

GALORATH

The Future. Delivered.

Executive Summary

SEERai

First-to-Market AI for Cost Estimation

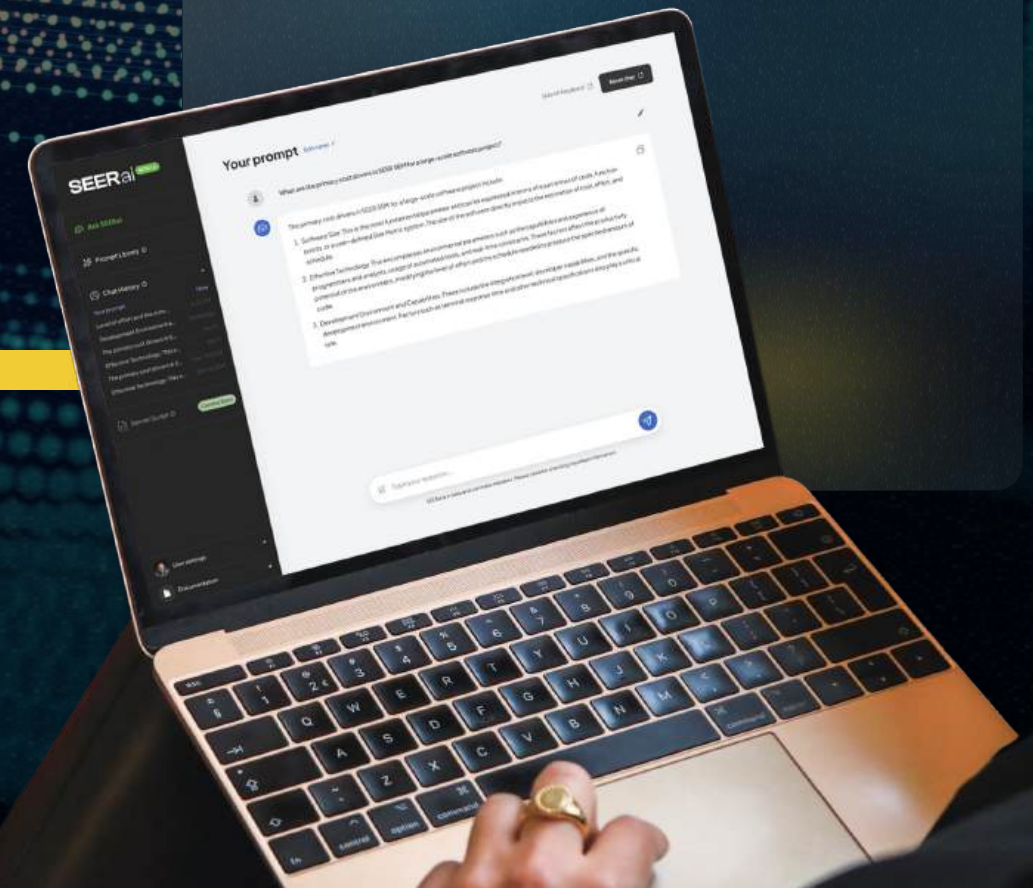
SEERai by Galorath empowers digital engineers with data-driven insights to launch products cost-effectively. It is an advanced generative AI explicitly built to assist the needs of digital engineers and engineering professionals as they plan and estimate projects in various sectors, including information technology (IT), software, hardware, manufacturing, aerospace, military, space, and more.



SEERai is the first of many innovations in artificial intelligence under the Galorath AI Strategic Initiative—a transformative, strategic development effort in digital engineering and estimation designed to provide real-time, data-driven insights that empower organizations to make better decisions in analysis and planning. As part of the SEER platform, SEERai works seamlessly with other SEER products, offering unparalleled scalability and extensibility.

Revolutionize Your Estimation Process with SEERai™

With SEERai, organizations can:

- Automate part of the estimation process
- Gain immediate insights based on data-driven information
- Utilize interactive SEER training
- Leverage prompt engineering templates custom to your project
- Export SEER scripts quickly and easily
- Dramatically enhance decision-making






Your Trusted Advisors with Decades of Collective Experience

For over 40 years, Galorath has partnered with leading organizations in high-stakes industries to achieve project success on time and within budget. Our consulting expertise, cost management technology, and proprietary data empower informed decision-making and drive project success to optimize cost planning and deliver desired outcomes.

