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Finding equilibrium

Managing business model compatibility in A&D deals

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Business model compatibility: A fundamental M&A consideration

US aerospace and defense (A&D) companies, facing flat US defense budgets and competitive pressures from non-traditional entrants, are seeking to grow sales and profits via diversification—from defense to commercial, from products to services, from domestic to international. This search for growth is leading many to explore activities outside their traditional core businesses. Both commercial and defense contractors are aiming to increase revenue and profit by capturing a greater allocation of aftermarket value, as well as by extending into services and other new portions of the platform value chain. And as incumbent "integrator" roles start to lose significance due to the disaggregation of major military programs, companies that have historically filled these roles are making forays into new territory as well.

Efforts to diversify may make sense in the abstract, as can efforts to leverage or monetize current assets (or value propositions) into new areas. However, decisions about entering new markets should be considered in the context of a company's ability to support those markets—specifically, the ability to employ the right business model(s) to serve new markets. More than the general truism that failing to properly design for business models can destroy value, failure to consider business model compatibility can be especially harmful to companies engaging in inorganic growth—which many A&D companies have made a cornerstone of their diversification efforts. Missteps in inorganic growth can destroy value far faster than organic pursuits, due to the significant capital outlays that happen all at once in an M&A transaction.

Our research suggests that business model compatibility—that is to say, the extent to which either an acquirer's business model is similar to the target's, or accommodations have been made for the differences—is a fundamental fork in the road for A&D companies pursuing M&A. In fact, business model compatibility can often be a more important consideration than many other, more commonly discussed levers of M&A value, such as asset utilization, process efficiency, and material procurement leverage.

We are not saying that A&D companies should not acquire, or cannot successfully acquire, companies whose business models differ from their own. But deals involving incompatible business models, as our research shows, carry a high risk of failure. Given this, business model compatibility should be addressed in a disciplined manner, not only as an ongoing part of a company's strategic planning process, but also, and especially, when evaluating and executing M&A deals.

The challenge with incompatibility

A business model is defined, broadly speaking, as the way a company seeks to win in a market. Business model elements include:

- An organization's **value proposition** (e.g., the ability to predictably provide a product or service at a viable market price, along with the supporting cost structure)
- The organization's **risk profile**, along with the mechanism(s) used to control and allocate risk among value chain participants
- The organization's **investment philosophy**, including the way it invests independent research and development (IRAD) and profit to create assets (e.g., intellectual property) for commercial pricing power

Most A&D companies' portfolio businesses adopt one of the six business models depicted in figure 1, with some variations.

Business models, in turn, are supported by operating models, which include elements such as organizational structure and methods of program and product governance. Metaphorically speaking, an operating model is how a business chooses to assemble the building blocks in order to successfully deliver the value proposition specified by the business model.

A company can, of course, choose to engage in multiple businesses with different business models—and many do. However, in the A&D industry, it is often difficult for a company to execute two or

Figure 1. High-level A&D business model spectrum

Pure military program ⟷ Pure commercial program

Traditional development	Defense production	International extension	Sustainment, engineering services	Service solutions	Product line
Develop solutions to address a customer-defined problem and customer-defined tech. baseline, typically on a cost-plus basis	Build and sell specialized products (which were developed via CRAD) to defense customers on a fixed price contract	Adapt previously developed programs for the international market, sold via DCS	Provide highly skilled labor (e.g., engineers), primarily at an agreed upon LOE and rate per hour. Customer is typically responsible for outcome	Provide an integrated service offering (typically including labor and parts) to deliver upon a defined outcome (e.g., sustainment)	Develop (via IRAD or from profit), build, and sell catalog-type products on commercial terms to commercial customers

Source: Deloitte analysis.

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more distinct business models or operating models well—and the further apart they are on the spectrum shown in figure 1, the more difficult it can be. More often, the company's core business model exerts a "pull" on those of the subsidiary businesses, so that the model employed by the main business, or inconsiderably different variants of it, are applied to markets across the board.

Examples of how this phenomenon can play out in A&D include:

- Attempting to supply value-based, competitive support services from regulated original equipment manufacturer (OEM) customer service departments
- Merging a commercial business with a defense-type business, and applying "contract" cost accounting in place of "product line" accounting

These and similar situations can arise when an A&D company engages in accretive diversification beyond a company's main business through M&A. Success in such efforts requires a willingness to find an equilibrium between the acquirer's and the target's business models—one that achieves a good fit between the markets pursued and the business models employed.

