

Brand Finance[®]



Aerospace

25

2015

The annual report on the world's most valuable aerospace brands
February 2015

Foreword.



David Haigh, CEO, Brand Finance

“The boardroom can sometimes feel like the tower of Babel, with CMOs and CFOs speaking mutually unintelligible languages, damaging the prospects for what should be their shared goals. Brand Finance bridges the gap between marketing and 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 the marketing and financial worlds. 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 marketers 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 maximizes profits.

Of course not all non-marketers need to be convinced that brands are valuable. Warren Buffet, renowned for his financial nous and stock picking ability, is famously keen on investing in some of the world’s biggest and best-loved brands such as Heinz and Coca-Cola. The sage

of Omaha certainly does extremely well from most of his investments, but could he be doing better?

It is all well and good to want a strong brand that customers connect with, but as with any asset, without knowing the precise, financial value, 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?

Brand Finance has conducted hundreds of brand and branded-business valuations to help answer these questions. 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.

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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 almost 20 years we have helped companies to connect their brands to the bottom line, building robust business cases for brand decisions, strategies and investments. In doing so, we have helped finance people to evaluate marketing programmes and marketing people to present their case in the Board Room.

Independence

Brand Finance is impartial and independent. We assess and help to manage brands, but we do not create or own them. We are therefore able to give objective, unbiased advice because we have no vested interest in particular outcomes of a project and our recommendations are entirely independent. We are agency agnostic and work collaboratively with many other agencies and consultancies.

Technical credibility

Brand Finance has high technical standards. Our work is frequently peer-reviewed by the big four audit practices and our work has been accepted by tax authorities and

regulatory bodies around the world. We are one of the few companies certified to provide brand valuations that are fully compliant with ISO 10668, the global standard on monetary brand valuations.

Transparency

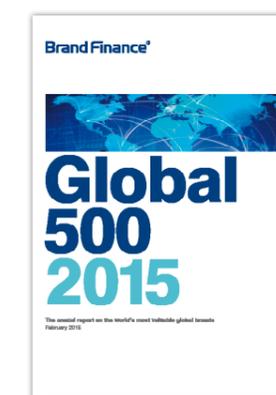
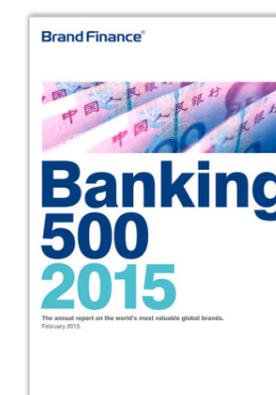
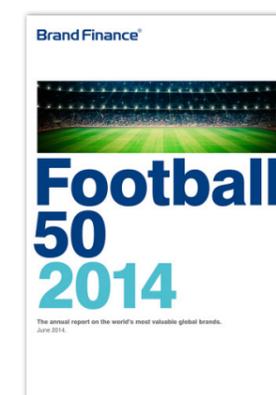
There are no black boxes. Our approach is to work openly, collaboratively and flexibly with clients and we will always reveal the details of our modelling and analysis. This means our clients always understand what lies behind 'the number'.

Expertise

We possess a unique combination of skills and experience. We employ functional experts with marketing, research and financial backgrounds, as well as ex-client-side senior management who are used to 'making things happen'. This gives us the mindset to think beyond the analysis and to consider the likely impact on day-to-day operations. We like to think this differentiates us because our team has real operational experience.

