

## *Original Paper*

# How Users can Solve the Trust Problem in the Digital Age

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### **Abstract**

*The digital age has brought new changes to both the production and dissemination of information, and these changes are both positive and negative. This paper focuses on the trust problems in information that has arisen in the digital age, analyses the problem of disinformation and the weakening influence of opinion leaders in the Internet environment from the perspective of users, and makes suggestions for improvement.*

### **Keywords**

*digital age, disinformation, trust problem*

## **1. Introduction**

The development and spread of digital technology have led the world into the digital age. Digital technology has provided media communication with increased speed of information dissemination, access to information processing technology and diversification and popularisation of information sources. Users are faced with many issues affecting ‘trust’ when using the relevant digital media platforms. People do not have sufficient cognition to discern the trustworthiness of information and people must rely on the trust and distrust of the sources that provide them with information on current events (Mangold, Bachl, & Prochazka, 2022). Trust issues are not unilaterally generated by the media in the digital age; users are both producers and disseminators of information (Mandarano, Meenar, & Steins, 2010). Trust issues are widespread in the digital age, where users need to sift through and discriminate between a large number of different sources of information simply by using the internet to browse or conduct searches.

Trust is based on reliance on the authority of the media as an information system, but the opportunity offered to ‘individuals’ to freely disseminate content in the context of the digital age undermines this reliance, and the damage is amplified by the growing development of the Internet (Liu & Lu, 2020). The collapse of users’ trust in the media means that media communication will become meaningless.

The issue of trust is seen in this article as the trust problem in the Internet based on digital technology. Therefore, it is necessary to address the issue of trust crisis arising in the digital age. This article discusses how to solve the trust problem in the digital age from the user's perspective dialectically. This paper will focus on two issues of trust crisis in the Internet environment, which are the problem of disinformation and the weakening of the influence of 'authoritative' opinion leaders such as mainstream media and experts. The problem of disinformation and the weakening of the influence of mainstream media and expert opinion leaders is a daily problem in the production and sourcing of information that users currently face when accessing information. While users are confronted with a certain amount of disinformation on a daily basis, the influence of mainstream media or authoritative experts is weakened by the current situation of information dissemination in the digital age based on the proliferation of information. Both of these problems have a negative impact on information trust in the digital age. This paper analyses the causes of these problems and proposes solutions to help rebuild trust in the Internet from the user's perspective.

Disinformation is an issue that affects trust in information arising from the rapid development of the digital age, where users need to reverse screen their exposure to false information through the technological means of the digital age. The business models of digital providers offer ways to influence public life, democratic debate and shared culture through covert means (O'Neill, 2020). Users face difficulties in identifying false information in the digital age of information overload because of the rapid development of information processing technology based on the development of digital technology and the ability of media platforms to profit from hot topics. On the one hand, the development of digital technology provides a wealth of means of communication for the dissemination of information, and on the other hand, it provides more and easier technical means for the falsification of information production. The development of digital technology has made it easier to disseminate video information in information dissemination, the visual presentation is more rendering than both text and verbal expression, and it also inspires more trust in the content received (Sherwin, Feigenson, & Spiesel, 2006). With the development of AI technology users are beginning to be unable to distinguish the authenticity of videos, for example, Deepfake videos are pornographic videos that anyone can create starring anyone with a perfect face swap [6]. Even former US First Lady Michelle Obama has had her face plastered on a pornographic film actress with a facial structure similar to hers. This is not the first time that a public figure has fallen victim to deep fakery techniques. In 2018, a video of actress Gal Gadot was also created by artificial intelligence. In this video, she was saying things that she never actually said. When these videos are viewed by users, who are unable to discern the authenticity of the content, they believe it at the beginning of the ferment of the event, all of which is intuitive to users brought to life by digital technology. The occurrence of such events is undoubtedly a negative impact on public discourse, human society and democracy, both in terms of the production and dissemination of false information ultimately (Borges, Martins, & Calado, 2019). In addition, deepfake can cause users to confuse real footage with fake footage, creating a crisis of trust. The biggest threat is not that

