

NARROW YOUR UNCERTAINTY

In this age of abundant information, data volumes are exploding. Make the best use of that data with strategies designed to narrow uncertainties.

The National Research Council's Committee on Applied and

Theoretical Statistics

provides objective, strategic approaches to data analysis.

COMMITTEE ON APPLIED AND THEORETICAL STATISTICS

Helping the nation—through the federal government and academe—strengthen capabilities for, and execution of, data analysis and uncertainty management.

DIVISION ON ENGINEERING AND PHYSICAL SCIENCES

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VISUALIZE

ANALYZE

STRATEGIZE

Leverage big data.

CATS produced early guidance for dealing with big data through:

Seminal reports on massive data sets (1996) and massive data streams (2004)

Compilations of best practices for combining information (1992) and record linkage (1999)

Steps to improve large-scale data integration (2010)

Expanding the toolkit for analyzing massive data (2012)

Identify the patterns.

CATS identifies opportunities to improve data analysis capabilities, such as:

Analysis of data from social networks and geospatial data

Dynamic network analysis for counterterrorism

Biomedical data and networks

Improving methods, practice, and performance in forensic science

Narrow the uncertainty of the future.

CATS consists of experts in managing uncertainties:

Sources of uncertainty, verification and validation methods

Uncertainty quantification for large-scale simulations

Uncertainties and decision making

Uncertainty management, such as in remote sensing of climate data (2010)

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