IBISWorld’s detailed, granular analysis provides all the information required to effectively assess industries using the Porter's Five Forces Framework, allowing you to improve strategic planning, mitigate risk and reduce costs.

Porter’s Five Forces, a framework for analysing the competitive environment of a business, was first published in 1979 in the Harvard Business Review. Developed by Harvard professor Michael E. Porter, the framework focuses on the microenvironment of an industry, analysing five forces that influence a company's ability to serve its customers and turn a profit. The framework aims to determine the competitive intensity and attractiveness of an industry in terms of its profitability.

IBISWorld industry research, which is closely aligned with the Porter's Five Forces model, provides analysis and insight into the threats and opportunities within an industry, helping you to develop more robust strategic plans, gain a competitive advantage, mitigate risks and reduce costs.

**Porter’s Five Forces Analysis**

- **Threat of New Entrants**
- **Supplier Power**
- **Competitive Rivalry**
- **Buyer Power**
- **Threat of Substitution**
The Breakdown

IBISWorld reports were created with the Porter’s Five Forces framework in mind. As a result, dissecting a report into the framework may be done with relative ease, as demonstrated below using the Aircraft, Engine & Parts Manufacturing industry in the United Kingdom. With all 443 UK industry reports, and indeed all industry reports across IBISWorld’s global collection, following the same granular format, you can easily apply the same approach to any industry you require.

1. Threat of New Entrants

Profitable, easy-to-enter markets attract a larger number of competitors, which erodes profitability over the long run.

Some questions this section aims to answer include:

- How easy is it for prospective entrants to enter the market?
- How easily are new entrants able to become significant competitors within the market?
- What are the costs of entry?
- How tightly is the industry regulated?

IBISWorld Chapter: Competitive Landscape

This chapter analyses an industry’s external environment by discussing each major player’s level of dominance, the breakdown of cost structures, barriers that operators face upon entering the industry and what differentiates one operator from another.

The Competitive Landscape chapter is essential in providing a complete view of an industry within the Porter’s Five Forces framework. As a result, this chapter and the subsections within it are referenced throughout the different components of the framework.

Competitive Landscape subsections to consider

**Barriers to Entry - High & Increasing**

‘Start-up costs are significant. Operators require substantial capital to start a manufacturing operation, and must also secure skilled labour and content with high compliance costs owing to considerable regulation.

Stringent regulation poses an absolute barrier to entry, with companies needing to demonstrate a high level of corporate governance.

Meanwhile, once a firm enters the industry, it will face substantial competition from incumbents with strong track records, supply chain support, industrial heritage and full order books. Buyers can cancel or delay orders during periods of economic uncertainty, which could significantly disrupt operations for a new entrant.’
Use IBISWorld Research for Porter’s Five Forces Analysis

Cost Structure Benchmarks

‘Purchases account for 59% of revenue, the largest share of the industry’s cost structure. Operators are exposed to fluctuations in commodity prices, as the raw materials involved in production are internationally traded. Firms must also have processes in place to mitigate the effects of fluctuating exchange rates.

Highly skilled labour is required throughout the industry, and wage costs account for 13.1% of revenue. Many duties are difficult to automate, but some production processes may be conducted automatically, and investment in technological improvements can help secure longer-term productivity.’

Sector vs. Industry Costs

Average Costs of all Industries in sector (2019-20) | Industry Costs (2019-20)

<table>
<thead>
<tr>
<th>Percentage of revenue</th>
<th>Profit</th>
<th>Rent</th>
<th>Utilities</th>
<th>Depreciation</th>
<th>Other</th>
<th>Marketing</th>
<th>Wages</th>
<th>Purchases</th>
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</thead>
<tbody>
<tr>
<td>0-20</td>
<td>60.6</td>
<td>59.0</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>20-40</td>
<td>1.1</td>
<td>3.4</td>
<td>9.6</td>
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<td>13.7</td>
<td>13.1</td>
<td>0.8</td>
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<td>13.3</td>
<td>4.5</td>
<td>8.5</td>
<td>0.1</td>
<td>13.1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: WWW.IBISWORLD.CO.UK
IBISWorld Chapter: Operating Conditions

Providing deeper insight into the external environment of an industry, the Operating Conditions chapter provides analysis on capital ratios, required technology, an overview of the regulatory environment and information on industry assistance. This provides insight into the strategies companies must adopt to achieve success.

