REI Systems Partnership with NASA

REI Systems is in our fourth decade of a trusted partnership with NASA. We offer a mix of technology, program management, outreach, communications, and strategy to support NASA's mission. Born directly out of the Small Business Innovation Research (SBIR) program, REI currently provides this support to SBIR, several science mission directorate programs including the Earth Science Technology Office and the Applied Sciences Program, and Prizes & Challenges program.

Our full suite of services at NASA includes:

→ Application Modernization

→ Software as a Service

→ Data Management

→ Data Analytics

→ AI/ML

→ Systems Integration

→ Advisory Services

Our work at NASA began with the Electronic Handbook (EHB) solution that was based on an innovation initially funded by the NASA SBIR Program back in 1989. The EHB has since transformed and modernized into a scalable digital ecosystem of contracts and grants management capabilities. Our EHB solution has been adopted and adapted by six other federal agencies to manage

REI Systems is in our 4th decade of partnership with NASA.

over $47 billion in grants and contracts each year, with the most recent innovation being an EHB module that supports selection and management of the scientific peer review panels.

We are proud that REI's impact has helped NASA: attract more small business innovation; improve IT efficiency, reliability and security; reduce computing costs via DevSecOps and open-source software; and achieve organizational transformation. Our partnership success stories below offer more detail into the impact of our work together.

REI leveraged Lean, Agile, and Organizational Change Management (OCM) principles to promote cross-functional collaboration, align stakeholder objectives, and facilitate user adoption and satisfaction.

Partner Success Stories

APPLICATION MODERNIZATION SERVICES

NASA's SBIR Electronic Handbook

REI partnered with NASA to modernize its legacy EHB system using a new user-centric design approach, which resulted in an intuitive, user-friendly, and integrated digital service that improves user efficiency and attracts entrepreneurs looking to support NASA's mission and commercialize their innovations. REI utilized a scalable microservices architecture to make the system easily customizable and configurable, and leveraged best-in-class COTS products such as Salesforce and Tableau, and open-source products such as ElasticSearch to enable customer relationship management, data analytics, and enterprise search capabilities. REI leveraged Lean, Agile, and Organizational Change Management (OCM) principles to promote cross-functional collaboration, align stakeholder objectives, and facilitate user adoption and satisfaction. As a direct result of these efforts, there has been a 14% year-over-year increase in innovations offered to NASA in response to its annual SBIR/STTR Solicitations.

GOVERNMENT DATA ANALYTICS SERVICES

Artificial Intelligence for Award/Contract Management

REI received a 2020 Agency Honor award in part for the development of a new decision support tool (DST) allows NASA

DST was extremely effective in helping to inform the final selection decisions, resulting in significant time and cost savings and enabling NASA to keep its commitment to the small business community that stimulates the nation's economy.

to select a balanced award portfolio that considers programmatic objectives from over a thousand potential awards. The DST was a first of its kind portfolio tool that was developed through an interdisciplinary team that integrated data science, algorithm development, software development, process improvement, and policy expertise into the final solution. DST was extremely effective in helping to inform the final selection decisions, resulting in significant time and cost savings and enabling NASA to keep its commitment to the small business community that stimulates the nation's economy.

ADVISORY SERVICES

Prizes, Challenges, and Crowdsourcing Program

The Prizes, Challenges, and Crowdsourcing (PCC) Program entrusted REI with the opportunity to utilize our extensive expertise in organizational design to support the program's rebranding and transformation to a new program structure. REI provided executive one-on-one coaching and helped the PCC Program Executive clarify roles and responsibilities of the leadership team and crosscutting functions, initiate discussions on program branding, streamline and integrate communication to increase awareness and recognition across program areas, and create a team building culture.

NASA's Innovation and Opportunity Conference

In 2020, REI played a lead role in the planning and execution of the highly successful, first-ever 100% virtual Innovation and Opportunity Conference (IOC). This generated more than twice as many participants as expected and received rave reviews such as, "As a startup, we have found these three days the most productive since our inception." In 2019, the integrated NASA-REI team received a NASA agency award for its new approach to IOC, which reduced cost while significantly increasing collaboration across multiple government agencies and broadening small business community engagement and participation.

Partnership Achievements

→ **NASA's Exceptional Public Achievement Medal** for outstanding contributions to NASA's SBIR/STTR program

→ **NASA Group Honor Award** for work on artificial intelligence

→ **NASA's Group Achievement Medal** for collaboration on the 2018 Innovation and Opportunity Conference

→ **Fed 100 Award** for REI's NASA Program Manager's leadership and contribution to NASA

About REI Systems

REI Systems provides reliable, effective, and innovative technology solutions that advance federal, state, local, and nonprofit missions. Our technologists and consultants are passionate about solving complex challenges that impact millions of lives. We take a Mindful Modernization® approach in delivering our application modernization, grants management systems, government data analytics, and advisory services. Mindful Modernization is the REI Way of delivering mission impact by aligning our government customers' strategic objectives to measurable outcomes through people, processes, and technology.