Our data-driven decision-making approach enables actionable intelligence so you'll know your next move is right. Our seasoned team members don't just work for the company; they own it. This ownership mentality drives them to go above and beyond to deliver exceptional results for our clients. With a vested interest in the company's success, our employees are deeply committed to providing top-notch service, innovative solutions, and unmatched quality.

When you partner with Galorath, you're not just hiring a service provider; you're gaining a strategic ally. Our experienced employees work hand-in-hand with you to understand your unique needs, challenges, and goals. They'll leverage their extensive expertise to develop tailored solutions that give you a competitive edge in your industry.



Introducing SEERai

The Future of Cost Estimation and Decision-Making

Organizations are increasingly required to deliver projects faster, reduce costs, and improve outcomes in complex settings. SEERai, the newest addition to the SEER™ Estimation Platform, revolutionizes project estimation and execution by integrating cost, schedule, and risk analysis into a single, scalable solution. SEERai enables:

- Increased speed-to-market: Automate cost-centric Work Breakdown Structure (WBS) creation, accelerate proposal responses and provide insights into should-cost and price-to-win analysis.
- Improved project planning and viability: Generate schedule and risk estimates 20 times faster than manual efforts, guided by domain-specific expertise.
- Enhanced profitability: Reduce costs, minimize waste, and scale operations without increasing overhead.

Leveraging advancements in AI, SEERai combines a powerful large language model with tools and agents to deliver secure, actionable intelligence. Its dynamic integration with external large language models (LLMs) allows organizations to harness real-time insights like industry trends and supplier data, while safeguarding privacy. SEERai delivers immediate value today while building a scalable foundation for the needs of tomorrow.



"Generative AI provides incredible value, strategic direction, and insight for project, cost, schedule, and risk estimation, and it allows previously buried project data to surface and become useful and actionable. We're excited about the possibilities that SEERai from Galorath represents and look forward to future development efforts in artificial intelligence."

— Denise Nelson, Affordability Lead Systems Engineer, The Boeing Company



Our Mission: Galorath provides expertise, technology, and data that empower informed decision-making, enabling organizations to achieve their goals with confidence.

Our Vision: We envision a future where businesses are architects of positive change, crafting and implementing innovative solutions that enhance the human experience.

Our Values

FOUNDATION | Our bedrock is integrity. Every decision and every action is rooted in trust and transparency. We uphold the highest standards of honesty and ethical conduct, ensuring that integrity is not just a value but a fundamental part of our identity.

FOOTPRINT | Leaving a positive mark on the world. Committed to community, environmental stewardship, and transformative impacts for our team. We actively engage in initiatives that promote sustainability, social responsibility, and a better future for all, reflecting our dedication to making a meaningful difference.

FRONTIER | Exploring new horizons. We embrace intelligent risks to pioneer solutions that shape the future. Our culture of innovation goes beyond technology; it's about thinking creatively, challenging the status quo, and constantly seeking better ways to achieve our goals.

SYNERGY | Diverse voices, united in purpose. We cultivate an environment where respect and inclusivity resonate in every interaction. Our commitment to diversity is not just about fairness; it's about enriching our company culture and embracing the strength found in different perspectives.

CONNECTION | Empathy drives us. Understanding and responding to our customers' needs is the pulse of our business. We listen intently, respond thoughtfully, and place our customers at the center of our innovation, ensuring that our solutions solve problems and enrich lives.

RESOLVE | Steadfast in our commitments. Upholding fiscal and personal accountability as the anchor of our success. We recognize that our actions have consequences and take ownership of them, ensuring that we act responsibly toward our stakeholders, community, and the environment.

SEER[®] by Galorath

The future. Delivered.

Space and Aerospace

Cost-effective solutions for space exploration.



Software

Streamline software project planning and execution.



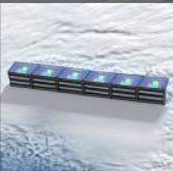
Systems Engineering

Accurate costs for complex systems engineering.



Information Technology

Enhance IT project efficiency and precision.



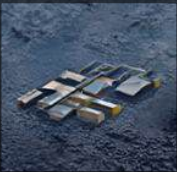
Military

Optimize federal projects with SEER accuracy.



