## PRESCRIPTIVE ENTERPRISE FORECASTING



# FORECASTING COMPLEX COST AND RESOURCE CHALLENGES

UNIQUELY OPTIMIZING THE FLOW OF CRITICAL ASSETS

### INVENTORY DECISION SUPPORT PROCESS

IDSP combines ops research, an authoritative baseline, and advanced analytics in a unique process for managing future cost and resource allocations.

The process iterates copious amounts of historical data with planning, budget, and policy info for authoritative forecasting.

### COMPUTATIONAL ENGINE

SPA Prescriptive Enterprise Forecasting and IDSP explicitly link near-term HQ budget and Program Office funding decisions to their readiness outcomes.

This powerful computational engine helps inform near-term (1-5 year) through long-term (30-40 years) enterprise outcomes, based in prescriptive analytics for strategic decision making.

### **ENTERPRISE INTEGRATION**

IDSP resolves enterprise-level conflicts of interest with authoritative output.

The process uniquely provides excursions from the baseline into "what if" plans and outcomes for maximum decision support.

#### UNIQUE, PRESCRIPTIVE LIFE-CYCLE MANAGEMENT

SPA Prescriptive Enterprise Forecasting synchronizes supply with demand: how, when, and where an asset (supply) should be maintained or modified with the operational schedule (demand). All assets' supplies and demands are considered "from cradle to grave."



#### ADVANCED CAPABILITIES CREATE EXCEPTIONAL RESULTS

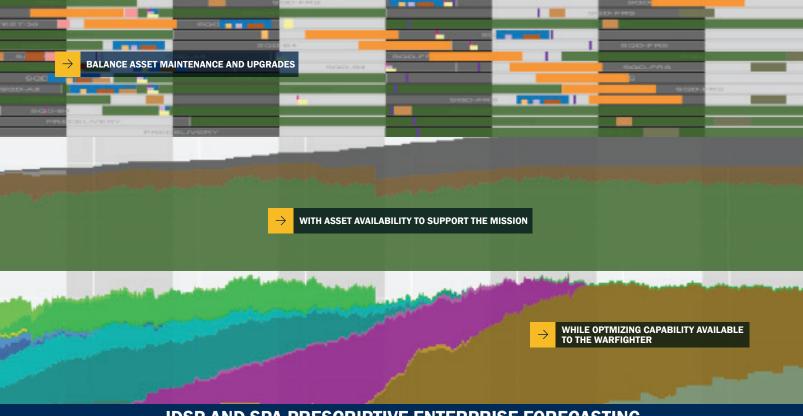
The SPA Prescriptive Enterprise Forecasting computational engine is **platform-independent**. It runs on any OS that implements Python and Rust runtimes (virtually all Operating Systems).

Flexible, standard architecture allows **customization** for each client's unique requirements. **SPA Prescriptive Enterprise Forecasting** implements an **advanced plugin-based architecture** that allows custom code injection in a standard discrete time-stepped simulation control loop.

The forecast **captures enterprise behavior** with minimal front-end investment.



### SPA PRESCRIPTIVE ENTERPRISE FORECASTING-GENERATED FORECASTS ARE INTEROPERABLE AND MAY BE INTEGRATED ACROSS SUPPORTED INVENTORIES



### IDSP AND SPA PRESCRIPTIVE ENTERPRISE FORECASTING CLARIFY AND FORECAST COMPLEX COST AND RESOURCE CHALLENGES

**Inventory Management:** optimizing the flow of critical assets, e.g., aircraft, ships, radars, pods, manpower.

**Service Life Modification Planning:** balancing near-term readiness and long-term force structure to optimize operational availability.

**Stakeholder Alignment:** quantitatively integrating plans from all echelons with authoritative baselines.

**Convergence of Modifications Planning:** synchronizing complex streams of discrete mod requirements and optimizing force capability.

#### **DECISION SUPPORT FOR NATIONAL SECURITY**

Systems Planning & Analysis, a leading global provider of advisory services supporting national security objectives, provides deep domain expertise, problem-solving capabilities, and a results-driven approach to program lifecycles, reaching a wide spectrum of market areas.

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