



Aerospace & Defence 2019

The annual report on the most valuable and strongest aerospace & defence brands
March 2019

About Brand Finance.

Brand Finance is the world’s leading independent brand valuation and strategy consultancy.

Brand Finance was set up in 1996 with the aim of ‘bridging the gap between marketing and finance’. For more than 20 years, we have helped companies and organisations of all types to connect their brands to the bottom line.

We pride ourselves on four key strengths:

- + Independence

+ Technical Credibility
- + Transparency

+ Expertise

We put thousands of the world’s biggest brands to the test every year, evaluating which are the strongest and most valuable.

Brand Finance helped craft the internationally recognised standard on Brand Valuation – ISO 10668, and the recently approved standard on Brand Evaluation – ISO 20671.



Get in Touch.

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Contents.

About Brand Finance	2
Get in Touch	2
Request Your Brand Value Report	4
Brand Valuation Methodology	5
Foreword	6
Brand Value Analysis	8
Aerospace & Defence Brand Finance (USD m)	10
Definitions	12
Consulting Services	14
Brand Evaluation Services	15
Communications Services	16
Brand Finance Network	18

Brand Finance®
Global Forum 2019

Understanding the Value of Geographic Branding
2 April 2019

Join us at the Brand Finance Global Forum, an action-packed day-long event at the Royal Automobile Club in London, as we explore how geographic branding can impact brand value, attract customers, and influence key stakeholders.

www.brandfinance.com/events

Request Your Brand Value Report.

A Brand Value Report provides a complete breakdown of the assumptions, data sources, and calculations used to arrive at your brand's value.

Each report includes expert recommendations for growing brand value to drive business performance and offers a cost-effective way to gaining a better understanding of your position against competitors.

What is a Brand Value Report?

Brand Valuation Summary

- + Internal understanding of brand
- + Brand value tracking
- + Competitor benchmarking
- + Historical brand value

Brand Strength Index

- + Brand strength tracking
- + Brand strength analysis
- + Management KPIs
- + Competitor benchmarking

Royalty Rates

- + Transfer pricing
- + Licensing/franchising negotiation
- + International licensing
- + Competitor benchmarking

Cost of Capital

- + Independent view of cost of capital for internal valuations and project appraisal exercises

Customer Research

- | | |
|-------------|-------------|
| + Utilities | + Tech |
| + Insurance | + Auto |
| + Banks | + Hotels |
| + Telecoms | + Beers |
| + Airlines | + Oil & Gas |

For more information regarding our Brand Value Reports, please contact:

enquiries@brandfinance.com

What are the benefits of a Brand Value Report?



Insight



Strategy



Benchmarking



Education



Communication



Understanding

Brand Valuation Methodology.

Brand Finance calculates the values of the brands in its league tables using the **Royalty Relief approach** – a brand valuation method compliant with the industry standards set in **ISO 10668**.

This involves estimating the likely future revenues that are attributable to a brand by calculating a royalty rate that would be charged for its use, to arrive at a 'brand value' understood as a net economic benefit that a licensor would achieve by licensing the brand in the open market.

The steps in this process are as follows:

- 1 Calculate brand strength using a balanced scorecard of metrics assessing Marketing Investment, Stakeholder Equity, and Business Performance. Brand strength is expressed as a Brand Strength Index (BSI) score on a scale of 0 to 100.
- 2 Determine royalty range for each industry, reflecting the importance of brand to purchasing decisions. In luxury, the maximum percentage is high, in extractive industry, where goods are often commoditised, it is lower. This is done by reviewing comparable licensing agreements sourced from Brand Finance's extensive database.
- 3 Calculate royalty rate. The BSI score is applied to the royalty range to arrive at a royalty rate. For example, if the royalty range in a sector is 0-5% and a brand has a BSI score of 80 out of 100, then an appropriate royalty rate for the use of this brand in the given sector will be 4%.
- 4 Determine brand-specific revenues by estimating a proportion of parent company revenues attributable to a brand.
- 5 Determine forecast revenues using a function of historic revenues, equity analyst forecasts, and economic growth rates.
- 6 Apply the royalty rate to the forecast revenues to derive brand revenues.
- 7 Brand revenues are discounted post-tax to a net present value which equals the brand value.

