

# Design for Affordability (DFA)

## Achieving Step-Change Cost Reduction on DoD Platforms

Program managers and defense manufacturers find themselves caught between opposing imperatives: deliver increasingly capable and complex systems and, at the same time, reduce costs. In an era of uncertain defense budgets and a shrinking procurement base, the traditional approach of squeezing savings through incremental cost-reduction initiatives no longer achieves the targets DoD programs demand. In response, programs must achieve a step-change in performance. Successful programs will be those that take a total cost perspective that systematically evaluates all cost drivers, starting with platform design.

### Booz Allen Can Help

Booz Allen Hamilton, a leading strategy and technology consulting firm, has a long history of helping government clients transform their cost structures. We use proprietary methodologies and advanced cost modeling tools to help decision makers identify cost drivers and mitigate risks, meet funding objectives, and ensure program affordability.

### Our Approach

To identify, analyze, and address a program's cost drivers, Booz Allen has developed a methodology called ISSR. ISSR evaluates cost drivers based on four categories:

- Inherent costs, driven by platform design
- Structural costs, driven by product manufacturing
- Systemic costs, driven by production management
- Realized costs, driven by actual work practices

#### About Booz Allen

Booz Allen Hamilton has been at the forefront of strategy and technology consulting for 95 years. Providing a broad range of services in strategy, operations, organization and change, information technology, systems engineering, and program management, Booz Allen is committed to delivering results that endure.

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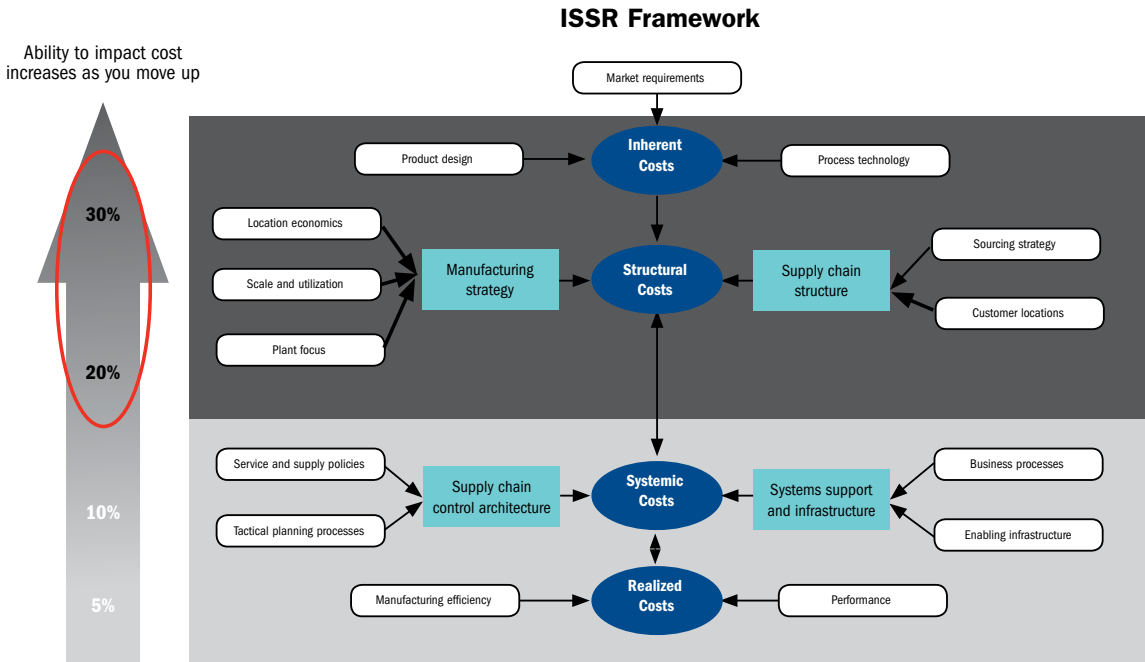
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Design for Affordability (DFA) leverages the ISSR framework by specifically targeting the inherent (design-based) and structural (assembly-based) cost drivers that impact a US government product's or weapon system's acquisition costs. It redefines project cost analysis and addresses fundamental questions, such as:

- Can system designs be simplified while maintaining state-of-the-art capability?
- Can components be standardized across the platform?
- Can less expensive alternatives be substituted for expensive parts?

By eliminating the most costly components from the system, DFA offers step-change performance improvement for DoD programs—including up to a 30-percent cost reduction.

To be effective, the DFA process requires the collaboration of multiple stakeholders, including the government, the prime contractor, and suppliers. Moreover, the process typically results in hundreds of ideas. A rigorous assessment approach is critical, and stakeholders must fully vet ideas based on performance as well as cost-savings potential. Booz Allen provides the impartiality of an independent third party and the credibility of having led DFA across some of the most complex weapons platforms under development.