

Date: Wed, 22 Sep 2010 10:28:19 -0400

To: "Dr. Baruch Fischhoff - Chair, National Academy Committee on Improving Intelligence"
<baruch@cmu.edu>

From: Lloyd Etheredge <lloyd.etheredge@policyscience.net>

Subject: 154. Priority requests: Cloud computing for behavioral science R&D; Federal curated data systems via DALLAS, Daniel Goroff at OSTP

Dr. Fischhoff and Colleagues:

Requests for Cloud Computing & Curated Data Systems

It might be worthwhile to make priority recommendations, in your Report or a follow-on project, for the federal curated data systems, in the public domain via cloud computing, that would support fast discovery behavioral science research to monitor, understand, and forecast global trends.

Content analysis is an obvious example: Machine-assisted coding and interpretation of communication flows requires highly sophisticated probability processing, keyed to languages, specific domains, and (even) user interests/nomenclatures. The development of statistical tools requires reference data systems. The DNI could be a catalyst for a new generation of global research and applications of this technology by shifting, into the public domain and cloud computing technology, the NSA reference data systems and basic software tools.<1>

- Bamford's work on NSA describes a wide range of content analysis programs, developed by Israeli consulting firms and others, capable of identifying dialects and understanding colloquial speech. It would probably be a useful investment for the DNI to place these tools in the public/cloud computing domain as academic researchers likely can improve them and find other applications..

Another example would be comparative politics and all of the world's election and public opinion/polling data.

Requests to Vivek Kudra: There also is a new Federal Chief Information Officer in the White House (www.cio.gov), tasked to make all federally curated data systems available in user-friendly forms (e.g. via cloud computing) to application developers and the public. General Clapper may be able to help, even if the data are not collected within his organization.

Dr. Daniel Goroff and Reinventing Statistics

Just to mention: Dr. Daniel Goroff joined the staff of the President's Science adviser in July and will be responsible for behavioral science issues. He has a doctorate in mathematics from Harvard and comes, most recently, from the Sloan Foundation where he had responsibility for leading edge macro-economics research.

This is the first time, perhaps in many years, that there has been a behavioral scientist at a key

top position with the mathematics expertise to understand the meta-hypothesis, cross-walking the failures of federal forecasting across several domains, of the need to reinvent statistics for changing, complex and adaptive systems with N dimensions (where N also is unknown).

I deeply urge you to discuss this possible diagnosis (# 139: Reinventing Statistics and Econometrics) because Dr. Goroff will have the expertise to grasp the dimensions of the problem and how to begin dealing with it.

LE

<1> Royalty payments for content on these R&D systems could be paid by NSA, if it has not already done so. Alternatively, Google News or others likely have arranged payments for their reference data/translation systems which could be used.

Dr. Lloyd S. Etheredge
Policy Sciences Center
URL: www.policyscience.net
301-365-5241 (v); lloyd.etheredge@policyscience.net (email)

[The Policy Sciences Center, Inc. is a public foundation that develops and integrates knowledge and practice to advance human dignity. Its headquarters are 127 Wall St., Room 322 PO Box 208215 in New Haven, CT 06520-8215. It may be contacted at the office of its Chair, Michael Reisman (michael.reisman@yale.edu), 203-432-1993. Further information about the Policy Sciences Center and its projects, Society, and journal is available at www.policysciences.org.]