Building habit with local weather updates

How we built, what we learned from automating local weather updates

Presented by

Jessica Davis
Senior Director, News Automation & AI Product
Gannett/USA TODAY Network

GANNETT



Jessica Davis
Sr. Director,
News Automation & AI
Product
@jessicaedavis

At a time of resource challenges, automation and AI can unlock the **time savings**, **effectiveness** and **consistency** we need to serve our communities at a high level.

We envision a future where hybrid teams of journalists and AI work collaboratively.



AI generated image created using DALL-E.

Climate impacts can be felt today, and newsrooms can help put those events in context using AI + automation



America's deadliest wildfire in the drought ravaged West: California's Camp Fire in 2018



Supercell tornadoes out of season: Mayfield, Kentucky EF-4 tornado in December 2021



Increasing Hurricane intensification: Cat. 5 Hurricane Ian in Southwest Florida in 2022

How we utilize Natural Language Generation templates at scale

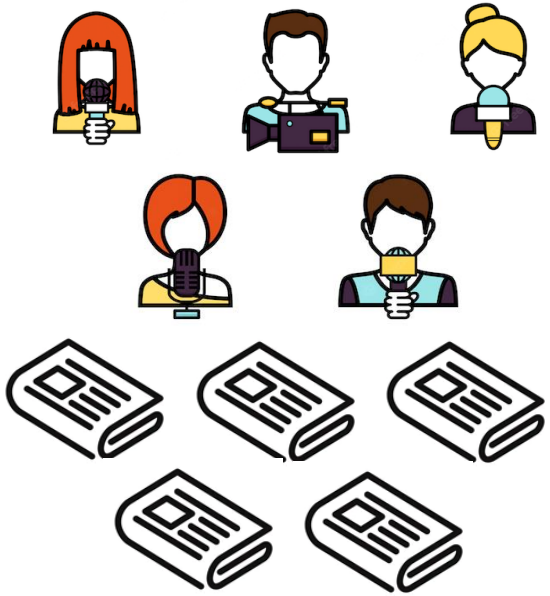
Old single-market manual model

One reporter might work **2 hours** to update a recurring monthly report for one state market.



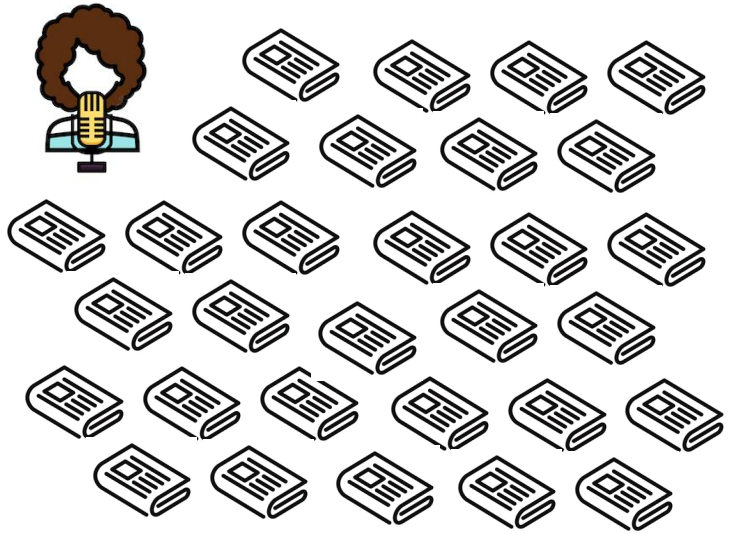
Manual scaling multi markets x50

50 reporters could work **100 hours** to update 50 state versions of that story.