Disclaimer

Brand Finance has produced this study with an independent and unbiased analysis. The values derived and opinions produced in this study are based only on publicly available information and certain assumptions that Brand Finance used where such data was deficient or unclear. Brand Finance accepts no responsibility and will not be liable in the event that the publicly available information relied upon is subsequently found to be inaccurate. The opinions and financial analysis expressed in the report are not to be construed as providing investment or business advice. Brand Finance does not intend the report to be relied upon for any reason and excludes all liability to any body, government or organisation.



Brand Strength Index (BSI)

Brand strength expressed as a BSI score out of 100.



Brand Royalty Rate

BSI score applied to an appropriate sector royalty range.



Brand Revenues

Royalty rate applied to forecast revenues to derive brand value.



Brand Value

Post-tax brand revenues discounted to a net present value (NPV) which equals the brand value.

Foreword.



David Haigh
CEO, Brand Finance

What is the purpose of a strong brand: to attract customers, to build loyalty, to motivate staff? All true, but for a commercial brand at least, the first answer must always be 'to make money'.

Huge investments are made in the design, launch, and ongoing promotion of brands. Given their potential financial value, this makes sense. Unfortunately, most organisations fail to go beyond that, missing huge opportunities to effectively make use of what are often their most important assets. Monitoring of brand performance should be the next step, but is often sporadic. Where it does take place, it frequently lacks financial rigour and is heavily reliant on qualitative measures, poorly understood by non-marketers.

As a result, marketing teams struggle to communicate the value of their work and boards then underestimate the significance of their brands to the business. Sceptical finance teams, unconvinced by what they perceive as marketing mumbo jumbo, may fail to agree necessary investments. What marketing spend there is, can end up poorly directed as marketers are left to operate with insufficient financial guidance or accountability. The end result can be a slow but steady downward spiral of poor communication, wasted resources, and a negative impact on the bottom line.

Brand Finance bridges the gap between marketing and finance. Our teams have experience across a wide range of disciplines from market research and visual identity to tax and accounting. We understand the importance of design, advertising, and marketing, but we also believe that the ultimate and overriding purpose of brands is to make money. That is why we connect brands to the bottom line.

By valuing brands, we provide a mutually intelligible language for marketing and finance teams. Marketers then have the ability to communicate the significance of what they do, and boards can use the information to chart a course that maximises profits. Without knowing the precise, financial value of an asset, how can you know if you are maximising your returns? If you are intending to license a brand, how can you know you are getting a fair price? If you are intending to sell, how do you know what the right time is? How do you decide which brands to discontinue, whether to rebrand and how to arrange your brand architecture? Brand Finance has conducted thousands of brand and branded business valuations to help answer these questions.

Brand Finance's research revealed the compelling link between strong brands and stock market performance. It was found that investing in highly-branded companies would lead to a return almost double that of the average for the S&P 500 as a whole.

Acknowledging and managing a company's intangible assets taps into the hidden value that lies within it. The following report is a first step to understanding more about brands, how to value them and how to use that information to benefit the business.

The team and I look forward to continuing the conversation with you.

Boeing's brand value to nosedive by US\$7.5bn as it grounds entire fleet of 737 Max aircraft.

- + Boeing is world's most valuable aerospace brand, value up 61% since last year to US\$32.0bn but brand reputation in jeopardy, according to new Brand Finance report
- + Rolls Royce in turmoil, feeling effect of Brexit confusion, brand slips four places, value drops 3% to US\$3.9 billion
- + American aerospace and defence brands performing well since President Trump's tax rate drop; US giant General Dynamics takes off as fastest-growing aerospace brand in ranking

Brand Value Analysis.



Boeing stays up top

Boeing's brand will immediately feel the effects of this week's Ethiopian Airlines crash and subsequent worldwide call to ground its 737 aircraft to the tune of US\$7.5bn.

Brand Finance valued the Boeing brand on 1st Jan 2019 at US\$32.0 billion. Since the incident last week, we estimate the loss to Boeing's brand to be at US\$7.5bn. The aerospace giant has already seen its shares plummet 11% since last weekend's incident involving one of its 737 Max 8 aircraft which plummeted just 7 minutes after taking off from Addis Ababa for Nairobi, killing all 157 people on board.

