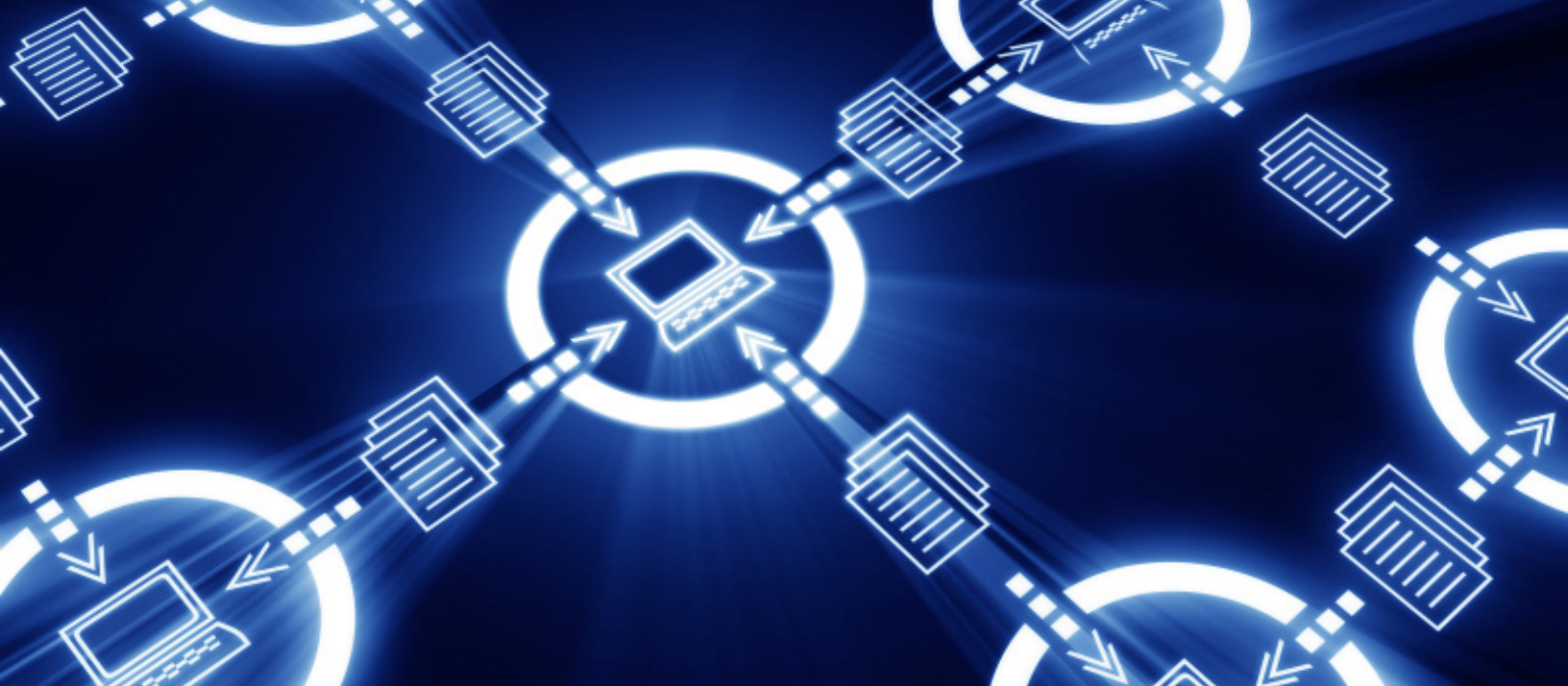




INSIDE ACTIVITY BASED INTELLIGENCE

SEEING THE BIG PICTURE



No mission is more critical than ensuring our national security and the safety of our warfighters. That's why BAE Systems Intelligence Analysts and Engineers developed Activity Based Intelligence (ABI). See how our innovative ABI solution and expertise is changing how the Intelligence Community is reviewing, processing and analyzing critical intelligence data.

Clear, actionable intelligence is vital to the planning and execution of any military, peacekeeping or disaster-relief operation. The success of these missions is largely dependent upon timely intelligence, fused from multiple data sources. However, the dynamic proliferation of new intelligence sources such as ground, airborne and space-based electro-optical, infrared and hyper-spectral sensors, has made it impossible to track and identify important activities solely through human analytical processes. There is simply too much big data being collected for human analysts to sort through it all – especially when time is of the essence.

