

## Düzeltilme Makalesi/Erratum Article

### Afet Yönetiminde Sosyal Medya, İnsansız Hava Araçları (Drone) ve Diğer Teknolojik Araçların Rolü

The Role of Social Media, Unmanned Aerial Vehicles (Drone) and other Technological Tools in Disaster Management

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## KAYNAKÇA

- Austin, L., Fisher Liu, B., & Jin, Y. (2012). How audiences seek out crisis information: Exploring the social-mediated crisis communication model. *Journal of Applied Communication Research*, 40(2), 188-207.
- Bahrepour, M., Meratnia, N., Poel, M., Taghikhaki, Z., & Havinga, P. J. (2010, November). Distributed event detection in wireless sensor networks for disaster management. In 2010 international conference on intelligent networking and collaborative systems (pp. 507-512). IEEE.
- Bird, D., Ling, M., & Haynes, K. (2012). Flooding Facebook-the use of social media during the Queensland and Victorian floods. *Australian Journal of Emergency Management*, The, 27(1), 27-33.

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- Bloomberg, (2023). Afetlerde hayat kurtaran mobil uygulamalar. <https://www.bloomberght.com/afetlerde-hayat-kurtaran-mobil-uygulamalar-2325522> Erişim Tarihi: 24.11.2023
- Blyenburgh, P. (2010) *UAS Yearbook, UAS—The Global Perspective*, Paris, France.
- Bruno, N. (2011). *Tweet first, verify later?* How real-time information is changing the coverage of worldwide crisis events.
- Bruns, A. (2018). *Are filter bubbles real?* John Wiley & Sons.
- Choy, S., Handmer, J., Whittaker, J., Shinohara, Y., Hatori, T., & Kohtake, N. (2016). Application of satellite navigation system for emergency warning and alerting. *Computers, Environment and Urban Systems*, 58, 12-18.
- Cooper, J. D. (1868). *San Francisco Daily Evening Bulletin*. November, 3, 1868.
- Cospas-Sarsat, (2021). International satellite system for search and rescue. International Cospas-Sarsat Programme. <https://www.cospas-sarsat.int/en/> Erişim Tarihi: 29.11.2023
- Çavaş, B., Çavaş, P. H., & Can, B. T. (2004). Eğitimde sanal gerçeklik. *TOJET: The Turkish Online Journal of Educational Technology*, 3(4), 110-16.
- Di Serio, Á., Ibáñez, M. B., & Kloos, C. D. (2013). Impact of an augmented reality system on students' motivation for a visual art course. *Computers & Education*, 68, 586-596.
- Drabek, T. E., & McEntire, D. A. (2003). Emergent phenomena and the sociology of disaster: Lessons, trends and opportunities from the research literature. *Disaster Prevention and Management: An International Journal*, 12(2), 97-112.
- Dukkanci, O., Koberstein, A., & Kara, B. Y. (2023). Drones for relief logistics under uncertainty after an earthquake. *European Journal of Operational Research*, 310 (1), 117-132.
- En Son Haber, (2023). Depremde hayat kurtaran 8 mobil uygulama. <https://www.ensonhaber.com/bilgi/depremde-kurtarici-8-mobil-uygulama-duduk-ambulans-mesaj-konum> Erişim Tarihi: 24.11.2023
- Encyclopedia, (2023). "Radio Broadcasting, History of." Encyclopedia of Communication and Information. <https://www.encyclopedia.com/media/encyclopedias-almanacs-transcripts-and-maps/radio-broadcasting-history> Erişim Tarihi: 11.12.2023
- Erkal, T., & Değerliyurt, M. (2009). Türkiye’de afet yönetimi. *Doğu Coğrafya Dergisi*, 14(22), 147-164.
- Estrada, M. Ruiz., & Ndoma, I. (2017). How Unmanned Aerial Vehicles—UAV’s—(or Drones) Can Help in Case of Natural Disasters Response and Humanitarian Relief Aid?. *Procedia Computer Science C*, 149, 375-383.