Brand Finance estimates revenues solely from the 737 aircraft to be US\$24.0 billion, accounting for roughly a third of Boeing's profits. Nevertheless, the brand value gap between Boeing and **Airbus** remains colossal as Boeing's brand value (up 61% to US\$32.0 bn) is well over double that of Airbus (up 19% to US\$ 13.0bn).

The market tells us that the business has already lost \$30bn in intangible value. This value loss could potentially increase to US\$50bn based on analyst estimates.

Rolls Royce in turmoil

Rolls-Royce reported 'expensive repairs to its Trent 1000 engine' as well as 'turbulence from restructuring costs and the weaker value of the Brexit-hit pound', causing the brand to slip four places in the ranking since last year, its brand

Given the importance of the 737 aircraft to the airline business, it is no surprise that the market is reacting with such immediacy. We estimate the brand value lost by Boeing to be approximately \$7.5bn and the maximum brand value loss up to US\$12.5 bn.

Boeing before the crash had an elite AAA+ brand rating, of which there were only 15 brands globally. Following recent events, we estimate that brand rating will drop to AAA as Boeing's reputation takes an almost immediate dent.

Savio D'Souza
Aviation Director, Brand Finance

value dropping 3% to US\$3.9 billion. The brand is cutting labour to improve and streamline its performance as it faces more challenges to make profit and net cash flow.

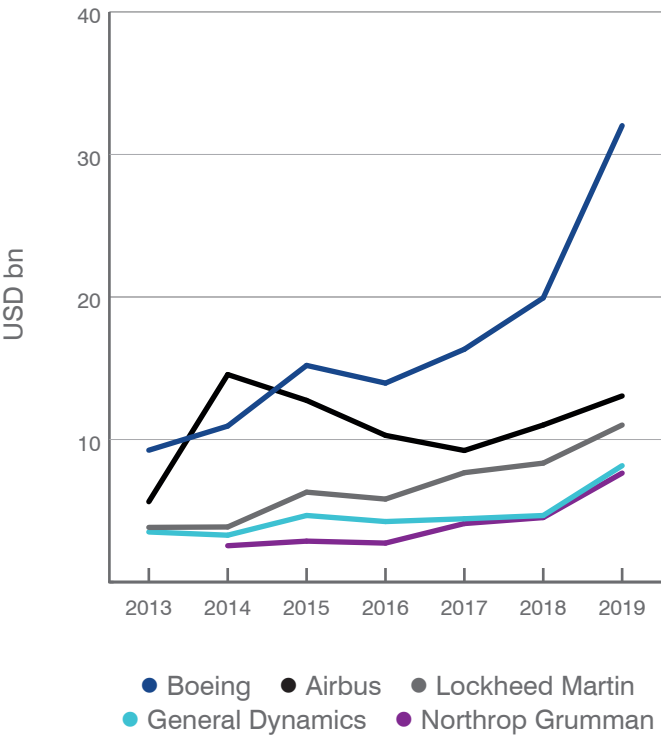
Having publicly expressed frustration at the disarray over Britain's departure from the EU, UK aerospace brand Rolls Royce is concerned that UK competitiveness would be hit if extra parts had to be ordered and stored to mitigate the impact of any disruption caused by failure to agree trade terms.

US giants dominate aerospace and defence industry

In the face of US taxes on steel and aluminium ordered by President Trump last year, US aerospace and defence brands continue to dominate the ranking with 50% of the brands coming from the US. General corporation tax has been adjusted from 40% to 27% in Brand Finance analysis.

US aerospace brand **General Dynamics** has held firm in 4th place in this year's Brand Finance Aerospace & Defence 25 2019 ranking, with its brand value up a whopping 75% since last year to US\$8.2 billion.

Brand Value over Time



Top 10 Most Valuable Brands

	1	← 1		2019: \$32,022m 2018: \$19,936m	+60.6%
	2	← 2		2019: \$13,057m 2018: \$11,018m	+18.5%
	3	← 3		2019: \$11,017m 2018: \$8,344m	+32.0%
	4	← 4		2019: \$8,165m 2018: \$4,668m	+74.9%
	5	← 5		2019: \$7,644m 2018: \$4,523m	+69.0%
	6	← 6		2019: \$6,277m 2018: \$4,312m	+45.6%
	7	↑ 9		2019: \$5,471m 2018: \$3,680m	+48.7%
	8	← 8		2019: \$4,656m 2018: \$3,684m	+26.4%
	9	↑ 10		2019: \$4,386m 2018: \$3,409m	+28.7%
	10	↑ 11		2019: \$4,350m 2018: \$3,250m	+33.8%

