

IPC
GLOBAL



Data Analytics

Qlik 

Enhancing Intelligence Capabilities

To Combat Foreign Influence
Using an Analytics, AI, ML and
Open-Source Platform



Meet with Us!

Introduction

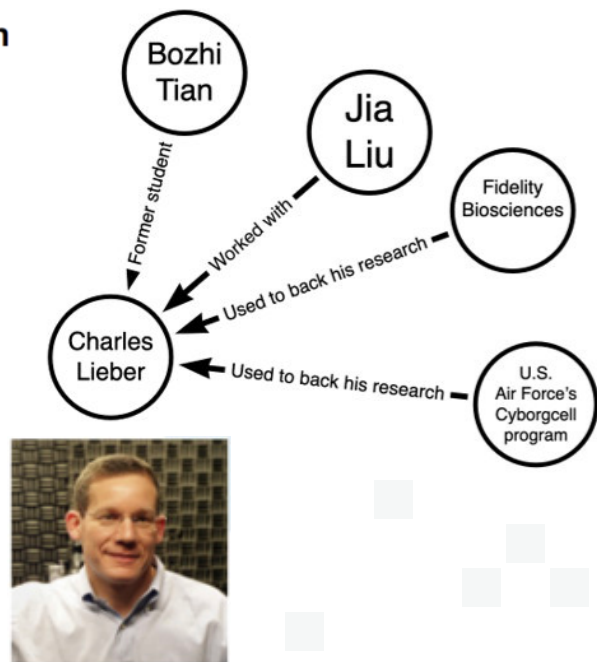
The United States intelligence agencies must constantly work towards enhancing their capabilities to counter foreign interference in the country's affairs. In today's rapidly evolving global landscape, the need for modernizing intelligence operations is more critical than ever before. NCIS recognizes the importance of leveraging advanced technologies such as analytics, machine learning, language learning models, and AI solutions to improve their investigative efforts. It is crucial to empower investigative analysts to quickly identify threats, conflicts of interest, conflict of commitments, technology and supplier vulnerabilities, and more. Enabling analysts to do more by automating processes, providing leadership with critical insights to make faster and informed decisions, and monitoring ongoing events in real-time is essential.

In this white paper, we will explore how NCIS's new platform, built by IPC Global, will leverage Qlik's analytics and machine learning capabilities to provide critical insights and streamline the investigative process. We used real-life examples, such as the Charles Lieber arrest post analysis, Col, CoC use cases, and NCIS process, to demonstrate the value of the new platform.

Post Analysis Findings

Critical Technology Risk: Counter-innovation

- **Who:** Bozhi Tian & Jia Liu "worked with" Lieber
- **What:** Created new nanoscale mesh network
- **When/Where:** 2010s, in Harvard & Wuhan labs
- **Why:** To counter USAF human perf. program
- **How:** Backed by VCs, growing "in the wild"
- **What next:** Track in open RISC-V ecosystem