Manufacturing

Cost effective manufacturing and resource utilization.



Hardware

Accurate hardware costs and comprehensive risk management.



Finding Opportunities in Challenges

Galorath operates at the convergence of emerging trends, market challenges, and the needs facing cost engineers. SEER®, Galorath's acclaimed cost estimation and digital engineering platform, leverages technology, artificial intelligence, proprietary datasets and knowledge bases, and proven methodologies to completely change how digital engineering is conducted.

Staying Ahead of Market Shifts: Monitoring Trends for Continuous Innovation

We monitor trends to ensure we are constantly innovating to address the market's needs and expand our development roadmap to ensure our customers are always ahead of market shifts. Here are a few of the trends we've been seeing:

Emerging Trends: Transforming Cost Engineering

- Automation and AI: The utilization of automation and AI is increasing, expediting estimating processes, reducing errors, and boosting productivity. SEERai stands at the forefront of this trend, offering speed and accuracy by automating cost-centric WBS creation and delivering real-time, actionable insights.
- Digital Twins: Integration of digital twins is transforming cost engineering. These virtual replicas of physical assets and processes allow for early identification of cost overruns and inefficiencies. The adoption of digital twins continues to increase significantly, providing a predictive capability that reduces risks and costs.
- Data-Driven Decision-Making: Advanced analytics tools and digitization of project data are fueling a shift towards data-driven decision-making. This trend enables more dynamic models that adapt to changing project conditions, moving beyond traditional estimation methods.

Market Challenges and How We Address Them

- Complex Project Management: Managing intricate projects across various sectors, such as aerospace, IT, and manufacturing, requires advanced tools to ensure accuracy and efficiency.
- Resource Allocation: Optimal resource allocation is a critical challenge, necessitating cost estimation and planning tools.
- Cost Overruns: Identifying and mitigating potential cost overruns early in the project lifecycle is essential to stay within budget and meet project deadlines.

Opportunities Unlocked by Our Innovative Solutions

- Innovation in Cost Estimation: Galorath's SEER platform, now enhanced with SEERai, offers innovative approaches to cost estimation, leveraging AI and data analytics to provide actionable insights.
- Enhanced Collaboration: Tools like SEER facilitate better team collaboration, ensuring all stakeholders are aligned and informed.
- Scalability: The SEER platform is scalable, catering to projects of varying sizes and complexities across multiple industries.

Software Development

SEER for Software (SEER-SEM™) simplifies software project estimation, planning, and management, ensuring projects are completed on time and within budget. SEER-SEM supports both traditional and agile methodologies, leveraging advanced algorithms and a vast repository of historical data to provide accurate cost and schedule forecasts for an array of development scenarios.

Key Benefits

SEER-SEM's comprehensive risk analysis identifies potential issues early, while its advanced reporting and visualization capabilities make complex project data accessible to all stakeholders, and its unmatched customization capabilities allow it to meet specific project needs, enhancing estimation accuracy and leading to successful project completions.

CASE STUDY

TASC: Leveraging SEER-SEM to Measure Internal Software Solutions

As one of the nation's largest privately held third-party benefits administrators, Total Administrative Services Corporation (TASC) was experiencing rapid growth of over 20% yearly. The company's product development capabilities and capacity were growing at a similar rate.

TASC needed to measure productivity improvements within the software development team as they improved their development processes and implemented a new continuous software delivery model.

TASC achieves 82% Internal Rate of Return with SEER-SEM

Learn how the early visibility provided by SEER-SEM, allowed the TASC team to change direction & deliver an 82% Internal Rate of Return (IRR). This early visibility enhanced credibility with the leadership team and gave them the confidence to use SEER for vendor evaluations as it contemplates full software module outsourcing for specific projects.

Information Technology

SEER for Information Technology (SEER-IT™) enhances IT project planning, estimation, and management, providing accurate cost assessments and strategic insights for cloud migrations, software deployments, infrastructure upgrades, and system integrations. Focusing on incident, problem, and change management, and offering tools for labor and resource forecasting and detailed work breakdown structures, SEER-IT ensures comprehensive oversight of projects of all sizes.

