

HOMELAND SECURITY INVESTIGATIONS

HSI



SECURING THE HOMELAND FROM TRANSNATIONAL THREATS AND CRIMINAL ORGANIZATIONS

RAVEN INDUSTRY DAY

- Agenda
 - Introductions
 - Purpose
 - Disclaimer
 - Introduce Homeland Security Investigations Innovation Lab and the Repository for Analytics in a virtualized Environment (RAVEn)
 - Present Anticipated Acquisition Strategy
 - Questions

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- **Purpose:** The purpose of this presentation is to introduce the Repository for Analytics in a virtualized Environment (RAVE_n) platform and communicate the Government's preliminary intent for the acquisition of support services in order to elicit industry questions, comments, concerns and recommendations which may be incorporated into the development of the final acquisition strategy. The purpose of this presentation is also to engage industry early in order to facilitate planning as a means of maximizing competition.
- **Disclaimer:** We are still in the market research phase of the acquisition process. The acquisition plan has not yet been developed or approved. This presentation is provided to communicate preliminary intent and elicit industry feedback, for planning purposes only. Any information contained herein is subject to change without notice, up to the point of formal solicitation, which will follow the approved acquisition plan.
- During this event, you may submit questions to michelle.brooks@ice.dhs.gov. Questions submitted will either be read aloud (anonymously) for immediate response and / or collected for response and public posting on beta.sam.gov.



Who We Are

HSI is the principal investigative arm of the U.S. Department of Homeland Security¹, responsible for investigating transnational crime and threats, specifically those criminal organizations that exploit the global infrastructure through which international trade, travel, and finance move.

Our Mission

HSI investigates, disrupts, and dismantles terrorist, transnational, and other criminal organizations that threaten or seek to exploit the customs and immigration laws of the United States.



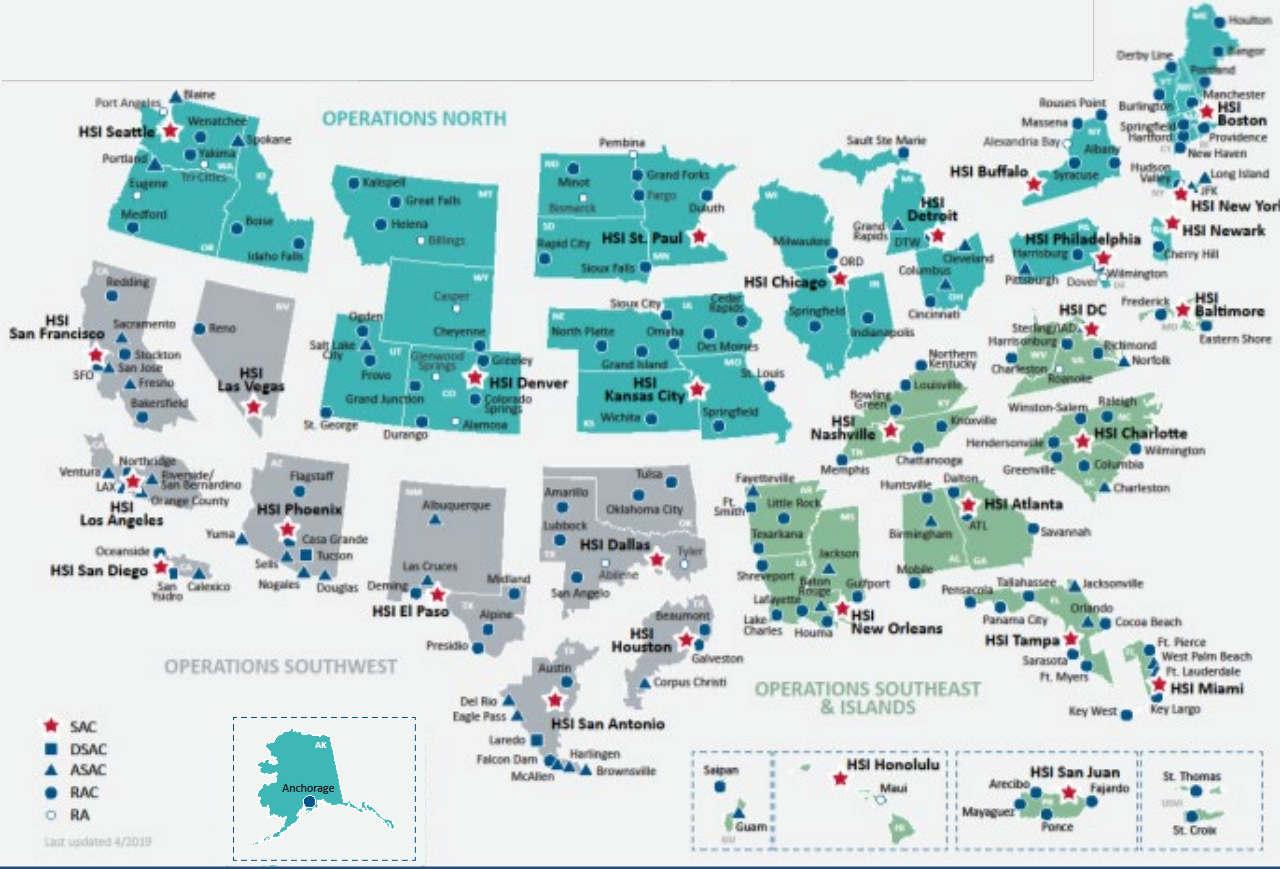
48,262
investigations
initiated in FY 2020

