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How Aerospace and Defense Companies Can Better Compete in an Evolving Market

By David Hanley, Gigi Gunderson, and Ned Calder

Given the increase in armed conflict around the globe, many nations are augmenting their focus on producing and manufacturing cutting-edge defense technology to counter fast-moving threats. For example, in September 2023, Deputy Secretary of Defense Katheen Hicks said that America's warfighters are counting on the Department of Defense and its partners "to deliver safe and reliable, combat-credible capabilities at *speed and scale*."

This will necessitate advancing innovative technology from ideation to the battlefield faster than ever before. It will also require that the technology be easily upgradable to maintain relevance and reduce costs.

As a result, rapidly fielded, easily upgraded, and less expensive solutions will begin to supplement traditional, costly technology. Defense contractors that want to be relevant in this changing landscape will need to adapt to compete.

In our work in this sector, we've seen companies encounter two key challenges as they try to agilely produce highly specialized solutions: struggling to shift from responding to an RFP to helping shape their customers' priorities; and innovating the company's business model to optimize speed and cost.

Challenge #1: Shifting from RFP Response to Shaping Customer Priorities

Customers are providing an increasing number of detailed requirements, impacting a solution's complexity, development time, and cost. Unfortunately, customers may not be able to easily derive the requirements necessary to meet their future mission objectives, a problem exacerbated in a more agile and iterative development environment.

To best meet future needs, companies will need to help shape the customer request while leveraging a jobs-to-be-done lens. "Jobs" can help companies recognize nuances in their customer's problems and provide solutions that are uniquely positioned to deliver differentiated value to the warfighter.

To successfully shape a customer request, companies should implement a "jobs-to-be-done" lens, shifting focus from the "widget" a customer is buying to the "problem" a customer is trying to solve. Jobs-to-be-done asks companies to contextualize the circumstance in which their customer's jobs or problems are encountered and to identify the barriers that are currently preventing their customer from solving that problem.

The jobs lens also acknowledges that purchasing decisions often go beyond the simple functional criteria of the product or service, i.e., requirements, and encompass a customer's non-functional needs, e.g., reputational, political, and social needs. Solving a customer's comprehensive needs, like those in Fig. 1, can help ensure a comprehensive solution.

Innosight worked with a large defense contractor to roll out jobs-to-be-done thinking for its Electronic Warfare/Information Warfare (EW/IW) business lines. Traditionally, EW/IW capabilities are procured as platform-centric modules, often targeting specific threats or operational environments. In many cases, separate EW/IW systems address the same threats within common frequency bands but are not necessarily cross-compatible. However, rapidly evolving near-peer threats are pushing customers towards a next generation EW/IW solution that can respond to both the threats of today and tomorrow.

Figure 1: Illustrative Jobs in the Defense Industry

The contractor recognized an opportunity to leverage jobs-to-be-done thinking to differentiate its next-gen EW/IW products. Its customer's mission parameters were for continuous, agile, and advanced detection solutions that could operate over a broad frequency range. The customer shared several strategic vignettes, or use cases, outlining probable future fight scenarios. Unique roles for a variety of platforms were outlined in each vignette.

The company's experts identified similarities across vignettes and platforms and proposed a simplification of the solution based on those similarities. The company helped its customer shape a series of common requirements that would ensure adaptability across platforms and use cases. With a focus on time to market and commonalities, the end-product could still include specific customization while maintaining a reduction in procurement and training costs.

In addition to solving its customer's functional job with the common requirements approach, the company had to solve its customer's other nonfunctional jobs. The company helped the customer feel comfortable about the new solution by engaging with senior leadership transparently and demonstrating the solution in a variety of scenarios and tests. The company even helped the customer identify the budgetary impacts of the new solution on various colors of money, allowing the customer to confidently "sell" the solution to its internal stakeholders.

