Is Bigger Data *Really* Better?  Thoughts on "Big Data" from the Front Lines of the National Security Community

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As a buzzword, "Big Data" is rapidly losing linguistic currency. However, the challenge of enabling humans to interact effectively and efficiently with large, heterogeneous stores of electronic information is not going away anytime soon.   The United States' national security community is particularly keen on realizing the information value of massive data – not surprising, considering the success of recent government investments in high-performance sensing systems.  With personnel "swimming in sensors and drowning in data," both defense and intelligence leaders are actively seeking mathematical, algorithmic, and computational solutions to the data deluge.

This talk approaches the data problem from the perspective of an anthropologist who has spent her career both participating in and observing technology projects across a range of domains, from nuclear weapons to corporate network security.   What all these projects share is a quest for new methods and technologies that will enhance the value of information while reducing uncertainty in decision-making.   I will draw on this experience to examine the aspirations and anxieties of "big data" as discursive markers for the ongoing reconfiguration of our national security institutions in the wake of the Cold war's end.  In doing so, I emphasize the limitations of the "big data" solution space, which privileges technological remedies for the deep epistemological and institutional challenges of policy and decision-making in an uncertain world.

Biographical Sketch:

Laura A. McNamara is Principal Member of Technical Staff at Sandia National Laboratories in Albuquerque, NM. She holds a PhD in cultural anthropology from the University of New Mexico. Dr. McNamara has worked in the Department of Energy's national laboratory environment since 1997, when she started her career as a graduate student at Los Alamos National Laboratory.  Since joining Sandia in 2003, Dr. McNamara has contributed to a wide range of research and design projects in the area of human-information interaction. She currently leads an interdisciplinary behavioral science research team that applies quantitative and qualitative methods to study visual cognition "in the wild," with consumers of complex, heterogeneous scientific and remote sensing data.