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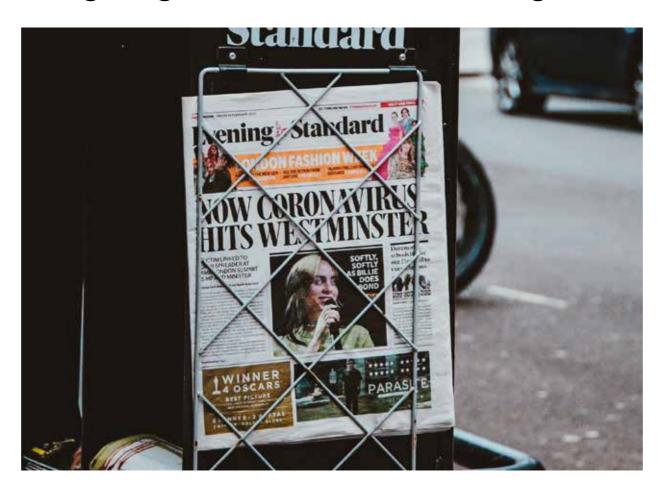
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Jeremy Cappello Lee

United States
Yonsei University Graduate School of International Studies

"Fighting Fake News in the Viral Age"

During the past several weeks, the news has been consumed by coverage of the novel coronavirus. But as the virus ripples from its epicenter in Wuhan, China, outwards – with the rest of the world bracing itself for the worst – it is equally critical to be wary of epidemic-related fake news.

While internet platforms have helped users remain informed of the constantly evolving situation, the magnified anxiety over the coronavirus could turn these very platforms into breeding grounds of misinformation. In an frequently quoted study, researchers at the Massachusetts Institute of Technology demonstrated that on Twitter, fake news is 70% more likely to be retweeted and travels an order of magnitude faster than verified information [1]. On the other hand, true stories take on average six times longer to spread than false ones.

It is no surprise, then, that alongside legitimate reports of nations sealing off borders and cities facing surgical mask shortages, false or unverified information has been liked, upvoted, and shared faster than the epidemic has spread. Even seemingly humorous examples, such as a home remedy that involved gargling hot garlic-infused water [2], have potentially deadly consequences.

Other cases of misinformation and fraud have involved malign actors taking advantage of collective anxiety and distrust. In Korea, a scheme allegedly offering access to data on confirmed or potential patients infected with the coronavirus in exchange for personal information is currently under police investigation [3]. Last month, an IBM X-Force research team discovered Japanese-language emails that purportedly offered health updates on the coronavirus [4]. The emails, however, also came attached with the Emotet Trojan malware.

These three cases illustrate the threat posed not only to public health outcomes, but also to personal livelihood and societal stability. For this reason, a coordinated effort among industry and government stakeholders is required to slow down the spread of misinformation and accompanying fraudulent activities.

First, social media companies must ensure that their platforms provide users with access to reliable information on the coronavirus. Several have already committed in doing so. For instance, Twitter updated its search bar so that users who input key-words associated with the virus are prompted to the accounts of verified local health care authorities in over 20 countries [5]. This kind of collaboration should be expanded and comprehensive measures such as prioritizing verified sources on recommendation lists or highlighting relevant news should be carried out.

Second, governments must inform its citizens of the dangers of fake information during a public health crisis and allocate resources for media consumption educa-tion campaigns. These include identifying reliable news sources, preventing email or personal data fraud, and providing clear channels of communication between health authorities and the public on media platforms.

Third, the press should prioritize information accessibility to the public. Today, much of the reputable news coverage on the coronavirus is paywalled, limiting access to those who cannot afford subscription fees. Temporarily lifting paywalls on stories directly affecting public health, such as updates on treatment or quarantine measures, could boost overall media literacy without cutting into subscription reve-nues.

It takes a strategic and coordinated effort to fight an epidemic, and countering misinformation is no different. Smarter media consumption is the closest thing there is to a cure.

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Luca Medeiros

Brazil

College of Information & Communication Engineering, SKKU

EU Debates facial recognition concerns

The European Union (EU) is considering temporarily banning the use of facial recognition technology in public spaces until specific laws are created to prevent the abuse of privacy. This proposal is described in a document obtained by Reuters [1], the details of which were released on January.

