after*

FUTURI **DIGITALI**

Regione Emilia-Romagna

AgendaDigitale ER

DATAVALLEY

lepida

UNIONE della ROMAGNA FAENTINA

Come si può migliorare la gestione delle emergenze grazie al digitale?

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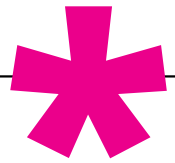
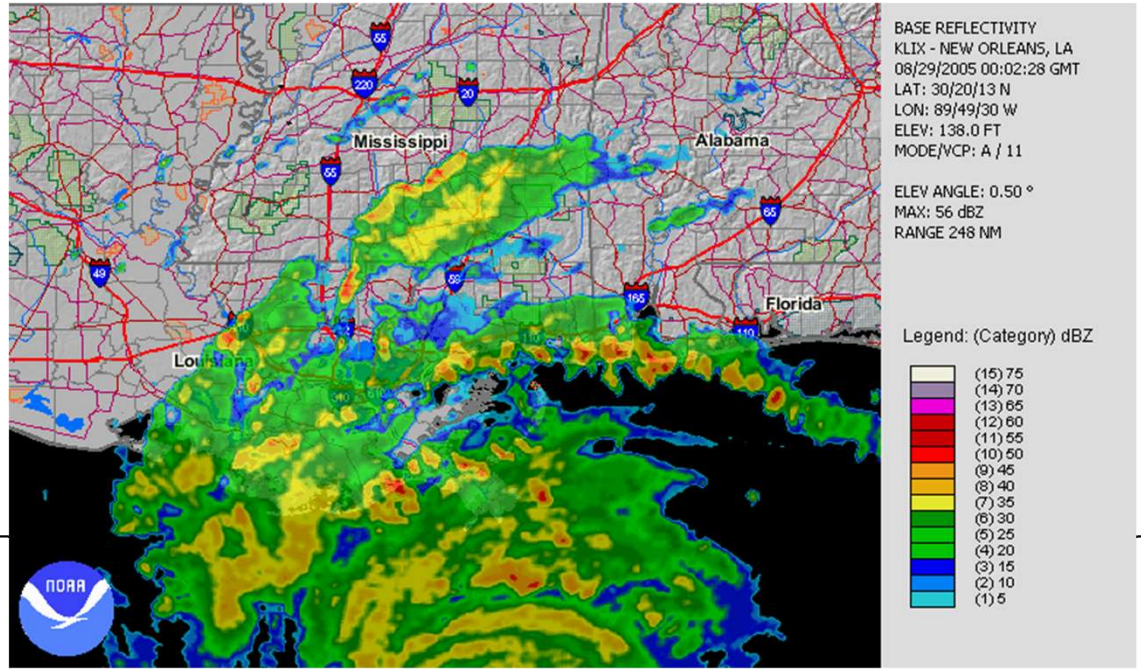


Uragano Katrina: Agosto 2005

- Almeno 1836 persone hanno perso la vita
- 81,2 miliardi di dollari di danni stimati

- No Smart Phone
- No Social media

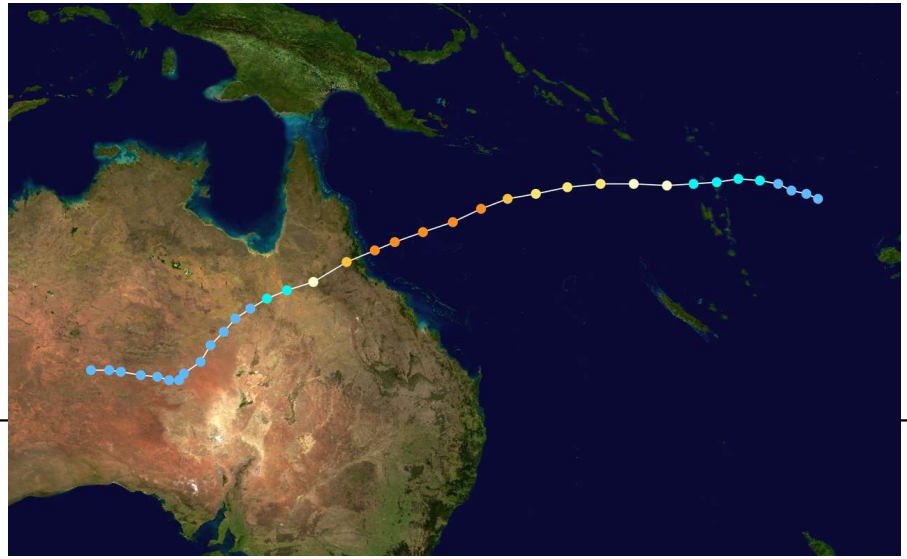
Di Jeff Schmaltz, MODIS Rapid Response Team, NASA/GSFC - http://visibleearth.nasa.gov/view_rec.php?id=7938, Pubblico dominio, https://commons.wikimedia.org/w/index.php?curid=307289