- Euronews, (2017). TDK, 'drone' için 'uçangöz' kelimesini uygun buldu. <https://tr.euronews.com/2017/10/04/tdk-drone-icin-ucangoz-kelimesini-uygun-buldu> Erişim Tarihi: 18.11.2023
- FCC (Federal Communications Commission), (2023). Wireless Network Resiliency During Disasters. <https://www.fcc.gov/wireless-network-resiliency-during-disasters>
- Fraçkiewicz, M. (2023a). The Advantages of Starlink for Disaster Warning and Forecasting. <https://ts2.space/en/the-advantages-of-starlink-for-disaster-warning-and-forecasting/#gsc.tab=0> Erişim Tarihi: 27.11.2023
- Fraçkiewicz, M. (2023b). The Use of Drones in Earthquake Damage Assessment <https://ts2.space/en/the-use-of-drones-in-earthquake-damage-assessment/#gsc.tab=0> Erişim Tarihi: 13.11.2023
- Fraustino, J. D., Liu, B. F., & Jin, Y. (2012). *Social media use during disasters: A review of the knowledge base and gaps*. National Consortium for the Study of Terrorism and Responses to Terrorism (START).
- Garrett, R. K. (2017). The “echo chamber” distraction: Disinformation campaigns are the problem, not audience fragmentation. *Journal of Applied Research in Memory and Cognition*, 6(4), 370–376. <https://doi.org/10.1016/j.jarmac.2017.09.011> Erişim Tarihi: 22.11.2023
- Gözlükaya, H., & Türk, A. (2016). Sakınım planlaması sürecinde Burdur kentsel sit alanı ve yakın çevresinin incelenmesi ve değerlendirilmesi. *Journal of Architectural Sciences and Applications*, 1(2), 31-47.
- Hobbs, R. (2011). The state of media literacy: A response to Potter. *Journal of Broadcasting & Electronic Media*, 55(3), 419-430.
- Hongur, A. (2019). Mobil 'Deprem Bilgi Sistemi' hayata geçirildi. <https://www.aa.com.tr/tr/turkiye/mobil-deprem-bilgi-sistemi-hayata-gecirildi/1550550> Erişim Tarihi: 28.11.2023
- Houston, J. B., Hawthorne, J., Perreault, M. F., Park, E. H., Goldstein Hode, M., Halliwell, M. R., ... & Griffith, S. A. (2015). Social media and disasters: a functional framework for social media use in disaster planning, response, and research. *Disasters*, 39(1), 1-22.
- Hugelius, K., Adams, M., & Romo-Murphy, E. (2019). The power of radio to promote health and resilience in natural disasters: a review. *International Journal of Environmental Research and Public Health*, 16(14), 2526.
- Hughes, A. L., & Palen, L. (2009). Twitter adoption and use in mass convergence and emergency events. *International journal of emergency management*, 6(3-4), 248-260.
- Hürriyet, (2022). AKUT Güvendeyim uygulaması nedir, nasıl kullanılır? İşte Güvendeyim uygulaması hakkında bilgiler. <https://www.hurriyet.com.tr/bilgi/galeri-akut-guvendeyim-uygulamasi-nedir-nasil-kullanilir-iste-guvendeyim-uygulamasi-hakkinda-bilgiler-42175496/1> Erişim Tarihi: 24.11.2023



- IP, Pauleth, (2022). How Drones Aid in Natural Disaster Response. <https://www.adorama.com/alc/drones-natural-disaster-response/> Erişim Tarihi: 25.11.2023
- ITU, (2023). Broadcast radio: The most reliable medium for disaster updates. <https://www.itu.int/hub/2023/02/broadcast-radio-the-most-reliable-medium-for-disaster-updates/> Erişim Tarihi: 11.11.2023
- İnan, K. (2019). *Bilgi Toplumuna Geçerken Teknolojik İş(lev)sizlik* (2. Baskı). İstanbul: İletişim Yayınları.
- Jacobson, D. (2017). Eye in the sky: Saving lives after an earthquake with drones. <https://temblor.net/earthquake-insights/eye-in-the-sky-saving-lives-and-earthquake-recon-using-drones-2273/> Erişim Tarihi: 16.11.2023
- Jet Propulsion Laboratory, (2013). FINDER: Radar for Locating Disaster Victims. <https://www.jpl.nasa.gov/videos/finder-radar-for-locating-disaster-victims> Erişim Tarihi: 23.11.2023
- Jin, Y., Liu, B. F., & Austin, L. L. (2014). Examining the role of social media in effective crisis management: The effects of crisis origin, information form, and source on publics' crisis responses. *Communication Research*, 41(1), 74-94.
- Johnson, H. (2020). The importance of communications when disaster strikes. <https://www.ericsson.com/en/blog/2020/5/importance-of-communications-when-disaster-strikes> Erişim Tarihi: 10.12.2023
- Kadioğlu, M. (2017). *Afet yönetimi: Beklenmeyeni Beklemek, En Kötüsünü Yönetmek*. İstanbul: Marmara Belediyeler Birliği Kültür Yayınları.
- Kayış, C. (2017). Sosyal medyada kriz yönetimi ve karşılaştırmalı örnek olay incelemesi. *İletişim Çalışmaları Dergisi*, 3(1), 131-160.
- Kelman I, Glantz MH. (2014). *Early Warning Systems Defined. Reducing Disaster: Early Warning Systems For Climate Change*. 2014 Jan 27:89–108. doi: 10.1007/978-94-017-8598-3\_5. PMID: PMC7120419.
- Kerawalla, L., Luckin, R., Seljeflot, S., & Woolard, A. (2006). "Making it real": exploring the potential of augmented reality for teaching primary school science. *Virtual Reality*, 10, 163-174.
- Lewandowsky, S., Ecker, U. K., & Cook, J. (2017). Beyond misinformation: Understanding and coping with the "post-truth" era. *Journal of Applied Research in Memory and Cognition*, 6(4), 353-369.
- Lewis, T. (1992). "A Godlike Presence": The Impact of Radio on the 1920s and 1930s. *OAH Magazine of History*, 6(4), 26-33.
- Lindsay, B. R. (2011). Social media and disasters: Current uses, future options, and policy considerations. <https://digital.library.unt.edu/ark:/67531/metadc93902/citation/#top> Erişim Tarihi: 24.11.2023

