

Highrise Consulting

Capabilities and Past Performance



About Us

Highrise Consulting, Inc. is an Information Technology (IT) company headquartered in Bethesda, MD, established in 2007. 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 - Multiple Award Schedule:

- Federal Supply Schedule 70 General Purpose Commercial Information Technology Equipment, Software, and Services
- SINs: 132-51, 132-56
- <u>Highrise GSA IT70 Rates</u>

NIH CIO-SP3 SB:

- Prime on the CIO-SP3 Small Business
- <u>Highrise CIO-SP3 rates</u>

NIH Blanket Purchase Agreement (BPA):

- Information Technology Professional Services
- \$500K max per order, unlimited number of orders
- <u>NIH BPA Program</u>

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 & Migration Strategy; Cloud Providers Evaluation; Network & Systems Architecture; Cloud Optimization; Authority to Operate (ATO); Cost Management; CI/CD
- **Cybersecurity**: Cybersecurity Preparedness, Accreditation, & Assessments; Cloud Security; Asset Management; Implementing Zero Trust; Vulnerability & Threat Management; DLP; Incident Response; Audit Support
- **Business Analysis**: Business Process Analysis; Business Process Management; Requirements Analysis; Stakeholder Collaboration
- Infrastructure & Operations: Virtual and Physical Infrastructure Operations & Maintenance; Database Administration; Networking; Storage Management; Monitoring & Alerting
- **SharePoint**: Microsoft Gold Collaboration and Content Competency; Over 15 years of Experience in SharePoint Development & Maintenance; SharePoint Upgrade & Cloud Migration
- **ServiceNow:** ServiceNow Partner; Experience with ServiceNow CSM, ITIL & more; Workflow Automation and Application Development; ServiceNow Implementation and Maintenance

- Software Development: Agile Software Development (SDLC); Object Oriented Analysis and Design; Java Enterprise Edition (JEE); .NET; Apache/Docker/Kubernetes Architecture 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; Single sign-on/MFA; Secure Development Practices; Angular JS; Workflow/BPM Development; UberResearch, Macie, Neptune, DavisAI
- **Testing and QA**: Test Strategy Evaluation and Implementation; Functional & Security Testing; Performance and Load Testing using JUnit and Selenium; Test Automation; Test Data Management;
- **Service Desk**: Functional Service Desk Support Leveraging ITIL; Communications, Documentation, and Training support; Account Management Support; SLA Reporting



HIGHRISE CONSULTING, INC.

- U.S. Department of Health and Human Services (HHS): ACF GrantSolutions.gov, ACF Denali Commission, Centers for Medicare & Medicaid Services (CMS), Agency for Healthcare Research and Quality (AHRQ), Payment Management Services (PMS)
- National Institutes of Health (NIH): Office of Extramural Research/eRA, Office of the Budget (OB), Office of AIDS Research (OAR), National Cancer Institute (NCI), National Institute of Mental Health (NIMH), Office of Research Infrastructure Programs (ORIP), Office of Administrative Management (OAM), Office of Research on Women's Health (ORWH), Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI)
- Others: US Army







- Expertise in delivering grants management services and solutions across the Federal government:
 - Employ over 200 professionals who 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)/ (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 •

• Facilitated onboarding of multiple Federal agencies, including SAMHSA, CDC, and Department of Commerce to the eRA grants management system. Provided business analysis, business process re-engineering, documentation & training, and overall support of the agency's business processes and workloads.

Stakeholder Collaboration .

• Supported the engagement with Federal agencies that utilize the eRA grants management system. Provided SMEs who engaged with stakeholders to elicit feedback, encourage collaboration, and identify shared business needs.

Shared Services Implementation •

• Provided the vision and approach for developing 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.

eRA Program by the Numbers

- eRA is the largest federal grants management system, processing over 50% of the federal grant applications received by Grants.gov
- Manages \$39.6 Billion annually in research and non-research grants
- Supports 1 Million registered users, 24.5 Million annual logins and 63,000 reviewers



Case Study: Department of Commerce Onboarding to NIH eRA

- **Description**: Highrise was tasked to lead the onboarding of the U.S. Department of Commerce (DOC) to eRA.
- **Solution**: Highrise staff analyzed, planned and executed successful onboarding of DOC National Oceanic and Atmospheric Administration (NOAA) bureau to eRA:
 - Fit Gap Analysis: Identified gaps between DOC systems and eRA and proposed resolution strategies
 - Network Connectivity: Architected and implemented network connection between DOC and eRA
 - Data Migration: Migrated DOC GOL data to eRA
 - **Integration with DOC's new financial interface system**: Designed and implemented integration between eRA and the new DOC financial system BAS
 - **Gaps Mitigations:** Analyzed, designed , and implemented gaps resolution strategies to support the integration of the DOC grants management cycle into eRA
 - Support: Supported DOC staff training, accounts creation , and post Go-Live support



Cloud Accomplishments at NIH/eRA

Cloud Security

- Established security architecture compliant with Federal Trusted Internet Connection (TIC) requirements
- Leveraged AWS native security tools to ensure compliance, data, network & applications protection
- Implemented Zero Trust and IPv6 requirements •

Cloud Migration •

- Successfully migrated eRA systems to AWS on time, within budget, and with minimal downtime
- Achieved significant cost savings by moving to the cloud
- Automated application deployment, environment provisioning, and simplified management

Cloud ATO •

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

Cloud Administration .

