

ASSIGNMENT 1 STRATEGIC MANAGEMENT EVALUATION OF THE DEFENSE INDUSTRY

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Executive Summary

The defense industry is a great example of how important strategic management planning is for long-term success in an industry. A volatile combination of powerful external forces and industry-defining internal factors means that the industry is highly competitive and constantly evolving. Geopolitical events such as the Russo-Ukrainian war and the Gaza war have increased global defense spending. Technological advancements such as AI and drone warfare has begun an arms race for defense companies. Failure to adapt means losing competitive advantage. Using a combination of different models, this report finds that investment into new technology and the labor force needed to develop such technology is crucial to long-term success in the industry. In addition, considerations should be made to improve ethical concerns and biological environmental sustainability to maintain strategic business sustainability as public relations and resource efficiency prove crucial in fostering government support of defense spending.

1. Introduction

The defense industry produces equipment and weapons to ensure a country's ability to fight threats both domestically and internationally. Armed conflicts are on the rise (Berckman et al. 2024), and defense spending has reached an all-time high (*Global military surges amid war, rising tensions and insecurity, SIPRI, 2024*). Conflicts such as the Russo-Ukrainian War and the Gaza War are leading to this growth in international discomfort and causing countries to invest more heavily in defense. The defense industry is massive and has incredibly unique challenges and opportunities to tackle. The difficulty of organizing a resilient supply chain is a large issue for companies in the industry (Korkmaz, 2024). The intricacies of the products and the need for rare resources with unique manufacturing processes means that issues easily arise. Domestic relations pose a massive political risk to defense companies, as products are sourced and

manufactured across the globe. Significant possibilities for growth also exist within the industry, with the advancements of AI, drones, and quantum computing posing potential areas of growth. With the defense industry having significant potential growth as well as large amounts of risk, the necessity for a strong strategic plan is clear. How should defense companies balance their desire for growth with consideration of the internal issues facing the industry? By using a combination of analytical models, we will dissect key areas of importance in an overview of the strategic challenges facing the defense industry as a whole.

2. External Environmental Analysis

The defense industry's external macroeconomic forces are varied and complicated. PESTEL and Porter's Five Forces will be used to better break down and understand the external factors affecting the defense industry.

Political	• Government defense policies (including budget) • Domestic relations between nations • Geopolitical conflicts (such as wars)
Economic	• Inflation and general strength of the economy • Exchange rates • The supply chain and costs of materials
Social	• Political perception on military spending • Labor market, especially with highly skilled labor • Ethical concerns for defense

Technological	• Advancements in AI, drones, and quantum computing • Cost-efficiency compared to risk with new tech • Potential areas of concern, such as cybersecurity
Environmental	• Environmental impact of military action, production, and disposal • Public perception of the industry's carbon footprint
Legal	• Protecting intellectual property • Procurement/trade regulations and laws • Human rights and ethical concerns

2.1 PESTEL Analysis

Companies within the defense industry have many external factors to monitor to remain competitive. One of the largest political factors is geopolitical issues. A Deloitte analysis writes that “approximately 59 countries were at war in 2022, up by 27 countries compared to 2019” (Berckman et al., 2024) and this manifests itself in defense spending with global defense spending hitting \$2.4 trillion in 2023 (*SIPRI*, 2024). In comparison, the automotive industry was valued at \$3.5 trillion in 2023 (*Spherical Insights*, 2024).

2.2 Porter's Five Forces Analysis

Threat of New Entrants	Low, due to high entry costs
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Buyer Bargaining Power	High, due to the length of contracts and legislative power that customers have (the Governments)
Industry Competition	High, due to significant investment needed to be competitive
Threat of New Substitutes	Low to medium, due to high costs of research needed for substitutes, but some dual-use civilian technology can threaten defense contracts
Seller Bargaining Power	Medium to high, due to rarity and difficulty to obtain specialized materials and manufacturing facilities

The competition within the industry is extremely high but consolidated (King and Driessnack, 2007). A few companies have much of the market share. This includes Lockheed Martin, Boeing, Northrop Grumman, RTX (formerly Raytheon), and BAE Systems (*Defense News*, 2024). They compete on every level, including labor, as a growing concern for the gap between the need for skill and the availability of it continues to challenge companies (Buyck, 2024). This is partly due to the overlap between different industries since the specialized engineers needed for much of this research have significant demand in many industries. A good representation of the competition for labor in the defense industry is the fact that wages for employees can be around 20-25% higher than in non-defense industry similar jobs (Vaze P. et al., 2017).