DEFENSE AND COMMERCIAL BUSINESSES: DIFFICULT TO MIX

One frequent driver of business model incompatibility in A&D industry mergers is the differences between compliance with government cost accounting standards (CAS) and commercial business dynamics, summarized in figure 2.

Figure 2. Differences between defense and commercial business requirements

US government performance requirements	Market segment requirements
US government-defined technology requirements	Marketplace or client-defined requirements
Allow-ability investment	Business case with amortization
Return on sales focus	Return on invested capital focus
Contract costing or billing	Product or solution standardized costing
Custom development	Standard solutions
Grouping, pegging, and distribution material assignment	Inventory turns managed
Contract profitability focus	Portfolio profitability focus
Bottom-up estimating or pricing	Market-based standard pricing
Function-led processes	Business-led processes

Source: Deloitte analysis.

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Virtually all functions within an A&D company affect and are affected by these differences, which call for substantial differences in the business model to accommodate effectively. Contrast the way a company's finance organization typically handles cost accounting under CAS versus in a commercial enterprise. CAS-compliant defense systems usually focus on accurately tracking costs incurred on a contract, whereas commercial systems focus on tracking the standard (average) cost of a product line or service. These two methods produce very different management information. Yet the CAS method is a prerequisite for being able to bill on many government contracts, whereas the commercial method is critical if a company needs to understand product costs and their drivers.

In addition, the CAS method is very expensive to administer because of the need to constantly reconcile between "forward pricing" commitments and actual expenditures along the way. We have seen an administrative cost difference of 25 to 35 percent between CAS and commercial accounting approaches.[1] (This is one reason that new entrants to the A&D industry have dramatically lower cost structures and thus are able to offer dramatically lower prices.) Therefore, CAS methods are typically only employed in cases where the customer is willing to pay for the administrative cost of complying.

Often, the incompatibility between CAS and commercial accounting methods comes to a head during financial integration efforts, when leaders attempt to bring the combined company onto the same ERP architecture. In such cases, the post-merger business architecture may be largely determined by an IT implementation team. This architecture can have substantial strategic and operational consequences.

Why compatibility matters in M&A

WHY should the extent of similarity between an acquirer's and a target's business models play a large role in M&A outcomes? Those unfamiliar with M&A might think that, if each company operated effectively in its respective market before the deal, each should be able to operate effectively and maintain its performance after the deal—or, as most M&A transactions aim to do, even improve. But this doesn't always happen. A target's pre-deal business model may work well in its chosen market, but after a target is acquired by another company, its business model is rarely left alone. And in many cases, the acquirer's integration efforts unintentionally change the target's business model in ways that may sabotage the latter's marketplace effectiveness.

One reason this can happen is that most traditional post-merger integration (PMI) programs do not specifically aim to tailor business models to fit the markets in which each business plays. At A&D companies, as in other industries, most PMI work focuses on "Day 1 readiness." While an essential part of the process, the readiness effort often fails to follow through by making the hard choices necessary to prepare the combined entity for success. Despite talk of applying "best practices" from both sides, for instance, the acquiring company's compliance position (or that of the party with the most stringent compliance requirements) may become the default position for all businesses in its portfolio—even for units with less-stringent requirements.

On an operational level, our experience suggests that the fault often lies in the power dynamics of PMI execution. The senior executives who make portfolio choices (sometimes with the help of consultants and bankers) usually delegate the job of designing and implementing the combined entity's business model(s) and infrastructure to those

SERVICES: A TRICKY PLAY FOR OEMs

Services are considered an attractive growth area in A&D, with the opportunities mostly seen in the two areas of mission services and sustainment. Many OEMs are investing in services with the hope of capitalizing on untapped platform and systems intellectual property, selling their products as services (for example, through "power by the hour" contracts), and/or taking advantage of special capabilities that they have developed and that may be underleveraged.

However, aligning business models appropriately is just as important in selling services as in selling products. Selling mission or sustainment services on a "value" basis requires a fundamentally different business model than the kind of time and materials contract that most defense contractors are used to. Because of this, it is nearly impossible for an OEM platform design production company to profitably compete on many portions of the sustainment value chain (such as aftermarket support, competitive MRO, or distribution) using the same business model that they used to design and produce the platform.

