Overcoming Information Disruption: Social Media Impact Analyses and Solutions for a Safer Digital Environment

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Abstract

This research discusses the phenomenon of information disorder revealed in the documentary film "The Social Dilemma", which illustrates the negative impact of social media and modern digital technology. Information disorder, as an irregularity in an information system, creates chaos in the social order of society. The chaos in the information society includes information manipulation, the psychological impact of excessive use of social media, and the spread of false information. Therefore, this research aims to find a solution to address the impact of information disorder comprehensively. Large technology companies have a significant role in regulating the information presented to users, but the potential chaos caused needs to be addressed through stricter regulation. Framing analysis methods are used to unravel the complex issues in the film, highlighting the importance of understanding the negative impact of digital media on society. Proposed solutions to tackle information disorder include data privacy regulation, algorithm transparency, user engagement, prevention of information misuse, and protection of children and youth. Civil society, expert involvement, and public education are also key to creating a safer, more transparent, and responsible digital environment. This research aims to create a safer digital environment and improve users' digital experience quality. With a better understanding of the negative impacts of social media and digital technology, it is hoped that appropriate preventive measures and interventions can be taken to reduce information disorder.

Keywords: Information Disorder, Social Media, Digital Technology

INTRODUCTION

Previous studies investigated how to identify issues related to information interference, or '(dis)information,' to understand the information dynamics surrounding the Australian Senate Committee Inquiry into Wind Turbines. They examined the various contested methods of assigning causality and responsibility for potential health concerns (Marshall, 2018). Later in 2021, a study on corrective action in the information disorder contributed to the literature by providing new insights into users' motivations in preventing the spread of distorted information by flagging, reporting or countering (Florian & Quandt, 2021).

Further research in 2022 examined the prevalence of fake news dissemination (i.e., information disorder [ID]) following terror attacks such as bombings that occurred in Southeast Asia (SEA) (Xingyu & Khader, 2022).

In the increasingly advanced digital era, the role of social media and digital technology in everyday life is increasingly dominating. However, along with these advancements, negative impacts must be taken seriously. The documentary film "The *Social Dilemma*" highlights the

information disorder phenomenon in society due to the influence of social media and modern digital technology. Information disorder, which is the disorganisation or chaos in a system, is the film's main focus, illustrating how digital media has created chaos in the social order of society.

In this context, large technology companies have a significant role in regulating user information. However, along with this power comes the potential for chaos that can cause harm to various parties. Information manipulation, the psychological impact of excessive social media use, and the spread of false information are the main challenges that need to be addressed comprehensively. Therefore, the need for stricter supervision and regulation of digital technology companies is a must to create a safer and more responsible digital environment.

The framing analysis method was used as an approach to unravel the complex issues faced in the film "*The Social Dilemma*". The results of the analysis show how important it is to understand the negative impact that digital media has on society. Thus, efforts to overcome the information disorder that occurs need to be made through various comprehensive and coordinated solutions. Data privacy regulation, algorithm transparency, user engagement, and prevention of information misuse are some of the steps proposed to overcome this problem.

In addition, the protection of children and young people from the negative impact of social media is also a major concern in the effort to create a safer digital environment. The involvement of civil society and experts in the process of regulating and monitoring digital media is also an important key in solving this complex problem. In addition, public education is also a crucial factor in raising awareness of the importance of responsible use of social media and digital technology.

Overall, the main goal of this research is to create a safer, more transparent and responsible digital environment for users. By understanding the negative impacts of social media and digital technology, it is hoped that appropriate preventive measures and interventions can be taken to reduce information disorder and improve the overall quality of users' digital experience. Thus, this research is important in dealing with the complex challenges faced in this digital era.

Disorder is something that is perceived as disorder by a group, or manifested in events that do not conform to their expectations, models and systems of order. As Gregory Bateson (1972) argues, socially sanctioned order has a limited number of ways of manifesting, while disorder has a myriad of ways of arising. People may therefore often agree on the existence of disordered states, though disagree on which order is best.

"Sociopolitical organisations constantly face problems that require increased investment just to maintain the status quo" (Tainter, 1990), and this must be matched by the resources, effort and

reorganisation required to solve new problems that arise. *Disorder will always appear and always has a politics*. In addition to there being chaos in politics, examples of chaos can arise from external 'disorder', perceived external disorder or the way internal disorder is projected onto figures who are scapegoated in the chaos of the 'outside world'.

Disorders that arise internally from systems of order are called '*self-generated disorders*'. An investigation is then made into what constitutes a disorder, whether it is localised or diffuse, how it relates to patterns of order, whether it seems to benefit anyone and whether the collection of systems needs to function.

