Capabilities Overview
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We apply industry-leading expertise and new emerging technologies to identify and solve the most complex organizational challenges. Since 2016, we have successfully collaborated with a wealth of enterprise and government organizations to help augment the workforce, improve productivity, and drive profitability on their behalf.

We act as a strategic consultancy, specializing in professional management & technical services, information security & compliance, and emerging technology & AI readiness. Our team is composed of expert data scientists, developers, engineers, futurists, and philosophers that are dedicated to delivering strong ROI with every project.

As a company, we believe in pushing the boundaries of what’s possible. We know that with the right team and technology, there’s nothing we can’t accomplish.

We appreciate you taking the time to review our capabilities and look forward to discussing how we can assist you and your organization in the years ahead.

Regards,

Terry Rice
CEO

Epigen Capabilities Overview
Practice Areas

We help our customers in the following ways:

Professional Management & Technical Services

We develop custom plans and playbooks dedicated to upskilling your team, improving your existing infrastructure and driving growth across your organization.

Our Capabilities

- Organizational Change Management
- Strategic Communications
- Enterprise Performance Management
- Enterprise, Data, Solution & Technical Architecture
- Portfolio, Program & Project Management

Information Security & Compliance

We help establish and maintain the highest level of cyber security for your organization, ensuring your systems and infrastructure meet all organizational and governmental requirements.

Our Capabilities

- DevSecOps
- Compliance
- Authorization & Certification
- Red Team/Blue Team
- Cyber Innovation

Emerging Technology & AI Readiness

We use emerging technology to help augment your workforce, unlock value from your data, and improve accuracy, productivity, and profitability across your organization.

Our Capabilities

- “AI Ready” Strategies
- Smart Cities
- Conversational AI
- Predictive Analytics
- Big Data Engineering
- Data Science & Statistical Analysis
- Distributed Ledger & Smart Contracts (Blockchain)
- Robotic Process Automation
Professional Management & Technical Services
Professional Management & Technical Services

We develop custom plans and playbooks dedicated to improving your team’s performance and your existing infrastructure. This includes change and program management, technical architecture solutions, and scenario planning.

Our Capabilities

- Organizational Change Management
- Enterprise, Data, Solution & Technical Architecture
- Strategic Communications
- Portfolio, Program & Project Management
- Enterprise Performance Management
Organizational Change Management

We develop strategic plans and frameworks for training teams and managing cultural and structural changes within organizations. This includes implementing new tools, skills, and behaviors to ensure ongoing growth and success. This process is designed to facilitate transformation, improve communication, establish operational metrics and educate employees about new roles and responsibilities allowing the organization to create methodologies that put people first while ensuring teams are aligned around mission and vision.

Strategic Communications

We work tirelessly to understand your organization and strategic objectives, with a goal to create a strong narrative dedicated to building brand awareness and engaging and motivating your audience to action.

We design strategic and integrated outreach plans for Enterprise-level and departmental launch initiatives, and individual projects with a disciplined communications development and launch process. We drive consistent and coordinated “air traffic control” of program efforts for maximum impact. We create compelling content and design across multiple platforms including digital, web, print and video to deliver the right message, at the right time to the right audience.

Enterprise Performance Management (EPM)

From concept to execution, every aspect of EPM was created to serve large government enterprises, with each engagement culminating in actionable scorecards, robust dashboards, clear recommendations for remediation, and agile change management plans.

Our process starts with observation, with an overall goal to help enterprise leaders make explicit and effective decisions.

We engage our customers through all-source interviews and research to identify and capture successes and potential areas for improvement.

We empower our clients by providing them clarity through data driven, quantitative performance analysis using a patented scoring methodology. We optimize their results through partnership and collaboration with our customers to road map, drive, and support continuous improvement.
Enterprise, Data, Solution & Technical Architecture

We are full-stack architects. We use proven methodologies, and frameworks, like TOGAF, BIZBOK, and DoDAF to develop technology and business strategies and solutions that align with organizational goals and objectives, while also ensuring scalability, security, business value, and mission value, and technical fit. We provide plans that define strategic vision, enterprise architecture, and operational road maps for the implementation of data, technology, and solutions for our customers and partners.

As a result of what we do, organizations develop the operational infrastructure necessary to increase digital literacy in the workplace, create a common vocabulary for business value and success enabling better collaboration, and implement an environment that enables a culture of adoption.

Portfolio, Program & Project Management

Our core strength revolves around our innate ability to understand our clients, support their mission-critical needs and identity, manage and solve their complex problems.

Our tailorable approach to real program and project management leverages our proven Agile Capability Management Methodology (ACMM).

ACMM provides comprehensive program and project planning, direction, coordination, and controls necessary for effective and efficient accomplishment of all core project tasks and activities.