Key Benefits

SEER-IT delivers cost assessments and strategic insights for IT projects, enhancing planning, estimation, and management efficiency. SEER-IT supports a wide range of IT initiatives, including cloud migrations and software deployments. With comprehensive incident, problem, and change management capabilities, as well as labor and resource forecasting, SEER-IT ensures successful project execution from start to finish.

CASE STUDY

Modernize Complex IT Processes with SEER-IT

Faced with oversight by the Treasury Department, GSA (General Services Administration), and Congress, the Internal Revenue Service (IRS) was tasked with providing specific information about their varied and numerous projects and initiatives. Their in-house project office had been using Excel spreadsheets as an estimating tool—but to little effect: cost and schedule overruns persisted.

After an extensive vendor evaluation, the IRS selected SEER-IT. Over the next 12 months, Galorath's on-site consultants helped the IRS develop and integrate processes, establishing a database of historical projects as a reference for future ones.

As the introduction of SEER for Software and SEER for IT took hold, the initial grouping of 12 projects selected for estimation grew to over 70+. For the first time, IRS management had a portfolio view of multiple projects—including proposed projects and those already in development—and was able to make better informed decisions.

Hardware Development

SEER for Hardware (SEER-H™) is the benchmark for cost estimation and predictive analytics in hardware development, including mechanical, electrical, electronic, and hydraulic systems. Leveraging predictive analytics and a comprehensive historical data repository, SEER-H provides detailed insights from initial scope to final delivery, supporting integrated decision-making for effective management of complex projects. With high precision in modeling intricate systems, SEER-H ensures accurate estimations and optimized project plans, and its intuitive interface ensures accessibility, providing timely, cost-effective development while maintaining high-quality standards.

Key Benefits

SEER-H delivers accurate cost estimations and predictive analytics, supporting the effective management of complex hardware projects. Its high precision in modeling ensures optimized project plans, while the intuitive interface makes it easy to use. Leveraging detailed insights and comprehensive data, SEER-H enables integrated decision-making from initial scope to final delivery, ensuring timely, cost-effective development without compromising quality.

CASE STUDY

Booz Allen Hamilton & the U.S. Navy Achieve Operational Excellence with SEER-H

Due to the lack of early technical and programmatic data and specificity, high-level, early-development-cycle cost estimates are difficult to determine and validate. The Navy asked Booz Allen Hamilton to develop a Business Case Analysis (BCA) of several acquisition options for the Navy's AEHF Terminal Program.



"When you use a parametric model like SEER, you reduce uncertainty by deconstructing the project into smaller, well-defined components; the cost estimate of which can be more readily critiqued by the technical and program management staff,"

—David Bracamonte, Senior Associate, Booz Allen Hamilton

The SEER Platform: Made for your Market

SEER, Galorath’s acclaimed cost optimization and analysis platform, is tailored to provide critical insights for public and private sector companies in vertical markets like manufacturing, digital/IT, hardware and software development, and space exploration.

The versatility and adaptability of SEER models, powered by AI and parametric algorithms, make them suitable for estimating costs and managing projects of varying complexity and scale. Industry-leading companies like Boeing and Lockheed Martin, as well as government agencies like the U.S. Air Force, IRS, and NASA, count on SEER to ensure their projects are planned and completed on time and budget.

- SEER for Software
- SEER for IT
- SEER for Hardware
- SEER for Manufacturing
- SEER for Systems Engineering
- SEER for Space
- Consulting & Federal Services

Systems Engineering

SEER for Systems Engineering (SEER-SYS™) provides cost estimation and predictive analytics for systems engineering projects in aerospace, defense, and space missions. Integrating requirements, design, and verification processes, SEER-SYS offers cost estimations using powerful algorithms and extensive historical data. SEER-SYS supports trade studies, reuse impact evaluations, and budget development aligned with industry standards like ISO-15288 and ANSI-632, ensuring effective project planning and execution with an intuitive interface.

Key Benefits

SEER-SYS delivers cost estimations and predictive analytics for systems engineering projects, enhancing planning and execution in aerospace, defense, and space missions. The solution integrates requirements, design, and verification processes, supporting trade studies and reuse impact evaluations. By developing budgets consistent with industry standards, SEER-SYS ensures accurate predictions and effective project management, all through an intuitive interface.