Recurring patterns of chaos are part of the social order, and can result in graded gains and losses; creating an order for some, and chaos for others. It thus adds to social antagonism, even though those who benefit are unaware of the chaos happening elsewhere.

However, the disorder can also be functional and adaptive. As an analogy, evolution, which is the primary process of life itself, occurs through enormous excess, failure and inefficiency; through what is called disorder. It relies on trillions of creatures that cannot survive to reproduce, genes that are not identically replicated, and an environment that is constantly changing and exerting new pressures, often through the actions of unexpectedly successful organisms. This chaos produces the order of the living world.

In informationalism, social groups almost always see disorder as the result of external or disruptive factors. Again, calling something disordered is often a political act, aimed at reorganising things. As a result, we can explore the extent to which the drive for order is embedded in social conflict and produces what others perceive as disorder.

The disorder is mainly of social interest when it is repeated. For example, the introduction of a new software system is expected to produce temporary disruption as people learn new procedures.

"Indeed, we could suggest that these potential disruptions are being deliberately ignored in information technology upgrades, although it is likely that they will be burdened by the passage of time, increased budgets, technical disruptions, and interruptions to important work," (Marshall *et al*., 2015). This is part of the essential function of the 'information society' and should not be overlooked.

Information

Information is linked to communication. Anything that can be communicated is information. In that concept, accuracy in information is not the main thing. Although there may be types of

knowledge that cannot be communicated through symbols, this can confuse information. When information and communication are combined, the first and foremost feature of this order/disorder complex is that communication and information orders are always entangled with interpretation, misunderstanding, strategy, and *noise,* and always occur in social contexts involving persuasion, building or breaking relationships, and establishing power or relative status.

Disorders of Information

'Information' is only meaningful as part of the social process. It is embedded in past communication efforts, in shaping group membership and reinforcing hierarchies. It is also influenced by assumed or imagined social categorisations. Therefore, in addition to being necessary for cooperation, information always has the possibility of being corrupted, misunderstood and misused. As digital technology massively increases the flow of information and eases communication efforts without reducing the problems of divergence, interference, framing, understanding, interpretation, self-referencing, and group relations, it also increases the incidence of misinterpretation, reinterpretation, or conflicting communication, therefore increasing the potential for disruption and conflict. These unintentional effects spread throughout the system through the network.

In the process, boundaries are replaced, realigned or reinforced in a disruptive change that is generative for some, but destructive for others. *Framing*, which is essential for the resolution of meaning, tends to bring out the cultural identity of the group, thereby devaluing information from other groups, and increasing the power of the information group as a form of filtering and discarding information. Hierarchies are entrenched and because of their framing and boundary effects, tend to interfere with the accuracy and transmission of information.

Vague jargon and lack of managerial clarity become an important part of generating status and power in the information hierarchy, where the purpose of information is not to inform, but to try to control, diffuse responsibility and confuse the 'enemy' or outside group. This magnifies the ineffectiveness and confusion of managerial actions.

In another study on information disorder conducted by Claire Wardle, PhD and Hossein Derakhshan in 2017, they introduced the terms information pollution and information defamation and avoided the term fake news to describe the presence of information disorder in messages spread on the internet. They introduced a new conceptual framework for examining information disorder, identifying three different types: mis-, dis- and mal-information. Using the dimensions of harmfulness and falsity, they explain the differences between these three types of information:

- Mis-information is when false information is shared, but there is no intent to harm.

- Disinformation is when false information is deliberately shared to cause harm.

- Mal-information occurs when genuine information is shared to cause harm, often by moving information that was originally private into the public domain.

METHOD

The framing analysis method is used to analyse the documentary film *The Social Dilemma*. Framing is selecting some aspects of perceived reality and making them more salient in the text being communicated, thereby encouraging a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the thing being described (Entman, 1993).

Three keywords are scrutinised in the definition of media framing: (1) Selection or selection of aspects of reality. (2) The prominence of the selected aspects of reality. (3) Offering a certain meaning to reality. Referring to the three keywords above, the results of observations on the documentary film *The Social Dilemma* can be found some data as follows:

Table 1. Media Framing Keywords

Media Framing Keywords	Analysis of the Documentary Film *The Social Dilemma*
Selection/selection of aspects of reality	The social, psychological and political impacts of social media and modern digital technologies
The prominence of selected aspects of reality	The manipulation and negative influence of social media
	The psychological impact of excessive social media use
	Social media influences politics, including the dissemination of false information (hoaxes)
	The need for stricter oversight and regulation of large tech companies
	The social impact of rapid digital innovation
Offering certain meanings of reality	Social media is like two sides of a coin, having both positive and negative influences on the social fabric of people's lives. However, the user community escapes the awareness of its negative influence.