Radar data from NWS New Orleans and processed by the National Climatic Data Center. - Animation orginally located on the NCDC August 2005 (direct link)., Pubblico dominio, https://commons.wikimedia.org/w/index.php?curid=1112259

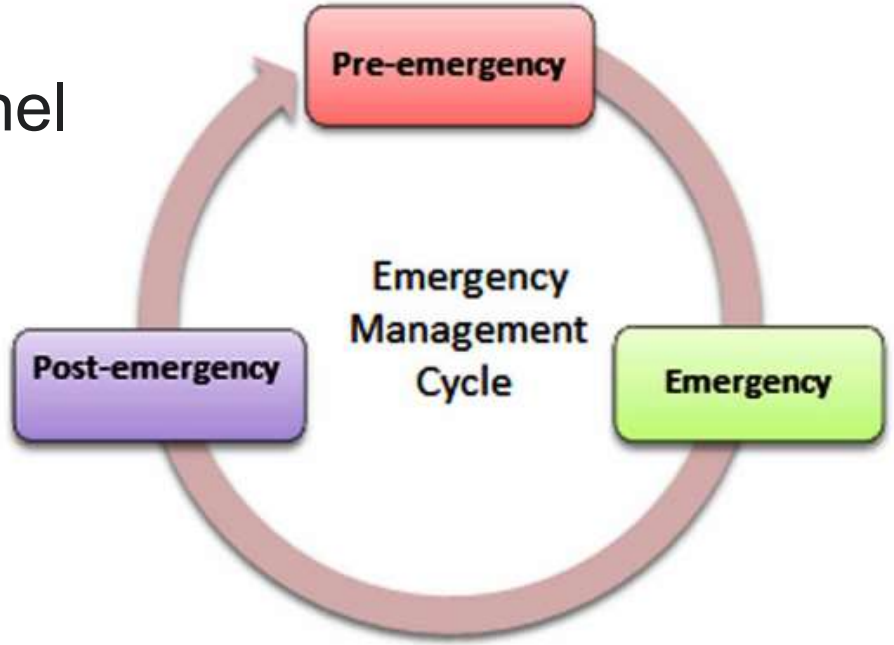
Ciclone Tropicale Yasi: gennaio 2011

- Il social media team del servizio di Polizia del Queensland (Australia) diventa la fonte ufficiale di informazioni per la popolazione
- Pubblicazione di informazioni ufficiali tramite Facebook e Twitter
- Limitazione e correzione di fake news
- Dirette Live su Twitter
- Collaborazioni con altri enti e agenzie
- Il servizio di Polizia del Queensland passa da 17.000 a 100.000 like in 24 ore



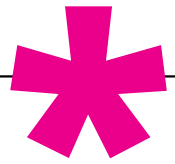
Quali fasi?

- **Pre**: prevenzione e monitoraggio
- **Durante**: prontezza nella risposta e nel coordinamento delle azioni (localizzazione, ricerche e salvataggi, evacuazioni, distribuzioni di aiuti immediati)
- **Post**: ricostruzione, compensazione, distribuzione di supporti



Elementi necessari

- **Infrastruttura, telecomunicazioni** (smart city, smart home)
- **Social media**
- **Applicazioni e siti Web dedicati**
- **Dotazioni tecnologiche** (smart phones, wearable device, droni)