Operating Conditions subsections to consider

Regulation & Policy – Medium & Increasing

‘The industry is currently subject to a range of international and domestic regulation. Regulations and quality standards are enforced globally by the International Aerospace Quality Group (IAQG) and the International Civil Aviation Organization (ICAO). Commercial aircraft manufacturers are required to comply with certification targets set out by the European Aviation Safety Agency and the Civil Aviation Authority (CAA). These regulations cover aircraft noise and engine emissions and have tightened in recent years, which has driven the development of quieter and cleaner aircraft.

In the military segment, operators must adhere to the standards set by industry bodies like the Military Aviation Authority (MAA) and European organisations that promote policies like Continuing Airworthiness Management Organisation (CAMO) scheme, which determines rules for military aircraft types. Exports of military aircraft components and engines to any destination, including the European Union, require an export licence issued by the Department for International Trade (DIT).’

Industry Assistance – Medium & Increasing

‘The industry benefits from a moderate level of assistance. Government funding is provided to commercial aircraft and military aircraft manufacturers. Financial aid can come in the form of research and innovation funding, particularly with regard to environmentally friendly developments. This includes the £4 million in government funding awarded to Rolls Royce to develop a composite electrical harness for aero-engines in 2016. In the same year, £365 million in government funding was also provided for new aerospace technologies to benefit aircraft manufacturing and performance.

Rising UK defence spending over the next five years should sustain demand from the UK military. The government is in an ongoing partnership with the industry to invest £3.9 billion in research and development projects between 2013 and 2026, as well as involvement when obtaining major defence contracts overseas.’

Technology & Systems – High

‘The industry has a high level of technological change. The stringent safety and environmental requirements placed on aircraft engines and parts has necessitated substantial investment in research and technology. Manufacturers have also invested in automation of the production process such as guided vehicles, robotics, computer simulations and other systems in order to reduce costs while improving quality and productivity.

The use of composite materials that help to reduce the weight and improve the environmental efficiency of aircraft components has been a significant development in recent years. Innovation is expected to continue in this area, with smart composites that can embed heating technologies to protect aircraft wings against ice build-up being developed. Similar advancements have been made in terms of fuel efficiency.

Industry operators have begun investing in the development of electric aircraft that could be delivered within the next decade. Rolls Royce plc has partnered with Siemens with the aim of developing hybrid electric aircraft.’
2. Buying Power of Customers

This section assesses the power of buyers by looking at the size and importance of each buying market and the costs associated with switching from one supplier to another.

Some questions this section aims to answer include:

- How large are the industry’s buying markets?
- Do they have the power to drive down or dictate prices?

IBISWorld Chapter: Products & Markets

The Products & Markets chapter provides insight into what an industry does, details on how it operates and how different factors influence its performance. It includes analysis on the industry’s products and services as well as its major markets, primary areas of operations, international trade (if applicable), supply chain and how it differentiates itself from other industries.

Products & Markets subsections to consider

Major Markets

‘The commercial sector is the most substantial market for the industry, accounting for 55.3% of revenue in the current year. Owing to the international distribution of the aerospace sector, the majority of products manufactured domestically are shipped to the manufacturer’s assembly operations overseas.

UK companies are also key suppliers of advanced composite materials to the US-led multinational Joint Strike Fighter programme, supporting revenue derived from foreign governments, which currently account for 31.5% of revenue.’

