

# Lessons for CDAC from NOAA Data Policies

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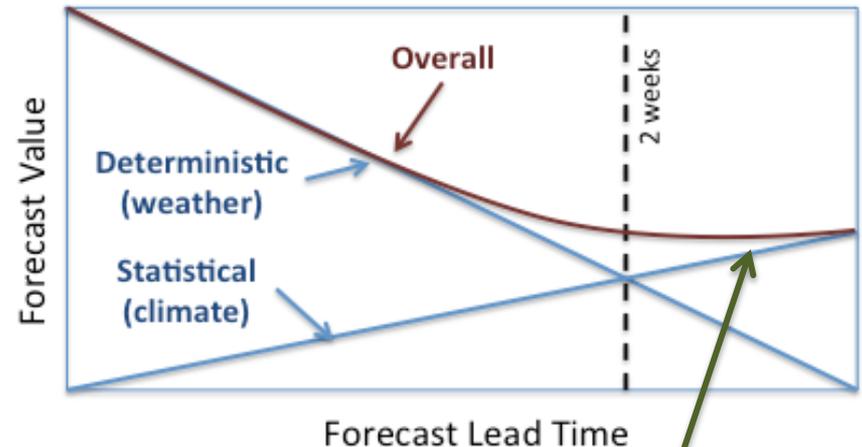
Global Weather Corporation



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# Lesson 1 – Time Value of Data

- Some data has value that declines rapidly with time
- Other data has value that stays constant or grows
- How is this manifested in NOAA data, and how is the notion of time-value relevant to CDAC?



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RESOURCES

- NOAA Big Data Project >
- NEXRAD on AWS** >

RELATED LINKS

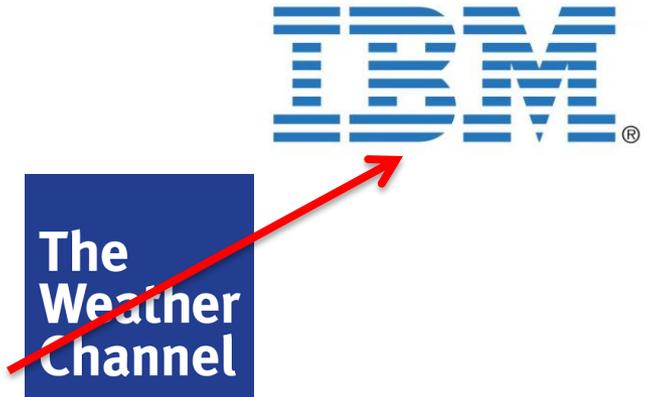
- Public Data Sets on AWS

## NEXRAD on AWS

The [Next Generation Weather Radar](#) (NEXRAD) is a network of 160 high-resolution Doppler radar sites that detects precipitation and atmospheric movement and disseminates data in approximately 5 minute intervals from each site. NEXRAD enables severe storm prediction and is used by researchers and commercial enterprises to study and address the impact of weather across multiple sectors.

# Lesson 2 – Captive vs Occasional Users

- "Captive users"
  - Rely largely on NOAA for their business model
  - Largely know how to use the data
  - *Examples: ~~The Weather Channel~~ IBM, AccuWeather, Weatherbug*
- "Occasional users"
  - May receive some benefit, but their business model does not depend on NOAA data
  - Are unfamiliar with the data
  - *Example: Wedding planner app that also incorporates weather*
- What are the characteristics of each user type, and how does it impact proposed DOC data initiatives?



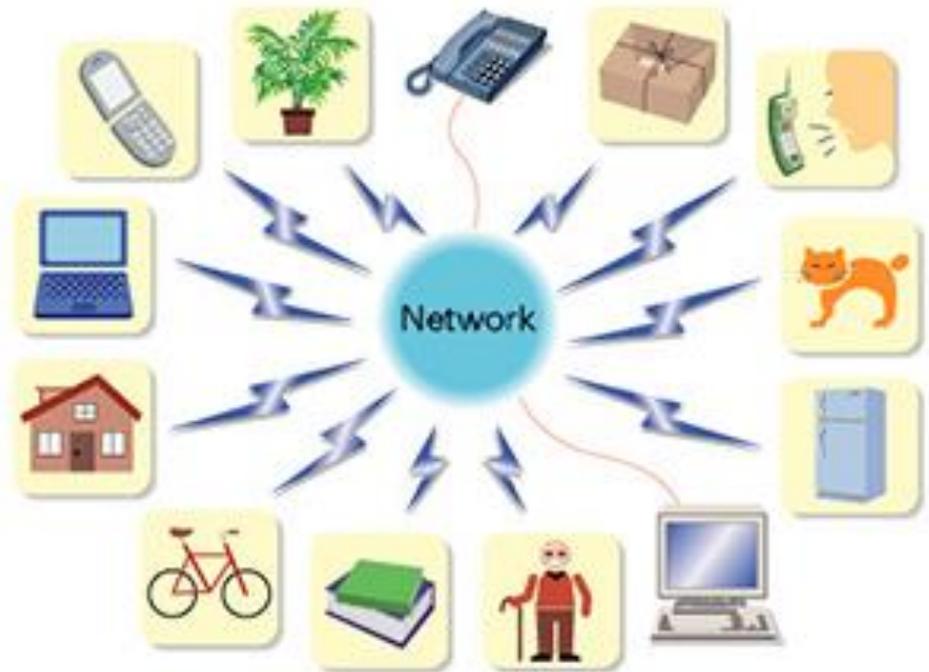
# Lesson 3 – Unused vs Undiscovered Data