Seller bargaining power can be very high, as some parts/products can be extremely unique. An example might be that Boeing charged The Pentagon over 177,000% over the “reasonable” price for a simple part for a helicopter part (Gledhill, 2024). That’s an example where the seller power was high due to the nature of the industry, as Boeing was the only one to manufacture that

specific part for that specific helicopter. This allowed them to employ monopoly pricing. This doesn't mean that the buyer is without power, though, as Gledhill points out the US Government is looking at legislation that would grant these government agencies the ability to lower the price to something fairer.

3. Internal Analysis

The importance of the external environment in the defense industry means that it is crucial to understand a company's internal workings to formulate a strong sustainable strategic plan that will enable long-term growth. Using different models these external forces will be identified and analyzed.

3.1 Resource-Based View

Companies have tangible and intangible resources that allow them to succeed in the defense industry. Tangible resources include financial, such as monetary capital, and assets such as manufacturing facilities, research facilities, parts, and raw materials. Intangibles include employee skills, patented technology, customer relationships, and brand reputation and culture.

The defense industry has financial backing from government entities due to the demand for their products and services, but this often comes with budgets and deadlines (Walker, 2023). Defense companies have significant facility and employee capital, with Lockheed Martin by themselves having 121,000 employees and 350+ facilities (*Lockheed Martin Fact Sheet*, 2024).

VRIN Criteria	Lockheed Martin F-35 Technology Example
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Valuable	The F-35's stealth fighter technology cost upwards of \$400 billion to develop (Sullivan, 2014) and is highly sought after by other countries
Rare	Due to patents and top-secret classification much of the technology for the F-35 is one of a kind.
Inimitable	The scale, capability, and synergy with pre-existing technology means the F-35 is not easily imitable.
Non-substitutable	Substitutes are not possible due to the classified nature of the technology as well as patents on key parts of the aircraft.

Lockheed Martin's F-35 program is expected to cost the US Government \$1 trillion throughout its lifespan (Sullivan, 2014). This was a contract that Lockheed Martin bid on and won, meaning that the contract would provide a massive competitive advantage against their competition. In addition to the money they will receive from the actual contract, they will also gain additional technological advancements because of the work they do in conjunction with the US Department of Defense. The training their employees will gain and the relationships with the military and government entities are also intangible resources and internal strengths that can be further leveraged for competitive advantage long term.

3.2 SWOT

The defense industry broadly has significant strengths and opportunities. By knowing and understanding these key traits companies can better utilize their competitive advantages to take

full advantage of opportunities. Knowing weaknesses and threats can allow companies within the defense industry to future-proof and address areas of significant concern.

Strengths	Weaknesses
- Intellectual property, including patented and classified technology - Significant physical capital, including money and materials needed to produce goods - Strong partnerships with Governments and alliances such as NATO	- Massive amounts of overhead - Most goods require significant materials that need a robust supply chain that can pose a large weakness because of all the places it can be disrupted (Korkmaz, 2024) - Long and expensive R&D pipeline
Opportunities	Threats
- Increasing demand for defense goods and services - Emerging technologies (Husain, 2021) - Potential new emerging markets can create new customers (India, Saudi Arabia, etc.)	- Resource scarcity and supply chain disruptions can bottleneck production - Cybersecurity threats (Snitkin, 2024) - New legislation can have extreme consequences for profitability