Major market segmentation (2019-20)

- 41.6% Private individuals
- 38.2% Fleet and business markets
- 11.2% Other
- 9% Goods transport market

Total £54.8bn
Use IBISWorld Research for Porter’s Five Forces Analysis

Demand Determinants

‘Industry demand is determined by the level of passenger travel and defence spending. The state of the economy largely determines the number of individuals that travel abroad and is therefore influences demand from commercial airlines. During periods of economic prosperity, higher consumer confidence and disposable income levels stimulate demand for air travel and encourage airlines to expand their fleets.’

IBISWorld Chapter: Competitive Landscape

The Competitive Landscape chapter provides information relevant to competition stemming from substitute products in alternative influences, which affects customers' buying power and purchasing choices, and is essential in understanding the customer landscape. This chapter also highlights the nature of internal competition, and how an operator may differentiate itself from its competitors.

Competitive Landscape subsections to consider

Basis of Competition - High & Steady

‘Aircraft manufacturers compete on price, innovation, delivery times, relationships and reputation. Price competition is strong in the industry, as the extremely high cost of the manufacturing process in general means operators need to secure large volumes of orders to make back their investments in their inputs. Due to the enormous scope of production required for commercial aircraft, only a small number of companies have a considerable market share and are able to compete on price in this market.

Import competition is a constant threat to industry manufacturers. The United States accounts for the largest portion of imports, largely due to the presence of Boeing. The company is the world's largest aircraft manufacturer and benefits from its extensive scope and reputation, which limits demand from both the commercial and military segments of the industry.’

3. Supplier Power

Like buyer power, supplier power assesses the number of suppliers in the industry, their uniqueness and their relative size and strength. These factors are taken into consideration to determine the level of influence the supplier base has on price, and the importance of supply chain management.

Some questions this section aims to answer include:

• How many suppliers are there?
• How unique are the products and services they provide, and how expensive are switching sides?

IBISWorld Chapter: Products & Markets

In the context of the Supplier Power section of a Porter’s Five Forces Analysis, the Products & Markets chapter provides insight on key selling and buying industries, as well as key information on current industry incumbents and their influence on prices.
**Products & Markets subsections to consider**

**Supply Chain**

Key buying industries include consumers, *Scheduled Passenger Air Transport, Non-Scheduled Passenger Air Transport*, and *Freight Air Transport*. Key selling industries include Iron & Steel Manufacturing, Electronic Component Manufacturing and Loaded Electronic Board Manufacturing.

*An IBISWorld subscription would provide you with full access to each of these reports to obtain deeper insight into upstream and downstream industries.*

**IBISWorld Chapter: Major Companies**

This chapter, which identifies the key companies operating in the industry, can be used to benchmark performance against an industry’s top players, identify emerging companies and see how the performance of incumbents is affected by both internal and external factors.

**Major Companies**

‘Airbus Operations Ltd is a UK-based subsidiary of Airbus Group, which was formerly the European Aeronautic Defence and Space Company NV (EADS) and is based in the Netherlands. The overall group is the second largest aerospace and defence firm in the world. Accounting for 12.5% of industry revenue, Airbus Operations Ltd’s revenue is expected to rise at a compound annual rate of 4.5% to reach £4.9 billion, supported by a number of commercial orders for its latest aircraft.’

<table>
<thead>
<tr>
<th>Year*</th>
<th>Revenue (£ million)</th>
<th>(% change)</th>
<th>Operating Profit (£ million)</th>
<th>(% change)</th>
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<td>N/C</td>
<td>276</td>
<td>N/C</td>
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<tr>
<td>2015</td>
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<td>2017</td>
<td>5,254</td>
<td>14.5</td>
<td>363</td>
<td>121.3</td>
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<tr>
<td>2018</td>
<td>5,018</td>
<td>-4.5</td>
<td>62</td>
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<tr>
<td>2019**</td>
<td>4,890</td>
<td>-4.5</td>
<td>50</td>
<td>-19.4</td>
</tr>
</tbody>
</table>

*Year end December **Estimate

SOURCE: COMPANIES HOUSE AND IBISWORLD
Use IBISWorld Research for Porter’s Five Forces Analysis

IBISWorld Chapter: Competitive Landscape

The Competitive Landscape chapter, specifically the Cost Structure Benchmarks sub-section, is especially useful when considering supplier relationships as part of the Porter’s Five Forces framework, as it sheds light on the average costs for a company operating within the industry. Moreover, it allows for each company to be benchmarked against the industry average.

