



Knowledge Discovery & Dissemination

Entities and Relationships from New Structured & Unstructured Data Sets
Program Manager: Dr. Arthur Becker; E-mail: arthur.becker@iarpa.gov



GOAL:

- To Enable Analysts to Quickly Produce Intelligence from New, Disparate Data Sources

RESEARCH TEAMS:

- Two Research Teams with Complementary but Different Approaches, Solutions and Tools

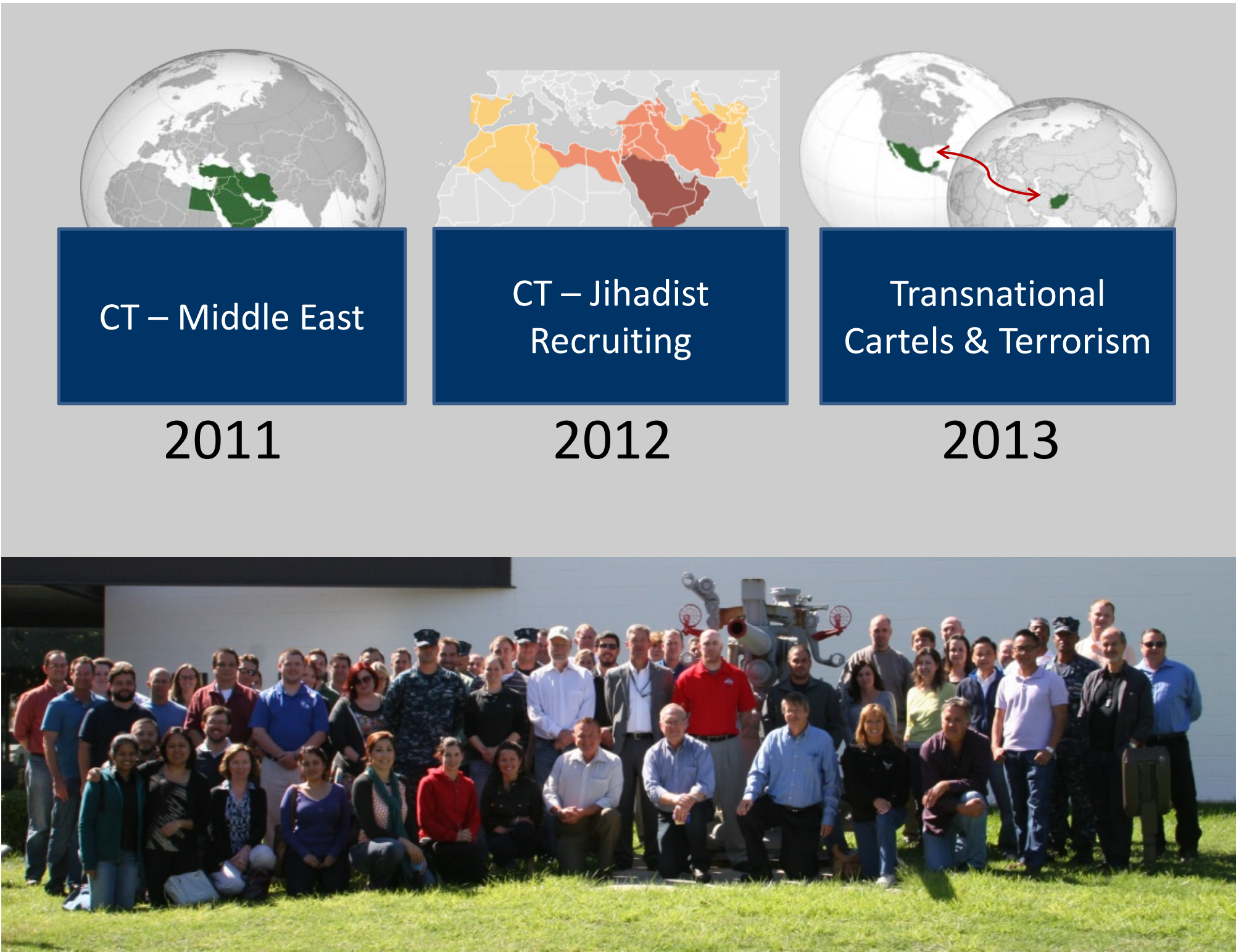


RESEARCH THRUSTS:

- Hierarchical Ontology
- Active Learning for Information Extraction
- Assisted Alignment of Structured Data
- Open Information Extraction
- Semantic Calculus
- Entity Resolution
- Event Resolution
- Quality of Service Estimates
- Coherence-Based Summarization
- Provenance Capture Assistance

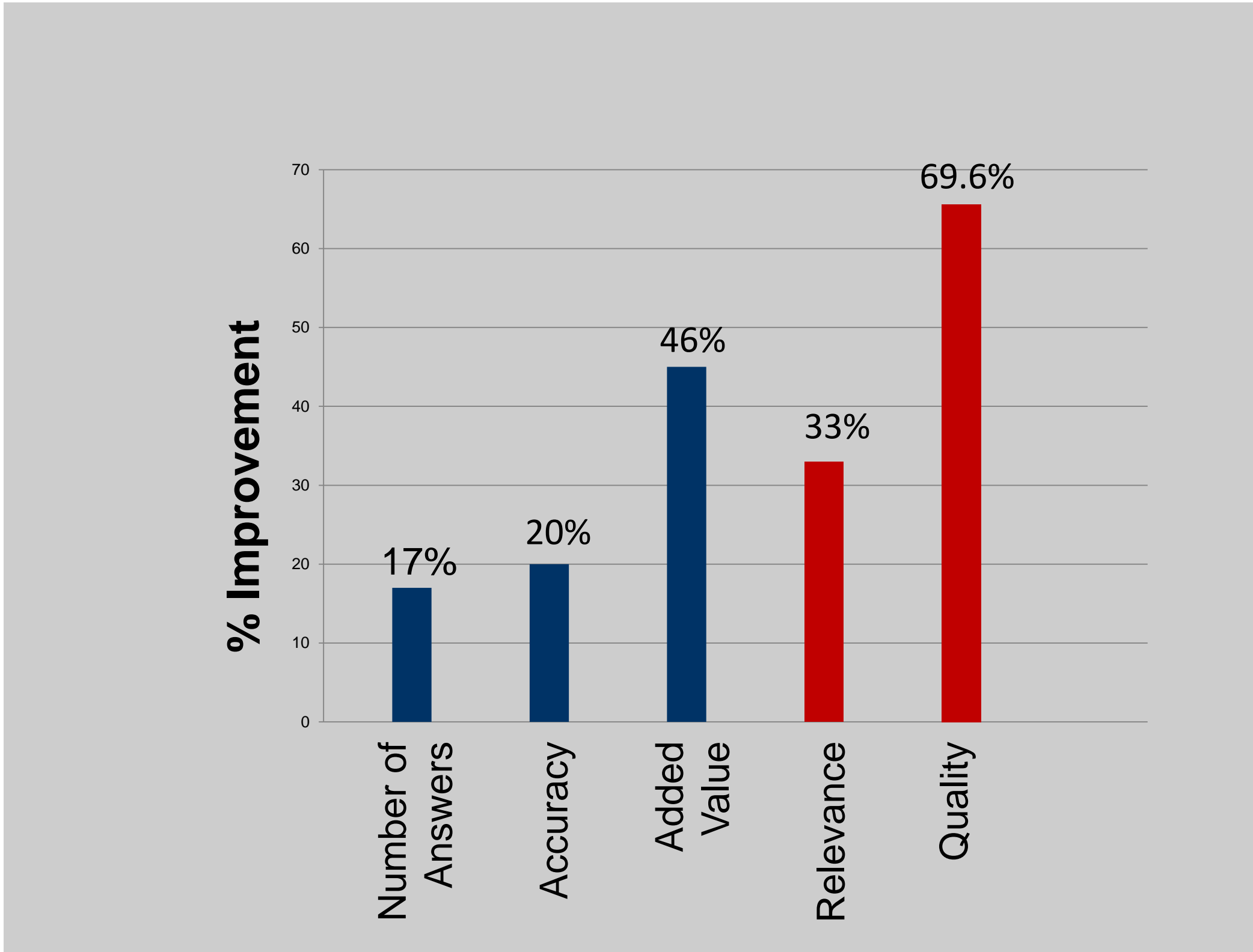
EVALUATION APPROACH

- Using Real Data, Real Scenarios, and Real Analysts



DEMONSTRATED RESULTS