people will be deceived, but that they will start to see everything as a deception (Westerlund, 2019). To solve the problem that it is so difficult to visually judge the authenticity of events, users will have to make judgements in relation to their attitudes when they are exposed to false information and the motives of the creators of false information. Users should think critically about the content of their personal experiences when confronted with the 'different' content of the visual presentation of information in the video which. Based on this view, what users can do to reduce the ability of disinformation to deceive them so much and thus maintain an environment of trust in the digital age is to give as little space as possible to the dissemination of such disinformation and to increase their awareness of the potential for AI abuse. In terms of the purpose of disinformation production, this prevents it from gaining greater traffic and influence and reduces the incentive to produce disinformation. On the part of the individual user, this helps the user to actively screen the information he or she is exposed to.

The stronger influence of disinformation on trust is also due to the development of digital technology, the ability of media platforms to profit from pushing hot topics in proportion to the number of views, and the power of mass media to control the duration of hot topics to a certain extent (Zhao et al., 2017). The duration of a hot topic correlates with the opportunities available to the media platform to make a profit; when users use the media more it indicates that the media is more influential, and other different revenue opportunities such as advertising revenue and media placement revenue are more favourable to this media partnership. Thus, media outlets aim to attract users by using algorithms provided by digital technology to deliver messages that match consumer preferences (Park et al., 2020). The information's influence in a media profit-driven pushing model grows like a snowball as soon as eye-catching and false information becomes available and as the number of views surges. For example, the rumour in China during the first year of the COVID-19 outbreak that Shuanghuanglian Oral Liquid could prevent the disease. The rumour appeared in the top social media searches, led by Weibo, and was not cleared up until the next day. On the night of the incident, the oral solution was sold out in several regions of the country and discussions on social media platforms continued for several hours. Messages similar to the one that helped prevent COVID-19 were repeatedly seen in China, with a large number of users posting questionable comments in the social media comments section of such messages and @ official media seeking real answers to the incident. This demonstrates the distrust that users can have in the absence of official information about similar information that has already been clarified. The great impact of such events is due to the high level of awareness and low level of expertise of the Chinese public regarding the new coronavirus, coupled with the fact that the preventable content of this pandemic virus will have a huge global impact.

From the perspective of the causes of such rumours, the trust issue arises because the media platforms capture the pain points of users through hot topics, attracting them and profiting from them by focusing only on the benefits of the hot topics and ignoring the authenticity of the information. From the user's point of view, in order to solve this kind of trust problem, we should moderately use media platforms to

forward such information that cannot be confirmed as credible at first, to narrow the influence of rumours, reduce the influence of hot topics containing false information and improve the information trust environment.

Users are able to become part of the production and dissemination of information based on the support of digital technology, and the growing trend towards personalised media communication has weakened the influence of mainstream media or authority figures. Information published on the web is based on each user's personal life, experiences and emotions. Users are unable to deduce which source is more credible in the digital environment because they do not have knowledge of a particular subject. At the same time, users are at greater risk of being misled online because almost anyone can post information without a 'gatekeeper', which means that the source's credibility is difficult to ascertain (White, 2021). In short, the difficulty in confirming the trustworthiness of sources in the online environment has created a crisis of trust in the online environment. For example, Twitter has added authentication tags as a way of distinguishing between genuine and fake official media of various companies or proving to be genuine celebrities themselves. This initiative, which was intended to help users filter out authoritative information publishers more directly, became unusable after being swamped by a wave of impostors who had paid for authentication. This incident illustrates that media platforms do not currently have effective information source filtering tools available to users.

The convenience offered to users in digital technology is a two-way street. Digital technology can either enable users to post personalised messages and share content on different topics, or it can allow users to work backwards with the media platforms that provide digital technology for the purpose of working together to screen for false information. It is possible to implement measures where media platforms provide a platform for all users to access information, disseminate it and give feedback. Users take the initiative to use their domain knowledge to provide feedback to the media platform on information that can be judged unreliable as they browse through it. When the amount of feedback from the same information exceeds a certain percentage, it gives the media platform the direction to filter the information. Further verification of the information by the media platform may can filter out some of the inaccurate information. Users need to work together with media platforms to rebuild the influence of authoritative information publishers. This can improve the trust environment in the digital age and helps to maintain the credibility of the discourse of mainstream media and authoritative experts, which means that the credibility of the source is enhanced.