Our team provides broad technical and functional management expertise to include, but not limited to, the following core project management activities:

- Centralized administrative and clerical program-management services
- Program and project metrics and reporting
- Risk, quality, schedule, stakeholder, and enterprise capability planning and management
- Communications and outreach
- Use of Agile Best Practices, to include lessons learned

ACMM, coupled with a problem identification framework, facilitates critical analysis and synthesis, and arms our client with qualitative and quantitative data, beyond cost, schedule, and performance constraints, allowing our team to track optimal return on investment metrics and make informed business decisions.
Information Security & Compliance
Information Security & Compliance

We help establish and maintain the highest level of cyber security for your organization, ensuring your systems and infrastructure meet all organizational and governmental compliance requirements. This includes auditing and identifying system vulnerabilities, educating and certifying your staff, developing robust cyber security programs, and providing ongoing monitoring.

Our Capabilities

- DevSecOps
- Red Team / Blue Team
- Compliance
- Cyber Innovation
- Authorization & Certification
Development Security Operations (DevSecOps)

We help you preempt, prevent, and prevail against cybersecurity threats to ensure the safety and integrity of your organization. This includes taking an innovative approach to the Software Development Life Cycle (SDLC) with proven security techniques, thought leadership, and creative problem solving to architect frameworks that meet and exceed your compliance requirements.

Our DevSecOps work utilizes agile processes to enhance traditional DevOps processes and procedures through continuous integration and continuous delivery supporting short term sprints, testing and release management to provide a holistic approach to DevOps.

We recognize new challenges such as the impact of shorter development cycles also shortening the time to identify security issues and the requirement for automation to stabilize the process. Automated static code analysis tools assist in responding to short development sprints by automating part of the static code analysis.

Compliance

From our initial audit to implementation, we ensure your organization’s systems and technical infrastructure meets all legislative, regulatory, and organizational compliance requirements. This includes but is not limited to, business and industry-specific models like HIPAA/HITECH, PCI, GLBA, SOX, FISMA, and NIST/DFARS. We also account for international and regional Data Protection Authority standards such as GDPR, the APEC Privacy Framework, and Cross Border Privacy rules.

Authorization & Certification

Recognizing the unique challenge organizations face in balancing operational/mission objectives with meeting ever evolving cybersecurity legal requirements, our elite team of cybersecurity professionals are here poised to guide and optimize your path to Authorization and Certification.

Our professionals being well versed with RMF, FedRAMP and CMMC, has on average been able to reduce the length of time it has taken our clients to achieve Authorization and Certification by 35%. Through augmentation of our AI capabilities, we are constantly finding innovative ways to automate and reduce the authorization and certification process.
Red Team / Blue Team Simulations

We simulate real-life cyber attacks against your organization to help locate weaknesses and improve information security. Unlike one-off safety checks like penetration testing or security auditing, our exercises are designed to test the resilience of your organization's security over an extended period. Upon completion, we provide a full overview of the problems we’ve identified and a detailed plan for ensuring the safety and integrity of your infrastructure.

We provide static code review tools and techniques and our professionals have a coding background to cut down on false positives and false negatives. We leverage OWASP top 10, WASC Threat Classification 2.0 and CWE/SANS top 25 to assure the highest level of code review to identify security vulnerabilities that can pose risks to your organization’s information systems. We review code to identify Injection flaws, Cross site scripting flaws, cross site request forgery attack (CSRF) vulnerabilities, and insecure coding practices.

Cyber Innovation

As we develop innovative ways to use AI in the detection of cyber attacks, attackers are using AI to create new and innovative threats to your overall security.

As cyber attacks continue to evolve, it’s essential to develop and implement new and innovative practices and tools to thwart those attacks.

We develop AI tools and training programs dedicated to upskilling security users on the application of AI in cybersecurity in the workplace.

Our applications have enabled organizations to detect network intrusion, perform cyber threat hunting, and continuously monitor production environments to identify and report on anomalous behavior.
Emerging Technology & AI Readiness
Emerging Technology & AI Readiness

We use emerging technology to help augment your workforce, unlock value from your data, and improve accuracy, productivity, and profitability across your organization. This includes implementing data science & advanced analytics, AI, blockchain, and low code/no-code solutions.

Our Capabilities

- "AI Ready" Strategies
- Predictive Analytics
- Distributed Ledger & Smart Contracts
- Smart Cities
- Big Data Engineering
- Robotic Process Automation (RPA)
- Data Science & Statistical Analytics
- Conversational AI
“AI Ready” Strategies

Our strategies help organizations understand how to apply artificial intelligence, blockchain, and RPA to their operations, from organizational growth and maturity to digital transformation, DevSecOps, Application Refactoring and Cyber.

Our “AI Ready” Notebooks provide concrete and executable examples for our customers in the areas of Organizational Change, Big Data, DevSecOps, and Cyber.