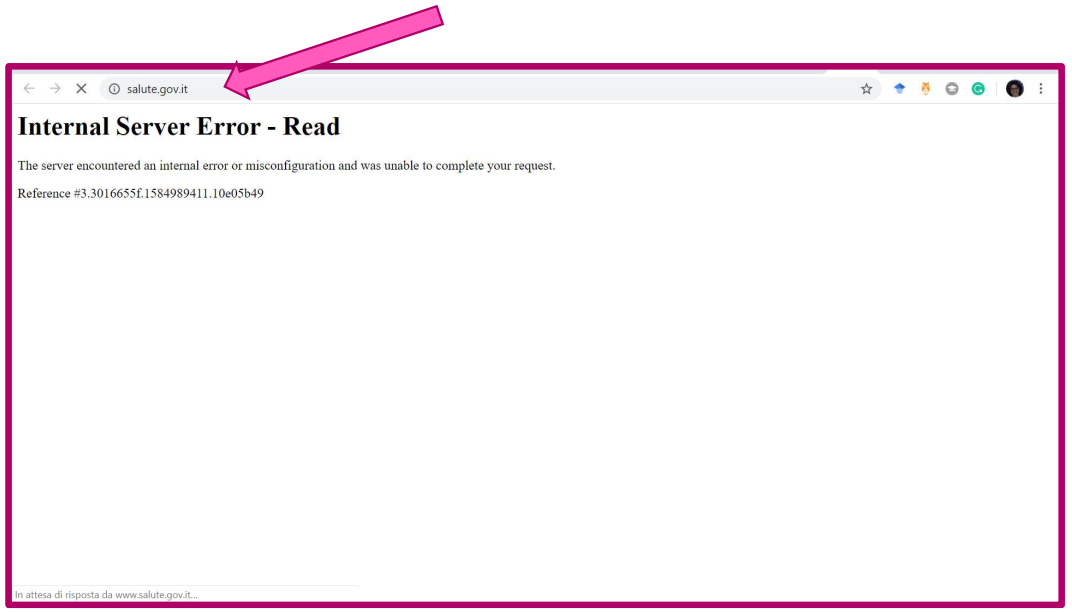


Elementi necessari: criticità durante le emergenze

- **Infrastruttura, telecomunicazioni** (smart city, smart home): frane, blackout

Elementi necessari: criticità durante le emergenze

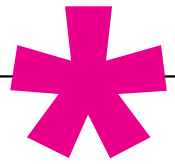
- **Social media**: troppe fonti, affidabilità delle fonti, fake news
- **Applicazioni e siti dedicati**: troppi accessi, coordinamento
- **Dotazioni tecnologiche** (smart phones, wearable device, droni): disponibilità, interazione con i device (persone anziane), blackout



Data: lunedì 23 Marzo 2020, ore 19:55

Eredità del CoVid

- **Infrastruttura, telecomunicazioni**: potenziamento delle infrastrutture
- **Dotazioni tecnologiche** (smart phones, wearable device, droni): in generale potenziate le dotazioni tecnologiche in enti, aziende, famiglie
- **Competenze e conoscenze informatiche di base**: in generale potenziate in modo orizzontale su tutta la popolazione (persone anziane)
- **In Emilia-Romagna**: risposta rapida da parte delle istituzioni e della popolazione (a sua volta: eredità terremoto 2012?)



Nuovi trend e direzioni future

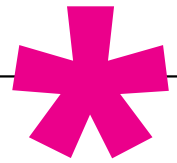
- **Droni e UAV**
- **Digital Twin**
- **Intelligenza Artificiale, machine learning**
- **CyberSecurity**

Fonti

- Saving lives and managing disasters with technology, https://www.pwc.com.au/digitalpulse/saving-lives-managing-disasters-with-tech.html
- https://www.ansa.it/sito/notizie/cronaca/2023/05/22/lemilia-romagna-torna-a-vivere-ma-si-spala-ancora_aa29b67f-77cd-4ffd-9ec6-20e940a0cc23.html
- https://www.fanpage.it/attualita/maltempo-cesena-case-allegate-e-blackout-ho-visto-un-uomo-nuotare-da-una-casa-allaltra/
- Connect, innovate, accelerate: Digital solutions for disaster risk reduction & crisis response, https://www.preventionweb.net/news/connect-innovate-accelerate-digital-solutions-disaster-risk-reduction-crisis-response
- Tech-Driven Disaster Management: Changing the Game, https://www.drishtiias.com/blog/tech-driven-disaster-management-changing-the-game

Fonti

- The Critical Role of Inclusive Technology For Communication in Crisis and Disaster Management, https://strategy-project.eu/the-critical-role-of-inclusive-technology-for-communication-in-crisis-and-disaster-management/
- The role of digitalisation in emergency response and post-war recovery, https://www.undrr.org/event/role-digitalisation-emergency-response-and-post-war-recovery
- Digital applications: use in natural disaster management, https://www.consorsegurosdigital.com/en/numero-18/front-page/digital-applications-use-in-natural-disaster-management
- Integration of Digital Technologies in Disaster Preparedness, https://www.unep.org/events/workshop/integration-digital-technologies-disaster-preparedness
- How Technology is Transforming the Emergency Management Cycle in 2021, https://publicsectornetwork.com/insight/emergency-management-technology-in-2021



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- Kundu, Tanmoy, Jiuh-Biing Sheu, and Hsin-Tsz Kuo. "Emergency logistics management—Review and propositions for future research." Transportation research part E: logistics and transportation review 164 (2022): 102789.

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- Adegoke, Damilola. "A Systematic Review of Big Data and Digital Technologies Security Leadership Outcomes Effectiveness during Natural Disasters." Sustainable Futures (2023): 100113.
- Köksal, Muammer Osman, and Baki Akgül. "The role of digital health technologies in disaster response." The Lancet 401, no. 10388 (2023): 1566-1567.
- Wen, Chao, Wei Liu, Zhihao He, and Chunyan Liu. "Research on emergency management of global public health emergencies driven by digital technology: A bibliometric analysis." Frontiers in Public Health 10 (2023): 1100401.
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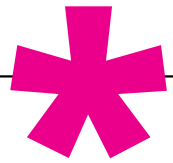

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