- Designed a single delivery pipeline for application deployments and environment provisioning
- Developed an integrated monitoring approach including network, application, database, CPU and memory utilization and log monitoring
- Architected solution to migrate applications to a fully managed container platform •

- **Description**: Highrise was tasked with migrating from two data centers to the cloud 100+ applications and components for the largest federal grant management system. We lead a multiyear phased management approach that included planning and preparation, cloud provider selection, security design, network architecture, cost management, extensive testing, and systems migration.
- **Solution**: Highrise's planed and executed successful migration to the AWS:
 - **Infrastructure Architecture**: Embedded flexibility as a core architectural and design principle to define and design a secure, cost-efficient, highly available, fault-tolerant, and scalable cloud infrastructure platform
 - **Application Enhancements:** Architected and implemented targeted enhancements and modifications to the application architecture to fully utilize cloud platforms and services such as Athena and RedShift
 - **Risk Management:** Utilized the Cloud Adoption Framework maturity heat map to identify the agency's maturity and potential cloud adoption inhibitors and develop mitigation strategies early in the migration process
 - Coordination and Collaboration: Minimized downtime and impact to users by working with numerous NIH ICs and Non-NIH partners to define, communicate, and execute changes to the connecting extension systems
 - Operational Improvements: Identified opportunities to increase operational efficiencies by adopting cloudnative services for patching, backup, and monitoring



Security Monitoring

- Implemented cloud-native security tools and services
- Leveraged Splunk and Dynatrace to create risk-based monitoring and alerting
- Built custom dashboards to unify threat detection, investigation, and incident response

Infrastructure Security

- Automated patching and infrastructure deployments to eliminate manual, error-prone processes
- Established regular security "fire drills" to maintain team readiness, reducing of time-to-resolution of any issues encountered by 15%

Asset Management

- Implemented an enterprise asset management solution to track assets across the IT footprint in real-time and ensure an always audit-ready, accurate inventory
- Developed reports of software inventory to alert of potential licensing violations and expirations





- **Description**: Highrise had to develop and implement a comprehensive cybersecurity management process to protect critical assets and comply with NIST 800-35, FISMA, FISCAM, GAO, and DHS HVA requirements.
- **Solution**: Highrise staff led the approach to improving cybersecurity throughout the program:
 - Conducting a capability assessment to determine if the agency is capable of standing up to the latest threats and identifying potential gaps in policies, procedures, and architecture
 - Developing a tailored approach, leveraging the latest security intelligence technologies to address current and future threats and risks
 - Optimizing existing services and solutions by applying industry-leading security practices, tools, and skills
 - Implementing security compliance baselines for all infrastructure components and creating dashboards for critical alerts and audit events to be reviewed and adjudicated within the required time
 - Enhancing asset management to provide continuous, real-time visibility of all critical infrastructure assets and software and alert on any potential unauthorized devices and software within the environment
 - Establishing a vulnerability management process with continuous monitoring to identify potential issues in real-time, automate patch management, and track remediations to ensure that issues are resolved within the approved timelines
 - Creating a process to support audit preparation, quality controls for audit data calls and artifacts, and tracking remediation of identified weaknesses



• Enterprise System Design and Development

• Design and develop large-scale software systems that support multiple variations of business processes while providing secure, efficient, and compliant solutions. We promote the use of automated solutions and artificial intelligence services to reduce the risk of human errors, increase efficiency, and minimize operational costs.

Secure Software Solutions

• Enable transparent and secure access for the users while implementing modern authentication requirements such as multi-factor authentication and step-up authentication. Expertise developing authentication services and integrating with existing established identity providers such as ID.me, Login.Gov as well as authentication services hosted by various agencies or organizations.

• Inter-System Integration

• Support integration with various financial, security, and reporting systems. Expertise integrating with multiple Federal and public systems to streamline data collection, grant submission and reporting processes. Build an enterprise system of over 100 separate applications integrated using a common framework and utilizing common integration solutions for synchronous and asynchronous communications.

• Data Design and Modeling

 Utilize a common data model to allow data intake from multiple systems and present it consistently with strict data quality controls. Our solutions utilize a combination of relational databases, NoSQL databases, object stores, and indexing platforms to utilize most suitable and cost-efficient solution for specific needs. Expertise in implementing real-time synchronization of data across multiple data sources to generate up-to-a-minute reports.