Space Engineering

SEER for Space (SEER-SPACE™) simplifies cost estimation and predictive analytics for space missions, from Earth-orbiting satellites to deep space explorations to crewed spaceflight, offering tailored solutions for various mission types, including orbiters, landers, and rovers, and models different instruments such as radars and lasers. Leveraging advanced algorithms and extensive historical data, SEER for Space provides cost visibility and supports technology maturation and versatile modeling, ensuring innovative and cost-effective space exploration.

Key Benefits

SEER-SPACE delivers cost estimation and predictive analytics for a variety of space missions, enhancing planning and execution.

SEER-SPACE provides visibility into costs and supports technology maturation by supporting various mission types and instruments. By leveraging advanced algorithms and historical data, SEER-SPACE ensures innovative, cost-effective space exploration aligned with real-world challenges.



CASE STUDY

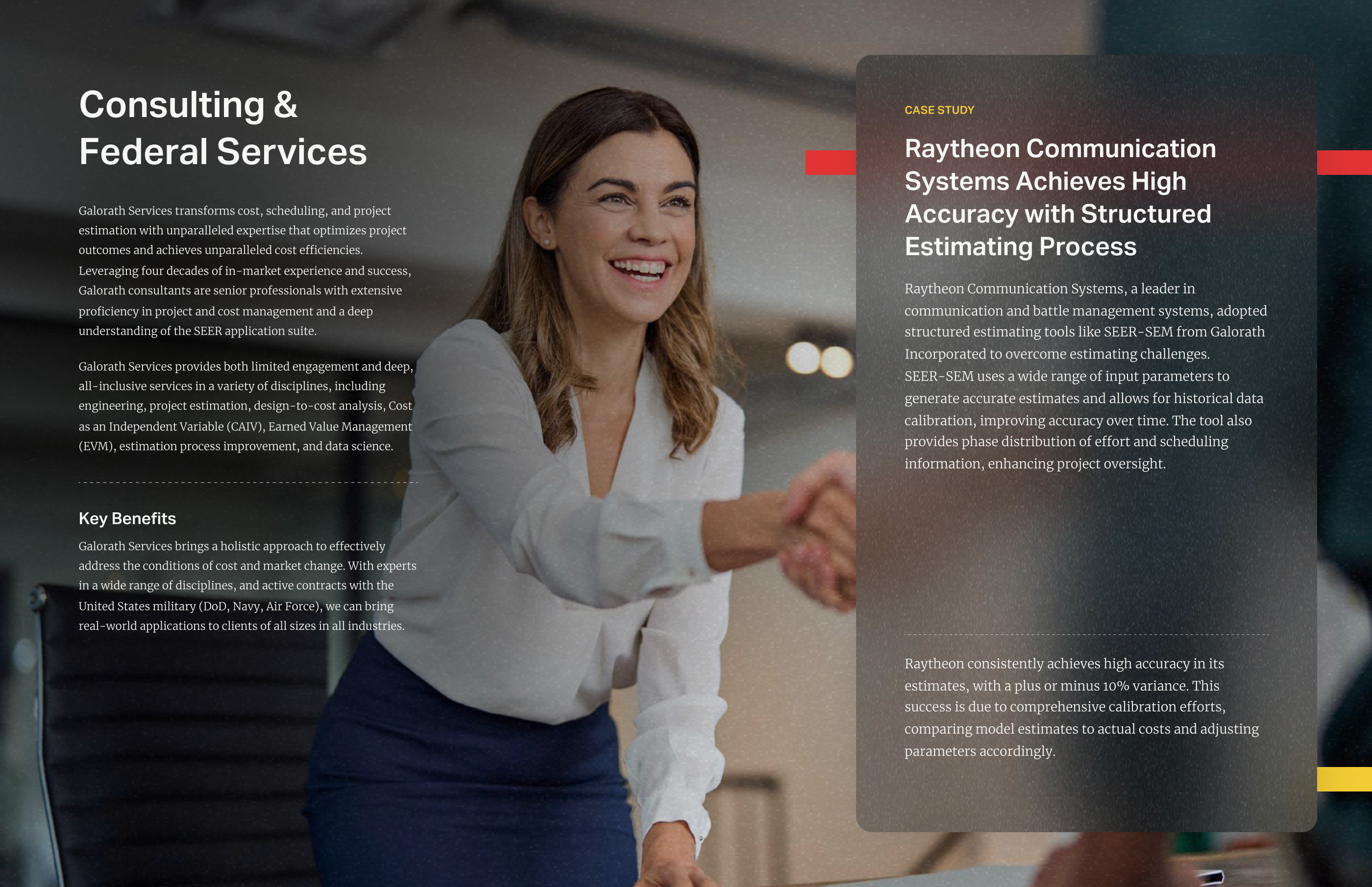
NASA's Structured Cost Estimate Cuts 75% of Time for Mars Rover Project

