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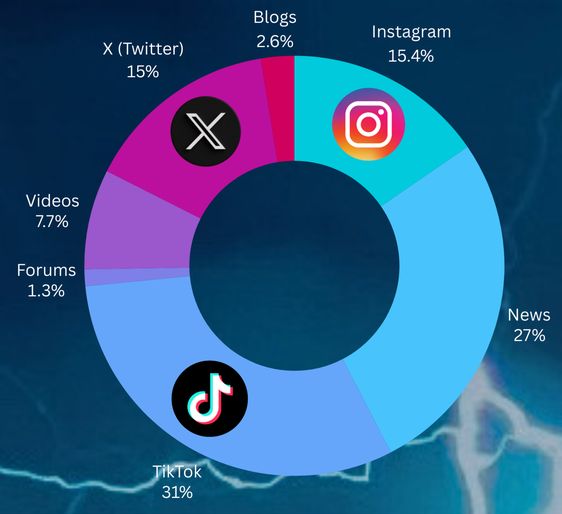
Improvements in Meteorological Communication: How to Communicate Scientific Information During Severe Weather

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Key Messages and Goals:

- Despite preparedness efforts, public confusion during severe weather remains high. Technology and communication gaps between governmental and broadcast meteorologists lead to inefficient response.
- The goal is to identify solutions to bridge communication gap and use communication theory to understand and speak to the audience.



Improving Meteorological Communication Through Technology:

- Collaboration between government and broadcast meteorologists for consistent messaging
- Communication Specialist implementation
- Briefings with media
- Leverage mobile apps and social media to promote broadcast meteorology during severe weather events, but add a personal touch to it

Historical Context of Broadcast Meteorology:

- Broadcast meteorology has evolved from the early 20th century to now
- Clarence Root's wireless telegraphy broadcast in 1915 was a breakthrough
- Shift from mail forecasts to live broadcasts helped streamline severe weather alerts
- Today's challenge: Competition with mobile weather apps

Data Pool:	Ages:	Gender:
300 Participants	17-72 Years Old	62.4% Male 37.6% Female

Elaboration Likelihood Theory:

- Describes how individuals process information and how their attitudes may alter dependent on the information presented
- Persuade viewers to act during severe weather through clear and concise messaging
- Encourage earlier action and better compliance with safety protocols

Future of Broadcast Meteorology:

Prediction:

The further advances in technology and integration of human expertise with AI will have the ability to improve the accuracy of severe weather forecasts and essentially take over as broadcasting continues to fizzle out. While the older generation is still present, news tends to still hold on and thrive, especially during severe weather.

Challenges:

- Public skepticism about broadcast meteorologists being "not real scientists"
- Overuse of scientific jargon confuses viewers, especially during severe weather events
- Younger generations favor mobile apps over traditional broadcasts for weather information, many do not watch television
- Finding trusted sources on the internet or social media is becoming difficult

Cognitive Dissonance Theory:

- This describes when an individual's beliefs and behaviors are contradictory to one another
  - When it comes to weather:
    - Viewers may panic or freeze during severe weather alerts, resulting in slower response times
    - These psychological barriers impact how well they process urgent weather information



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