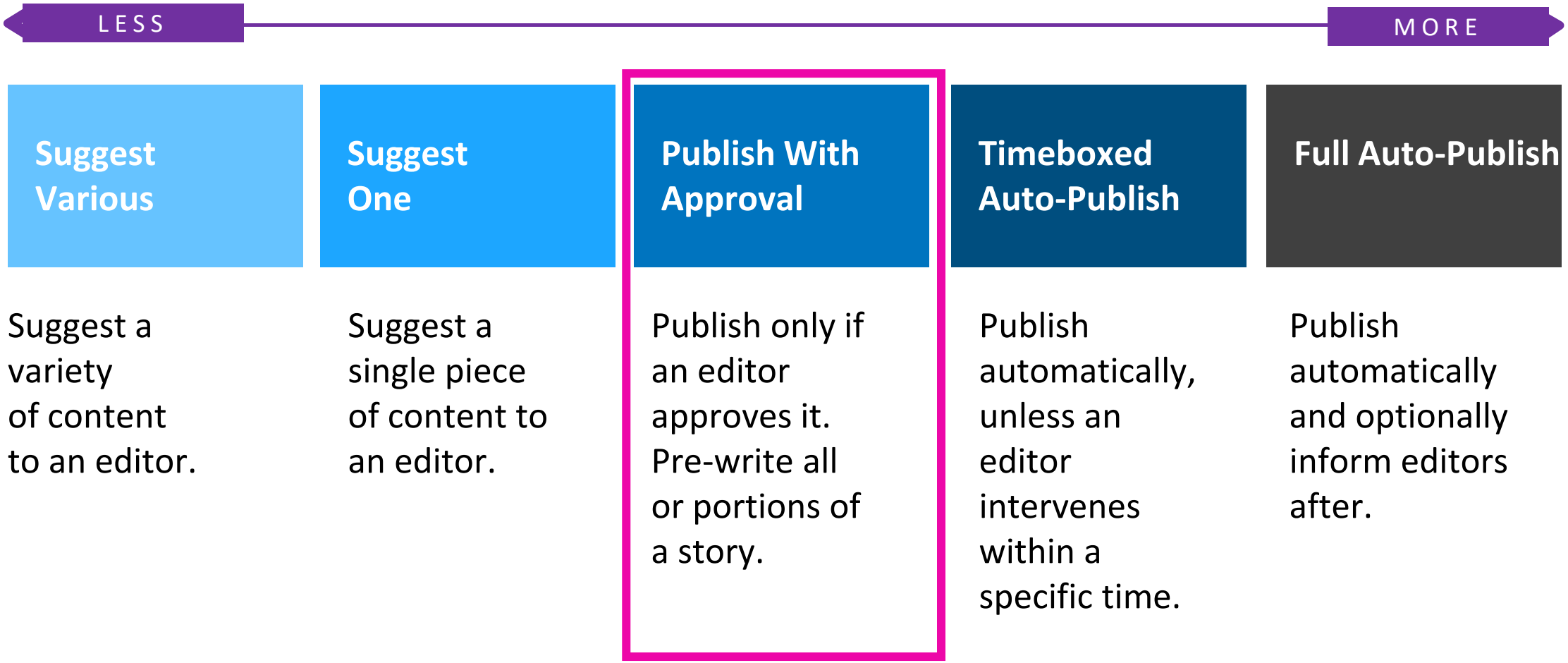


Apply AI tools & network distro

One reporter could work **less than two hours** to update a recurring story template for 100s of markets.



Degrees of news automation: Human touch is important to helping newsrooms embrace new technologies