Domestic Footprint



30

SAC offices and multiple sub-offices in over 210 cities



Global Footprint

80

offices in 53 countries

13

countries with HSI-led Transnational Criminal Investigative Units





FINANCIAL
CRIMES



CYBER
CRIMES



CHILD
EXPLOITATION



NATIONAL
SECURITY



HUMAN
TRAFFICKING



HUMAN
SMUGGLING



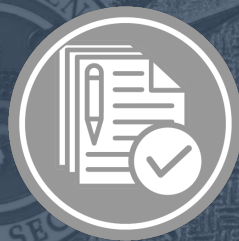
TRANSNATIONAL
GANGS



COUNTER-
PROLIFERATION



DRUG
TRAFFICKING



WORKSITE
ENFORCEMENT



IDENTITY AND
BENEFIT FRAUD



IP AND TRADE
ENFORCEMENT

BORDER SECURITY



The Investigative Objective



Disruption

Action(s) taken in furtherance of the investigation that impede the normal and effective operation of the target organization or targeted criminal activity.



Dismantlement

Destruction of the target organization's leadership structure, network, and financial base such that the organization is incapable of reconstituting itself. A successful dismantlement is often, but not always, linked to the judicial proceedings in the case.



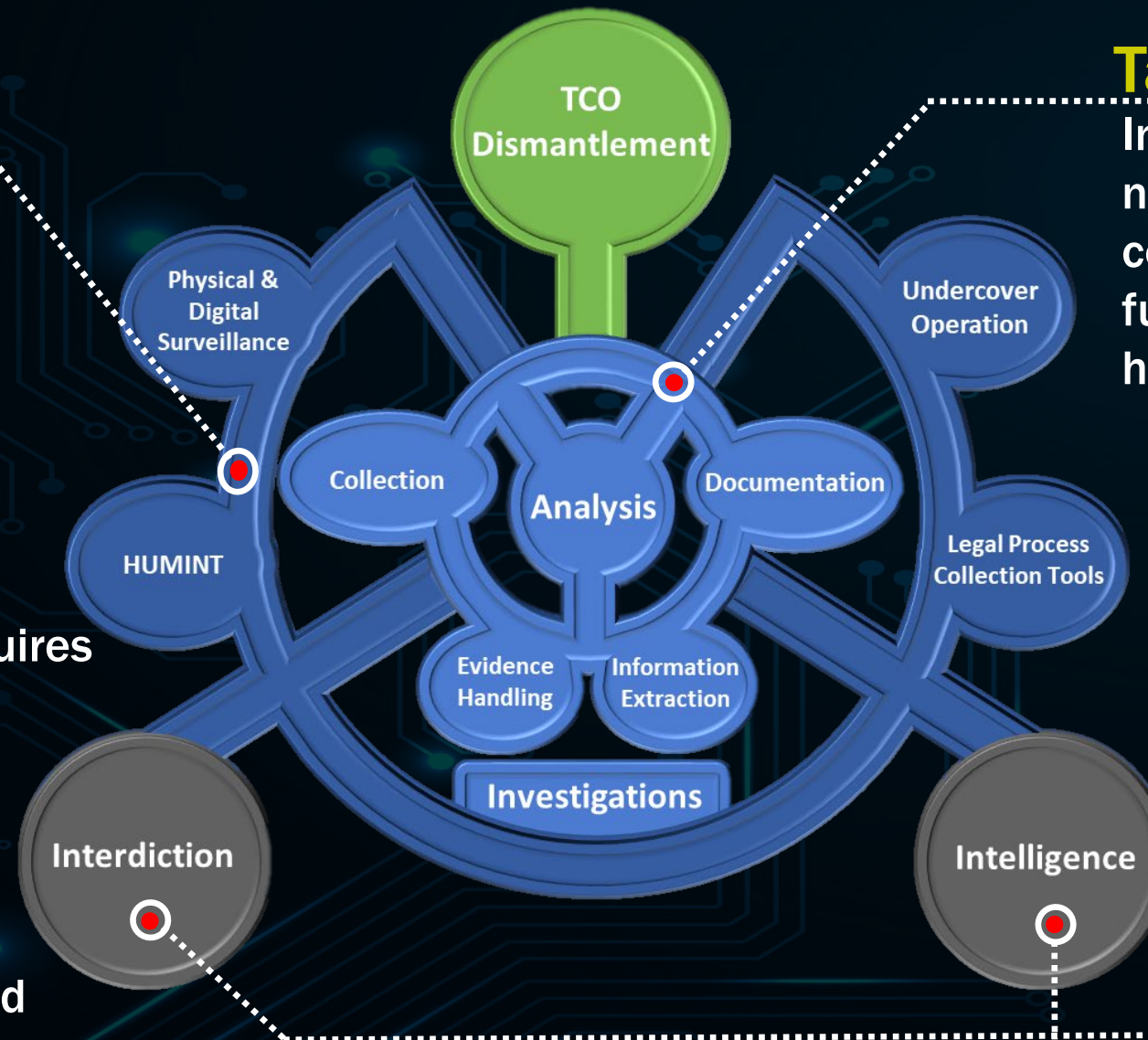
INVESTIGATIVE PROCESS

Unique Tools

HSI leverages many unique tools such as:

- management of confidential informants
- certified long term undercover operations
- T-III Wiretaps
- Grand Jury Subpoenas

Collected information requires specialized handling and information protections. Additionally, **advanced analytics** are vital to protecting our operators and best leveraging limited resources.



Tasks

In practice, investigations are not cyclical instead they are a constant flow between the fundamental tasks highlighted in this graphic.

Partnerships

Successful organization dismantlements are generally the result of a whole of government effort where Interdiction and Intelligence components play a vital role.



Deep Understanding of Requirements

In 2018 the RAVEN Program Team began collecting requirements for a next generation analytics platform.



30
Requirements Gathering Events



