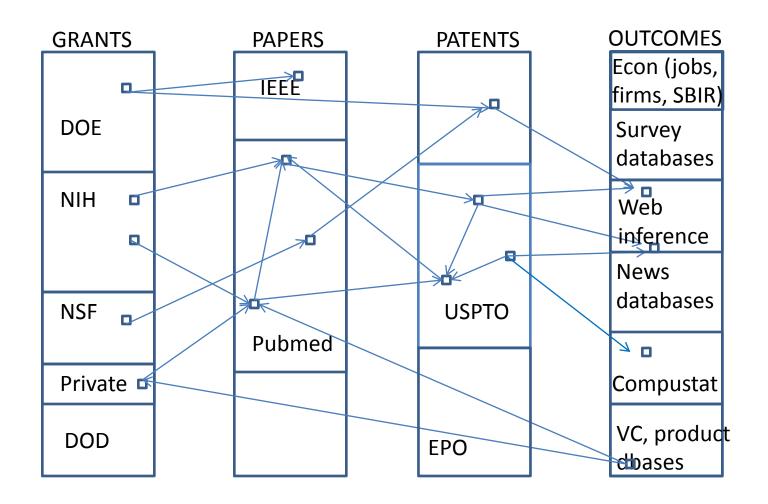
## Where are we in metric research?

- The Quest (away from a faith-based worship of V. Bush):
  - research \$-> jobs, firm outcomes, lives saved
- The Quest has been swept up in big data mania
  - Government
  - Academia
  - Industry
    - LinkedIn: How do people impact economic outcomes?
      - They have 150 million careers and growing...
    - Google Scholar has disambiguated and linked many databases
- Fits and starts and uncoordinated
  - We will eventually get the Grail, parts possibly soon how do we accelerate? And make sure it's right - and used right?



"Islands of useful data" are appearing: effort now is to make those accessible and to link them. Most useful links are between topics, documents, people, and orgs.

## Challenges

- Top down vs. bottom up
  - Either way, make results accessible fertilize 1,000 flowers
    - Need APIs for all databases, and tool repositories
- Metric validation: find/characterize correlates to the Grail
  - Computer and social scientists need to collaborate
    - Focused call?
- Professional infrastructure support
  - Not enough recognition of value add yet
    - Clearinghouse, coordination, coding support?
- Access
  - Private and corporate concerns
- Manual vs. automated
  - Yes, but minimize manual input
    - ORCID will help