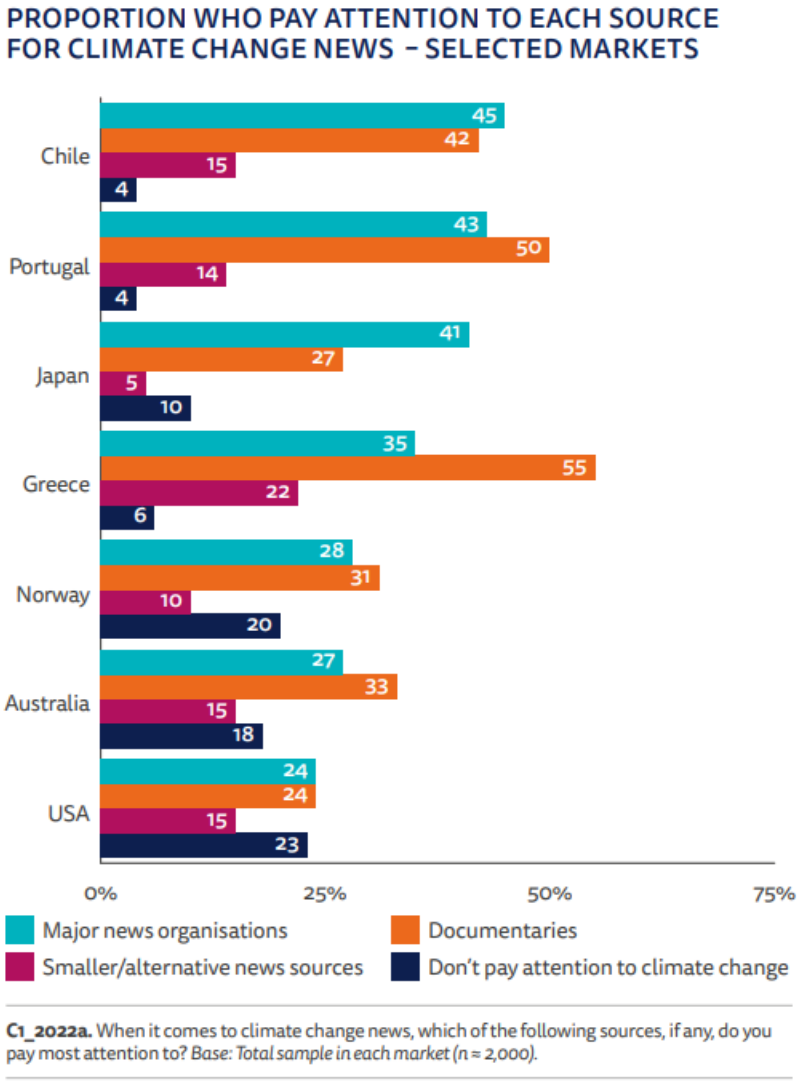
Adapted from: "A Model for Types and Levels of Human Interaction with Automation," IEEE Transactions on Systems, Man and Cybernetics, no. 3 (2001)

We don’t use AI to replace reporters.
The AI tools can help us fill gaps and free up journalists to pursue things that can’t be automated.



What we're solving for: Helping communities understand their climate starts with relevant coverage with local data

