



Highrise Consulting, Inc.
Capabilities Presentation

Introduction

Highrise Consulting, Inc. is an established (since 2007) small-business Information Technology (IT) company headquartered in Bethesda, MD. Our goal is to provide our clients with the best technology services that contribute to building the most powerful, reliable and cost-effective solutions in the IT industry.

Contract Vehicles:

GSA – Federal Supply Schedule:

- Federal Supply Schedule 70 - General Purpose Commercial Information Technology Equipment, Software, and Services
- SINs: 132-51, 132-56
- [Highrise GSA IT70 Rates](#)

NIH CIO-SP3 SB:

- Prime on the CIO-SP3 Small Business
- [Highrise CIO-SP3 rates](#)

NIH Blanket Purchase Agreement (BPA):

- Information Technology Professional Services
- \$500K max per order, unlimited number of orders
- [NIH BPA Program](#)

NAICS Codes:

- 518210 - Data Processing, Hosting, & Related Services
- 541330 - Engineering Services
- 541511 - Custom Computer Programming Services
- 541512 - Computer Systems Design Services
- 541513 - Computer Facilities Management Services
- 541519 - Other Computer Related Services
- 541611 - Administrative Management and General Management Consulting Services
- 541690 - Other Scientific & Technical Consulting Services
- 541990 - All Other Professional, Scientific, and Technical Services
- 611420 - Computer Training



Capabilities Summary

- **Cloud:** Cloud Adoption, Cloud Providers Evaluation and Security; Network and Systems Architecture; Process Improvement and Cloud Administration; Authority to Operate (ATO) package and Cost Management
- **Cybersecurity:** Support Audits; Identify threats; Cybersecurity Preparedness; Cloud Security; Asset Management
- **Business Analysis:** Business Process Analysis; Business Process Management; Requirements Analysis; Stakeholder Collaboration;
- **Operations Support:** Infrastructure Operations and Maintenance; Database Administration; Network and Storage Management; Cybersecurity; Incident Response; Certificate Management; Asset Management
- **SharePoint:** Microsoft Gold Collaboration and Content Competency; 10-year experience in SharePoint consulting and development; Custom solutions on SharePoint Online and SharePoint On-Premises for numerous Federal agencies; Proven track record of successful SharePoint migrations – 2016, 2019, Online, Office 365
- **Software Development:** Object Oriented Analysis and Design; Java Enterprise Edition (JEE) development; .NET Development; Apache/Tomcat setup and configuration; Client (JavaScript, AJAX, Tiles) and server-side programming; Relational database design; DBC API, SQL, PL/SQL Oracle Database Management Systems; Web Services, Service Oriented Architecture, XML; Testing tools and technologies such as JUnit and Selenium; Single sign-on development; Secure development practices; Angular JS; Workflow/ BPM development
- **Testing and QA:** Test Strategy Evaluation and Implementation; Functional Testing; Performance and Load Testing; Test Automation; Security Testing; Test Data Management; Tool evaluation and recommendation
- **Service Desk:** Functional Service Desk Support; Communications, Documentation, and Training support; Account Management Support; Enterprise Service Desk tools implementation and management

Grants Management Expertise

- Expertise delivering grants management services and solutions across the federal government
 - Employ over 150 professionals that specialize in the Grants Management arena
 - Full life cycle software development using Agile Software Methodology
 - Grants business process modeling and program onboarding
 - Grants system architectural support, including integration with systems such as Grants.gov and UFMS.
 - 24/7 systems and user support including emergency response
- Knowledge of building, growing and marketing two of the largest HHS grants management shared service providers
 - **National Institutes of Health (NIH)/electronic Research Administration (eRA)**: Provide services across all major areas of the enterprise program including partner development and management, business analysis, software design and development, operations, user support and helpdesk, and partner agency onboarding and training.
 - **Administration for Children and Families (ACF)/GrantSolutions.gov**: Provide services across all phases of the funding opportunity announcement and application review processes utilized by the partner federal agencies.
- Understanding of federal shared services approach: Standardize, streamline, and increase value through the delivery of information technology services; Strike a balance between a one solution fits all approach and a unique solution for each approach.