Recent marketplace activity suggests that some OEMs, realizing the difficulty of competing in services with a product-focused business model, are starting to take a new approach. Specifically, these companies are launching new functions (and in some cases, organizations) to accommodate mission services and sustainment, setting them up with business processes and cost structures that are outside of the core OEM framework.

at lower organizational levels. This is where things typically go wrong. While presumably well-intentioned, the people in charge of implementation may:

- Lack (or not be given) a full appreciation of the portfolio strategy to be accommodated. They thus tend to make decisions based on more-immediate operational considerations, which may work against the company's overall strategic intent.
- Lack the authority to make the kinds of trade-off decisions that often arise when creating a new infrastructure (e.g., cost vs. performance). Without this authority, they may be bound to adhere to the status quo around these trade-offs instead of making changes more appropriate to the combined entity's needs.
- Lack the freedom to make significant structural or procedural changes to what has been successful in the core. This raises the risk that, in implementing an acquired business, a company will simply reproduce or scale what has worked for the main business, regardless of factors that may argue against it.

In cases where both companies serve similar markets, the acquirer's business model's "pull" upon the target's may not prove very harmful. But if the markets are very different, the acquirer's influence on the target's business model—whether deliberate or unintentional—may change some of the very elements that helped the target succeed in its chosen market, with consequences that can range from mild to devastating.

Testing the compatibility-to-value correlation

To what extent does a correlation between business model compatibility and M&A outcomes *actually* exist, independently of the aforementioned reasoning and our anecdotal observations? To find out, we examined 228 M&A deals in the A&D industry over the past 10-plus years (2007 through March 2017). These 228 deals represented all industry M&A transactions in this timeframe where:

- The deal size was $50 million or more
- The acquirer was based in the United States[2]

We classified these deals into five categories according to our evaluation of the acquirer's "strategic intent" (figure 3).[3] These categories were specifically designed to represent a range of degrees of business model compatibility. We evaluated each deal's "success" based on a combination of growth in revenue, margin, and market share in the acquired company's business base pre- and post-merger. Finally, as shown in figure 5, we compared success rates across deal types.

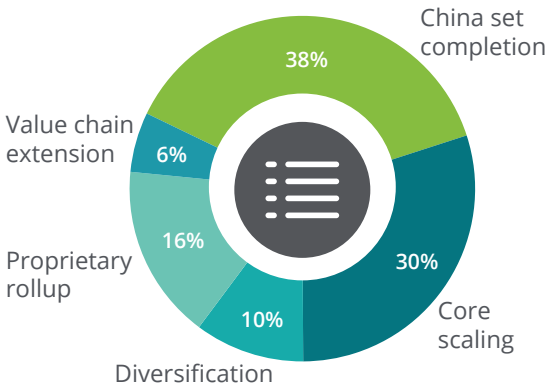
Figure 3. Categories of M&A strategic intent

Business model alignment: Low → High

Category name	Buying entity's strategic intent	Examples
Diversification	Moving to an entirely new value chain	• Defense buys commercial, services, or infrastructure company • Commercial A&D buys industrial products company
Value chain extension	Moving "downstream" in the company's value chain	• OEM seeks to provide services and might buy an MRO or mission services company • OEM sells the "capacity" of a product (e.g., power by the hour) as a new business model • OEM applies "digital" methods to change product value proposition (e.g., C4ISR)
China set completion	Filling in portfolio gaps at current value chain position	• OEM buys a product line missing from current portfolio
Proprietary rollup	Capitalizing on a sole-source position	• Financial buyer (e.g., a PE fund) buys component companies and raises prices (usually for spare parts)
Core scaling	Consolidation of current value chain position	• OEM buys a competitor

Source: Deloitte analysis.

Figure 4. M&A deal assignment by category (by number of deals)



Source: Deloitte research described in Harlan Irvine, Gagan Chawla, Maryann Zeira, and Ted Sinsheimer, *Finding equilibrium: Managing business model compatibility in A&D deals*, Deloitte Insights, February 7, 2018.