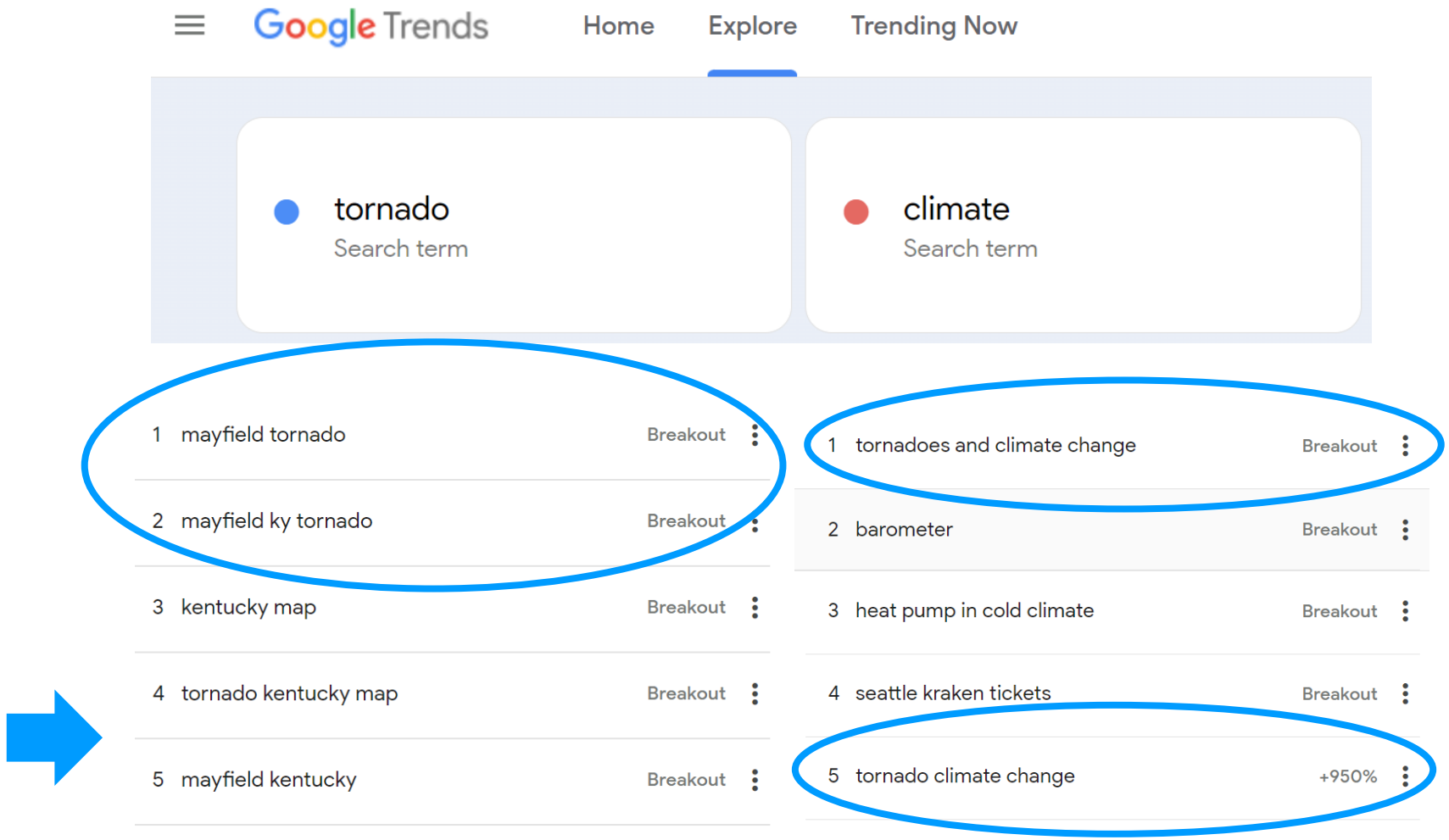
- **Climate impacts are happening now.** To build trust with audience, it's important to be clear when extreme weather is attributable to climate change. And equally as important to state when it is not.
- **Audiences are more interested in climate change news where the negative effects are directly felt** (fires, floods, droughts).*
- Climate is highly polarized and audiences want "just the facts."*
- **Local weather data allows newsrooms to make climate coverage more relevant and in context.** (*Ex: July was the hottest month on record in LOCATION.)*



*Source: Reuters Institute Digital News Report 2022

Why weather for Gannett?

- **Audience**: Weather is popular with new readers and subscribers alike.
- **Data**: Weather is a data rich area, helpful for automation products.
- **Fills gaps**: Automation using weather data helps fill in gaps that no reporter can do on their own (not staffed 24 hours).
- **Builds habit**: When extreme weather happens, people want to know what is happening and why. This is an opportunity to answer reader questions and put climate into context.



Source: Google Trends data from December 2021.