New Agency Onboarding

- Supported the onboarding activities of the Substance Abuse and Mental Health Services Administration (SAMHSA) using the NIH/eRA grants management system. Provided business analysis, business process re-engineering, onboarding support and training, and overall support of the agency's business processes and workloads.

Stakeholder Collaboration

- Supported the engagement of federal agencies that utilize the NIH/eRA grants management system. Provided business experts who engaged with stakeholders to elicit feedback, encourage collaboration and identification of shared business needs.

Shared Services Implementation

- Provided the vision and approach for the development of a shared services module to support the Funding Opportunity Announcement business process to be utilized by GrantSolutions.gov and NIH/eRA grants management systems. Provided business analysis design, requirements gathering, stakeholder engagement, and requirements management.



Cloud – Understanding Challenges

- **Cloud Adoption** - organizations do not have a robust cloud adoption strategy in place prior to migration, resulting in projects lacking established standards, security configurations and embracing of new processes and platforms by staff
- **Migration** – preparing and moving existing systems and applications to cloud environment present many challenges, including system preparation and upgrades, large volume migration, executing cutover with minimal disruptions
- **Security** - it is essential to ensure that critical cloud assets are well protected. Misconfigured cloud services frequently result in data breaches
- **Compliance** - ensuring that organizations are compliant with NIH/HHS security standards after migration. NIH does not have clear cloud-specific security requirements.
- **Governance/Control** - ensure that cloud assets are properly provisioned, controlled and maintained in accordance with organization's CM policies.
- **Authority to Operate** – creating ATO package requires incorporating NIH/HHS requirements, GAO recommendations, and cloud-specific aspects of an organization
- **Cost Management** - on-demand and scalable nature of cloud computing services presents unique challenges planning and managing costs

Cloud - Adoption

- Utilize **Cloud Adoption Framework (CAF)** maturity heat map to identify the program’s maturity and expose potential cloud adoption inhibitors
- **People:** Evaluate organizational structure, roles and expertise
- **Process:** Evaluate program and project management
- **Business:** Assess business strategy and goals
- **Security:** Define the security strategy
- **Operations:** Define the operational strategy
- **Maturity:** Prepare for the target state
- **Platform:** Provide guidance for optimal use through cloud design principles and patterns

People	Organizational Structure	Manage Staffing	Roles and Job Descriptions	Organizational Change Management	Skills and Competencies	Training and Certification Readiness
Process	Portfolio Management	CI/CD	Program and Project Management	Service Delivery Management	Process Automation	Quality Management
Business	Benefits Management	Portfolio Governance	IT Strategy	Value Management	Risk Management	Cost Management
Security	GRC	Security Strategy	Security Reference Architecture	DevOps and SecOps Principles	Life Cycle Security	Security Operations Playbook
Operations	Business Continuity	SLAs and OLAs	Incident and Problem Management	Change and Configuration Management	Cloud Service Management	Performance and Ops Health Mgmt
Maturity	Heat-Map	Application Portfolio Analysis	Cloud Readiness Assessment	ITSM Assessment	Roadmap Sequencing	Target Platform Capabilities
Platform	Cloud Design Principles and Patterns	Conceptual Architecture	Application Migration Patterns	Logical Architecture	Implementation Architecture	Architecture Optimization

Cloud - Success Story: NIH eRA Program

Cloud Security

- Established security architecture compliant with Federal Trusted Internet Connection (TIC) requirements
- Implemented (CIS) baselines for consistent implementation of NIH/HHS/eRA requirements

Cloud Migration

- Successfully migrated NIH eRA Non-Prod and Prod 100+ systems to AWS on time and within budget
- Significant cost savings by moving to cloud
- Streamlined environment provisioning and management using automation

Cloud ATO

- NIH eRA is the first National Institutes of Health (NIH) enterprise system receiving Authority to Operate (ATO) in a cloud environment
- Reviewers commented that ATO package was one of the best approved by OCIO

Cloud Network

- Designed NIH eRA networking approach consistent with NIH long-term network requirements and compliant with Federal Trusted Internet Connection (TIC) requirements
- eRA to NIH to cloud networking connectivity that can be utilized by other NIH organizations