- Liu, B. F., Austin, L., & Jin, Y. (2011). How publics respond to crisis communication strategies: The interplay of information form and source. *Public relations review*, 37(4), 345-353
- Matracia, M., Saeed, N., Kishk, M. A., & Alouini, M. S. (2022). Post-disaster communications: Enabling technologies, architectures, and open challenges. *IEEE Open Journal of the Communications Society*, 3, 1177-1205.
- Mavrodieva, A. V., & Shaw, R. (2021). Social media in disaster management. *Media and Disaster Risk Reduction: Advances, Challenges and Potentials*, 55-73.
- McHale, J. (2001). Wireless devices link soldiers on the digital battlefield. <https://www.militaryaerospace.com/communications/article/16710748/wireless-devices-link-soldiers-on-the-digital-battlefield> Erişim Tarihi: 15.11.2023
- Meer, V. T. G., & Verhoeven, P. (2013). Public framing organizational crisis situations: Social media versus news media. *Public Relations Review*, 39(3), 229-231.
- Memiş, L., & Babaoğlu, C. (2020). Acil Durum ve Afet Yönetiminde Süreç Yaklaşımı ve Teknoloji. *Omer Halisdemir Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 13(4), 776-791.
- Mihailidis, P., & Viotty, S. (2017). Spreadable spectacle in digital culture: Civic expression, fake news, and the role of media literacies in “post-fact” society. *American Behavioral Scientist*, 61(4), 441-454.
- Nakamura, Y. (1988). On the urgent earthquake detection and alarm system (UrEDAS). In Proc. of the 9th World Conference on Earthquake Engineering (Vol. 7, pp. 673-678).
- Nakamura, Y., Saita, J., & Sato, T. (2011). On an earthquake early warning system (EEW) and its applications. *Soil Dynamics and Earthquake Engineering*, 31(2), 127-136.
- Namita, N. (2020). Role of Community Radio in Disaster Management and Climate-change Communication. [http://svc.ac.in/SVC\\_MAIN/Departments/History/Miscellaneous/Publications/Role%20of%20Community%20Radio%20in%20Disaster%20Management%20by%20Nuti%20Namita.pdf](http://svc.ac.in/SVC_MAIN/Departments/History/Miscellaneous/Publications/Role%20of%20Community%20Radio%20in%20Disaster%20Management%20by%20Nuti%20Namita.pdf) Erişim Tarihi: 15.11.2023
- NASA, (2023). FINDER Finds Its Way into Rescuers’ Toolkits. <https://spinoff.nasa.gov/FINDER-Finds-Its-Way-into-Rescuers-Toolkits> Erişim Tarihi: 22.11.2023
- Nazari, M. R. (2011). The Role of Broadcasting in Management of Natural Disasters\*\* Mohammad Reza Nazari,\*\* Md Salleh Bin Hj Hassan, “Saadat Parhizkar,” Mohd Nizam Osman" Department of Communication, Faculty of Modern Languages and Communication. *World Applied Sciences Journal*, 14(2), 334-340.
- Ortaç, G., & Yılmaz-Kaplan, D. (2021). Afet Yönetimi ve Kablosuz İletişim Sürekliliğine Genel Bakış. *Türk Doğa ve Fen Dergisi*, 10(1), 316-326.
- Önsüz, A. (2016). Osmangazi Tıp Dergisi, Afet Lojistiği, 37 (3), 1-6.