3.3 TOWS

TOWS Analysis	Strengths	Weaknesses
Opportunities	- Leverage current technological expertise to win contracts that are a result of increased demand - Use human and material capital to develop new goods and services using new technologies such as AI (Husain, 2024) - Leverage current partnerships (NATO, EU, etc) to gain new customer ties with emerging markets like India and the Middle East	- Reduce overhead through reduced stockpiling and using more efficient product management processes (Göksidan, 2025) - Use existing partnerships to reinforce strained supply chains and potentially develop more sustainable ones - Find more efficient ways to utilize highly skilled labor to reduce R&D pipeline
Threats	- Use current partnerships to find new and cheaper places to source materials to address resource scarcity - Turn cybersecurity threats into new customers by developing robust cybersecurity software and services to earn new customers	- Find more efficient ways to produce goods to reduce overhead and reduce supply chain risk - Develop more cybersecurity services to increase revenue streams and it doesn't use nearly as much of the highly expensive and difficult to source materials that other goods require.

4. Strategy Formulation & Competitive Positioning

The market generally currently employs the differentiation strategy, as they are trying to provide higher value products while not focusing too much on one niche within the market. An example of this differentiation strategy is Raytheon, whose current top contracts include maintenance of the Zumalt class destroyers within the US Navy, development of several advanced radar systems, multiple contracts to develop missiles, including hypersonic missiles, and a contract to provide cybersecurity to the Department of Homeland Security (Bernal, 2023).

4.1 Ansoff's Growth Matrix

Generally, the strongest areas of growth for the industry are product development and market development. This is because markets such as India pose significant areas of growth (Arthur, 2025). Product development is still the bread and butter of the defense industry, with European Union members spending a total of €11 billion in 2023 (*Defence Data 2023-2024*, 2024).

4.2 Mergers and Acquisitions in the Industry

Following the fall of the Soviet Union, defense spending changed strategic methodology (Cypher, 1991). Even before that, companies either doubled down on the defense industry or left it. This led to a “constant state of consolidation” from the 90’s into the 2000’s (Alfonso, 2007). There is concern that this consolidation would lead to inefficiency, but Alfonso in his 2007 article found that this was not the case, and in some cases, it led to more efficient production from the top companies.

5. Sustainability & Strategic Recommendations

Like other industries, the defense industry is having to confront the long-term sustainability of its business. Climate change and environmental challenges could threaten long-term viability, as well as other threats that aren't biologically environmental. If defense companies embrace this challenge, they could adapt as a company and gain a newfound agility and benefit long-term (Ashbridge, et al.). Companies within the defense industry can vastly improve their future outcomes by embracing new technologies such as AI and drone technology. By investing into their ability to recruit skilled employees, continuing to implement new technologies, and making efforts to reduce overhead and manufacturing costs by utilizing efficient data and product management systems defense companies can prime themselves for future growth. Areas of growth to pay particular attention to is emerging markets such as India and using new technologies to improve the value proposition of your company such as AI. Social responsibility will also need to be a large consideration for defense companies. Public opinion can massively effect legislation that has drastic repercussions with the market. By being more transparent and displaying significant consideration for ethical concerns companies can increase their long-term growth by fostering more good will. In Ghoshroy's 2019 article he discusses how incentives amongst some government contractors may lead them to spend time on contracts which are not physically possible due to engineering constraints. While it may provide the company with money in the short-term, it will negatively affect them in the long-term because their labor would be researching dead-end technology that does not actually provide any benefit to the contractor outside of the one contract. It would also mean that these employees would be wasting their time when they could be increasing their skills by working on productive projects.

6. Conclusion

The defense industry has the potential for massive growth long-term, but if companies wish to remain competitive in the industry, they need to not only develop new products, but also a company culture and system of management that allows them to achieve the maximum they can give the external and internal factors they exist within. The best way for these companies to do this is for them to employ a strategic management plan tailored to their individual circumstances which would allow them to understand where they are, where they need to be, and how they can get there. Prioritizing not just short-term profit, but long-term sustainable and competitive advantage, will allow them to foster their strengths and address their weaknesses to best face the ever-changing landscape of the defense industry.

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