

# Systems Integration

Critical IT and Engineering Systems Integration for Global Systems and Missions

SMX provides systems integration capabilities for critical IT systems, including software development and application integration for global systems and full life-cycle hardware engineering integration for all missions.

Government and global enterprises are involved in a new wave of disruption brought about by both the digital revolution and the commoditization of hardware and platform solutions. To remain ahead of and responsive to adversary actions and competitive in this new environment requires rapid, continuous, and iterative approaches to system integration. Prior to the advent of cloud-native infrastructure, data engineering, and rapid fabrication, the scale and robustness of large, vertically integrated system integrators were valued for their ability to engineer and deliver monolithic solutions end-toend. Preference for complex multi-year solutions has given way to disruptive solutions that leverage a robust ecosystem of open-source software, best-of-breed public cloud providers, data platforms, DevSecOps platforms, and commoditized hardware. Entire industries and nation states have been disrupted by agile, innovative approaches that out-cycle and continuously improve upon minimally viable solutions that scale to global adoption within weeks and months.



Delivering solutions to keep pace with the digital age requires deep expertise and partnering in several interconnected disciplines to provide scalable, secure, reliable, and modular solutions. Our approach to systems integration is to provide deep expertise in all domains while leveraging the best platforms, vendors, and technology partners within the landscape.

The foundation of the digital landscape is compute, network, and storage. As a recognized leader in public cloud computing, SMX enables software-defined datacenters for the Enterprise and the Edge and provides best-of-breed managed services with the highest levels of Government-grade security and compliance. DevOps Engineering requires the development of Continuous Integration and Continuous Development (CI/CD) pipelines for software development.



Data is the heart of any enterprise. Our data engineering solutions include the full range of transactional and analytical data platforms to support mission-critical applications as well as advanced analytics, artificial intelligence (AI), and machine learning (ML). Our architectures and data pipelines allow Data Scientists and Analysts to focus on decisive analytics rather than curation and conditioning.

Software development is where ideas are translated into user experiences, enhancements to operations, interfaces for Operators, and visualizations for critical mission insights. Software development by SMX is enhanced by enabling the pillars and capabilities that Software Developers can leverage. Our approach is API driven into the data platforms we leverage. Our development process is iterative and truly Agile—from development through deployment—due to the DevOps platforms we enable, which are further supported by secure, reliable, and infinitely scalable cloud managed services. The richness of the application experience and outcomes are magnified by the infinite variety and scale of our data engineering and data pipelines to bring the right data for the right purpose for the capability at hand.

## Our Capabilities:

- Digital Transformation
- Application Modernization
- DevSecOps Engineering
- Secure Cloud Services

AI-Enhanced C5ISR
Advanced Analytics/AI/ML

Data Engineering

smxtech.com



Google Cloud Partner

#### Full Lifecycle Systems Integration and Engineering

SMX leverages vendor and partner expertise to provide manned and unmanned platforms and the full range of sensors and satellite ground stations; edge compute; cloud compute; Processing, Exploitation, and Dissemination (PED) support; training; geospatial imagery; advanced analytics; and AI/ML enhancements.

As a global ISR solutions leader, SMX is contributing to mission success at all stages of the DoD acquisition and sustainment life-cycle. In support of Combatant Commands, we are designing and conducting experiments to showcase the emergent technologies and latent capabilities of systems, ranging from space-based sensors to unmanned surface and undersea platform data collection sources. As these emergent technologies are validated for the levels of promise and maturity, we rapidly convert and deploy the technologies to today's missions from humanitarian disaster relief to building coalition partner capacity.

#### SMX's Strength as a Lead Industry Integrator (LII)

The SMX approach to system integration is to combine the need for robust solutions with the responsiveness governments and global enterprises need to thrive in this new age of disruption. As an LII, we bring the best-of-breed platforms, technologies, and companies to provide rapid solutions.

SMX offers rapid alternative solutions to ensure coupling and decoupling of technology to assure modularity and avoid monolithic approaches. We maintain an extensive network of partners across the digital and manufacturing landscape for rapid integration of innovative solutions to meet urgent needs. Our overall approach is aimed at customer outcomes to provide cost-effective, turn-key solutions. SMX consistently has demonstrated the ability to integrate the capabilities of a wide array of teammates to simultaneously accomplish unique tasking from multiple Government customers. We have the large business controls, small business agility, and rapid responsiveness required to produce the best solution industry has to offer and deliver mission success.

### **Client Solution Spotlights**

Joint Strike Fighter - DevSecOps Cloud Solution - The Joint Program Office (JPO) needed to provide Government employees better access to Joint Strike Fighter (F-35) development efforts. As a result of the DoD 'Cloud First' strategy, the SMX Team was selected to build the infrastructure, pipelines, security posture, and environment for the JPO. This was the first joint cloud environment with Government control and private business partners. The customer received a viable product within six months and the SMX solution laid the groundwork to enable them to support the building of multiple DevSecOps pipelines that will be able to sustain continuous ATO on the software that is built through them. This will include pipelines that enable seven different Government depots, major private companies that build and maintain the F-35, up to 40 small businesses that work supply chain issues for the F-35, and foreign nationals to support their flight systems. This is possible because of the solid infrastructure security plan built by the Team for the total environment.

TARCES 2 - As the prime contract holder since 2011, SMX provides systems integration and engineering services in support of Tactical and Remote C5I Edge Systems to enable efficient information exchange of voice, video, and data for the customer. This includes research, design, engineering, development, analysis, prototyping, fabrication, integration, installation, test and evaluation, training, and logistics support of telecommunication and related C-E systems, subsystems, and components. Systems are employed at user locations or in platforms, including shipboard, shore-based (fixed, transportable, and ground mobile), airborne, and handheld devices. The technologies applied to the telecommunications systems are designed, developed, and produced by SMX to deliver exceptional performance within strict cost effectiveness and maintainability constraints..



#### For more information, please contact: <a href="mailto:solutions@smxtech.com">solutions@smxtech.com</a>

SMX harnesses the transformative power of technology to achieve mission success as a leader in digital and mission solutions, specializing in secure and advanced cloud, ISR, cyber, data analytics, engineering, space, and IT solutions. Operating in close proximity to our clients across the globe, the SMX team has a shared vision to deliver scalable and secure solutions to assure outcomes for the critical missions of our Government and commercial clients.

Learn more about our current contracting vehicles: www.smxtech.com/contracting-vehicles



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