A new computer-assisted problem solving methodology, known as ABI, has emerged to improve the efficiency and timeliness of intelligence analysis to better understand and take action upon historical, current and anticipated activities involving national or global security.

“I don't want our analysts to spend time searching for information,” said National Geospatial-Intelligence Director, Letitia Long in a July 2013 interview with *WashingtonExec*. “I want to take advantage of computers and technology to serve up the information that we need to be focused on.”

The ABI intelligence tradecraft organizes and collates large volumes of collected data, to make it easier for analysts to identify potential adversaries and their targets, by distinguishing relevant patterns and recognize suspicious behaviors before a possible threat may be imminent.

Throughout September and October, we will be profiling some of the many engineering and intelligence analysis experts behind our ABI solution to explain how this innovative methodology is impacting intelligence analysis and developing a “new breed” of analyst.



SPOTLIGHT ON: **DONALD WIDENER** PROGRAM MANAGER

What advantages does ABI offer?

ABI is the stovetop for stovepipes of data. Our engineers have utilized an ABI framework to leverage existing infrastructure and technologies, apply collaborative technologies, and change the default acquisition and development behavior to technology services vs. products. BAE Systems is now delivering solutions with reduced cost and risk with an increased rate of technology deployment.

This is an exciting time for analysts as well; we are seeing a break from the old hardware emulators to new applications that enable the revolutionary ABI tradecraft and analytic methodologies.

How is ABI revolutionizing intelligence analysis?

User engagement has become a priority. As new ABI tradecraft and analytic methodologies are being developed, new software applications are being created in record time to evolve with the analysis saving analysts' time, so they can focus on providing clear, actionable intelligence. This alignment of tradecraft development with technology development cycles is leading to a more advanced technology pipeline. Using ABI principles to characterize multi-INT data provides our analysts with the most expansive libraries of information that has ever been available, allowing them to provide the most accurate analysis that can only emerge from the fusion of multiple disparate intelligence datasets.

There are some challenges facing this revolution, analysts are going through a culture shock, with new datasets made available every day analysts have to face their biases for data selection. All data and data sources are equally viable for ABI analytics, and data neutrality may be difficult for analysts that have developed expertise in one data source (like imagery intelligence) or may not understand the validity of new data sources. New ABI products may also face this bias with decision maker acceptance.

What government customers or private industries could benefit most from integrating ABI, and why?

Innovative ABI solutions can be unclassified, web based, and open source, which makes commercial application significantly easier. Anywhere big data is a problem, ABI is the revolutionary solution and BAE Systems has the past performance to prove mission success. We are seeing ABI expand through the Intelligence Community at record pace and we have a real competitive advantage in many other industries like Cyber, Disaster Response, Environmental (like Farming and Oil&Gas), and healthcare systems.



SPOTLIGHT ON: **NICHOLAS WILLIAMS** SYSTEMS ENGINEER

Activity Based Intelligence has been defined and sponsored by the U.S. Office of the Director for National Intelligence and has been embraced by the major U.S. intelligence agencies.

You can check out the entire “Inside ABI” web series on our website, www.baesystems.com/abi.

What advantages does ABI offer?

Basing intelligence software and tradecraft on activities, rather than on data that is evidence of those activities, allows analyst to interact with information at the semantic knowledge level. Basically, ABI is empowering analysts to study what the data is showing and how it is connected, rather than just storing it as many intelligence database tools were designed to do.

How is ABI revolutionizing intelligence analysis?

ABI is going to level the playing field and allow analysts to see the big picture. Currently functional intelligence stovepipes exist because each data type, and the systems that support it, require significant training and knowledge. As analysts move from data analysts to activity analysts, the reliance on system-specific skills declines and a premium is placed on thinking and reasoning. Specialists will always be needed in any functional intelligence lane, but the need for these training-intensive billets will be replaced in favor of more generalists and problem solvers.

What government customers or private industries could benefit most from integrating ABI, and why?

The more varied the data is the harder it is to reason across the data enterprise. The intelligence community will benefit most, because they have the most varied types of data on the planet, but there are a variety of commercial industries that deal with a similar breadth of data. Examples include supply chain logistics companies, health care companies, and multinational product companies. Anywhere that a business needs to understand how people, places, and things are connected and change over time can benefit from an ABI approach to their data and analysis.