210
Front Line Subject Matter Experts Participants



14
Operators on the RAVEN Leadership Team

Information Collection

- Automate collection of publicly available information from the internet to support criminal investigations and investigative initiatives.
- Automate collection of non-public online information to support law enforcement undercover activities.
- Enhance HSI's ability to securely obtain information from private sector partners.
- Enhance HSI's ability to obtain information from the general public related to potential threats and/or possible criminal activity.

Ingestion and Transformation of Information

- Automate the ingestion of and connections to information in existing DHS authoritative systems of record.
- Automate the extraction and transformation of information from data sources which traditionally require manual user intervention.
- Facilitate user's ability to bring data to the system and fuse it with information currently in the system.



Intelligent Analysis

- Fusion of information from many different sources so that a single threat picture can be assembled.
- Enable users to search across all available data for selectors.
- Facilitate search and exploration of all available data to expose complex event interactions and criminal networks.
- Lead generation through robust multi vector analytics.
- Prioritization through analytics which measure threat.

Collaboration and Sharing

- Facilitate a secure and fully integrated mechanism for users from different components and agencies to work together on investigations and share information without having to be co-located.
- A fully integrated knowledge transfer system for users to share information concerning constantly evolving criminal typologies. This system must facilitate the use of all available information and incorporate intelligent analytics to test, support, or refute assertions and expose non-obvious trends.