- Some NOAA data is known to have value but is presently not accessible
- Other data may be accessible, but the value is not understood by users
- How does this impact NOAA's efforts to enable data access, and how should it influence DOC initiatives?



# Lesson 4 – Output vs Input Data

- We often talk about “data” only in the context of what is produced by DOC
- NOAA is also a great aggregator of data from across the weather community
- How should DOC initiatives reflect a role as data collector in addition to the role as data disseminator?



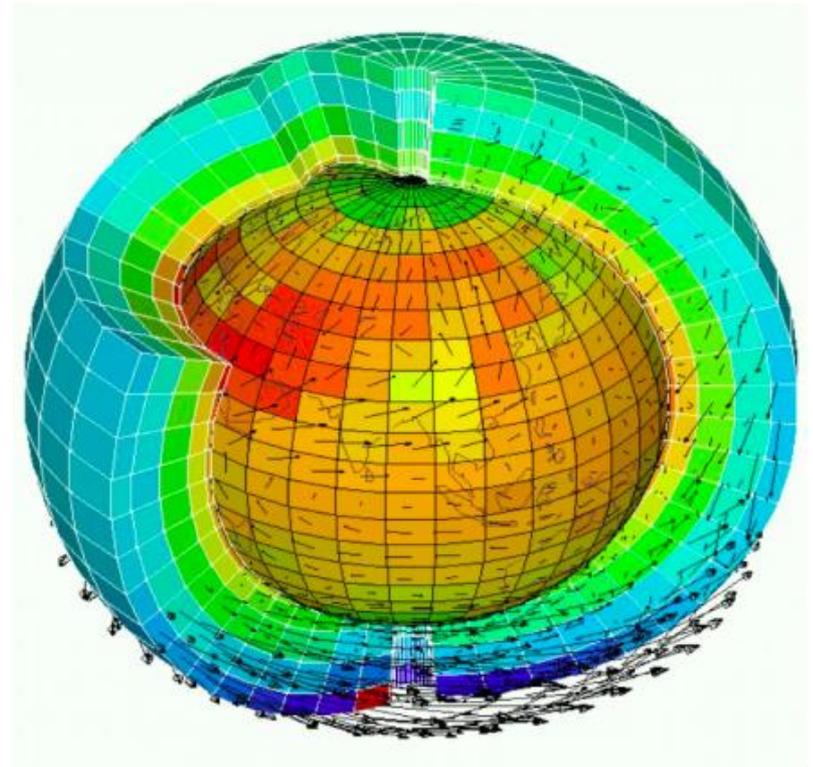
# Lesson 5 – Technological Barriers

- In some cases, the technological barriers to NOAA data access are high
  - Legacy systems using old IT standards (e.g., automated weather stations built using low bandwidth comms)
  - Overall bandwidth constraints
- Where do technological barriers exist, and how should they be addressed?



# Lesson 6 – Intermediate Data

- With NOAA data, final products often involve many intermediate data steps
  - *Example: Computation of weather models*
- How much intermediate data should be made accessible? How do you decide?



# Lesson 7 – International Access

- NOAA data is used globally, with particular value for the developing world
- NOAA's own forecasts depend heavily on data from international partners
- How much attention should DOC initiatives pay to international use cases?



# Using NOAA's Example

- The NOAA user community is already an excellent example of the benefits that arise from open data access
- International counterparts generally have more restrictive data policies, charging for data in some cases
- Specific lessons are readily identified
- How can this real-world example (and the international comparison in particular) be used by CDAC and DOC to demonstrate the benefits of DOC open data policies?