Smart Cities

We empower intelligent collaboration between the citizens and their city by designing and implementing a diverse range of traditional, and emerging technologies, electronics, and sensors to collect data. By collecting the right data, and applying artificial intelligence, we can help cities increase administrative insight, automate citizen services, improve the delivery of critical services and communications, as well as asset management, resources and services management, and overall city operations, budgeting, and leadership.

Conversational AI

We are developing technology that uses real-world data to provide personalized solutions and recommendations designed to benefit individuals as they navigate work, education and everyday life. Our technology provides automated messaging and speech-enabled applications that offer human-like interactions between computers and individuals. Our platform can communicate like a human by recognizing a user’s speech, vision, text, and context to provide calculated, real-time answers and insights.

Our customers are using Conversational AI to bridge the knowledge gap, improve diversity, and increase productivity and revenue.

Robotic Process Automation (RPA)

We use RPA to automate your existing manual processes, improving the overall efficiency and profitability of your organization.

RPA is designed to automatically capture and manipulate data like humans. It communicates with and triggers responses from other systems in order to perform a variety of repetitive tasks. RPA operates 24/7 and helps eliminate the risk of human error.
Big Data Engineering

At Epigen, our goal is to help you create and manage your own big data infrastructure. We will assist you in setting up scalable, robust, and fault-tolerant systems. This will allow you to better understand, analyze, and extract vast amounts of information quickly as we provide you with the necessary skills to develop, maintain, test, and evaluate big data solutions.

Data Science & Statistical Analysis

Our goal is to help you better understand and unlock value from your data means. We do this by utilizing scientific processes, algorithms, and methods to identify patterns and trends to give you better insight into your organization. We will teach you how to structure and understand big data (which includes the 5 Vs—volume, value, velocity, veracity, and variety) and how to apply the correct statistical and machine learning algorithms to develop the best data model. All of these data processes result in producing a graphical visualization of the data of your organization.

Distributed Ledger and Smart Contracts (Blockchain)

We help develop and implement smart contracts for use by your organization. These contracts permit agreements to be executed among separate parties, without the need for third-party involvement. We use blockchain technology (a decentralized distributed ledger) to ensure the highest level of safety and security with each contract.

Predictive Analytics

We use statistical algorithms, machine learning techniques, data mining, and modeling to uncover insights and identify future outcomes based on historical data. Our goal is to exceed the present knowledge of data and provide your organization with a comprehensive best assessment of what will happen in the future.
Our Process
We assist organizations at every stage of their journey.

**Assess**
We audit and assess your existing systems, infrastructure, and processes to identify problems and opportunities for improving ROI.

**Advise**
We develop strategic playbooks for solving your biggest organizational challenges, outlining a clear plan for driving growth and achieving success.

**Educate**
From AI readiness to security and compliance, we help up-skill and train your team to ensure they are ready to take on the challenges of today and tomorrow.

**Implement**
We work closely with your team to implement and execute our proposed plans, ensuring the team is set up for success moving forward.
Success to Date

Department of Defense
Building An "AI Ready" Organization

Our team of “AI-Ready” experts and thought leaders, provided unparalleled expertise and insight to the Department of Defense (DOD), in planning, coordinating, and establishing the Defense Business Systems Center of Excellence (DBS CoE).

Applying intentional organizational creativity, engineering, and Agile principles, we designed and delivered DBS CoE initial operational capability (IOC) in less than 9 months.

IOC included critical business system strategies, tools and methodologies necessary to bolster DoD’s DBS modernization efforts.

As a result, the newly established DBS CoE was credited with reducing IT capability investment risks across DLA’s enterprise, and incrementally improving business system life cycle outcomes for the Warfighter.

The Defense Business Systems Center of Excellence (DBS CoE) was asked to assess the impact to the non-military Services or Intelligence Community agencies of the DoD, collectively referred to as the “4th Estate”.

Having helped establish the DBS CoE, our team was able to quickly establish and execute a plan of action, leveraging our analysis framework that includes data collection, analysis, and synthesis.

Through our process, we reviewed applicable acquisition, procurement, and contract policy/guidance documentation, and current CWS capabilities, combined with interviews.

Our analysis enabled us to accurately identify CWS gaps with potential contract writing and administration needs, and provide DPAP, DLA, and 4th Estate leaders with essential insights and recommendations supporting explicit acquisition decisions.
Department of Transportation, FTA  
Implementing an "AI Ready" Strategy

Since 1964, FTA has partnered with state and local governments to create and enhance public transportation systems, investing more than $12 billion annually to support and expand transit services.

To keep track of the industry and provide public information and statistics as it continues to grow, FTA’s National Transit Database (NTD) records the financial, operating and asset conditions of these transit systems.