## **2. Conclusion**

In the digital age, digital technology facilitated the production and dissemination of information are the two sides of the same coin. On the one hand, digital technology has made it easier to trust information received visually due to easier access and visualization of information, while on the other hand, the lack of a "gatekeeper" for the production and distribution of information has made it less credible. Furthermore, in terms of information production, sources of information have diversified as a result of

digital media. This change also has a negative impact on trust in information in terms of the credibility of the sources of information. Possible measures to improve the current information trust environment from the user's point of view are that individuals exposed to information whose authenticity cannot be confirmed should try to avoid extending their influence over that information. In addition, users working with media platforms to flag or give feedback on disinformation with low credibility could also help to address the trust issues currently faced in the digital age.

This article analyses the causes of the trust problem and then proposes solutions to address the different motivations. However, the limitation of this article is that it fails to verify the validity of the solution measures and fails to consider the different realities of different regions in the digital age, such as policies, economic development and other factors that affect the effectiveness of the solution measures. This paper provides a single analysis of the causes of the problem combined with the user's perspective to provide ideas and different aspects of the solution to the problem of trust in the Internet environment. The user's perspective is one of the key ideas for solving the trust problem in the digital age, but the problem needs to be solved by making efforts from multiple perspectives.

## References

- Borges, L., Martins, B., & Calado, P. (2019). Combining Similarity Features and Deep Representation Learning for Stance Detection in the Context of Checking Fake News. *ACM journal of data and information quality*, 11(3), 1-26. <https://doi.org/10.1145/3287763>
- Liu, X., & Lu, J. (2020). Does the Internet Erode Trust in Media? A Comparative Study in 46 Countries. *International journal of communication*, 5822.
- Mandarano, L., Meenar, M., & Steins, C. (2010). Building Social Capital in the Digital Age of Civic Engagement. *Journal of planning literature*, 25(2), 123-135. <https://doi.org/10.1177/0885412210394102>
- Mangold, F., Bachl, M., & Prochazka, F. (2022). How News Audiences Allocate Trust in the Digital Age: A Figuration Perspective. *Journalism & mass communication quarterly*. <https://doi.org/10.1177/10776990221100515>
- Maras, M., & Alexandrou, A. (2019). Determining authenticity of video evidence in the age of artificial intelligence and in the wake of Deepfake videos. *The international journal of evidence & proof*, 23(3), 255-262. <https://doi.org/10.1177/1365712718807226>
- O'Neill, O. (2020). Trust and Accountability in a Digital Age. *Philosophy* (London), 95(1), 3-17. <https://doi.org/10.1017/S0031819119000457>
- Park, S., Fisher, C., Flew, T., & Dulleck, U. (2020). Global Mistrust in News: The Impact of Social Media on Trust. *International journal on media management* (Saint Gall, Switzerland), 22(2), 83-96. <https://doi.org/10.1080/14241277.2020.1799794>
- Sherwin, R. K., Feigenson, N., & Spiesel, C. (2006). Law in the digital age: how visual communication technologies are transforming the practice, theory, and teaching of law. *Boston University journal*

- of science & technology law*, 12(2), 227. <https://doi.org/10.2139/ssrn.804424>
- Westerlund, M. (2019). The Emergence of Deepfake Technology: A Review. *Technology innovation management review*, 9(11), 39-52. <https://doi.org/10.22215/timreview/1282>
- White, A. (2021). Review essay: fake news, and online misinformation and disinformation: Fake news: understanding media and misinformation in the digital age, edited by Melissa Zimdars and Kembrew McLeod, Cambridge, Mass. & London, The MIT Press, 2020, xl + 395 pp., US\$38 (paperback), ISBN 978-0-262-53836-7. *Information, communication & society*, vol. ahead-of-print, no. ahead-of-print, pp. 1-7.
- Zhao, J., Gao, H., Li, Y., & Liu, J. (2017). Which factors affect the duration of hot topics on social media platforms? *Quality & quantity*, 51(5), 2395-2407. <https://doi.org/10.1007/s11135-016-0395-1>