Top 25 most valuable aerospace and defence brands 1-25

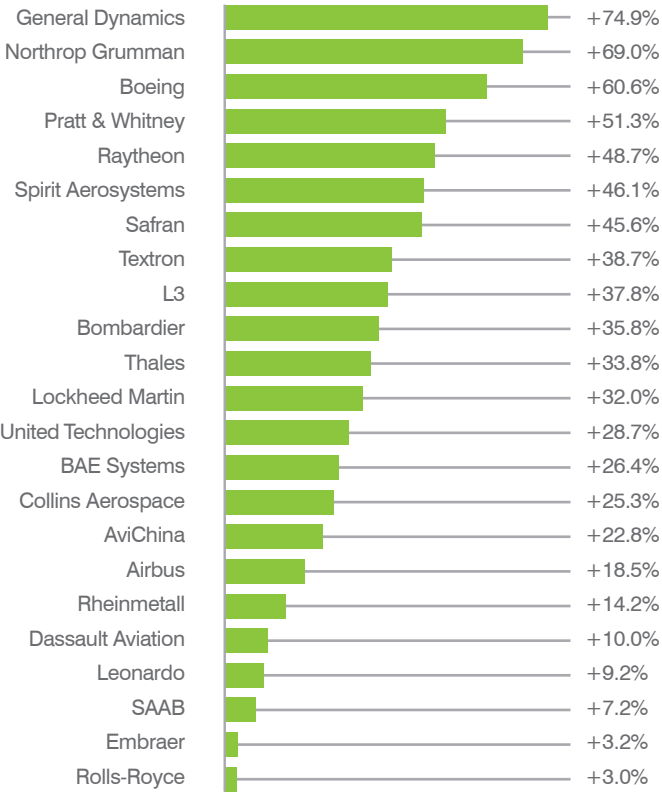
2019 Rank	2018 Rank	Brand	Country	2019 Brand Value	Brand Value Change	2018 Brand Value	2019 Brand Rating	2018 Brand Rating
1	1	↔ Boeing	United States	\$32,022	+60.6%	\$19,936	AAA+	AAA+
2	2	↔ Airbus	France	\$13,057	+18.5%	\$11,018	AA+	AA+
3	3	↔ Lockheed Martin	United States	\$11,017	+32.0%	\$8,344	AAA-	AAA
4	4	↔ General Dynamics	United States	\$8,165	+74.9%	\$4,668	AA+	AA+
5	5	↔ Northrop Grumman	United States	\$7,644	+69.0%	\$4,523	AAA-	AAA-
6	6	↔ Safran	France	\$6,277	+45.6%	\$4,312	AAA	AAA
7	9	↑ Raytheon	United States	\$5,471	+48.7%	\$3,680	AA+	AA+
8	8	↔ BAE Systems	United Kingdom	\$4,656	+26.4%	\$3,684	AA	AA+
9	10	↑ United Technologies	United States	\$4,386	+28.7%	\$3,409	AA+	AA+
10	11	↑ Thales	France	🔒	🔒	🔒	🔒	🔒
11	7	↓ Rolls-Royce	United Kingdom	🔒	🔒	🔒	🔒	🔒
12	12	↔ Pratt & Whitney	United States	🔒	🔒	🔒	🔒	🔒
13	14	↑ Bombardier	Canada	🔒	🔒	🔒	🔒	🔒
14	13	↓ Collins Aerospace	United States	🔒	🔒	🔒	🔒	🔒
15	16	↑ L3	United States	🔒	🔒	🔒	🔒	🔒
16	15	↓ Leonardo	Italy	🔒	🔒	🔒	🔒	🔒
17	19	↑ Spirit Aerosystems	United States	🔒	🔒	🔒	🔒	🔒
18	23	↑ Textron	United States	🔒	🔒	🔒	🔒	🔒
19	20	↑ AviChina	China	🔒	🔒	🔒	🔒	🔒
20	17	↓ Dassault Aviation	France	🔒	🔒	🔒	🔒	🔒
21	-	New Sikorsky	United States	🔒	🔒	🔒	🔒	🔒
22	18	↓ Embraer	Brazil	🔒	🔒	🔒	🔒	🔒
23	22	↓ Rheinmetall	Germany	🔒	🔒	🔒	🔒	🔒
24	21	↓ Mtu Aero Engines	Germany	🔒	🔒	🔒	🔒	🔒
25	24	↓ SAAB	Sweden	🔒	🔒	🔒	🔒	🔒

