

# PIIM CASE STUDY

## RAYTHEON KM/KD

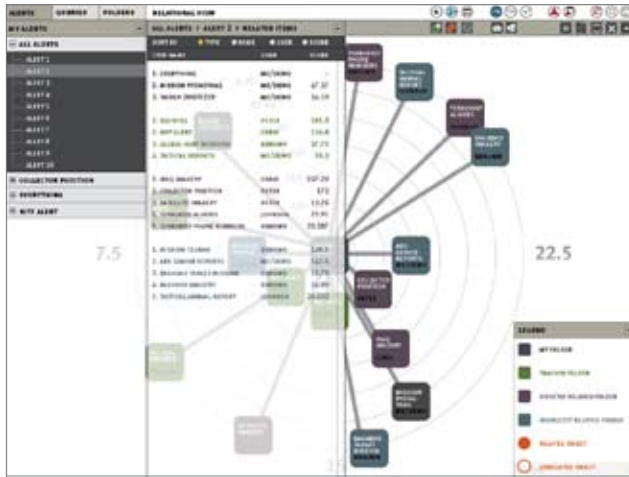
DISCOVERING KNOWLEDGE THROUGH INTELLIGENT VISUAL CONTEXT

## THE NEW SCHOOL

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*The Raytheon Knowledge Management / Knowledge Discovery (KM/KD) Platform integrates multiple intelligence-gathering applications under a single framework to support the myriad analytic workflows.*

Raytheon's KM/KD campaign lacked a clear, cohesive vision to its diverse product line. Through finely orchestrated usability evaluations, design heuristic studies, and technology reviews, PIIM redesigned and provided innovative product development recommendations to four key toolsets.

In total PIIM significantly enhanced the following KM/KD toolsets:

1. *Multi-Lingual Reverse Query Expander*—PIIM completely re-engineered the user workflow and semantic querying processes adapting usability and product design specifications to existing technical and system limitations. Additionally, the PIIM designers and usability experts standardized GUI assets and display modules to enhance workflow processes and usability.
2. *Chat Viz*—After reviewing this communication portal used by field personnel and intelligence analysts, PIIM identified several key usability issues regarding transmission, acceptance, and comprehension of communication within the system. The PIIM visualization team redesigned Chat Viz's core message system and integrated its GUI with external systems to increase cognition and accuracy.

3. *Metadata Catalog*—To streamline inter-system communication and extend the capabilities of the Chat Viz tool, PIIM identified and corrected the cataloging, tagging logic and display issues with the Metadata Catalog. As the Metadata Catalog uses several large components of the Chat Viz system, PIIM developed a comprehensive, visual connection between the systems.
4. *News-worthiness People Tracking*—As a comprehensive media and social network tool, the News-worthiness People Tracking system provides great insight into tremendous amounts of data with a variety of attributes and characteristics. PIIM's greatest enhancement to this system was to develop a multimodal, integrated application display that streamlined usage without sacrificing access to the underlying datasets.

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*The Parsons Institute for Information Mapping (PIIM) is a Research, Development, and Professional Services facility within The New School and located in New York City. PIIM's mission is to advance the field of Knowledge Visualization through academic and commercial pursuits.*