolded organically into dynamic discussions where the intended questions naturally emerged and were addressed. But the questions I designed for the interviews are as follows:

1. Before we start, do you have any questions about the informed consent form that you've signed?

2. Do you agree with this interview being recorded?

3. Can you briefly introduce yourself and your area of expertise?

4. Have you ever used TikTok?

5. If yes, what is your experience with the platform?

6. If not, have you used any other social media platforms before?

    a. Are you familiar with the concept of short-form video content?

7. How do you think people use TikTok to share information?

8. In your opinion, is there any relationship between TikTok and democratic practices?

9. If so, how would you describe this relationship?

10. Based on your previous responses, do you think TikTok can be used as a platform for activism?

11. If so, are there any challenges related to activism on TikTok?

12. If not, are there any characteristics of social media platforms that you think might be relevant to democratic practices?

13. Could you share an example of a situation in which a challenge related to the use of TikTok for activism arose?

14. In your opinion, what are the key ethical considerations that individuals and organizations should keep in mind when using TikTok for activism?

15. Are there any best practices for promoting ethical and informed use of TikTok for activism that you would recommend?

16. What do you see as the potential future developments in terms of how social media platforms like TikTok can be used to promote democratic practices and activism?

Appendix G – Data Management Plan

Plan Overview

A Data Management Plan created using DMPonline

Title: TPM - MSc The new era of breaking news

Creator: Ivy de Jong

Contributor: Dr. O. (Olya) Kudina

Affiliation: Delft University of Technology

Template: TU Delft Data Management Plan template (2021)

Project abstract:

In recent years, the use of social media has increased constantly. This is also evident in daily life where platforms, such as TikTok, are used for an increasing number of tasks. Although this has many useful purposes and broadens horizons for many people, there are also risks associated with this development. Consider, for example, the speed and ease with which information is distributed via these platforms. This research will look into the impacts of information dissemination through social media on democratic practices, by delving into AI-trained algorithms used in social media, new technologies, and ethics. The following research question will guide this research: 'How does the use of AI in TikTok affect democratic practices, specifically in terms of informed decision-making?'. The field of social media's impact on society has received significant research attention, but there is still a need to explore the topic from different angles. Qualitative studies and ethical considerations can provide a deeper understanding of users' experiences, while a political philosophy perspective can offer insights into normative dimensions of social media use. The most appropriate research approach is the qualitative exploratory approach. Literature reviews and interviews will be used to investigate the effects of the dissemination of information via social media on society.

ID: 120472

Start date: 13-02-2023

End date: 30-06-2023

Last modified: 28-04-2023

TPM - MSc The new era of breaking news

0. Administrative questions

My faculty data steward, Nicolas Dintzner, has reviewed this DMP on 22-03-2023

2023-03-22

I. Data description and collection or re-use of existing data

Type of data	File format(s)	How will data be collected (for re-used data: source and terms of use)?	Purpose of processing	Storage location	Who will have access to the data
Interview date and time.	Word file	Looking at the date and time	To be able to distinguish easily between different interviews.	TUD OneDrive	Me and Olya Kudina
First name of the experts.	Word file	During the 'recruiting' phase.	To be able to distinguish easily between different interviews.	TUD OneDrive	Me and Olya Kudina
Organization affiliated with the expert	Word file	This will be the second question of the interview.	To gain a better understanding of the nature of the expert	TUD OneDrive	Me and Olya Kudina
Email address of the expert	Word file	During the 'recruiting' phase.	For communication purposes	TUD OneDrive	Me and Olya Kudina
A summary of the comments about the information dissemination through TikTok and its effects on democratic practices by experts. No personal information.	Word file	Through interviews, both in person as well as online interviews	To gain a better understanding about information dissemination	TUD OneDrive	Me and Olya Kudina
The expert interviews will be recorded	MP4 file	Through recording the interviews, both in person as well as online interviews	To process data easier.	TUD OneDrive	Me and Olya Kudina

- < 250 GB

II. Documentation and data quality

- Methodology of data collection

III. Storage and backup during research process

111

- OneDrive

IV. Legal and ethical requirements, codes of conduct

- Yes

- Yes

I will work with only minimal required personal data, in order to facilitate the interview.

- No, I will not work with any confidential or classified data/code

The project is an internal TUD MSc Thesis. The datasets underlying the published papers will not be publicly released following the TU Delft Research Data Framework Policy. During the active phase of research, the project leader from TU Delft will oversee the access rights to data (and other outputs), as well as any requests for access from external parties. They will be released publicly no later than at the time of publication of corresponding research papers.

- Other types of personal data - please explain below
- Data collected in Informed Consent form (names and email addresses)
- Signed consent forms
- Photographs, video materials, performance appraisals or student results
- Email addresses and/or other addresses for digital communication
- Names and addresses

A general job description

1. Information experts based on their jobs

- No

- Informed consent

All study participants will be asked for their written consent for taking part in the study and for data processing before the start of the interview.

- Same storage solutions as explained in question 6

- None of the above applies

Created using DMPonline. Last modified 28 April 2023

3 of 5

112

113

- Personal research data will be destroyed after the end of the research project
- Anonymised or aggregated data will be shared with others

When the thesis is finished, and the thesis is published into the TUD repository, all data will be anonymized. MP4 files will be destroyed.

- Other - please state the duration and explain the rationale below

I will not be storing pseudonymised personal data.

- Other - please explain below

No sharing.