Software Development •

 Object Oriented Analysis and Design, Java Enterprise Edition (JEE), .NET, SharePoint, EKS/Apache/Tomcat/Docker, Client (JavaScript, AJAX, Tiles) and server-side programming, Web Services, Service Oriented Architecture, XML, R, Jenkins, Ansible, Python, Atlassian (Jira, Confluence, Bitbucket), Angular JS, Workflow/BPM development, JUnit/Selenium, UberResearch, Macie, Drupal, Neptune, DavisAI, ServiceNow

Databases

• Relational database design, DBC API, SQL, PL/SQL Oracle Database Management Systems, Oracle GoldenGate, DynamoDB, Athena, AWS RDS

Security/Monitoring

• Tenable, CylancePROTECT, Splunk, Tripwire, DbProtect, Device42, DynaTrace, BigFix, Carbon Black, FireEye, Netsparker, xMatters, WAF, Credentials Management, SAML

Cloud Platforms

AWS and Azure





www.highriseconsulting.com

HIGHRISE CONSULTING, INC.

- **Description**: Driven by new business requirements, security compliance, and concerns with scalability, Highrise was asked to led the modernization process for a suite of applications supporting scientific, budgetary, legislative, and policy within NIH.
- **Solution**: Highrise staff designed and developed a comprehensive technical solution:
 - Using an Agile software development approach, validated requirements, worked with stakeholders to model business processes, and code the required functionality
 - Used Microsoft Power Apps for low-code development to simplify development complexities and expedite the delivery of new functionalities
 - Followed the Test Driven Development (TDD) methodology to write tests concurrently while developing code, resulting in better interfaces and less code rewriting
 - Introduced Angular framework to redesign applications with modern user interfaces incorporating state-ofthe-art User Experience (UX) design
 - Developed a complex mapping algorithm for tracking individual data elements, enhancing the applications for cross-fiscal year analysis and reporting
 - · Documented new functionalities and conducted end-user training with stakeholders



Service Desk Expertise

- Over a decade of providing Tier I and II level support for the eRA Service Desk, assisting internal and external users of eRA systems via phone, email, and web portal in the account registration process, account requests, troubleshooting of system issues, and external system-to-system interfaces
- Proven ITIL-based management approach focused on continuous process improvement
- Expert knowledge of leading Help Desk software solutions, including BMC FootPrints and ServiceNow

Quality Control

- Implemented a Quality Control Plan for phone support, leveraging Cisco CCX to actively monitor calls, ensure quality assurance, and provide continuous feedback and targeted training to staff
- Utilized performance metrics, QA results, and customer feedback to adjust staffing levels, training, tools, documentation, processes, and communication mechanisms

• Training

• Developed interactive training tutorials, videos, user guides, and online help content to facilitate end-users online learning and self-service, reducing the number of calls that needed to be answered

Automation

• Automated workflows for triaging issues using Auto-Assignment rules, escalation templates, and call routing based on customer input



Case Study: ServiceNow Implementation for eRA Service Desk

- **Description:** Highrise had to prototype and migrate the eRA Service Desk to a new ticketing system supporting the NIH research grantee community.
- **Solution:** Highrise staff led the evaluation and implementation of ServiceNow to replace the legacy Service Desk support system. We coordinated the pilot and testing activities with internal and external stakeholders, acted as the vendor's liaison, and provided technical leadership during the migration. To facilitate the evaluation and migration, Highrise completed the following activities:
 - Met with stakeholders to understand and document requirements. The requirements were then analyzed, • and solutions prototyped
 - Analyzed cross-workspace impacts, integration needs, infrastructure impacts, licensing, and other costs
 - Implemented the ServiceNow workflows (including users, roles, contact address book, custom • notifications, templates, reports, etc.)
 - Facilitated the testing process with a select group of end users
 - Developed a communication plan for impacted users, training materials, and guides to manage the • transition
 - Designed customer-tailored solutions to optimize workflows and boost operational effectiveness
 - Post-migration, created reusable elements, including widgets and templates that can be easily shared • across numerous applications to allow for faster development and assurance with the agency's uniformity and standards



SharePoint – Capabilities Summary

- **Business Process Automation** with SharePoint, we advance productivity by translating manual routines from simple ٠ 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 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 develop tailored SharePoint architecture coupled with first-class security controls for correct operation without compromising user experience and interface appeal.
- **Document Management** –build electronic document management systems that enable centralized control over all ٠ 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 ٠
 - 15 years experience in SharePoint consulting and ٠ development
 - 50+ Microsoft-certified SharePoint experts ٠
 - Custom solutions on SharePoint Online and SharePoint On-٠ Premises for numerous Federal agencies
 - Proven track record of successful SharePoint migrations -٠ 2016, 2019, Online, Office 365



Gold Collaboration and Content