Brand Value by Country



Country	Brand Value (USD bn)	% of total
United States	79.9	65.3%
Japan	24.8	20.3%
Hong Kong	8.6	7.0%
United Kingdom	2.4	1.9%
Germany	1.9	1.5%
France	1.8	1.5%
Others	2.9	0.9%
Total	122.4	100.0%

Brand Value Change 2018-2019 (%)

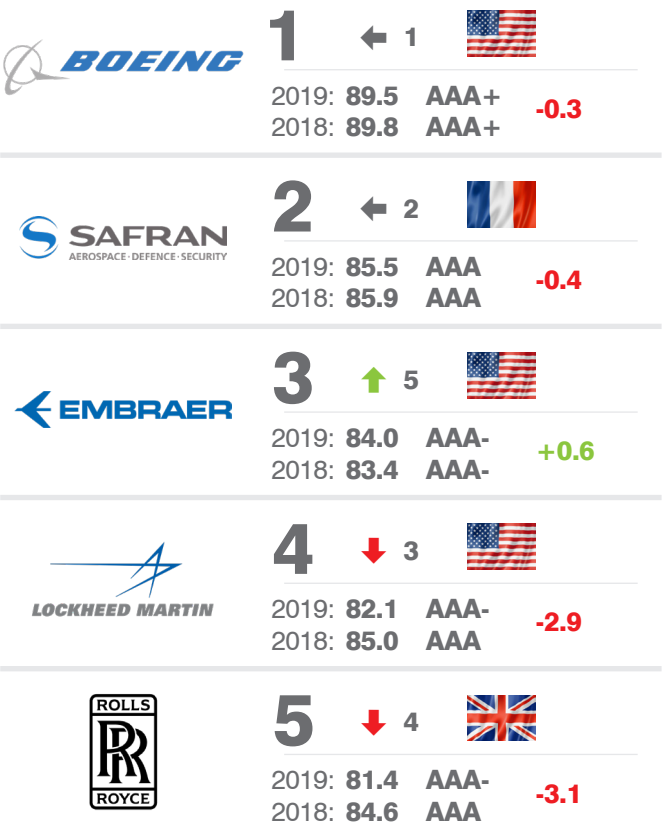


The brand has acquired CSRA and combined its business into GDIT. Considering CSRA’s annual revenue of US\$5.0 billion, General Dynamics forecast jump and brand value increase is substantiated. The forecast however may not be so positive as the group is expected to deliver both underlying profit and cash flow. In fifth place, **Northrop Grumman** has seen a 69% growth in its brand value, sitting at US\$7.6 billion in this year’s Brand Finance Aerospace & Defence 25 2019 ranking. This can be attributed to the brand’s acquisition of Orbital ATK.

Boeing is also strongest aerospace and defence brand

Aside from calculating overall brand value, Brand Finance also determines the relative strength of brands through a balanced scorecard of metrics evaluating marketing investment, stakeholder equity, and business performance. Along with the level of revenues, brand strength is a crucial driver of brand value. Boeing is the only brand in the Brand Finance Aerospace & Defence 25 2019 ranking to post the elite AAA+ brand rating. With a Brand Strength Index (BSI) score of 89.5 out of 100, Boeing is still the strongest brand in the industry.