Cybersecurity – Understanding Challenges

- **Supporting Audit** - preparing and maintaining program security documentation, conducting internal audits and interfacing with federal auditors, respond to findings
- **Identifying threats** - knowing when your organization is under attack to be able to swiftly identify and shut down malicious threats
- **Cybersecurity preparedness** - understanding if your cybersecurity is capable of standing up to the latest threats is pivotal to effective risk mitigation
- **Incident response** - addressing cybersecurity threats is a huge challenge requiring rapid attack detection and incident response capabilities
- **Cloud Security** - it is essential to ensure that critical cloud assets are well protected. Misconfigured cloud instances frequently result in data breaches
- **Asset Management** - continuous, real-time visibility of all critical assets and software to know all of the authorized and unauthorized devices and software within your environment



Cybersecurity - Adoption



PLATFORM

- ▶ Compute Provisioning
- ▶ Network Provisioning
- ▶ Storage Provisioning
- ▶ Database Provisioning
- ▶ Cloud Migration

Focused on:

- ▶ Securely provision applications and infrastructure on-prem and cloud
- ▶ Optimize services and solutions by applying industry leading security practices, tools and skills



SECURITY

- ▶ Infrastructure Security
- ▶ Configuration Management
- ▶ Data Protection
- ▶ Security Hardening
- ▶ Security Testing
- ▶ Incident Response
- ▶ Audit Support

Focused on:

- ▶ Aligning federally mandated NIST, CIS and HHS security controls to your organization
- ▶ Ensuring compliance with DHS, HIPAA, Privacy Act, FISMA, NIST, FIPS, HHS and NIH security and privacy directives



OPERATIONS

- ▶ Continuous Monitoring of service availability and compliance
- ▶ Release & Change Management
- ▶ Real-time scanning and analysis for threat detection
- ▶ Asset Management

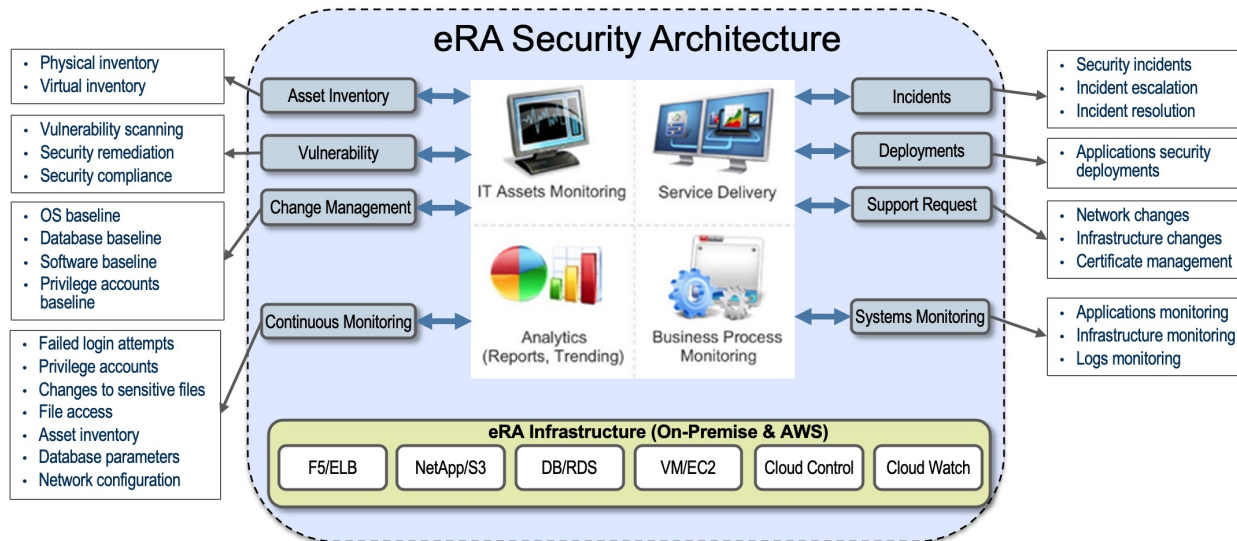
Focused on:

- ▶ System availability and security
- ▶ Enhancing data loss prevention
- ▶ Establishing a culture of best security practices



