Sources of Requirements

- Analysis of CAIS
  - Capabilities
  - Deficiencies

- May '91 Off-Site Meeting

- In-House Meetings with Expert User Group

- Knowledge Engineering Sessions

- Continuing Discussions with AI Targeting Branch
Sources of Requirements

☐ Management Guidance

☐ Analysis of CAIS
  - Capabilities
  - Deficiencies

☐ May '91 Off-Site Meeting

☐ AI Targeting Branch Requirements Document

☐ In-House Meetings with Expert User Group

☐ Knowledge Engineering Sessions

☐ Continuing Discussions with AI Targeting Branch
Data Model

The system must have the ability to:

- provide consistency and search across databases (CTR, CMIR, 8300, Casino)
- establish initial linkages between individuals and transactions
- recreate form
- provide good performance
User Interface

The system must have the ability to:

- save queries for retrieval and reuse
- make available the full set of parameters for search criteria
- serve any level of user
- provide print-screen capability
The system must have the ability to:
The system must have the ability to:

- manage target development and reports
- address management information requirements
- provide security access control
- provide audit trail for security
- provide on-line help
# AI SYSTEM REQUIREMENTS

- DATA RELATED REQUIREMENTS -

## CONSOLIDATION

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(b) (7)(E)
AI SYSTEM REQUIREMENTS
- MISSION RELATED REQUIREMENTS -
TARGETING

(b) (7)(E)
AI SYSTEM REQUIREMENTS
- MISSION RELATED REQUIREMENTS -

STRATEGIC ANALYSIS

(b) (7)(E)
**AI SYSTEM REQUIREMENTS**  
- **DEVELOPMENT APPROACH** -

- Build upon the base of the short-term AI system.

- **Rapid Prototyping:** Build a little, test a little, deliver a little;

- **Risk Management:** identify top technical & managerial risks, plan and track risk amelioration, update list;

- Recording and representing the knowledge and expertise observed during the Knowledge Engineering sessions;

- Integrate new capabilities/functionalities into existing baseline;

- Prefer integration of COTS/GOTS over development of custom code;

- Use a combination of in-house and contractor development with FinCEN maintaining the system and the "corporate knowledge."
AI SYSTEM REQUIREMENTS
- INTEGRATING ADDITIONAL TECHNOLOGIES -

(b) (7)(E)

Consolidation Programs
Aggregation Programs
Targeting Programs
Case Development Programs
Strategic Analysis Programs

FINANCIAL AI TARGETING DATABASE
CONSOLIDATED RECORDS
AGGREGATIONS
TARGETS
CASES
METHODS, TRENDS, PATTERNS

HUMAN-COMPUTER INTERFACE
AI SYSTEM REQUIREMENTS
- CAPTURING FinCEN CORPORATE EXPERTISE -

* Knowledge Engineering is the key to building a successful AI system.
* It is a dynamic process which will require the following routine steps:
  ** Interacting with a number of senior agents and analysts as they perform their jobs;
  ** Recording and representing the knowledge and expertise observed during the Knowledge Engineering sessions;
  ** The codification of the knowledge must be verified with the agent or analyst;
  ** The codification of the knowledge must be validated at the system level by formal control board.

RECOMMENDATION

1- The FinCEN AI Group (agents, analysts, technical staff) should become a "knowledge" control board chaired by a manager;
2- The "knowledge" control board should meet routinely to authorize changes to the system's knowledge;
3- Formal design reviews should be the venue for final "validation" decisions based on input from the "knowledge" control board.
Users request FinCEN's artificial intelligence system have the ability to:

- Produce graphics interface capability easily
- Select on-line help while using the system
- Print-screen
USER REQUIREMENTS

FinCEN analysts require a system that will assist in the analysis and presentation of large quantities of information contained in various electronic data bases and outside sources.

1. Automatic Link Analysis Charting
   a. Accepts data from a data base
   b. Easy to learn and use
   c. Hypertext features
   d. Accepts data from outside sources (scanning features)
   e. Automatically draws charts (conforms to professional standards)

2. Automatic Geographical Mapping
   a. Accepts data from a data base
   b. Easy to learn and use
   c. Hypertext features
   d. Automatically displays and/or draws maps
3. Case Library
   a. Automatically targets suspicious financial activity
   b. Provides a degree of suspiciousness
   c. Easy to learn and use
   d. Hypertext features
   e. Accepts data from outside sources (scanning features)
   f. Produces an audit trail for evaluation (suspense and feedback)
   g. Provides management information and statistics
USER REQUIREMENTS

PHASE I (SHORT TERM AI SYSTEM)

0. REIMPLEMENT CAIS

1. Data Base Re-structure
   - Simultaneously Search All BSA /8300 Filings
   - Good Response Time

2. User Friendly System
   - Easy to Use but FLEXIBLE
   - Ability to Save Queries / Information
USER REQUIREMENTS

PHASE I (SHORT TERM AI SYSTEM)

3. Proactive Targeting Abilities
   - Explain why Target was Identified
   - Provide a Tracking System

4. Expandable
   - Grow as Additional Capabilities are Achieved
USER REQUIREMENTS

PHASE II (*LONG TERM AI SYSTEM*)

1. Automated Link Analysis / Chart

2. Location / Mapping Representation

3. Integration with other Systems
4. Output
   a. formulate output in a manner that can be easily read and understood
   b. types of output – hard copy by defined fields

5. Presentation
   a. preparing attachments
   b. preparing reports
   c. dissemination

6. Feedback – evaluation
   a. feedback means that lends itself to a good evaluation of the report – should be specific