- Yes, in consent form - please explain below what you will do with data from participants who did not consent to data sharing

V. Data sharing and long-term preservation

- All other non-personal data (and code) underlying published articles / reports / theses

- My data will be shared in a different way - please explain below

It can be shared, however, I will choose not to share it. The anonymized and aggregated data used in the report can be found directly in the report in TUD educational repository.

- < 100 GB

- As soon as corresponding results (papers, theses, reports) are published

- CC BY-ND
- Other - Please explain

It will be under the same license as the master thesis. If possible: CC BY-ND

VI. Data management responsibilities and resources

- Yes, the only institution involved

This will be Dr. Olya Kudina. In the end, it is most likely that the non-aggregated, anonymized data will also be destroyed. As there is no apparent purpose for it.

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4 of 5

113

114

Only a small amount of time after the end of the project.

114

Appendix H – Informed Consent Form

Informed consent form

You are being invited to participate in a research study titled 'The new era of breaking news'. This study is being done by master student Ivy de Jong from the TU Delft, under the supervision of Dr. Olya Kudina.

The purpose of this interview/ study is to gain insights into your experience with information dissemination through TikTok and its potential effects on democratic practices and will take you approximately 20 minutes to complete. The data will be used for evaluation purposes.

As with any (online) activity, the risk of a breach is always possible. To the best of our ability, your answers in this study will remain confidential. We will minimize any risks by asking you for as little personal information as possible and storing all information in a secure manner. At the end of the project, the (possible) audio recording will be deleted and an anonymous summary will be used. This summary will be included in the master thesis and will be made publicly available in the TU Delft educational repository.

Your participation in this study is entirely voluntary and you can withdraw at any time. You are free to omit any questions. You can contact Ivy at I.deJong-1@student.tudelft.nl at any time.

Signature/ initials:

PLEASE TICK THE APPROPRIATE BOXES	Yes	No
A: GENERAL AGREEMENT – RESEARCH GOALS, PARTICPANT TASKS AND VOLUNTARY PARTICIPATION		
1. I have read and understood the study information or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction.	☐	☐
2. I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.	☐	☐
3. I agree to the fact that this interview will be recorded, knowing that the audio recording will be destroyed as soon as the project ends.	☐	☐
B: POTENTIAL RISKS OF PARTICIPATING (INCLUDING DATA PROTECTION)		
4. I understand that taking part in the study also involves collecting specific personally identifiable information (PII) through my name and email address with the potential risk of my identity being revealed.	☐	☐
5. I understand that the following steps will be taken to minimise the threat of a data breach, and protect my identity in the event of such a breach: anonymization of data, secure data storage, using summary.	☐	☐
6. I understand that personal information collected about me that can identify me, such as my name, email address, and potential audio recording, will not be shared beyond the study team.	☐	☐
7. I understand that the (identifiable) personal data I provide will be destroyed after the research is completed at last, or earlier once deemed no longer necessary.	☐	☐
C: RESEARCH PUBLICATION, DISSEMINATION AND APPLICATION		
8. I understand that the summary of our discussion will be used to create a better understanding of the effects of information dissemination through TikTok and its effects on democratic practices.	☐	☐
9. I acknowledge that a summary of our discussion will be shared with me prior to its publication, and I am pleased to have the opportunity to request revisions if necessary.	☐	☐
10. I agree that my responses, views or other input can be quoted anonymously in the summary and in the thesis.	☐	☐
D: (LONGTERM) DATA STORAGE, ACCESS AND REUSE		
11. I give permission for the summary of the discussion to be archived in the TU Delft repository (in the form of part of one of the appendices to the thesis) so it can be used for future research and learning.	☐	☐

Signature/ initials:

117

Signature

_____   _____   _____

Name of participant   Signature   Date

Contact details for further information: Ivy de Jong – +316 42562233 – I.deJong-1@student.tudelft.nl

Appendix I – Human Research Ethics Approval

Date	06-Apr-2023
Contact person	Dr. Cath Cotton, Policy Advisor
	Academic Integrity
E-mail	c.m.cotton@tudelft.nl

TUDelft — Delft University of Technology

Human Research Ethics
Committee TU Delft
(http://hrec.tudelft.nl)

Visiting address
Jaffalaan 5 (building 31)
2628 BX Delft

Postal address
P.O. Box 5015 2600 GA Delft
The Netherlands

Ethics Approval Application: The new era of breaking news
Applicant: Jong, Ivy de

Dear Ivy de Jong,

It is a pleasure to inform you that your application mentioned above has been approved.

Thanks very much for your submission to the HREC which has been conditionally approved. Please note that this approval is subject to your ensuring that the following condition/s is/are fulfilled:

Please make sure any risks of reidentification/providing potential sensitive expert views, and steps take to mitigate such risks, are clear in the IC.

In addition to any specific conditions or notes, the HREC provides the following standard advice to all applicants:
• In light of recent tax changes, we advise that you confirm any proposed remuneration of research subjects with your faculty contract manager before going ahead.
• Please make sure when you carry out your research that you confirm contemporary covid protocols with your faculty HSE advisor, and that ongoing covid risks and precautions are flagged in the informed consent - with particular attention to this where there are physically vulnerable (eg: elderly or with underlying conditions) participants involved.
• Our default advice is not to publish transcripts or transcript summaries, but to retain these privately for specific purposes/checking; and if they are to be made public then only if fully anonymised and the transcript/summary itself approved by participants for specific purpose.
• Where there are collaborating (including funding) partners, appropriate formal agreements including clarity on responsibilities, including data ownership, responsibilities and access, should be in place and that relevant aspects of such agreements (such as access to raw or other data) are clear in the Informed Consent.

Good luck with your research!

Sincerely,