Cybersecurity - Success Story: NIH eRA Program

Audits Support	<ul style="list-style-type: none"> Achieved preparedness for GAO, FISMA, FISCAM and A-123 audits and security hardening eRA received one of the highest NIH marks during GAO audit eRA systems were consistently the highest scoring on CIS Benchmarks
Cloud Migration	<ul style="list-style-type: none"> Successfully migrated eRA Non-Prod and Prod 100+ systems to AWS on time and within budget Significant cost savings by moving to cloud Streamlined environment provisioning and management using automation
Infrastructure Security	<ul style="list-style-type: none"> Improved eRA security rating to one of the highest at HHS Implemented a comprehensive vulnerability management process and automated patching solution Establish regular security “fire drills” to maintain team readiness resulting in reduction of time-to-resolution of any issues encountered by 15%
Asset Management	<ul style="list-style-type: none"> Implemented enterprise asset management solution Automated discovery of infrastructure, software, IP’s and certificates for on-premise and AWS Enabled real-time capture of all assets in the environment to easily identify rogue assets



Business Analysis – Capabilities Summary

- **Business Process Analysis:** *analyze and document existing business processes*

Focus on business processes, solutions and the delivery of services; Define high level requirements that define the initial scope; Engage stakeholders to learn and document existing business processes and develop requirements and process workflows; Maintain standard practices and knowledge base to facilitate customer requirements validation, implementation and maintenance; Observe user's system interactions to identify pain points and define features that provides a better user experience; Facilitate identifying As-Is and To-Be approaches to meet customer needs.

- **Determine Business Process Changes:** *identify process requirements that result in a change to the business process.*

Overarching Product Owners with full business lifecycle and system expertise; Deliver flexible functionality that understands the agencies' needs and pain points, and deliver the services and solutions that bring them success; Propose innovative solutions that strive to reduce customized implementations that drive up development and maintenance costs associated with unique solutions

- **Design and Develop System Changes:** *technical approaches to support changes while providing flexibility*

Foster the design and development of business-driven solutions that utilize best practices focused on the business process needs, not only technical details; Communicate overall requirements to Agile development teams to ensure requirements are properly documented and understood; Assist teams in defining Epics and User Stories through techniques such as user-centered design and story mapping; Adhere to requirements management policies and processes to ensure effective approaches to requirements management are utilized

- **Stakeholder Collaboration** - *ensure stakeholder involvement and feedback throughout the development phase*

Communicate and promote capabilities to stakeholders to identify needs and opportunities; Collaborate with the customer and stakeholders to define detailed requirements that drive development activities; Elicit, analyze, validate and communicate customer needs, expectations, and constraints throughout the business analysis and software development process



Operations – Capabilities Summary

- **Infrastructure Operations and Maintenance:** Our approach is modeled under continuous improvement and Agile principles to offer highly trained, customer-service oriented professionals that excel in maintain critical systems at 99.9% uptime; Experienced in wide range of operating systems (Windows, RHEL, CentOS, Solaris) and hardware administration (vCenter, NetApp, Brocade, HP Blade, X5) and support both on-premise and in the cloud in patch management, configuration management, and security hardening; Created custom solutions to automate multiple O&M tasks including OS patching, Java upgrades and software provisioning; Designed and implemented solutions for centralized monitoring, alerting, and life-cycle management functionality for IT infrastructure (over 300 servers) and business applications (100+); Implemented a centralized asset inventory management tool to manage all infrastructure inventory in real-time including purchased COTS software, physical servers, virtual servers, certificates and IPAM (auto discovery of IP addresses)
- **Database Administration:** Designed and rolled out a consolidated Exadata, Data Guard and Disaster Recovery environment improving database performance, scalability and increasing systems availability from 80% to 99.98%; Standardized databases upgrade and patching processes on 15 Oracle databases; Implemented best in class data protection and data loss prevention by encrypting data in rest and in transit, ensuring the safety of 800,000 users financial and PII data; Staff experienced in wide range of relational and transactional databases (Oracle, RDS, DynamoDB, MySQL, and PostgreSQL) including patch management, database tuning, and security hardening
- **Network and Storage Management:** Cisco and AWS Certified network engineering staff specializes in providing diverse enterprise networking solutions focused on security and scalability; Implemented custom monitors for enhanced network and storage management, proactively addressing performance issues and potential security threats; Upgraded on-premise storage to latest SSD technologies with no downtime and minimal performance impact; Designed network architecture compliant with Federal Trusted Internet Connection (TIC) requirements and supported migration from AWS site to site tunnel to direct connect; Implemented AES-256 encryption cipher on incoming and outgoing network traffic
- **Incident Management and Monitoring:** Developed a continuous process for managing incidents from the initial response, incident escalation and corrective action, to providing final updates to the client and providing program metrics; Rolled out automated incident escalation procedure enabling Operations team to effectively resolve issues early and often, streamlining the incident escalation process and reducing troubleshooting and recovery time; Designed and implemented database, application and infrastructure monitoring solutions to analyze data, detect issues quickly and investigate emerging security and privacy threats for potential impact