Visualization and Reporting

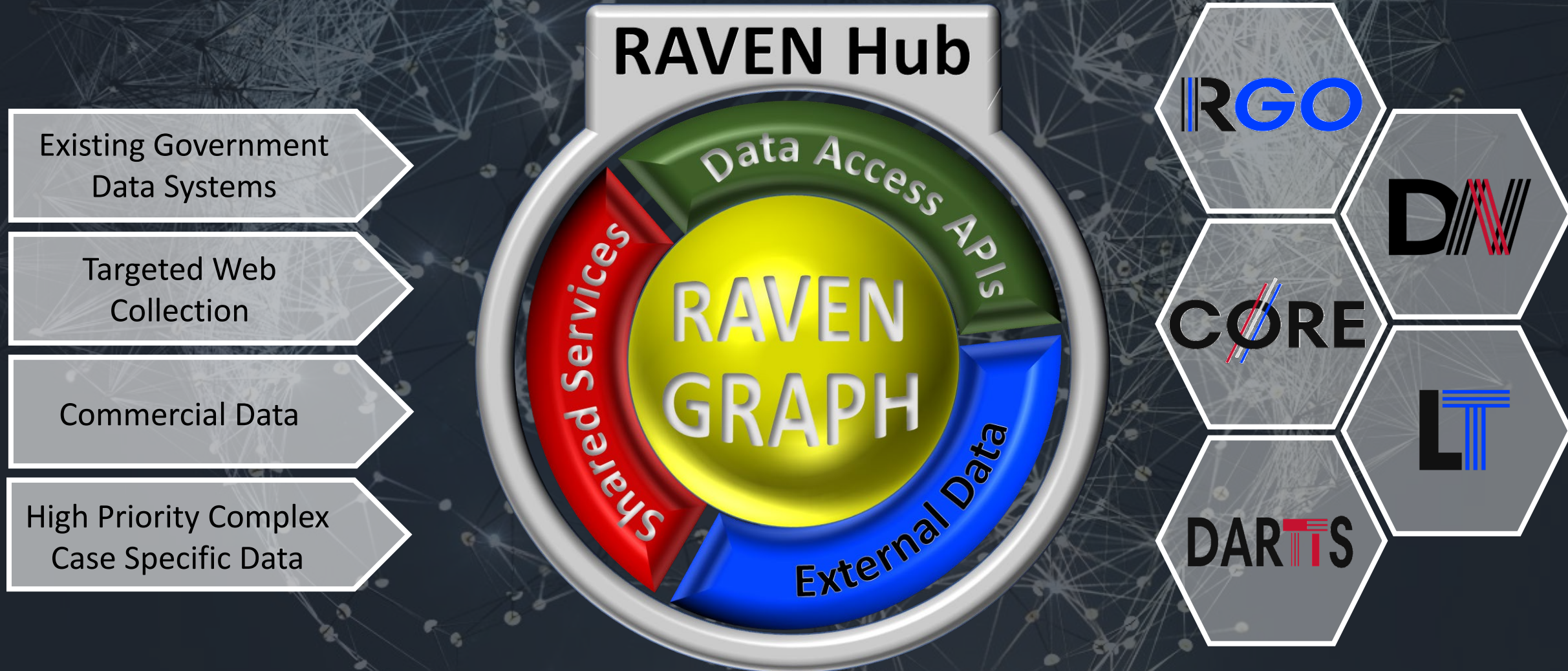
- User interfaces which can be accessed via web and mobile devices.
- User friendly interfaces which are tailored to effectively address the needs of the user and have a consistent appearance and function so as to lower the level of training required for their effective use.
- Reports and exportable visualizations which can be shared with team members who do not have access to the system and can be used to brief interested parties.

RAVEN PLATFORM GUIDING PRINCIPLES

- *Build For Modularity and Extensibility*: We are focusing on building tools which are modular and built to be extended. The governing idea is that criminal organizations constantly change, and we need to the ability to rapidly build advanced analytics and expose them to the user without having to change the underlying framework.
- *Simple But Deep*: Easy for users to understand and utilize for general queries yet allows for extensive functionality focused on super user needs.
- *Web Based AND Mobile Always*: All user interfaces will be exposed via the web browser or a custom app (RAVEN Go). We do not build desktop tools because they are too expensive and time consuming to maintain.

