

# Catastrophe Resiliency Council

## Beyond Classic Cat Modeling

Christopher G. McDaniel  
mcdaniel@theinstitutes.org



Who We Are

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**Collaborate with risk- and insurance-focused parties to create a healthy, competitive risk marketplace that promotes resilience against natural catastrophes.**

## CLIMATE & RESILIENCE

Research & Resilience Innovation

### DATA

Standards  
Content & Interpretation  
Industry Data

### TECHNOLOGY

Models & Analytics  
InsurTech Innovation  
Technical Standards

### OPERATIONS

Industry Tools  
Communication/Exchange  
Support/Education

# What Is Classic Cat Modeling?

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A catastrophe model is a computerized process that simulates thousands of plausible catastrophic events scenarios.

Simulated event scenarios are based on realistic event parameters drawing data from meteorological history, geology, and geography to probabilistically model what could happen in the future.

These scenarios are used by the models to quantify the expected damages for an underlying portfolio of exposures using an engineering approach.

The insured loss is calculated by incorporating underlying insurance policy coverage. These models provide valuable insights for risk identification, risk quantification and risk management strategies by taking a multi-disciplinary approach of science engineering and mathematics/statistics.

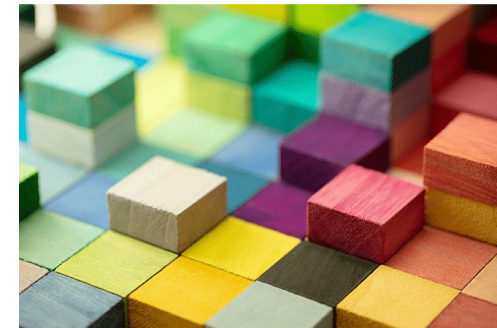
Catastrophe models have been rapidly evolving since their introduction in the 1980s based in part through technological advances and higher resolution exposure data.



# Why Is Classic Cat Modeling Not Sufficient For Future Needs?

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- Most use only a few sources
- Which sources are the right sources?
- How do you measure and predict something like Climate Risk with limited data points?
- No way currently to easily ingest non-traditional data sources
- Lack of transparency into how upstream data is calculated
- No easy way to share data between Carriers, Brokers and Reinsurers, and others
- No Mechanism to provide data for a thirsty audience outside of the industry

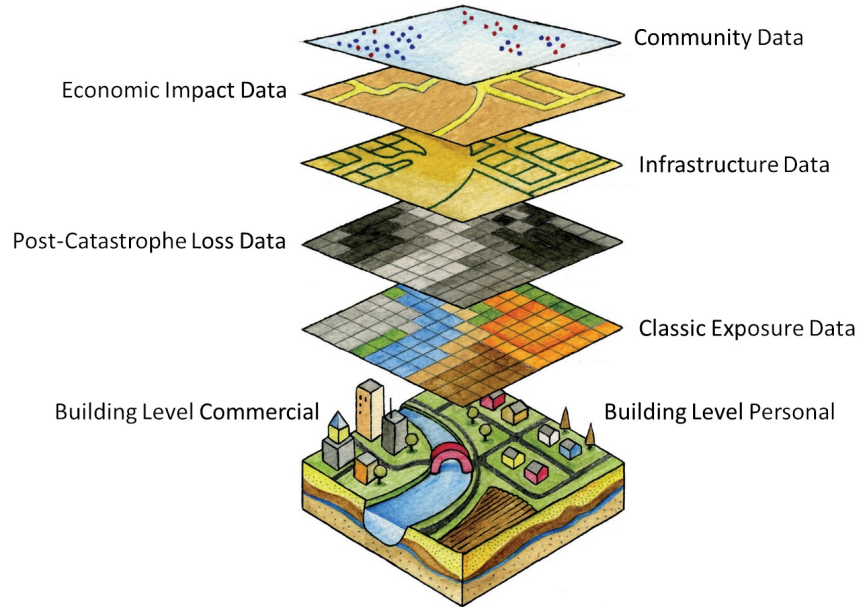


What is Needed To Address Future Needs?

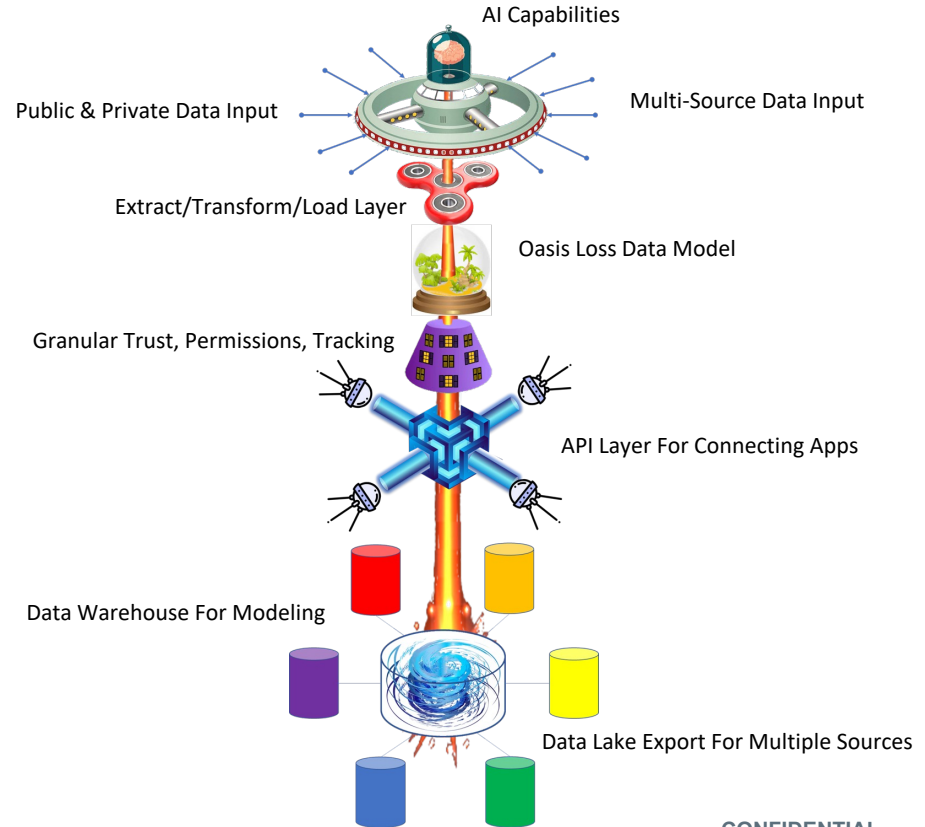
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## OXM Data Model



## Tempest Framework



# Q&A

Want more information?

Contact us at [mcdaniel@theinstitutes.org](mailto:mcdaniel@theinstitutes.org)