RISC-V Ecosystem, courtesy of SiFive

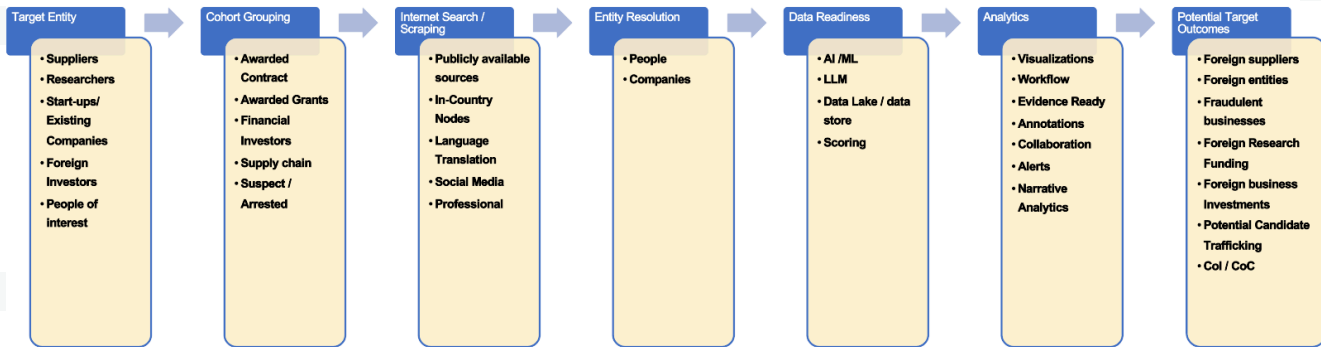
Background

"China, and to some extent other intelligence services, have already begun their strategic and comprehensive efforts to acquire (legally and illegally) any and all ideation, data, research and trade secrets emanating from the new funding and technological incentives..." - William Evanina, CEO, THE EVANINA GROUP and Former Director of the United States National Counterintelligence and Security Center (NCSC).

The arrest of Charles Lieber, the former Chair of Harvard University’s Department of Chemistry and Chemical Biology, highlights the ongoing challenges that the US faces with regards to foreign influence. Lieber was arrested in January 2020 for making false statements about his involvement in China’s Thousand Talents Program, a Chinese government-run recruitment program that has been accused of using Chinese academic institutions to steal American intellectual property and technology.

Another example is the arrest of Chinese National, Hao Zhang for allegedly stealing trade secrets relating the performance of wireless devices. Specifically, Surface Acoustic Wave (SAW) and Bulk Acoustic Wave (BAW) filters are used in wireless devices to eliminate interference and improve other aspects of device. The foreign entity in question was arrested by the FBI.

To address these challenges, NCIS has decided to modernize its investigative process by incorporating a modern investigative platform. The agency has partnered with IPC Global, a leading system integrator, to bring together best-in-class solutions and technologies that meet its unique needs. IPC Global leverages best-in-class technologies like Qlik a 13-year Gartner Top Quadrant Data Analytics and integration platform as well as open-source aggregators like Vertical Knowledge to ensure its solutions are scalable, flexible, and address all technical and functional requirements highlighted in the NCIS problem statement.



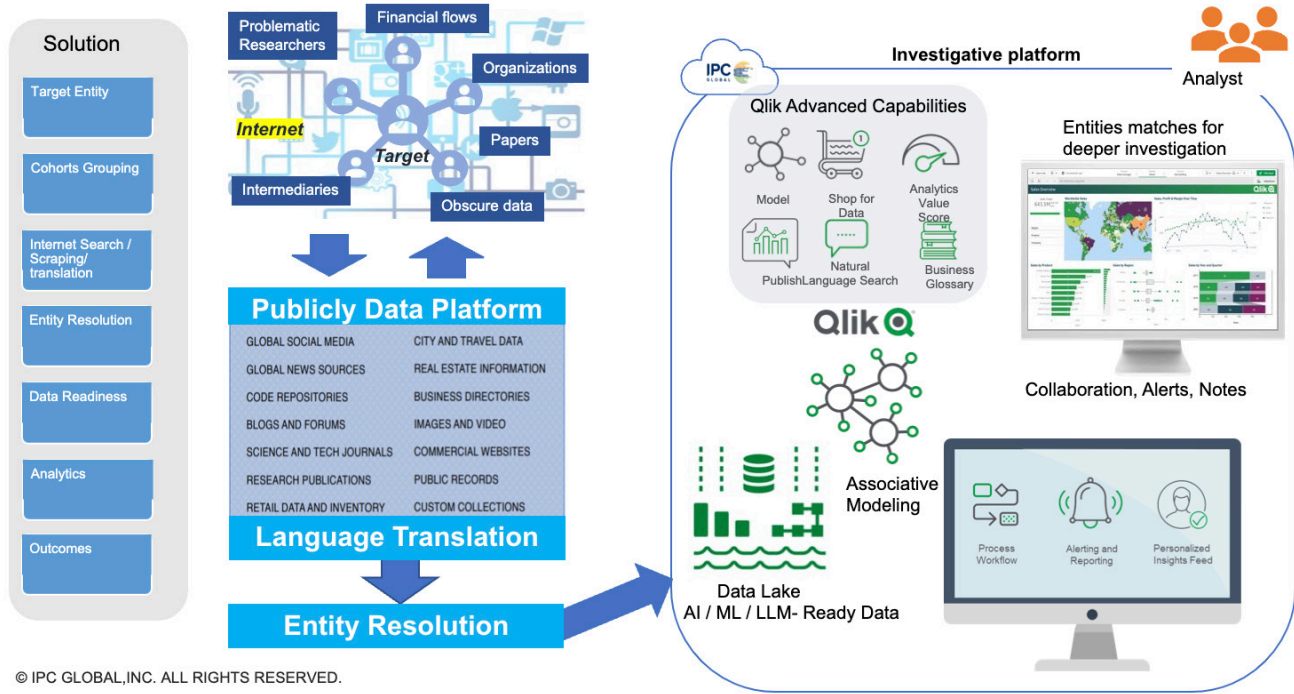
Investigative Modernization Process Overview