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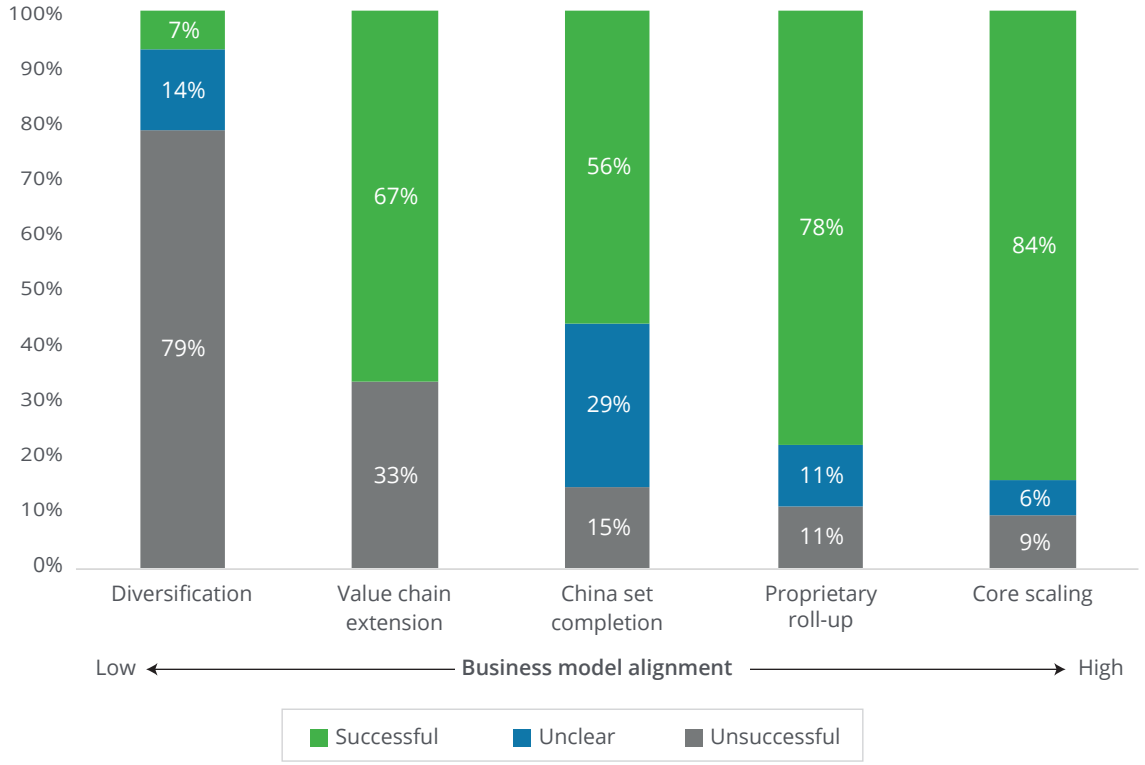
As expected, acquisition success rates among the 228 deals analyzed were highly related to strategic intent—which, in our classification, indicates the extent to which the acquirer's and target's business models were compatible pre-deal. Other factors (e.g., lawsuits, oil prices, defense budgets) also had an impact, but no other factor showed as strong a relationship with deal success as business model compatibility.

This analysis shows that business model compatibility—or at least the recognition that business models need to be considered—is a major factor in whether or not a combination is successful. The more compatible the business models of the two companies, the higher the success rate. Conversely, the greater the gap between the business models, the lower the success rate. For example, diversification through acquisition is inherently difficult, as many of these deals by nature involve buying a company with a fundamentally different business model.

Figure 5. Level of M&A success by deal type



Source: Deloitte research described in Harlan Irvine, Gagan Chawla, Maryann Zeira, and Ted Sinsheimer, *Finding equilibrium: Managing business model compatibility in A&D deals*, Deloitte Insights, February 7, 2018.

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Proprietary rollups and core scaling deals, on the other hand, are usually made specifically to capitalize on high business model compatibility, and they are almost always successful. In the middle of the spectrum, value chain extensions, which seek to move the acquirer into new roles in its value chain, display mixed success. When a company is alert to the business model differences and supports the new value chain position with the proper metrics and governance, these deals tend to go well. However, the assumption that one business model (and one type of manager) will work for a broad range of the value chain is usually a bad one that can potentially destroy value.