Epigen was asked to use AI to detect issues in the reporting of public transportation within the National Transit Database (NTD).

Our goal was to provide a machine learned algorithm that could mimic the existing rules-based engine that the FTA uses to identify issues in reporting.

Our success in developing the machine learning model to accurately predict the outcomes of the rules-based system allowed the FTA to realize a cost savings of $1M per year in the creation and maintenance of the rules.

In the first six months of the project, we were able to assist the FTA in implementing the infrastructure (both technical and personnel) necessary for AI, develop the communications strategy and planning methodologies, and develop and implemented an AI plan and predictive model that lowered the burden on public reporting. This helped FTA policy makers gain insights into their data, and adjusted existing legacy applications to interact with AI based models.

Epigen worked closely with our Federal partners to develop an “AI Ready” strategy allowing them to gain valuable insights from their data and make well informed and timely decisions.
Department of Health and Human Services (HHS OIG) Establishing "AI Ready" Data Architecture

The Department of Health and Human Services Office of the Inspector General’s (HHS OIG) mission is to protect the integrity of HHS programs as well as the health and welfare of program beneficiaries.

HHS OIG must ensure that all internal data sources are accessible and connected, the correct technologies are available for use, and the results can easily be shared with the right decision makers.

The HHS OIG’s Chief Data Officer (OCDO) and Chief Information Officer (OCIO) work together to improve the access to and visibility of data. They play an essential role in developing integrated, organizational-wide operations to better understand and prioritize investigations of waste, fraud, and abuse.

HHS OIG Offices of the Chief Data Officer and Chief Information Officer engaged Epigen to provide leading-edge insight through the application and implementation of descriptive and predictive analytics, the development of "AI Ready" data architecture, and enterprise and solution architecture.

As the Federal Healthcare portfolio changes, healthcare systems become more complex and fraud cases become more sophisticated. The detection of waste, fraud, and abuse requires a view of the “big picture” that is managed by different HHS OIG components across multiple geographic regions.

The implementation of data management, systems integration, and predictive analytics and visualization through the use of AI have helped investigators efficiently and effectively detect waste, fraud, and abuse and protect the integrity of HHS OIG programs operations to better understand and prioritize investigations of waste, fraud, and abuse.
The HHS OIG recognized that a strategic approach to managing data is a prerequisite to any business transformation or technology modernization effort.

Critical factors for success included:

- **Integrated Analytics**: Enable HHS OIG to effectively validate and visualize their data to assist agents in optimizing leads to fight waste, fraud, and abuse.

- **Data Management**: Enable HHS OIG to define and govern data across multiple stakeholders within HHS OIG offices for increased operational efficiency.

- **Evidence-based Decision-Making**: Improve upon existing HHS OIG decision-making by leveraging new and unique data sources to further enhance data-driven decision making.

- **Data-Savvy Workforce**: Enable HHS OIG to increase proficiency in modern technical approaches to assist in strategizing and prioritizing future business impact.

Epigen enabled the HHS OIG to achieve these four critical success factors by:

- Providing insight and leveraging visualizations and statistical models, which allowed HHS OIG to prioritize cases of fraud and align internal resources for further investigation.

- Connecting business processes through integrating and managing data sources and ensuring information is available to those who require access.

- Clearly defining and identifying metadata standards to assist HHS OIG in governing existing and future datasets.

- Integrating information from multiple HHS OIG systems and analyzing relationships, between a data use agreement and impacted data sets.

- Incorporating data traceability to better understand the quality of the data and use of the data in the overall decision-making process.

- Enabling datasets to be searchable, with read-access, across all HHS OIG components.

- Integrating external data sources to facilitate the research of unexplored relationships and insights which build upon existing models and analysis.

- Providing guidance and training to HHS OIG staff on best practices relating to technology solutions and agile methodologies.
What Sets Us Apart?

Agile & Adaptive Team

We are a highly responsive and agile team that can quickly and easily adapt to achieve your deliverables and timelines. We pride ourselves on being a strong, strategic, and nimble partner that can accommodate and scale as required.

Proprietary Approach

We are constantly developing new and innovative technologies and methods for identifying and solving your biggest challenges. Our solutions are custom-built and tailored to address your individual needs.

Unrivaled Network

We are backed by an unrivaled network of thought leaders and c-suite executives that sit at the forefront of technology and innovation. These individuals are regularly involved in our projects and are responsible for contributing to your ongoing success.
Get in touch today to find out how we can benefit your organization.

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NAICS Codes:
511210 Software Publishers
541511 Primary Custom Computer Programming Services
541512 Computer Systems Design Services
541519 Other Computer Related Services
541690 Other Scientific and Technical Consulting Services

Product & Service Codes Selected
PSC Description
R410 SUPPORT - PROFESSIONAL:
PROGRAM EVALUATION/REVIEW/DEVELOPMENT