The first project-level use of structured costing at NASA significantly reduced the time required to generate an independent cost estimate for the Mars Exploration Rover (MER) project. This method completed the estimate in less than 25% of the time needed for the traditional bottoms-up approach.

The structured costing approach used a knowledge base that compared rover hardware and software modules to thousands of real-world projects, resulting in a highly accurate estimate in a fraction of the time.

Harris engineers saved 1,000 hours using the SEER platform

Harris engineers estimate that approximately 1,000 hours were saved using SEER tools. The structured costing approach saved significant time and improved the quality of cost estimates.



Consulting & Federal Services

Galorath Services transforms cost, scheduling, and project estimation with unparalleled expertise that optimizes project outcomes and achieves unparalleled cost efficiencies.

Leveraging four decades of in-market experience and success, Galorath consultants are senior professionals with extensive proficiency in project and cost management and a deep understanding of the SEER application suite.

Galorath Services provides both limited engagement and deep, all-inclusive services in a variety of disciplines, including engineering, project estimation, design-to-cost analysis, Cost as an Independent Variable (CAIV), Earned Value Management (EVM), estimation process improvement, and data science.

Key Benefits

Galorath Services brings a holistic approach to effectively address the conditions of cost and market change. With experts in a wide range of disciplines, and active contracts with the United States military (DoD, Navy, Air Force), we can bring real-world applications to clients of all sizes in all industries.

CASE STUDY

Raytheon Communication Systems Achieves High Accuracy with Structured Estimating Process

Raytheon Communication Systems, a leader in communication and battle management systems, adopted structured estimating tools like SEER-SEM from Galorath Incorporated to overcome estimating challenges. SEER-SEM uses a wide range of input parameters to generate accurate estimates and allows for historical data calibration, improving accuracy over time. The tool also provides phase distribution of effort and scheduling information, enhancing project oversight.

Raytheon consistently achieves high accuracy in its estimates, with a plus or minus 10% variance. This success is due to comprehensive calibration efforts, comparing model estimates to actual costs and adjusting parameters accordingly.

Manufacturing

SEER for Manufacturing (SEER-MFG™) revolutionizes cost estimation and predictive analytics for manufacturing, delivering estimates and insights across various processes. Focusing on speed-to-market and should-cost analysis, SEER-MFG evaluates multiple materials and production methods for optimal resource utilization and cost efficiency. Detailed work breakdown structures and risk analysis enhance project planning, while integration with CATIA and 3D CAD models streamlines cost estimation from design to production.

Key Benefits

SEER-MFG provides cost estimations and predictive analytics, optimizing manufacturing resource utilization and cost efficiency. It supports rapid speed to market with should cost analysis and evaluates multiple materials and production methods. Enhanced project planning through detailed work breakdown structures, risk analysis, and integration with CATIA and 3D CAD models ensures streamlined cost estimation from design to production.

CASE STUDY

Bell Helicopter's 50% Cost Reduction Triumph: A Success Story with SEER

To set new standards in performance and affordability, Bell Helicopter partnered with Galorath, using SEER-MFG and SEER-H for cost estimation. The goal was to create the Bell 505 Jet Ranger X—a cutting-edge aircraft with a clean sheet design, featuring an integrated glass cockpit and extensive composite materials, all aimed at outperforming its predecessor while staying competitive in the market.

Galorath's expertise and SEER platform were instrumental in guiding Bell Helicopter through the complex challenges of designing and producing a technologically superior helicopter that meets the rigorous demands of today's industry.



"SEER enables detailed discussions on cost reduction options with an actual cause and effect relationship. No tool we have worked with has been nearly as effective as SEER."

—David Smith, Program Manager, Bell Helicopter



At Galorath, we partner with the world's most innovative companies to achieve unmatched project success.

Partner with us and experience the transformation.

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