Proposed Solution

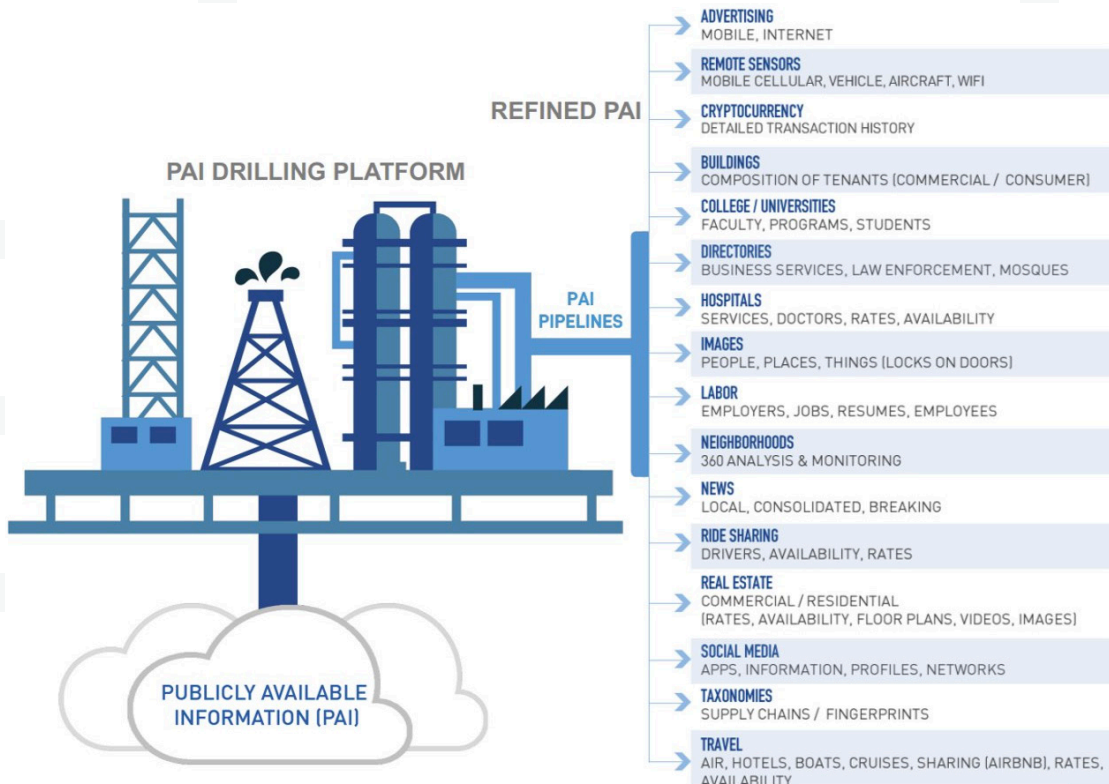
IPC Global, a leading system integrator, can provide intelligence agencies with a comprehensive platform to counter foreign interference. To ensure the platform’s robustness, IPC Global can integrate the best-in-class solutions and open-source aggregators, Vertical Knowledge, with Qlik’s Associative Engine, an ideal solution component for analytics and machine learning.

1. **Advanced Analytics:** The platform would include advanced analytics capabilities to detect as well as identify potential conflicts of interest and national security vulnerabilities.
2. **AI:** The platform will use LLMs, entity resolution, knowledge graphs, machine learning, visualization and automate current processes, allowing investigative analysts to focus on high-priority tasks and collaborate to account for an analyst unique experience.
3. **Real-time Monitoring:** The platform would enable real-time monitoring of ongoing events, enabling analysts to respond quickly to potential threats.
4. **Actionable Insights:** The platform would provide leadership with critical insights to make faster and informed decisions, based on real-time data.

