



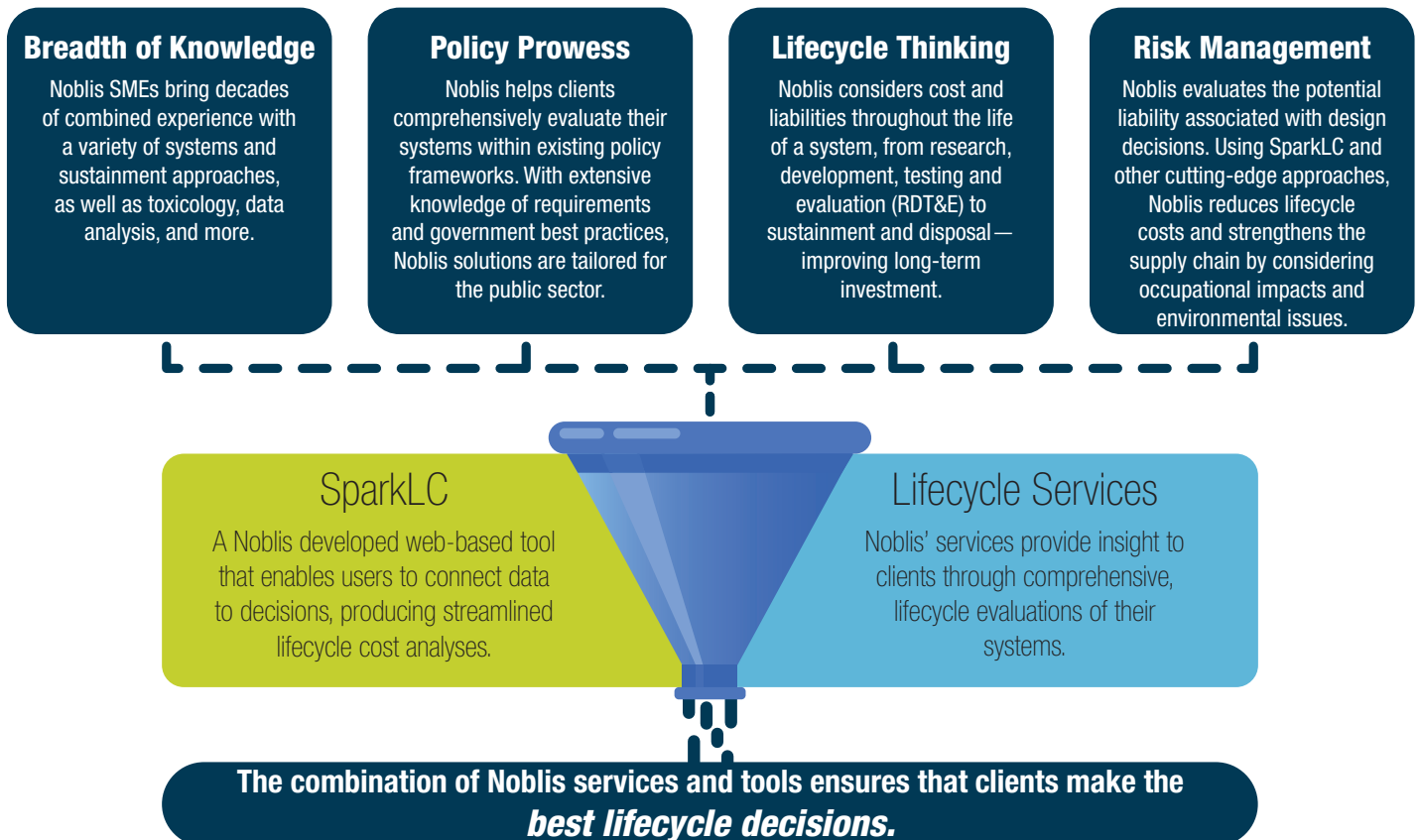
ASSESSING OCCUPATIONAL & ENVIRONMENTAL RISKS FOR ROBUST DECISION-MAKING

Integrating lifecycle analysis and costing for more robust decision-making and improved mission outcomes

Legacy systems are familiar to an organization and to users, but they may eventually need to be replaced by more modern and optimized systems. Choosing the best replacement for legacy systems is difficult. There may be several alternative solutions to choose from, and they each carry their own benefits, risks and costs. While some organizations have domain expertise in analyzing the performance of a system (benefits), assessing operational challenges (risks), and estimating expenditures (costs), there is a hidden side of the analysis: the unknowns associated with occupational and environmental performance.

Whether the system is in support of a new material, vehicle or building, it is critical to understand lifecycle costs and risks of the system and its supply chain. Noblis offers subject matter experts (SMEs) to analyze systems for lifecycle costs and risks. Noblis also developed a web-based tool, SparkLC, for assisting clients with such analyses. These sustainability analyses (combining cost and risks) can identify inefficiencies and hazards such as occupational exposure to hazardous conditions in systems, improving safety and performance and saving money.

Making robust decisions for the long-term using...



CLIENT SUCCESS STORIES

Analysis of an Army Munition Reveals Significant Lifecycle Cost Savings Potential

Noblis assisted an Army Armament Research, Development and Engineering Center (ARDEC) investigator in identifying comparative savings associated with a new alternative explosive formulation and munition manufacturing process, complementing the cost analysis with a robust life cycle cost analysis that incorporated various financial, environmental, and occupational risks. Prior to the cost analysis, it was widely understood that the alternative explosive was not financially viable as a direct product replacement; however, taking a systems perspective, the Noblis team showed that the alternative would likely be much less costly to the DoD than the original product line. The findings of the Noblis team proved the value of continued research of the alternative.

Reducing Use of Hazardous Chemicals in Sustainment Depots

Noblis led an analysis of a new anti-corrosion process at a maintenance depot. The combination of site visits and innovative data integration helped the client communicate cost savings and reductions in hazardous chemicals such as cadmium and sodium cyanide. The analysis also demonstrated the client's leadership in implementing a depot-wide strategy to reduce use of cadmium and hexavalent chromium at maintenance depots. Due to the success of the Noblis analysis, the client is expanding the analysis to other systems onsite.

WHY NOBLIS

Noblis' SMEs bring decades of combined experience with a variety of weapons systems and sustainment approaches, as well as toxicology and data analysis. In support of our mission of providing solutions in the public interest, we have leveraged our subject matter expertise to create tools in support of our clients' critical missions. The Noblis developed tools expand access to unique insights in support of our clients' defense and national security missions.

Noblis helps improve our clients' long-term investment outcomes and ensure mission success by considering costs and liabilities throughout the life of a system, from RDT&E to operations and maintenance to disposal. Our scientists and engineers help clients examine the cost, occupational and environmental impacts of early design decisions on new systems by combining data and tools from different domains.

This lifecycle perspective is critical as operations and maintenance costs—which might account for over three-quarters of a system's total cost—can be locked in during the design phase. Noblis' approach to systems analysis allows clients to anticipate and make informed decisions about total costs of new or modified systems. In addition, this approach identifies leverage points for improving system efficiency, resulting in cost and resource savings down the line.

With all clients, Noblis ensures compliance with relevant policy and guidance to capture costs across the system lifecycle.

To learn more about SparkLC and Noblis' Lifecycle services, contact us at SparkLC@noblis.org