According to the agency, the objective of the ban, which would last three to five years, is to develop safe methods to assess the impact of using facial recognition and create possible measures to manage risks. The plan is based on the EU's General Data Regulation, which gives citizens the right not to be subjected to a decision based solely on automated processing.

The plan drawn up by the entity's executive body, due to be presented to the community next month, comes amid several debates about AI-based systems widely used by security agencies to identify suspects.
The document stated that exceptions to the ban could be made for security projects as well as research and development [2]. It also suggested imposing obligations on both developers and users of artificial intelligence and that EU countries should appoint authorities to monitor the new rules.

The American government recently published a study in which it suggests that facial recognition algorithms are not very accurate when it comes to identifying faces of Africans and Asians. The study also announced measures to limit the authorities' power over the use of AI.

Germany, France, and Spain are among the countries planning to implement surveillance enhanced by facial recognition systems with the installation of smart cameras in several public areas; ideas that can be postponed if the European Union prohibits the use of this type of tool. In the UK, there is also a similar plan. While Europeans and Americans discuss the risks of these systems to citizens' privacy, China has made facial registration, new phone registration, and even access the internet mandatory, in addition to having a camera surveillance system with facial identification technology installed on the streets.

This raise concerns on the future of such applications and the influence it will inflict on researchers. Nonetheless, regulations are needed to set boundaries and protect citizens from exploitations of breaches.

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Paloma Valentina Carrillo-Gallegos

Mexico

Department of Global and International Studies, Yonsei University

Digital Agriculture: The New 21st Century Trend?

It is no secret that agriculture projects of any kind are a large-scale endeavor. Even in the present day determining how much water and other necessary components for growth are added to a field is largely a trial-and-error procedure until a working routine is set [1]. Such experiments are bound to waste valuable farming resources until finding the best balance. This is where technology can step in: by looking for patterns in aggregate research analyses on weather, soil nourishment, and water usage, it is possible to find the ideal amount of resources that can be expended quicker, leading to less waste and more output [1].

The benefits of digital agriculture could be summarized into the word "efficiency." By utilizing smart scales and data measurements to find the perfect recipe for the best crops, more produce can be grown while saving scarce but necessary resources such as water for further production [1]. For example, one collaborative project from Fujitsu and Microsoft utilized sensors in lettuce fields to produce cabbages with less potassium in Japan; in doing so, it became a safer dietary component for individuals with kidney disease, who are often advised to monitor their levels of this mineral [1]. PepsiCo's similar projects with potatoes have helped cut down water usage by one-fourth by closely monitoring crop growth in relation to rain and sunshine patterns [1]. These advancements are just two of many examples that illustrate how technology can help take the guesswork out of these important projects.

This approach can encompass all parts of the farming process. For example, detectors can be utilized on the field to manage planting and watering intervals, while others can be flown above the field to determine what kind of steps farmers should take depending on that specific day's weather [2]. A project at Purdue University revealed that crop production statistics examine each piece of produce on a molecular level, allowing farmers to accurately water and harvest said crops while also helping create an ideal environment [3]. In addition, field gridding could become quicker, simpler, and more organized with systems which can both encircle and survey an entire agricultural area [2].

Digital agriculture is a productive, resource-conserving, and valuable field with a need to act now. The Food and Agriculture Organization, or FAO, of the United Nations reports that the world will need to more than double its crop production in order to feed the earth's people [1]. However, it faces the challenge of not being an easily expandable science because it is still in development, and is therefore quite expensive [1]. Even if the initial costs are high, it seems that investing in this science will not only bring greater returns to those who cultivate it, but could also serve as the answer to providing low-cost and healthy food to people on a global scale. An abundance of quality crops could also mean increased commerce and accessibility of healthy foods, so it is imperative to further study and encourage fruitful and creative agricultural design maps with a sense of urgency and hope for more eco-friendly practices.

Source: https://www.youtube.com/watch?v=0EUO1S0Mw6s

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