Investigative Platform Process Overview



With the aid of this platform, intelligence analysts can monitor and analyze vast amounts of data from various sources, including social media, news outlets, and academic papers at the speed of thought to garner rapid insights. By automating data processing, analysts can detect patterns and quickly identify potential foreign interference in the US. Leveraging the power of Qlik we can also integrate data from various sources, including unstructured data, enabling intelligence agencies to make better-informed decisions without requiring specific technologies enabling us to pivot as the environment changes.



IPC Global's experience in providing custom solutions to government agencies will be essential in creating a modern investigative platform. IPC Global is ensuring that the platform is scalable, flexible, and addresses all the technical needs of the intelligence community as changes in legislative laws are applied and foreign entities change approaches.

Conclusion

Foreign interference in US affairs is an ongoing threat that requires intelligence agencies to constantly improve their capabilities. By partnering with IPC Global, NCIS can leverage best-in-class solutions, like Qlik's Associative Engine and Vertical Knowledge's open-source aggregation, to improve their investigative capabilities. With this platform, intelligence analysts can quickly detect foreign interference and protect American intellectual property and technology. It is imperative to remain vigilant in the fight against foreign influence in the US.

References:

"Former Harvard Professor Charged with Lying about ties to China." The New York Times, 28 Jan. 2020, <https://www.nytimes.com/2020/01/28/us/charles-lieber-harvard.html>.

"Chinese Citizen Convicted of Economic Espionage, Theft of Trade Secrets, and Conspiracy <https://www.justice.gov/opa/pr/chinese-citizen-convicted-economic-espionage-theft-trade-secrets-and-conspiracy>

William Evanina quote: "China, and to some extent other intelligence services, have already begun their strategic and comprehensive efforts to acquire (legally and illegally) any and all ideation, data, research and trade secrets emanating from the new funding and technological incentives, especially semiconductors." - William Evanina, CEO, THE EVANINA GROUP <https://www.intelligence.senate.gov/sites/default/files/os-wevanina-092122.pdf>

About IPC Global

Headquartered in Alpharetta, Georgia, IPC Global is best-in-class data and analytics consulting solutions firm in healthcare and higher education. Our goal at IPC Global is to provide enterprise-active intelligence solutions with sustaining value. Professionalism, integrity, humility, loyalty, and the importance of family are core values that guide our corporate behavior. We hope to engage our clients to be “customers for life.” We are proud to have engaging and effective industry experts with proven experience in business intelligence, data warehousing, big data analytics, data science, and certified project management professionals. In addition to our expert staff, IPC Global is an Elite Qlik Partner and has been honored as a two-time Qlik Global Partner of the Year.

ipc-global.com

About Qlik

Qlik’s vision is a data-literate world, one where everyone can use data to improve decision-making and solve their most challenging problems. Only Qlik offers end-to-end, real-time data integration and analytics solutions that help organizations access and transform all their data into value. Qlik helps companies lead with data to see more deeply into customer behavior, reinvent business processes, discover new revenue streams, and balance risk and reward. Qlik does business in more than 100 countries and serves over 50,000 customers around the world.

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About Vertical Knowledge

Vertical Knowledge is a data products, insights, and intelligence company with a mission to help customers solve their most vexing challenges. Our mature website collection methodology, unique data fabric, a comprehensive library of dynamic data products, and proprietary technology platforms equip us to comb through a massive amount of globally available open-source data to find, assess, and frame information and insights. We cover virtually every industry, ecosystem, and topic. And no matter how complex the subject is, we deliver a distinct decision advantage for our clients. Bring us your most difficult challenges. We can analyze global supply chains for automotive and munitions manufacturers. Inspect pricing and discount patterns for consumer products as diverse as technology and tennis shoes. Even drive deep insights for decision-makers in industries from telecommunications to health care to semiconductors. In short: There’s almost no publicly available data we can’t find, organize and supply with a level of insight and intelligence suited for your specific need.

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