INTERNATIONAL SALES: DIFFERENT DYNAMICS, DIFFERENT RISKS

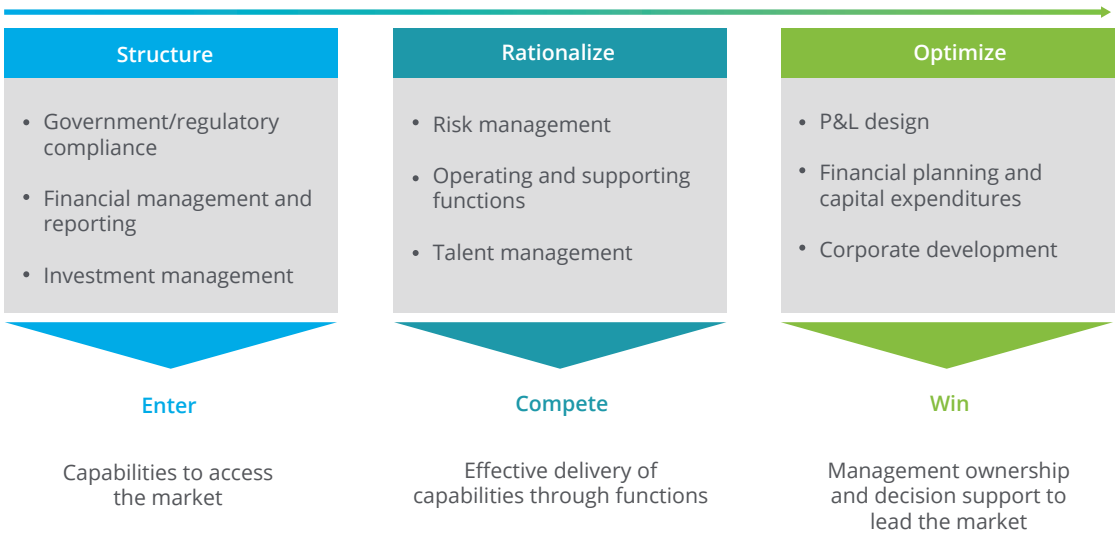
International sales are one area where US A&D companies may stumble due to business model incompatibility. Most US defense companies are well versed in "foreign military sales" (FMS), which are effectively sales to the US government under slightly different terms and conditions. But while FMS is a natural extension of what OEMs regularly do, direct commercial sales (DCS), where an OEM sells directly to a foreign military customer, have proved problematic for many. One reason for the difficulty is that DCS, because it involves "commercial-like" transactions, exposes the seller to risks that are not of significant concern for US government suppliers (such as political context, contractual terms, operational disruption, offsets, payments, and so on). That said, both FMS and DCS can be extremely productive growth areas, as long as an OEM clearly understands the differences between them and the different business models required to engage effectively in each.

Solving the business model challenge

To help manage the risks posed by business model incompatibility, A&D companies seeking to grow and diversify should consider the following steps:

- Start with the organization's charter and goals. Identify major revenue and profit streams, including the current backlog and expected follow-on; new programs, taking into account program win probability; and gaps that need to be filled to meet plan or expectations.
- Inventory the current portfolio, and map it in a way that facilitates discussion around which business models are required. Then, add to the map new markets and businesses that are expected to be a part of the company's diversification or gap-filling efforts over the next three to five years.
- Identify the business models required to support the desired future portfolio.
- Define options for closing gaps, as well as the cost and effort associated with doing so. Potential sources of cost may include plans to launch a new business entity or redesign existing ones, develop new ERP architecture, add capabilities, or even remove cost. Keep in mind that more than one business model can be effectively accommodated in a single operating unit. Also, modern ERP systems are capable of supporting more than one model in an "instance," if designed appropriately.
- If a new organizational structure is required, consider the recommended sequencing for redesign efforts shown in figure 6, which starts with regulatory and reporting requirements and ends with P&L design—the opposite of the sequence often employed.
- Be honest in evaluating the company's ability to support specific business models. Include the

Figure 6. Organizational design decision sequence



Source: Deloitte analysis.

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cost and disruption of efforts to close portfolio gaps in business cases for both organic and inorganic growth.

- Reconsider diversification plans in the context of the aforementioned analysis. If the company cannot support the development of new business models at a particular time, avoid commitments to businesses that cannot be addressed by currently available business models, or for which the business case for creating new models is questionable. If the business models required to successfully diversify through M&A are out of reach, consider other ways to create value (such as licensing or teaming arrangements).
- When planning and executing deals, specifically address business model compatibility as a focus area for the senior executive team. Dedicate appropriate time and resources to planning how to integrate and run the acquired business in light of its degree of business model compatibility. Then, give the people in charge of executing the integration the necessary strategic understanding, decision-making authority, and operational latitude to establish a business model or models that work for the marketplace—whether that means completely integrating the target into the main business, setting it up as a wholly separate stand-alone division, or something in between.

To reiterate: We are not suggesting that A&D companies should always avoid acquiring businesses with different business models from the core organizations. Successful A&D companies work to optimize the market segment/business model equation on an ongoing basis, and this is especially critical when placing bets on M&A deals. The path to business model equilibrium lies in understanding what business models are needed to effectively serve the markets in which one chooses to compete—and then deliberately designing each business model to fit its market. Those who do not take these important steps potentially risk destroying value in their inorganic growth pursuits.

ENDNOTES

1. Deloitte analysis.
2. D&B Hoovers, company data, retrieved February 2017. M&A deal information gathered from company 10-Ks and 10-Qs, press briefings, and analyst reports.
3. The acquirer's strategic intent was determined through analysis of earnings calls, annual reports, press releases, and industry publications.

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ACKNOWLEDGEMENTS

The authors would like to thank **Alexander Fischer** of Deloitte Consulting LLP for his contributions to this article.

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