For more information, please visit our website: brandfinance.com

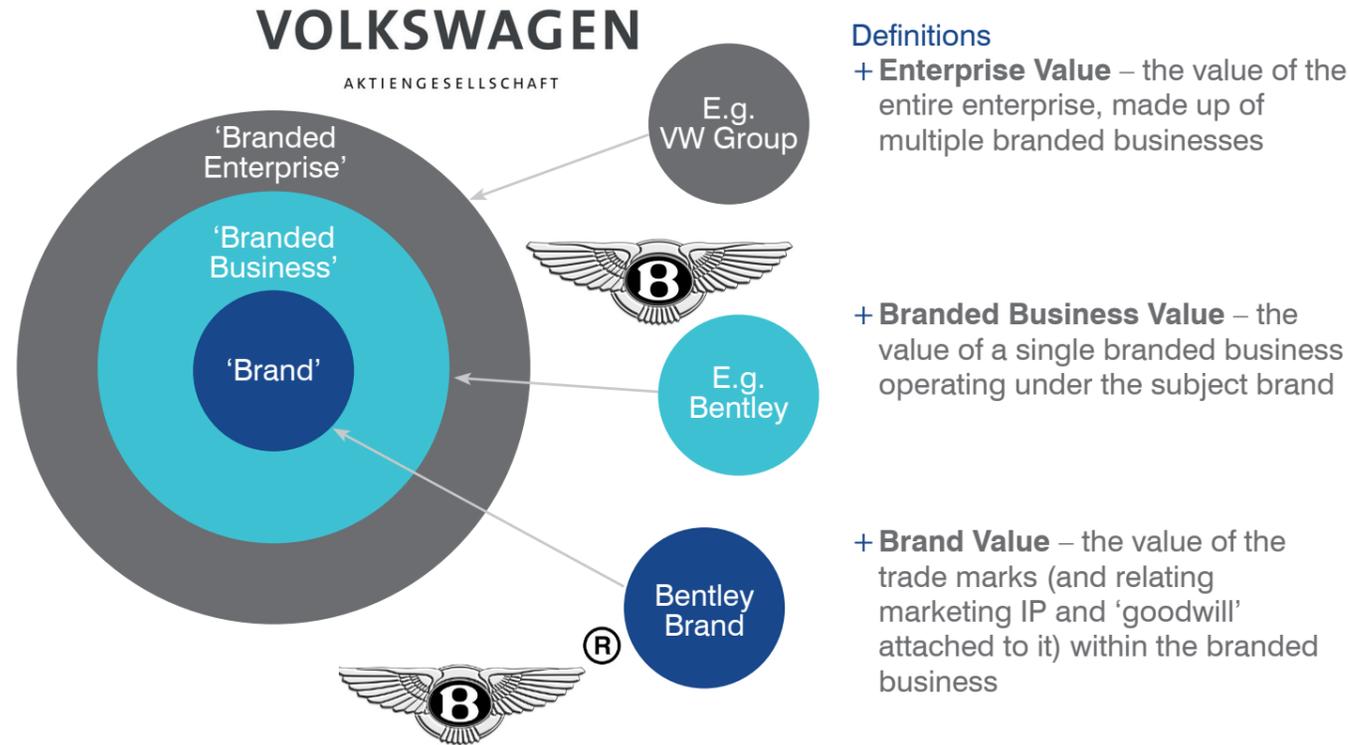
Brand Finance puts thousands of the world's biggest brands to the test every year, evaluating which are the most powerful and most valuable. The Global 500 covers the top 500 from all sectors and is just one of many annual reports produced by Brand Finance. Visit www.brandfinance.com to discover more.



Bridging the gap between marketing and finance

Methodology

What do we mean by 'brand'?

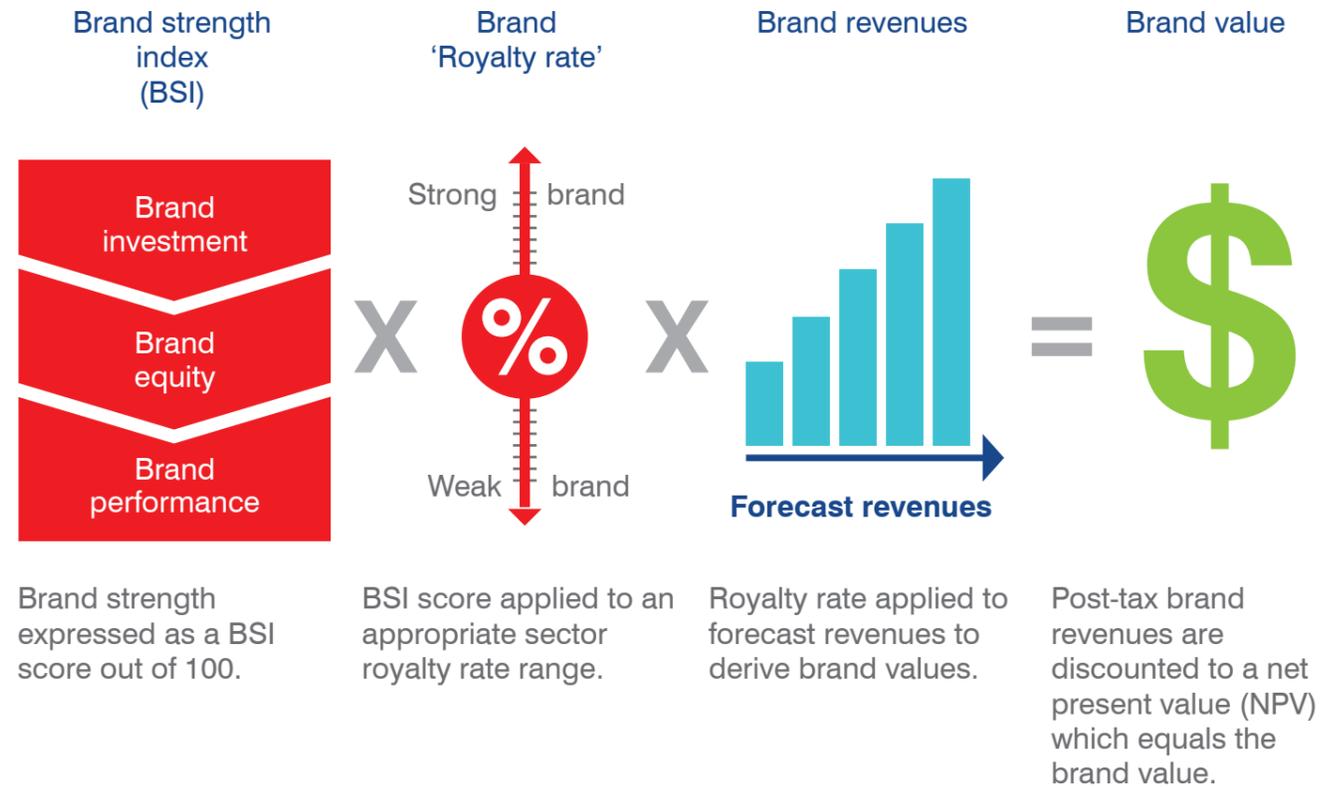


Definition of 'Brand'