Operations - Success Story: AHRQ HealthIT.gov

Operations and Maintenance	<ul style="list-style-type: none">• Maintained 20 main and sublevel domains with 99.9% infrastructure availability• Switched to AWS reserved instances for substantial cost savings• Migrated from MySQL to RDS databases• Implemented Change Control Board to approve changes
Monitoring	<ul style="list-style-type: none">• Monitored stack using New Relic• Created custom monitors• Enhanced escalation process to improve alert response time
Security	<ul style="list-style-type: none">• Proactively monitor logs and investigate potential threats• Performed Incident Response• Implemented Ipv6• Performed disaster recovery and fail over testing
Account and Asset Management	<ul style="list-style-type: none">• Implemented solution to auto-disable inactive user accounts• Managed AWS Identity and Access Management (IAM)• Developed a solution to capture hardware, software and digital certificates inventory

SharePoint – Capabilities Summary

- **Business Process Automation** - with SharePoint, we advance productivity by translating manual routines - from simple tasks to complex procedures - into fully automated operations. This approach boosts on-site performance by shortening workflow cycles, fostering teamwork transparency and eliminating the risk of human error.
- **Content/Knowledge Management** - SharePoint-based content/knowledge management aids organizations in adopting a modern approach to knowledge gathering, classification, searching, sharing, and reuse. Be it customized wiki libraries, a dedicated portal, or just a tool integrated into your infrastructure, our team applies high-level security practices for safe storage and effective decision making.
- **Web/Intranet Portals** - we create feature-packed web and intranet SharePoint portals that grant users a powerful toolkit to facilitate collaboration. Depending on your business requirements and culture, we come up with tailored SharePoint architecture coupled with first-class security controls for correct operation without compromising user experience and interface appeal.
- **Document Management** - with SharePoint, we build electronic document management systems that enable centralized control over all enterprise files. The transition to automated document processing prevents data loss and unauthorized usage. Rich metadata and smart data structuring allow for easy searching, editing, and secure storage, thus turning a platform into a shared virtual workspace.
 - Microsoft Gold Collaboration and Content Competency
 - 10-year experience in SharePoint consulting and development
 - 50+ Microsoft-certified SharePoint experts
 - Custom solutions on SharePoint Online and SharePoint On-Premises for numerous Federal agencies
 - Proven track record of successful SharePoint migrations – 2016, 2019, Online, Office 365



Software Development – Capabilities Summary

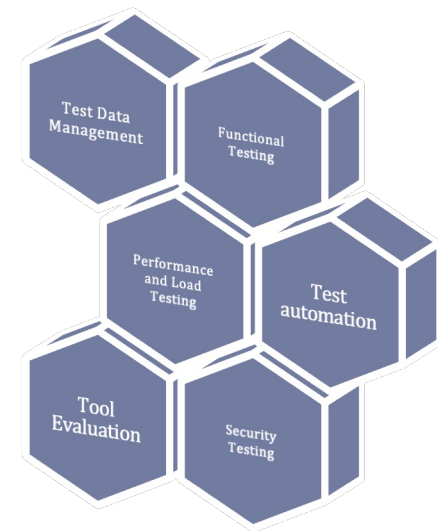
- Object Oriented Analysis and Design
- Java Enterprise Edition (JEE) development
- .NET Development
- Apache/Tomcat setup and configuration
- Client (JavaScript, AJAX, Tiles) and server-side programming
- Relational database design
- DBC API, SQL, PL/SQL Oracle Database Management Systems
- Web Services, Service Oriented Architecture, XML
- Testing tools and technologies such as JUnit and Selenium
- Single sign-on development
- Secure development practices
- Angular JS
- Workflow/ BPM development