- Plotnick, L., Kushma, White, C., J., Hiltz, S. R., & Turoff, M. (2009). An online social network for emergency management. *International Journal of Emergency Management*, 6(3-4), 369-382.
- Qualman, E. (2012). *Socialnomics: How Social Media tTransforms the Way We Live and do Business*. John Wiley & Sons.
- Restas, A. (2015). Drone applications for supporting disaster management. *World Journal of Engineering and Technology*, 3(03), 316.
- Salahudin, S., Nurmandi, A., Sulistyarningsih, T., Lutfi, M., & Sihidi, I. T. (2020). Analysis of government official Twitters during the Covid-19 crisis in Indonesia. *Talent Development & Excellence*, 12(1), 3899-3915.
- Seba, A., Nouali-Taboudjemat, N., Badache, N., & Seba, H. (2019). A review on security challenges of wireless communications in disaster emergency response and crisis management situations. *Journal of Network and Computer Applications*, 126, 150-161.
- Segarra, F., (2018). How Drones Improve Disaster Response And Relief From Hurricane Florence. <https://connexicore.com/how-drones-improve-disaster-response-and-relief-from-hurricane-florence/> Eriřim Tarihi: 15.12.2023
- Smith-Rose & R. Leslie (2023). Guglielmo Marconi. Encyclopedia Britannica. <https://www.britannica.com/biography/Guglielmo-Marconi> Eriřim Tarihi: 27.11.2023
- Smithsonian Museum (2013) "WWI 100 years later Unnamed Drones have been Around Since World War I. <http://www.smithsonianmag.com/arts-culture/unmanned-drones-have-been-around-since-world-war-i-160> Eriřim Tarihi: 19.11.2023
- Sputnik Türkiye, (2023). Afet durumlarında telefonumuzda olması gereken 5 uygulama. <https://sputniknews.com.tr/20230216/afet-durumlarinda-telefonumuzda-olmasi-gereken-5-uygulama-1067107408.html> Eriřim Tarihi: 24.11.2023
- Starbird, K. (2019). Disinformation's spread: bots, trolls and all of us. *Nature*, 571(7766), 449. <https://link.gale.com/apps/doc/A594456965/HRCA?u=anon~4f868d11&sid=googleScholar&xid=1c7b5f00>. Eriřim Tarihi: 20.11.2023
- Stogaitis, M. (2020). Earthquake detection and early alerts, now on your Android phone. <https://blog.google/products/android/earthquake-detection-and-alerts/> Eriřim Tarihi: 15.12.2023
- The Universe, (2023). How NASA Helps Find People Trapped Under Rubble. <https://universemagazine.com/en/how-nasa-helps-find-people-trapped-under-rubble/> Eriřim Tarihi: 13.11.2023
- Thompson, R. R., Garfin, D. R., Holman, E. A., & Silver, R. C. (2017). Distress, worry, and functioning following a global health crisis: A national study of Americans' responses to Ebola. *Clinical Psychological Science*, 5(3), 513-521.

- Tully, M., Vraga, E. K., & Bode, L. (2020). Designing and testing news literacy messages for social media. *Mass Communication and Society*, 23(1), 22-46.
- UNISDR (2012) *Terminology*. UNISDR (United Nations International Strategy for Disaster Risk Reduction), Geneva.
- United States Geological Survey (USGS), (2022). You Can be Powered by ShakeAlert®- Earthquake Early Warning for All! <https://www.usgs.gov/media/videos/pubtalk-092022-you-can-be-powered-shakealtr-earthquake-early-warning-all> Erişim Tarihi: 18.11.2023
- Ünlü, F. (2018). Orta yaş üstü bireylerde sosyal medya bağımlılığı ve sosyal izolasyon. *PESA Uluslararası Sosyal Araştırmalar Dergisi*, 4(1), 161-172.
- Velev, D., Zlateva, P., Steshina, L., & Petukhov, I. (2019). Challenges of using drones and virtual/augmented reality for disaster risk management. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, 42, 437-440.
- Wang, X. (2016). *Social media in industrial China*. London: UCL Press.
- Wardle, C., & Derakhshan, H. (2017). *Information disorder: Toward an interdisciplinary framework for research and policymaking* (Vol. 27, pp. 1-107). Strasbourg: Council of Europe.
- Waugh Jr, W. L., & Streib, G. (2006). Collaboration and leadership for effective emergency management. *Public Administration Review*, 66, 131-140.
- Wills, E. M. (2007). *Theoretical Basis for Nursing*. Lippincott Williams & Wilkins.
- Wineburg, S., & McGrew, S. (2019). Lateral Reading and the Nature of Expertise: Reading Less and Learning More When Evaluating Digital Information. *Teachers College Record*, 121(11), 1-40.
- Woodford, C. (2023). Antennas and transmitters. <https://www.explainthatstuff.com/antennas.html> Erişim Tarihi: 21.11.2023
- Zincir, Oya (2013). Kriz yönetimi ve afetlerde sosyal medya kullanımı. *İstanbul Üniversitesi Siyasal Bilgiler Fakültesi Dergisi*, 65-82.
- Zubiaga, A., Aker, A., Bontcheva, K., Liakata, M., & Procter, R. (2018). Detection and resolution of rumours in social media: A survey. *ACM Computing Surveys (CSUR)*, 51(2), 1-36.