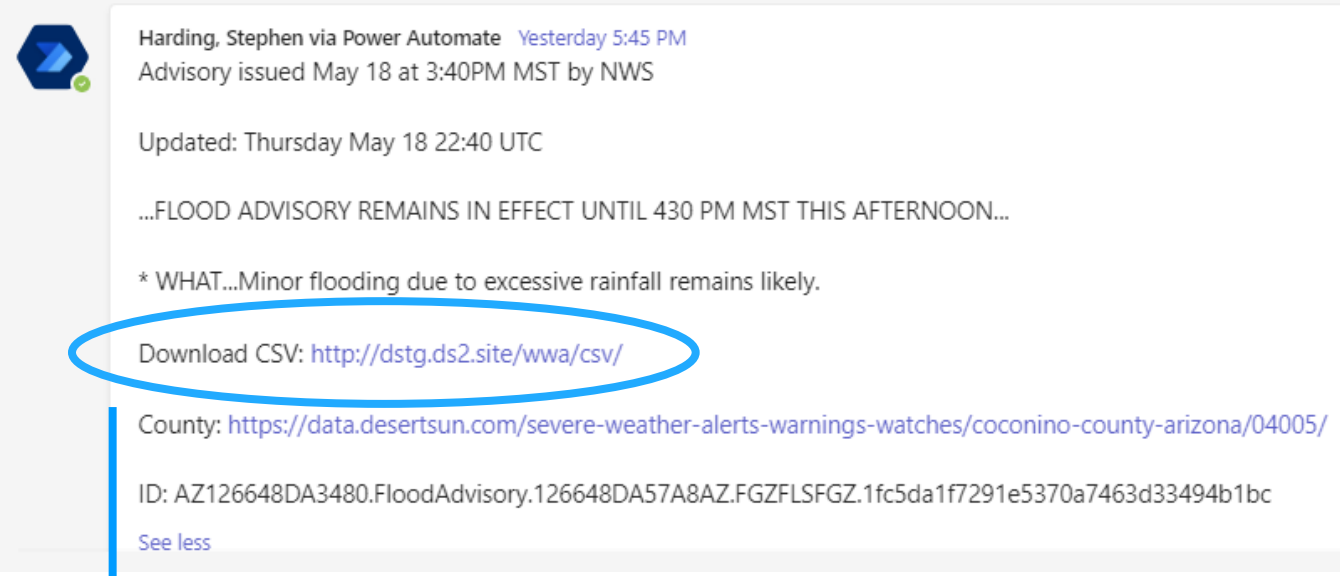
Weather automation experiment with the Arizona Republic

- **What we did**: Templated severe weather alerts for Phoenix, Arizona with the Arizona Republic staff this spring.
- **What we learned**: What it will take to get to full automation for all 200+ newsrooms to deliver accurate, up-to-the minute severe weather reports.
- **Where we go next**: Insert climate context into templates
- **Longer term**: Exploring how to use generative AI to provide context into more weather products.



Newsroom workflow: Building trust with reporters with manual publish to start

Weather alert sent to Microsoft Teams to notify newsroom



Reporter downloads automated CSV, uploads to our internal content automation tool to generate a draft story in CMS.

Reporter reviews draft story in CMS and publishes, validates the template or logs the need for future changes.

Weather alert story published by a reporter



Building habit: Mapping out the user journey

- Each alert story invites the user to continue their journey with links to a landing page to that includes:
  - Even more links to in-depth AZ weather coverage written by staff
  - Automated maps and visualizations showing weather trends and conditions



Building a foundation for more AI experimentation

- **Newsroom workflows using automation**: Modeling the future of news production and stepping our organization forward with journalists using automation tools.
- **Automated templates**: Secure way to build human in the loop workflows to build a library of accurate weather stories at scale.
- **Key partners and data sources**:
  - Oxford Climate Journalism Network (community support)
  - NOAA, NWS, Climate Central, World Weather Attribution (data)

Key learnings

- Climate impacts are happening today. Where extreme weather hits, audiences are more interested in learning more about climate and environmental news coverage.
- Local weather data, much of which is free and public, provides relevant coverage, in context.
- Automation allows consistent publication of weather stories, beyond what one reporter can do on their own. This frees up our journalists to do things that can’t be automated like provide analysis and feature human impact stories.
- Gannett’s collaborative model with newsrooms using automation provides a strong foundation to continue AI experimentation.

Thank you.

Want to partner with Gannett on AI or News Automation Team or learn more?

Jessica Davis
jedavis@gannett.com

GANNETT