Cost Structure Benchmarks

‘Owing to intense competition, industry operators are often unable to pass on high input prices in full. At the beginning of the period, rising steel prices squeezed profit margins. However, demand has soared over the past five years, particularly from foreign clients, which kept margins relatively high, supported by falling steel prices. However, as many inputs are sourced internationally, the recent weakness of the pound is expected to have weighed on operating margins.’

4. Threat of Substitutes

This section within the framework assesses the substitute products and services that buyers gravitate towards in response to price increases.

Some questions this section aims to answer include:

• How viable and competitive are the available substitutes?
• How likely are buyers to gravitate to those substitutes in the event of price increases?

IBISWorld Chapter: Competitive Landscape

The Competitive Landscape chapter is especially useful within this framework section because it discusses the scale of the threat facing the industry from competition, such as substitute products.

Basis of Competition - High and Steady

‘There is a high level of competition in the Aircraft, Engine and Parts Manufacturing industry due to the vast amount of import penetration, while competition among domestic operators is sizeable and varies between the different markets of the industry.

The shift to composite materials in aircraft wings is increasing competition from France and Germany. Aircraft wings are the most critical and lucrative parts of aircraft manufacturing and plants overseas are leading the way in the shift from aluminium to lighter composite materials. After Britain leaves the European Union, the ADS has raised concerns that the industry’s competitiveness could be negatively affected by restrictions to the free movement of goods and people beyond 2020. In the long term, work on major projects could be allocated to foreign plants.’
IBISWorld Chapter: About this Industry

This chapter provides an outline of what operations are included within the industry.

Competitive Landscape subsections to consider

• Similar Industries (includes potential competitors or substitutes)
• Related International Industries

5. Industry Competitors

This component of the Porter’s Five Forces framework focuses on the number, extent and capabilities of competitors within the market.

Some questions this section aims to answer include:

• How many competitors are currently operating in the industry and what are their capabilities?
• How have they performed financially over the past five years?
• What are their strengths and weaknesses?
• Who are they, and how does their product or service offering differ from yours?

IBISWorld Chapter: Major Players

‘Airbus designs, builds, sells and supports a range of aircraft. It employs over 14,000 workers in the United Kingdom across 25 sites. Airbus’s UK facilities at Filton and Broughton play an important role in designing and producing highly advanced aircraft wings for the Airbus aircraft family. Airbus established a Composite Structures Development Centre at Filton in response to the transfer from metallic to composite materials. Over half of the structure of the company’s newest A350 aircraft, the A350 XWB, is built with composite materials, which are far lighter than materials used previously. Airbus claims this has lowered fuel consumption by 25%. In 2011, Airbus opened a new £400 million plant to manufacture carbon-fibre wings for the new A350 airliner at Broughton.

This investment is important, as the company seeks to compete for commercial contracts against Boeing, the largest aerospace operator in the world. Downstream operators are particularly concerned with fuel efficiency as a means of improving profit, so the company’s investment has been essential.’

IBISWorld Chapter: Competitive Landscape

Within this framework section, the Competitive Landscape chapter, which provides insight into the type of competition amongst industry operators, outlines the factors that can prevent a new company from entering the industry and indicates how much industry revenue is accounted for by the top four players.
Use IBISWorld Research for Porter’s Five Forces Analysis

Competitive Landscape subsections to consider

Basis of Competition - High and Steady

‘Smaller companies may find it difficult to compete with established firms owing to their dominance of the supply chain. The economies of scale that larger operators like BAE Systems and Airbus are able to achieve, along with their superior reputation and brand awareness, give them an advantage by allowing them to price aircraft more competitively and secure contracts with both domestic and international airlines and militaries.