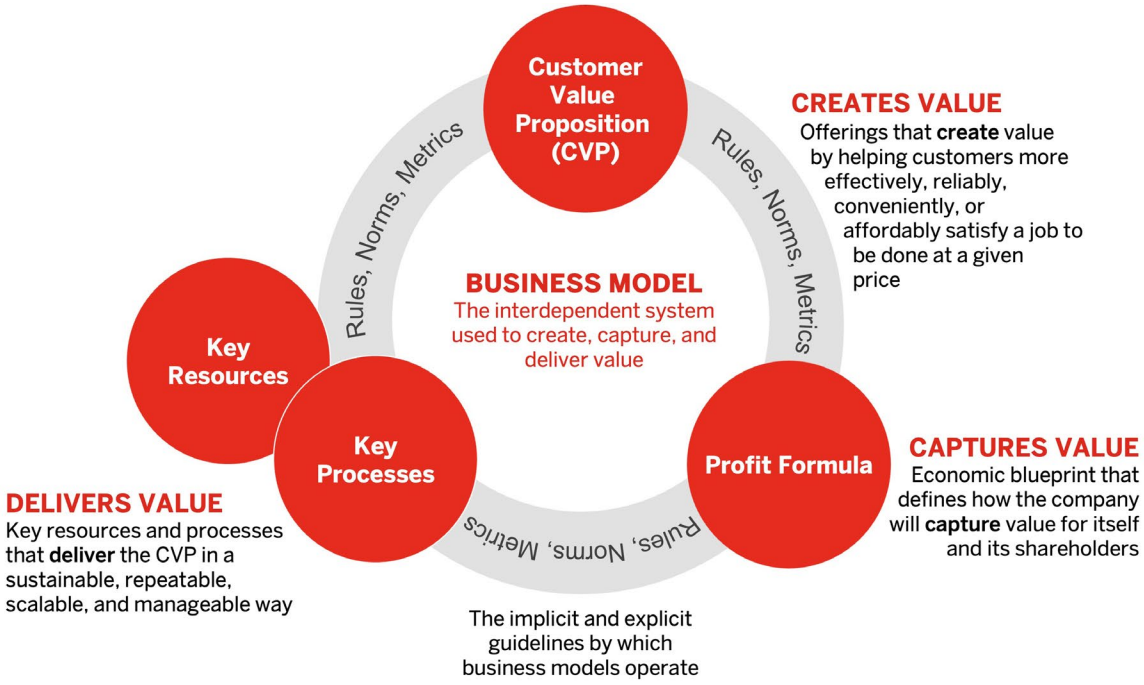
The company's solution is now the gold standard in the market and is used by the U.S. and its allies around the world. By recognizing the nuances within its customer's jobs, the company was able to deliver on its customer's vision of scalability, affordability, and speed in a novel way that delivered differentiated value to the warfighter.

Challenge #2: Business Model Innovation

Even when a company can identify its customers' problems, it may struggle to provide solutions through novel business models. Once thought of only as the domain of disruptive startups, business model innovation is an essential tool for companies to create and capture value in a changing ecosystem. A business model, as shown in Fig. 2, consists of four distinct yet interdependent elements, which include the customer value proposition; key resources; key processes; and the profit formula.

Successful businesses devise a stable system in which these elements interact in consistent and complementary ways. A change to any one element should prompt updates to the other three. For instance, expanding the customer value proposition may require additional resources or modified internal processes to deliver the new offering.

Figure 2: Four Elements of the Business Model



Innosight recently worked with a major defense contractor to augment its business model to elevate a focus on sustainment, which is the support, maintenance, or upgrade of a product or offering. The company recognized the value of incorporating sustainment thinking earlier in the product lifecycle due to market dynamics pushing for technology that could be produced faster and maintained easier.

By designing around, planning for, and delivering repairs and upgrades, the company could bring down the total lifetime cost for its customer while accelerating the speed to market of new functionalities.

To capture this opportunity, the company shifted aftermarket maintenance and support out of existing business lines, creating a new business line focused on sustainment. The new business line coordinates maintenance "Service Hubs" staffed with technicians and an inventory of key parts, exploring cross product efficiencies.

The business line has increased internal training to ensure products are designed with maintenance and upgrades in mind. The company also incorporated total cost of ownership into marketing and capture materials to ensure customers were cognizant of the total value purchased.

The company was aware of potential differences in the profit formula for its sustainment business line versus its core business. The company set specific, relevant metric targets for the new sustainment business line. Targets considered margin differences and the contribution of upstream impacts, like increased competitiveness and capture rate, based on its products' newly lowered total cost of ownership.

By innovating its business model, the company delivered a sustainable, scalable solution that continues to generate value to its business and customer.

As these two challenges demonstrate, in today's increasingly tense macroeconomic and geopolitical environment, it is essential for aerospace and defense companies to develop solutions faster, produce them cheaper, and make them easier to maintain. To accomplish this, companies need to deeply understand their customers' needs and update their business models to increase value creation and capture throughout the value chain.

Key Takeaways

1. **Develop** solutions with speed and at scale
2. **Understand** your customers' needs
3. **Update** business models to increase value creation

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ABOUT INNOSIGHT

Innosight is a strategy and innovation consulting firm that helps organizations navigate disruptive change and manage strategic transformation. Now a member of the Huron Consulting Group, we work with leaders to create new growth strategies, accelerate critical innovation initiatives, and build innovation capabilities. Discover how we can help your organization navigate disruption at www.innosight.com.

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