Testing and Quality Assurance (QA) – Capabilities Summary

- Highrise provides a holistic testing services approach, that focuses on preventing mistakes or defects early to avoid delivering defects in our solutions to the end users. We pair skilled people with standard tools, frameworks and best practices for different types of testing (functional, performance, Section 508, security etc.). We also incorporate user acceptance testing prior to the deployment of new functionality or significant changes. Highrise is focused on implementing and improving test automation for our clients. We combine testers, processes and tools to provide comprehensive testing services for software development teams across HHS and beyond.

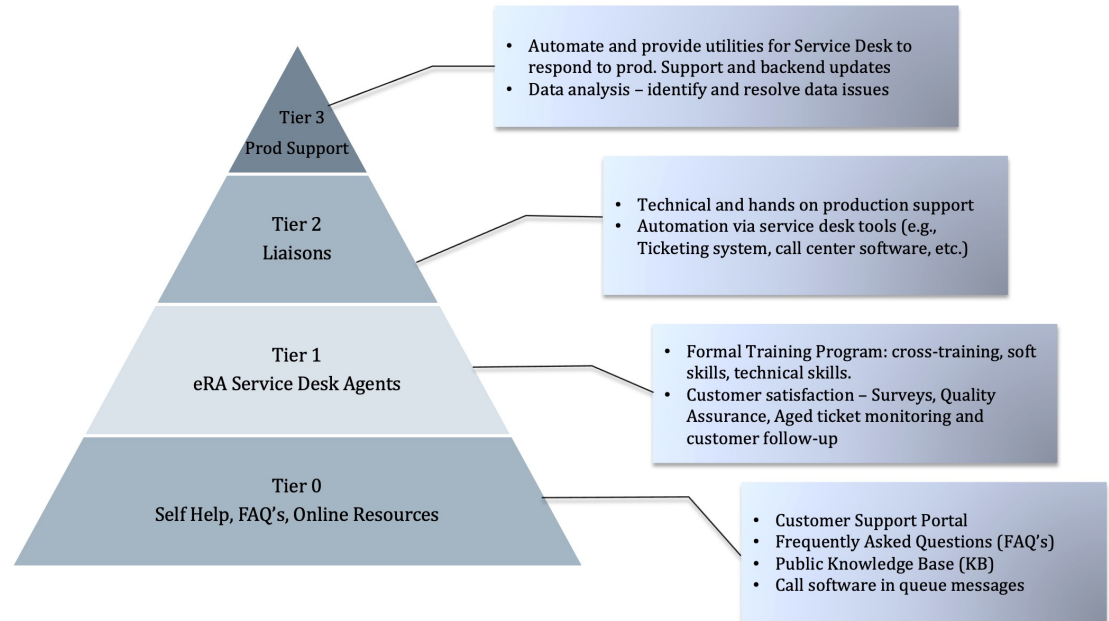
- Test Strategy Evaluation and Implementation
- Functional Testing
- Performance and Load Testing
- Test Automation
- Security Testing
- Test Data Management
- Tool evaluation and recommendation



Service Desk – Capabilities Summary

Management Approach:

- **Plan:** Proactively participate in release planning activities; Implement major deadline checklist; Develop project plans for special projects and initiatives
- **Communicate:** Huddles with structured agendas; Liaisons to facilitate communication and collaboration with development teams and other stakeholders
- **Execute:** Service Request Management: Knowledge Management
- **Evaluate:** Data analysis; Performance metrics: Quality assurance and customer surveys: Continuous improvement



Success Stories:

- Lead the successful migration to the Cisco CCX Call Center solution for the NIH electronic Research Administration (eRA) Service Desk.
- Lead the software evaluation and successful migration of the Service Request Management tool currently being utilized by the NIH eRA Service Desk.
- Implemented a process for performing backend data updates and data analysis which helped alleviate the burden production support on the development teams.