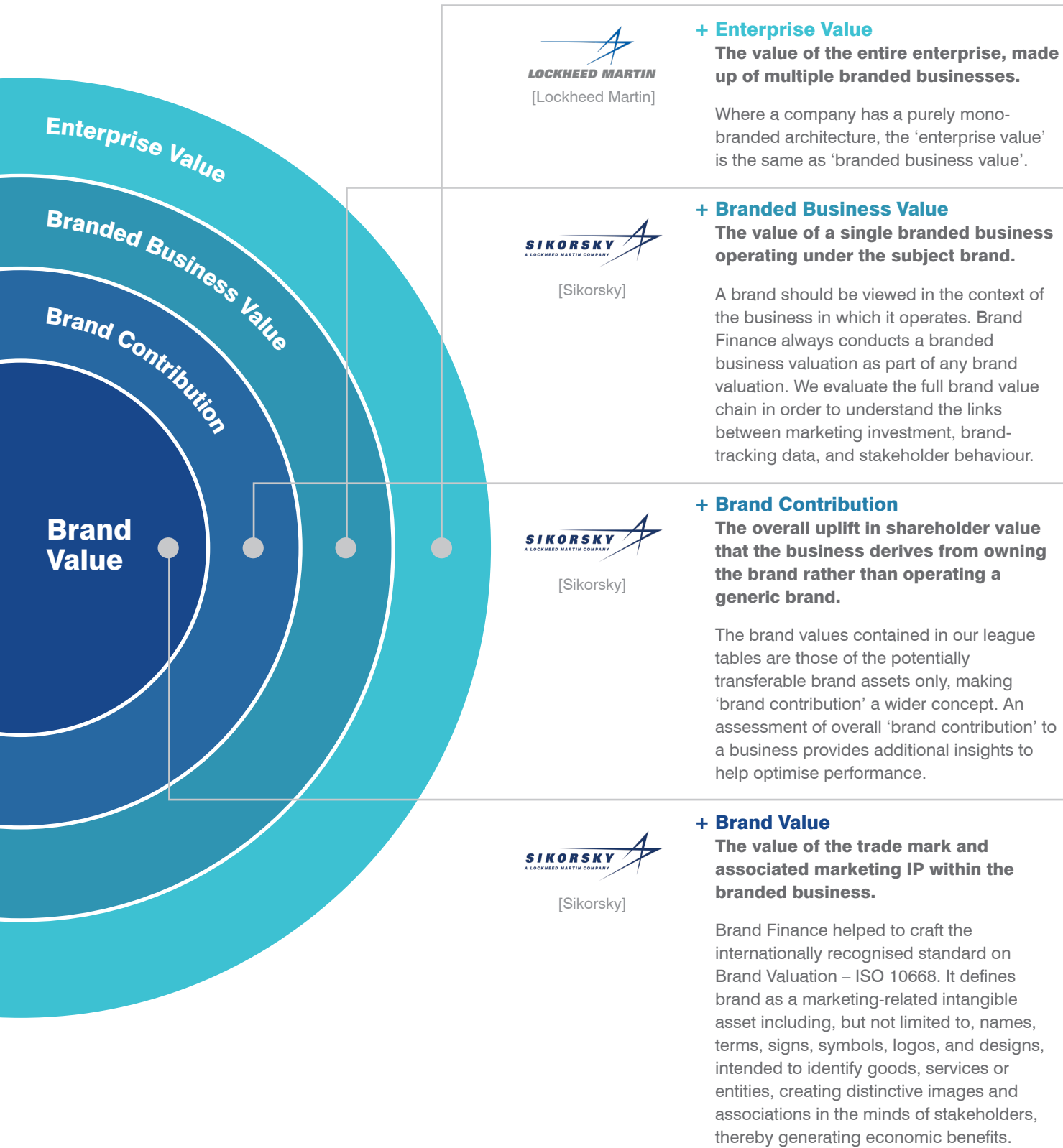
Top 10 Strongest Brands



Buoyed by federal income tax cuts ordered by President Trump, US brands continue to dominate the Aerospace and Defence ranking with 50% of the brands coming from the US. General corporation tax has been adjusted from 40% to 27% in this year’s Brand Finance analysis.

David Haigh
CEO, Brand Finance

Definitions.