RAVEN PLATFORM

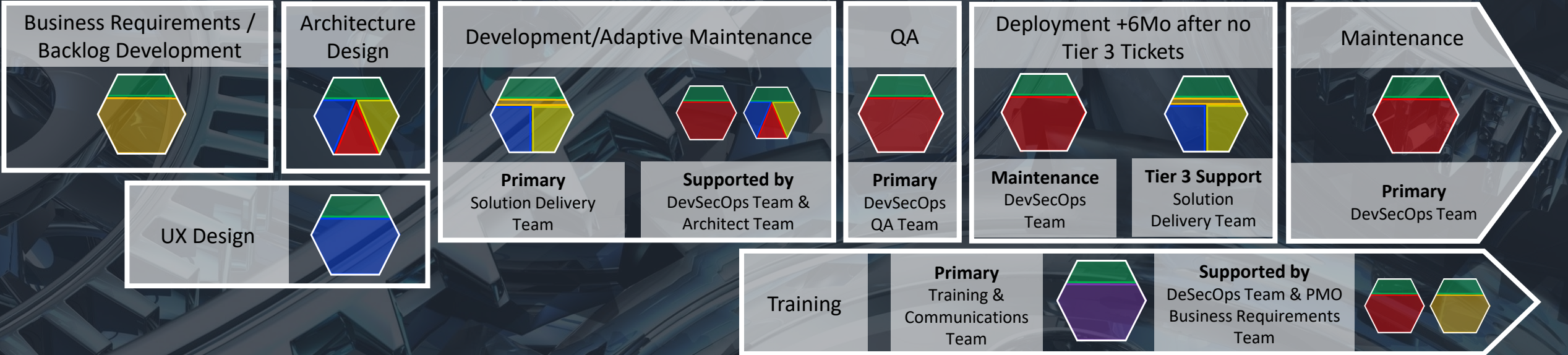
The RAVEN platform is designed as a **Hub and Spoke model** with a single shared data layer, reusable micro-services which specialize in data cleaning and machine learning tasks surrounded by a suite of special purpose web-based and native mobile user interfaces.



RAVEN – DELIVERY WORKFLOW



Non-Production Environments



Production Environments

RAVEN – TEAM COMPOSITION

Architecture Team



- Lead by a Government Project Manager.
- Comprised of the Architects from all three contracts.
- Each Architect specializes in their contracts specific area.
- Responsible for technical planning and coordination so that Solution Delivery Teams have what they need to be productive.

Focused on a consistent platform.

Solution Delivery Teams



- Each team is led by a Government Project Manager.
- Each team is comprised of members from the Data Analytics, UI/UX, and PMO contracts.
- Each team is full stack capable but may be weighted more heavily in one direction to support a specific problem.

Focused on developing and deploying high quality code at a rapid cadence.