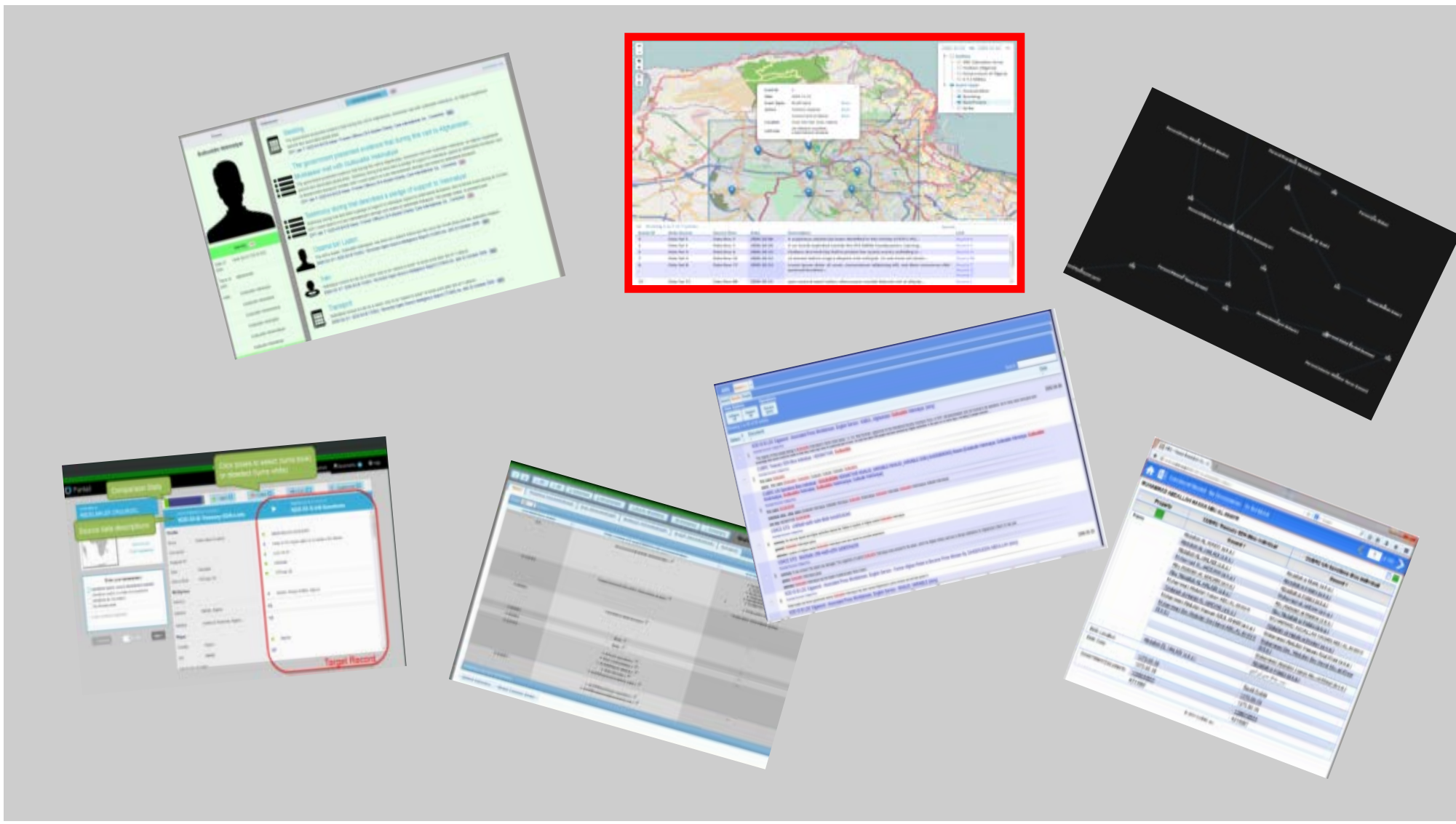
- Data Alignment: Reduces effort by 90%
- Extraction algorithms reduce time by 95%



- Average Improvement over Commercial Boolean Search Tasks (in Blue); and Reports (in Red)

APPLICATIONS:

- Rapidly Configured and Adapted to New Requirements and New Data Sources in a Few Weeks



TRANSITION PARTNERS

- 12 Transition Agreements
- 8 Funded Contracts or Transitions Underway