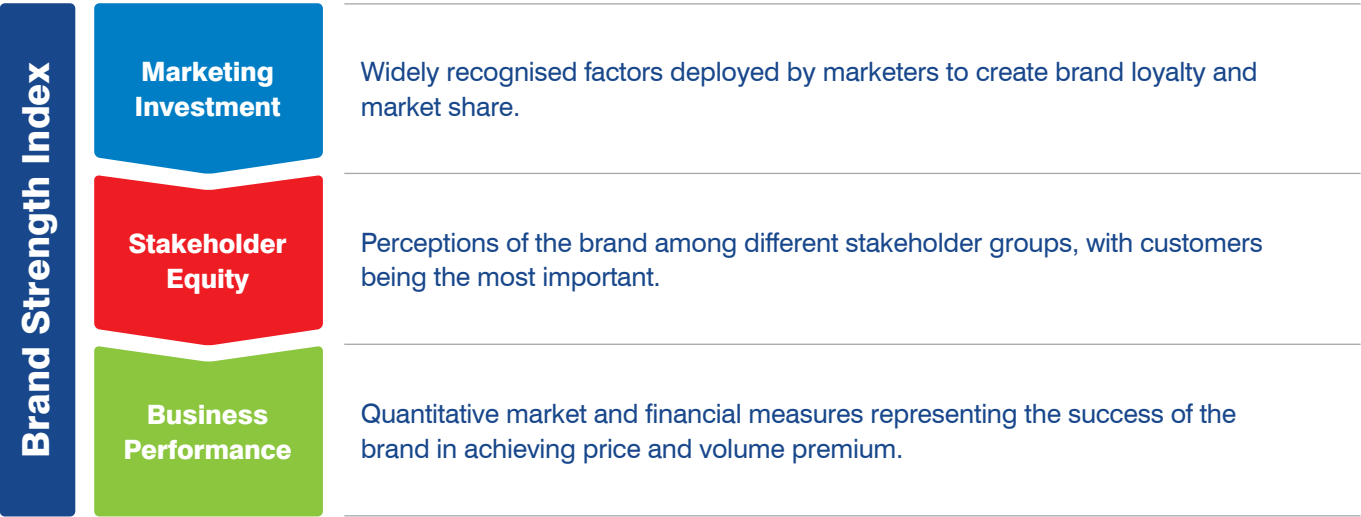
Brand Strength

Brand Strength is the efficacy of a brand's performance on intangible measures, relative to its competitors.

In order to determine the strength of a brand, we look at Marketing Investment, Stakeholder Equity, and the impact of those on Business Performance.

Each brand is assigned a Brand Strength Index (BSI) score out of 100, which feeds into the brand value calculation. Based on the score, each brand is assigned a corresponding rating up to AAA+ in a format similar to a credit rating.

Analysing the three brand strength measures helps inform managers of a brand's potential for future success.



Consulting Services.



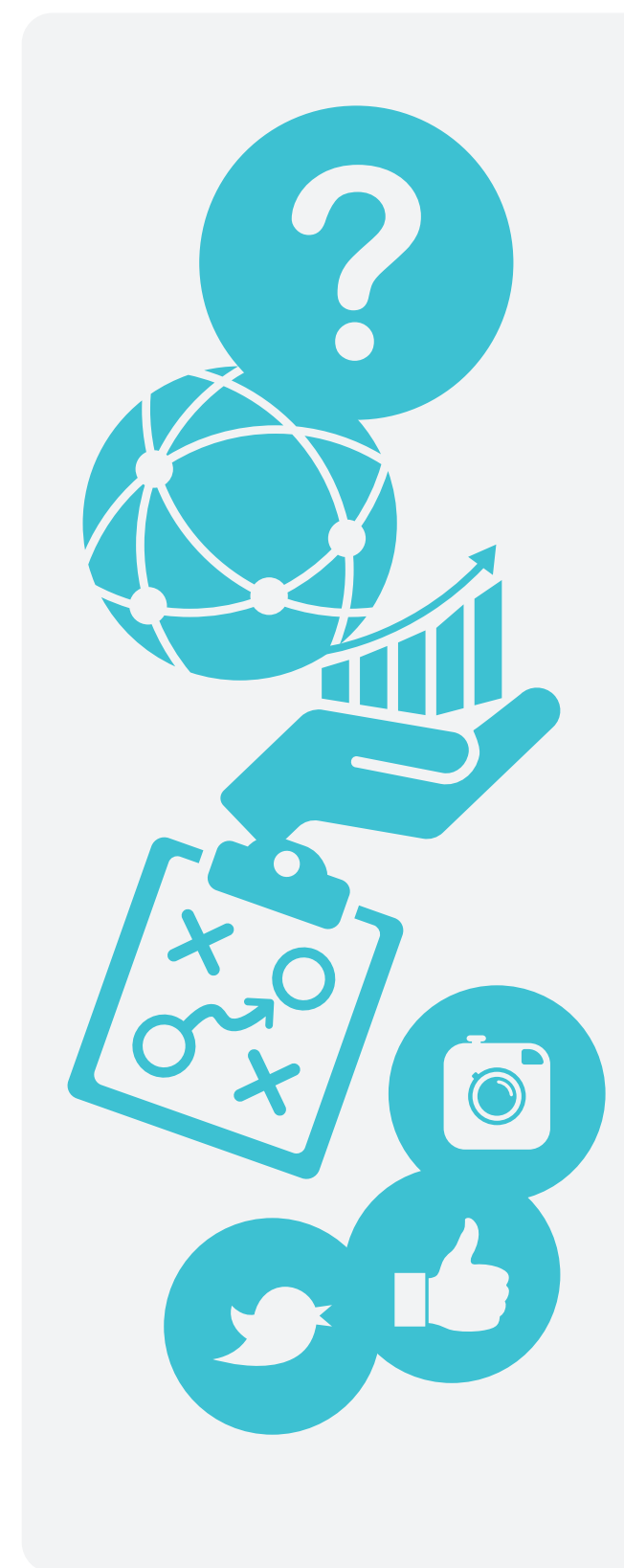
We help marketers to connect their brands to business performance by evaluating the return on investment (ROI) of brand-based decisions and strategies.

