



Proposal Management in the Aerospace and Defense Industry

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Introduction

Tools available for better proposal pricing

During a previous automotive manufacturing trend, manufacturers gave their suppliers control over making various components and subassemblies for their automobiles. As a result, there was a marked increase in production flaws, assembly incompatibilities, and quality degradation. From this trend rose increased concern and process scrutiny that has forced manufacturers into a mode of more tightly controlled vendor relationships with more involvement in the inner workings of the companies manufacturing their components.

The aircraft industry is seeing a similar need to gain better visibility into the work product and output of their vendors and contractors. This transition is not yet complete; but as aerospace companies continue to see inadequate results from their outsourced contracts, it will be critical to get this formula right. Additionally, the manufacturing trend towards outsourcing will also bring this issue to a head and drive more aggressive change.

An important aspect of this trend for aerospace is the complexity of collaborative relationships and the accuracy of their shared data. We are seeing collaboration not only between vendors and their contractors, but also an increase among market leaders like Boeing and Lockheed Martin. As the government demands more sophisticated technology and a more “best-of-breed” approach, an increase in this trend will continue.

As the government’s program requirements become more complicated and their audit criteria more austere, many companies are finding their bidding processes and tools to be severely deficient. Companies like Boeing and Lockheed Martin have discovered the need for common tools and processes to help them provide more accurate proposals in a true collaborative manner. Additionally, as the allocation of funding constricts, A&D companies are finding their proposal response time taking on a greater importance. This environment exposes several key deficiencies in the proposal response and estimating functions. This article looks at several ways to improve efficiency within the respective A&D functions.

Accelerated Response Times

Many organizations are still relying on fragmented systems or manual processes to support proposal generation activities. This condition has prevented accurate and efficient data reuse, leading to extended response times. In addition, the lack of system integrated supply chain functions create material pricing lead times that drastically reduce the organizations’ ability to turn around RFP responses in a timely fashion.

Fortunately, solutions have been designed to address these areas of inefficiency and redundant effort. Through the creation of a common platform and data structure, the solution enables data reuse for similar program and contract proposals, thus greatly speeding response time. This extreme reduction of proposal setup and contract part configuration effort through data reuse allows for more data analysis and precision of effort rather than data entry. Additionally, the accelerated part structure configuration draws in the material pricing activity greatly reducing the full cycle time.

More often than not the material pricing activity is the longest thread in the proposal pricing process. Given customer and regulatory requirements, the majority of the material must be priced with accurate and effective quoted data for each proposal. The pricing solution was designed to create a common pricing source data repository for the material pricing engine. In addition, a fully integrated RFQ utility extends allows for direct supplier input in a real-time

environment. This architecture reduces the lengthy and costly material quoting process thereby truncating the overall proposal cycle.

Pricing Methodology Consistency

The post merger A&D landscape is riddled with a wide variety of disparate processes and systems. Both across and within key disciplines (engineering and manufacturing), we find variations on pricing methods, data retention, material consolidation, and proposal generation that lead to inaccurate bidding and consequently invalid budgeting.

To add to this problem, regulatory and audit requirements are forcing organizations to examine and verify their pricing methods. The pricing solution aligns these pricing methods to ensure consistency in the pricing process. Common reference data (rates, factors, etc.) leveraged across functional areas and geographies ensures that collaborative proposals are accurate and verifiable. Additionally, the configuration of a common set of pricing algorithms by functional areas such as manufacturing, engineering, and supply chain, promote consistency in the pricing outputs.

Extendable Proposal Response Framework

As enterprises struggle to implement governance solutions for numerous functions and programs, many are failing to adequately address the needs of the proposal process. Additionally, many of the point solutions in the market provide for basic pricing functions, but little to no program proposal organization, activity tracking, or management metrics. This lack of organization and management visibility contributes to the extended and inaccurate proposal responses.

Even in companies that possess detailed pricing applications, the resulting data is often misaligned with similar outputs from other performing groups. The pricing solution establishes and maintains a framework and structure designed to align and coordinate a large number of disparate performing groups. Additional tracking and dashboard utilities allow program leadership and management visibility in to detailed activities and alignment with the proposal schedule.

Robust and Flexible Pricing Work Bench

In an industry dominated by standardized platforms such as SAP, no clear common pricing tool has emerged to drive consistency and flexibility for proposal estimation. Despite extensive data and process consolidation initiatives, many organizations continue to create and maintain estimating silos with data generated by various COTS or homegrown applications. Additionally, the variable factoring and time-based criteria for estimating is often accomplished manually due to the lack of application flexibility.

Through the process of developing a pricing solution, one of the discoveries was the variation in customer requirements and subsequent pricing options. Often the justification for continuing to employ manual pricing activities is the absence of a suitable tool that offers the flexibility to match the needs of the business. The pricing solution provides variable algorithmic models for pricing, and provides option variances at several key levels within the proposal hierarchy. This flexibility allows for rapid adjustments in accordance with customer requirements, and provides the business with "option" based proposals for facilitation in the negotiation process.

The Aerospace & Defense Industry is facing ever increasing pressure to produce more accurate and timely proposals. The challenges that have hampered this process progression and refinement are consistent across the industry and there are solutions to facilitate change.

About the Author

Pete Chamberlin, Hitachi Consulting Senior Manager, wrote this article for *Aerospace Engineering*.

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