

# Modeling, Simulation, and Training

## Revolutionize Training and Predictive Analysis



### Overview

SMX provides state-of-the-art modeling and simulation tools and technology to provide our discerning clients with the most accurate and realistic simulations possible. Our portfolio includes a wide range of modeling and simulation services; including desktop training, simulated environments for operationally relevant testing, digitally facilitated courseware, scenario-based wargaming simulations, and more. We offer a range of live-virtual-constructive capabilities for immersive environments in support of C5ISR, sensor technology evaluation and validation, Artificial Intelligence/Machine Learning (AI/ML), wargaming, and commercial applications. Our technology provides a closed, secure environment for testing exquisite customer capabilities in situations where the operating environment may be sensitive in nature.

SMX also offers our clients digital twin capabilities to create a virtual replica of a physical object or system. These dynamic models can be outfitted with a variety of sensors to monitor performance and component health, predict behavior, and optimize system operation. Our comprehensive modeling and simulation technology can be tailored to meet client needs and improves decision-making, reduces risk, and increases efficiency.

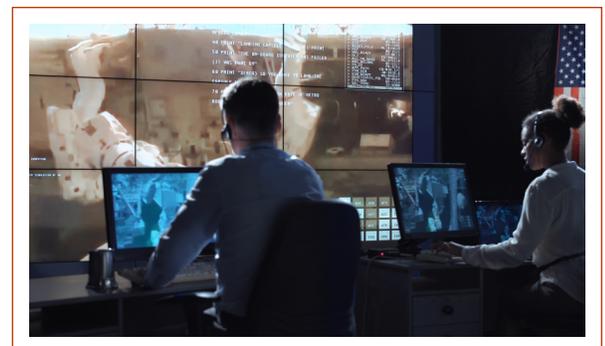
- Constructive Simulation
- Systems-of-Systems Modeling
- Testing and Evaluation
- Human-in-the-Loop Simulation
- Virtual Training
- Digital Twin

### Live Virtual Constructive (LVC) Simulation Training

Our mission rehearsal solutions and comprehensive training is immersive and realistic to support personnel readiness and mission advantage. Multisensory integration into our simulation training suite enhances learning, increases response speed, and improves detection and recognition.

We support military forces by providing multi-faceted simulation solutions for explosives training, Troops-in-Contact (TIC), Close Air Support (CAS), Course of Action (COA) development, joint and service exercises, operational rehearsals, and leadership development.

We provide the ability to simulate missions to deny, degrade, disrupt, or manipulate enemy signals in support of Electromagnetic Warfare, Signals Intelligence, and Cyberspace operations.



## Engineering, Integration, Digital Twins, Testing, and Evaluation

- From large fixed-wing aircraft to small, Group 1 uncrewed aircraft and ground vehicles, clients can use our high-fidelity modeling and simulation portfolio for sensor integration and solutions assessments, capabilities analysis, and performance validation.
- Leverage our digital engineering and transformation services or use our or our client's Software Development Toolkits (SDK) to integrate with third party technologies.
- Model and simulate operational environments on proposed technology enhancements. Our applications can be used to refine Model-Based Systems Engineering prototypes and 3D depictions to support testing and certification.
- Use our customizable suite of tools to apply statistical analysis, conduct preliminary evaluations of engineered solutions and integrations, and prediction and analysis of prototype system performance.
- Clients can optimize their maintenance schedules through our Digital Twin Technology. Use a digital twin to monitor the performance of a physical object or system, understand wear and tear patterns, and predict when maintenance is needed.

## Client Solution Spotlight

**STORMBREAKER:** From Data to Dominance - SMX is partnered with USINDOPACOM and other industry/government stakeholders to deliver a DoD wide advanced technology, AI/ML enabled planning and decision-making tool to quickly generate and analyze military courses of action in a data-driven environment. The STORMBREAKER program augments and automates the Joint Planning Process (JPP) through the structuring and aggregation of authoritative data; the streamlining of the JPP workflow; and the introduction of a modeling and simulation capability that supports COA analysis and wargaming. STORMBREAKER will drastically reduce the time from plan inception to decision-making while simultaneously increasing the fidelity, accuracy, and number of high-confidence options for the Commander.

The SMX team has paired subject matter experts from the gaming industry, software development, cloud, IT infrastructure, information assurance, data science, and graphic design with military planners, operators, and intelligence professionals to create a warfighter focused, accelerated development environment that is poised to deliver an operational solution that exceeds industry standards for deployment timeline and user integration. Our agile team structure enables in-depth, complex military concepts to be translated quickly into technology solutions that provide intuitive and meaningful value to the DoD and its partners.



For more information, please contact: [solutions@smxtech.com](mailto:solutions@smxtech.com)

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](http://www.smxtech.com/contracting-vehicles)