We provide financiers and auditors with an independent assessment on all forms of brand and intangible asset valuations.

We help brand owners and fiscal authorities to understand the implications of different tax, transfer pricing, and brand ownership arrangements.

We help clients to enforce and exploit their intellectual property rights by providing independent expert advice in- and outside of the courtroom.

Brand Evaluation Services.



How are brands perceived in my category?

Brand Finance tracks brand fame and perceptions across over 30 markets in 10 consumer categories. Clear, insightful signals of brand performance, with data mining options for those who want to dig deeper – all at an accessible price.

What if I need more depth or coverage of a more specialised sector?

Our bespoke brand scorecards help with market planning and can be designed to track multiple brands over time, against competitors, between market segments and against budgets. Our 30-country database of brand KPIs enables us to benchmark performance appropriately.

Do I have the right brand architecture or strategy in place?

Research is conducted in addition to strategic analysis to provide a robust understanding of the current positioning. The effectiveness of alternative architectures is tested through drivers analysis, to determine which option(s) will stimulate the most favourable customer behaviour and financial results.

How can I improve return on marketing investment?

Using sophisticated analytics, we have a proven track record of developing comprehensive brand scorecard and brand investment frameworks to improve return on marketing investment.

What about the social dimension? Does my brand get talked about?

Social interactions have a proven commercial impact on brands. We measure actual brand conversation and advocacy, both real-world word of mouth and online buzz and sentiment, by combining traditional survey measures with best-in-class social listening.

Communications Services.

How we can help communicate your brand's performance in brand value rankings



Brand Accolade – create a digital endorsement stamp for use in marketing materials, communications, annual reports, social media and website. Advertising use subject to terms and conditions.



**TOP 25
AEROSPACE &
DEFENCE
BRAND**



**MOST VALUABLE
AEROSPACE &
DEFENCE
BRAND**



**STRONGEST
AEROSPACE &
DEFENCE
BRAND**



Video Endorsement – record video with Brand Finance CEO or Director speaking about the performance of your brand, for use in both internal and external communications.



Bespoke Events – organise an award ceremony or celebratory event, coordinate event opportunities and spearhead communications to make the most of them.



Digital Infographics – design infographics visualising your brand's performance for use across social media platforms.



Trophies & Certificates – provide a trophy and/or hand-written certificate personally signed by Brand Finance CEO to recognise your brand's performance.



Sponsored Content – publish contributed articles, advertorials, and interviews with your brand leader in the relevant Brand Finance report offered to the press.



Media Support – provide editorial support in reviewing or copywriting your press release, pitching your content to top journalists, and monitoring media coverage.

Brand Dialogue®



Value-Based Communications

With strategic planning and creative thinking, we develop communications plans to create dialogue with stakeholders that drives brand value. Our approach is integrated, employing tailored solutions for our clients across PR, marketing and social media.

SERVICES

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- Integrated Communications Planning
- Project Management and Campaign Execution
- Content and Channel Strategy
- Communications Workshops

For more information, contact enquiries@brand-dialogue.co.uk or visit www.brand-dialogue.co.uk

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