The production of smaller commercial planes, helicopters and parts requires less financial power, but manufacturers still compete extensively on innovation, particularly with regard to tightening environmental regulations. The growing use of composite materials is benefiting demand from airliners, as they offer efficiency savings. The ability to adjust to market trends can also provide a competitive advantage, with demand for wide-body aircraft falling for much of the past five-year period.’

Barriers to Entry - High and Increasing

‘Industry operators require skilled staff in the fields of engineering, design, production and management. The industry invests a great deal of time and money in the research and development on aerospace products, and professional workers are required for many processes. Many aerospace professionals work in scientific research and development services. Therefore, skilled labour may be difficult to secure depending on availability and general conditions of the labour market. In addition to requiring substantial start-up capital, operators must also compete to attract and retain skilled employees.’

Market Share Concentration - High

‘The industry exhibits a moderate level of market share concentration, since the top four players are estimated to account for 35.8% of industry revenue in the current year. There are a handful of extremely large players surrounded by a competitive fringe of many small to medium-size firms. The United Kingdom is a major global producer of aircraft wings and engines, and a substantial producer of defence-related aerospace equipment and products. The largest players in the industry benefit from economies of scale in production, while smaller firms tend to provide highly specialised equipment.’

IBISWorld Chapter: Operating Conditions

Operating Conditions within this section provide a guide to the amount of capital required in production or for providing a service and compare it to the amount of labour in the total mix of inputs.

Competitive Landscape subsections to consider

Capital intensity - Medium

‘The Aircraft, Engine and Parts Manufacturing industry exhibits a high level of capital intensity, measured by the capital-to-labour ratio of the industry. For every £1.00 they spend on capital, industry operators spend an estimated £2.91 on wages. Industry wages are fairly high, reflecting the importance of professional and skilled workers in fields including engineering, design, production and management.’
Use IBISWorld Research for Porter’s Five Forces Analysis

IBISWorld Chapter: Industry Life Cycle

The Industry Life Cycle chapter assesses the life cycle stage of the industry, indicates the various competitive pressures faced within each stage, and provides analysis on the industry’s future direction.

‘The Aircraft, Engine and Parts Manufacturing industry is considered to be in the mature stage of its life cycle. Industry value added, which measures the industry’s contribution to the overall economy, is expected to increase at a compound annual rate of 3.1% over the 10 years through 2024-25.

This shows that industry’s contribution to the economy is expected to grow over the period. However, moderate revenue and enterprise growth in the second half of the five-year period through 2019-20 indicates the industry is in the mature stage of its life cycle. Despite its maturity, investment in new technologies remains an important factor for success.’

IBISWorld Chapter: Industry Outlook

This chapter outlines expectations for the key industry indicators over the next five years.

‘The Aircraft, Engine and Parts Manufacturing industry is expected to grow more slowly over the five years through 2024-25. Concerns over the state of the economy after the United Kingdom leaves the European Union are likely to dampen investment by downstream businesses and manufacturers aiming to expand operations. The UK’s trading relationships have also given rise to considerable uncertainty. However, an anticipated increase in defence spending and soaring global order books are expected to partially offset this. The continued weakness of the pound is expected to present opportunities for manufacturers over the next five years as foreign companies take advantage of the exchange rate.’

As evidenced above, IBISWorld reports complement the Porter’s Five Forces framework, providing decision makers with the insight and analysis needed to make better, more strategic business decisions. A subscription to IBISWorld provides decision makers with access to our full suite of 440+ UK industry reports, with 100 Ireland industry reports also available. Want more information on IBISWorld and Porter’s Five Forces? Contact us to speak with one of our representatives today.
At IBISWorld, we know that industry intelligence is more than assembling facts. It is combining data with analysis to answer the questions that successful businesses ask.

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Assess competitive threats from existing and new entrants
Benchmark your performance against the competition
Make speedy market-ready, profit-maximising decisions

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