Government

RAVEN - PMO

RAVEN - Training &
Communications

RAVEN - UI/UX

RAVEN - Data
Analytics

RAVEN -
DevSecOps

SOLUTION DELIVERY TEAM – DIVISION OF WORK

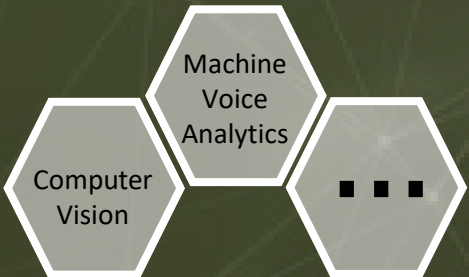
ETL



Normalization & Enrichment



ML Extraction & Classification



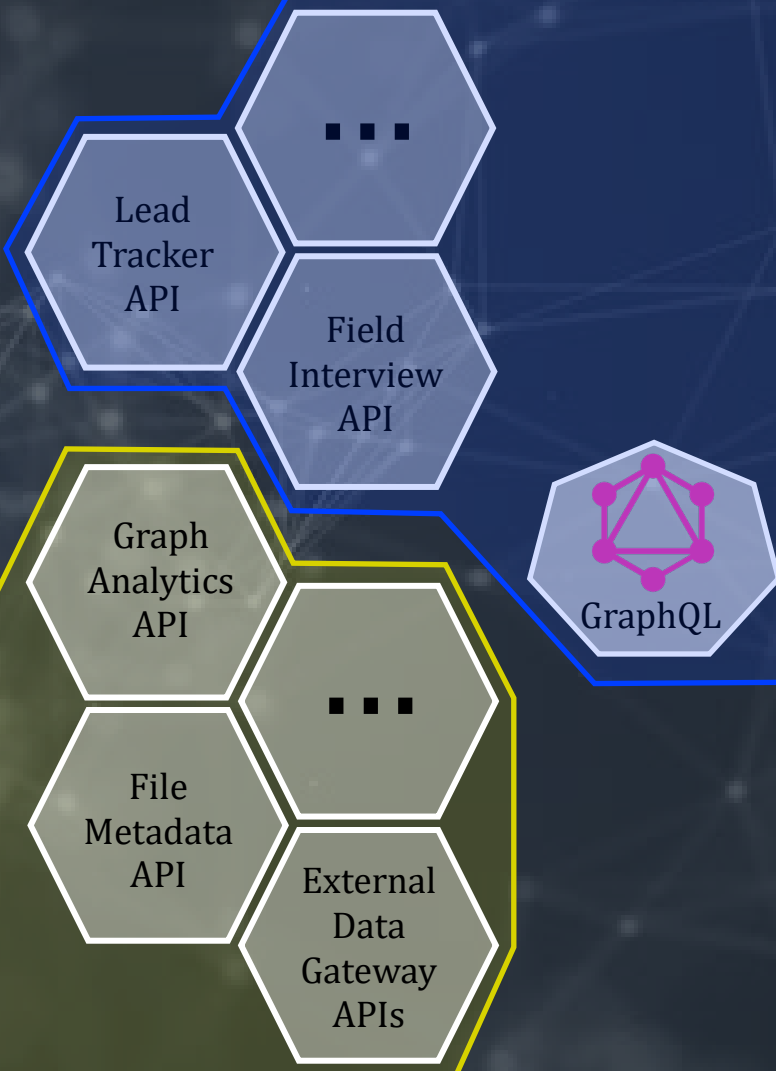
Data Storage



Targeted Web Collection



Application and Data Access APIs



Web and Mobile UI



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- HSI is currently in the process of restructuring its RAVEN Development Support Contracts.
- HSI anticipates award of the following requirements in the following order:
 1. RAVEn Data Analytics: APFS # F2021053371
 2. RAVEn User Interface / User Experience (UI/UX): APFS # F2021053369
 3. RAVEn DevSecOps: APFS # F2021053372
 - a. The APFS is an Advanced Planning Forecast System that is subject to change as requirements and acquisition strategies fully develop. You are encouraged to keep an eye on projects that you are interested in participating on, in order to witness updates to the requirements or strategy.
<https://apfs-cloud.dhs.gov/dashboard>
- The Government intends to award to three separate contractors as primes. Offerors who are awarded a prime task order may participate in a second or third task order as subcontractors if they elect to do so.

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Anticipated Acquisition Strategy

	Data Analytics	UI/UX	DevSecOps
Vehicle	GSA MAS - IT 70	GSA MAS - IT 70	GSA MAS - IT 70
Estimated Dollar Range	\$50,000,000.00 to \$100,000,000.00	\$50,000,000.00 to \$100,000,000.00	\$50,000,000.00 to \$100,000,000.00
Incumbent*	DirectViz Solutions, LLC	KCI Acuity, LLC	Booz Allen Hamilton
Competition	Competitive RFQ IAW 8.405-2(c)(3)(iii)(B)	Competitive RFQ IAW 8.405-2(c)(3)(iii)(B)	Competitive RFQ IAW 8.405-2(c)(3)(iii)(B)
Contract Type	Hybrid Firm Fixed Price (FFP)/Time and Material	Hybrid Firm Fixed Price (FFP)/Time and Material	Hybrid Firm Fixed Price (FFP)/Time and Material
Evaluation Criteria, Methodology, Pricing Strategy	Anticipate using a two phased approach with a firm down select from phase 1, inviting up to 3 of the most highly qualified to participate in phase 2 which will include technical demonstrations.		
Solicitation Release	5/13/2021	6/1/2021	6/15/2021
Award	7/30/2021	8/16/2021	8/31/2021

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- Questions? Additional questions following the presentation must be submitted by 5:00 PM local time on Wednesday, April 28th, 2021, to michelle.brooks@ice.dhs.gov.
- We may not be able to answer all the questions during the event, however, we will collect all questions and provide responses to the original beta.sam.gov posting associated with the Industry Day invitation.
- The Government may support one-on-one meetings with the industry day participants following the event, provided there is industry interest and Government bandwidth to fairly support interested participants.