The framing analysis method that researchers used in this research is the method developed by Edelman, where categorisation is done through the use of certain perspectives and vocabulary.

RESULTS AND DISCUSSION

Through the film *The Social Dilemma*, researchers discovered the fact that digital media such as Google groups, Meta groups, Twitter and similar platforms are a disorder to the pre-existing social order. They make the production and dissemination of information in society happen so fast, beyond the speed that people have ever imagined before. In the film *The Social*

Dilemma, people who have worked in digital companies thought that what they were doing was for the good. But then they feel very worried about what they are doing for these digital companies.

They recognise that these digital media have created beautiful things in the world, such as facilitating communication between individuals regardless of distance and time, sharing information easily and quickly without spending money, and other beauties. What digital media has done is a systemic change that has a huge impact on the social order of people around the world. One of the former employees mentioned that the way the media was being used was not what they expected. The tools that have been created today are starting to erode the social structure and workings of society. Social media and search engines are run by algorithms. These digital media companies have managed to keep their users on their platforms for a long time. The algorithm system is known as a *filter bubble,* where algorithms on digital platforms, such as search engines or social media, automatically narrow down the information provided to users based on their preferences and previous behaviour. Based on information disorder theory, the algorithmic system becomes an information disorder where people should be able to get any information, but with the *filter bubble,* people are only treated to information that matches their online behaviour. As a result, users tend to be provided with content that is more in line with their views and interests, creating an information bubble that isolates different viewpoints or views.

In information disorder theory, those responsible for the chaos or disruption of information in society are those in power. In the film *The Social Dilemma,* the rulers of digital media are the owners of digital media companies. They are a form of capitalism in the technology business that has the authority to regulate what information is given to users, and what is not given. They also get as much profit as possible from the digital media business they run.

The chaos caused by social media has resulted in profits for some media companies and losses for some. As in the film *The Social Dilemma*, some people use social media to inform the public and influence the public according to their will. Social media influences politics, including the dissemination of false information (hoaxes), political polarisation, and possible influence on the democratic process. There is an information disorder, where people receive incomplete, inaccurate and ambiguous information with various interpretations. Whether we realise it or not, digital media companies have added to social antagonism, even though those who benefit from them are unaware of the chaos happening elsewhere.

Examples of information chaos shown in the film *The Social Dilemma* include: the ISIS group influencing its followers through the internet, the same thing is done by white supremacists.

False information is scattered on the internet through social media and search engines, for example about Covid-19, the Covid-19 vaccine, information about political parties that are competing in elections and affecting a country's democracy, and many more information disorders caused by digital media. However, digital media companies that are responsible for their platforms do not seem to pay serious attention to the chaos that occurs in society due to information disorder in digital media.

The suggested solution is the need for stricter oversight and regulation of large technology companies. In the context of the film "The Social Dilemma," some of the concrete solutions suggested for oversight and regulation of large tech companies include:

1. Data Privacy Regulation: Regulates how companies collect, store, and use users' data. This includes ensuring that users provide clear and informed consent on the use of their data.

2. Algorithm Transparency: Require tech companies to be more transparent about how their algorithms affect the content users see and how they reinforce filter bubbles or echo chambers.

3. User Engagement: Encourage companies to give users more control over their privacy settings, including options to set preferences and control the user experience.

4. Prevention of Information Misuse: Sets out the company's actions to combat the spread of disinformation, hate, and other harmful content. This could include improvements in detection andaction against fake or manipulative accounts.

5. Independent Auditing and Examination: Requires independent examination and auditing of company practices to ensure that they adhere to the necessary ethical and compliance standards.

6. Protection of Children and Young People: Set out specific restrictions to protect children and young people from exposure to harmful or psychologically harmful content.

7. Involvement of Civil Society and Experts: Involve civil society, non-governmental organisations, and experts in the policy-making process to ensure that the regulations implementedreflect the diverse interests and values of society.

8. Public Education: Increase public awareness on how to use technology responsibly, and recognise and deal with the negative impacts of social media.

Such regulations aim to create a safer, more transparent and responsible digital environment for users while maintaining room for innovation and economic growth in the tech industry.

CONCLUSION

This paper concludes that social media and modern digital technology have created information disorder that has resulted in chaos in the social order of society. Negative impacts such as information manipulation, the psychological impact of excessive social media use, and the spread of false information needs to be seriously addressed. Stricter regulation of digital technology companies, user engagement, protection of children and youth, and public education are important steps in creating a safer, more transparent and responsible digital environment. Preventive efforts and appropriate interventions need to be made to reduce information disorder and improve the overall quality of users' digital experience.

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