In the very broadest sense, a brand is the focus for all the expectations and opinions held by customers, staff and other stakeholders about an organisation and its products and services. However when looking at brands as business assets that can be bought, sold and licensed, a more technical definition is required. Brand Finance helped to craft the internationally recognised standard on Brand Valuation, ISO 10668. That defines a brand as “a marketing-related intangible asset including, but not limited to, names, terms, signs, symbols, logos and designs, or a combination of these, intended to identify goods, services or entities, or a combination of these, creating distinctive images and associations in the minds of stakeholders, thereby generating economic benefits/value”

Brand Strength

Brand Strength is the part of our analysis most directly and easily influenced by those responsible for marketing and brand management. In order to determine the strength of a brand we have developed the Brand Strength Index (BSI). We analyse marketing investment, brand equity (the goodwill accumulated with customers, staff and other stakeholders) and finally the impact of those on business performance. Following this analysis, each brand is assigned a BSI score out of 100, which is fed into the brand value calculation. Based on the score, each brand in the league table is assigned a rating between AAA+ and D in a format similar to a credit rating. AAA+ brands are exceptionally strong and well managed while a failing brand would be assigned a D grade.



Brand Finance calculates the values of the brands in its league tables using the 'Royalty Relief approach'. This approach involves estimating the likely future sales that are attributable to a brand and calculating a royalty rate that would be charged for the use of the brand, i.e. what the owner would have to pay for the use of the brand—assuming it were not already owned.

The steps in this process are as follows:

- 1 Calculate brand strength on a scale of 0 to 100 based on a number of attributes such as emotional connection, financial performance and sustainability, among others. This score is known as the Brand Strength Index.
- 2 Determine the royalty rate range for the respective brand sectors. This is done by reviewing comparable licensing agreements

sourced from Brand Finance's extensive database of license agreements and other online databases.

- 3 Calculate royalty rate. The brand strength score is applied to the royalty rate range to arrive at a royalty rate. For example, if the royalty rate range in a brand's sector is 1-5% and a brand has a brand strength score of 80 out of 100, then an appropriate royalty rate for the use of this brand in the given sector will be 4.2%.
- 4 Determine brand specific revenues estimating a proportion of parent company revenues attributable to a specific brand.
- 5 Determine forecast brand specific 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.

Sector Analysis – Aerospace

Aerospace 25



Aerospace and Defence brands performed well in 2014, which saw unprecedented demand for commercial aircraft and increasing military spend in Asia in addition to continuing economic recovery in traditional markets.

Boeing has overtaken its rival, Airbus, to take the title as most valuable aerospace and defence brand. Boeing's brand value increased 39% to US\$15.2 billion whilst Airbus' fell 12% to US\$12.7 billion. Both brands will have felt the effects of a declining military budget in the West; however, Boeing has managed to counter this as it records the highest number of jet orders in addition to contracts from NASA and the US government. This success has boosted Boeing's profits and maintained its title as the biggest aircraft maker for the third year running.

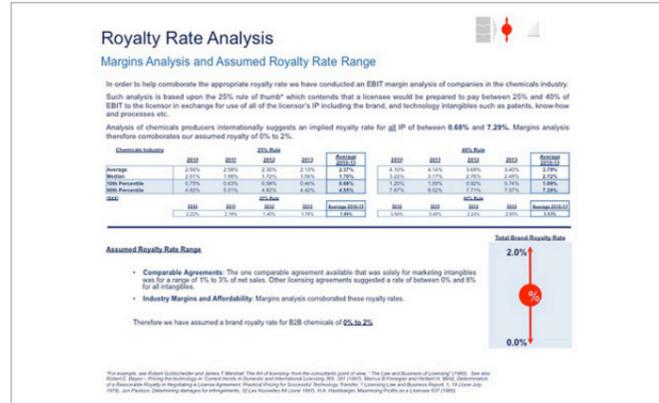
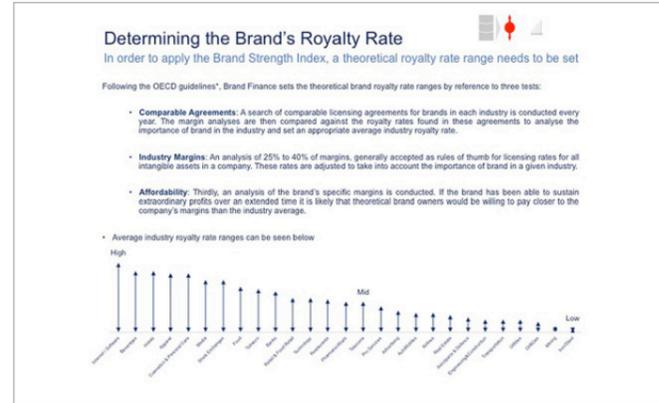
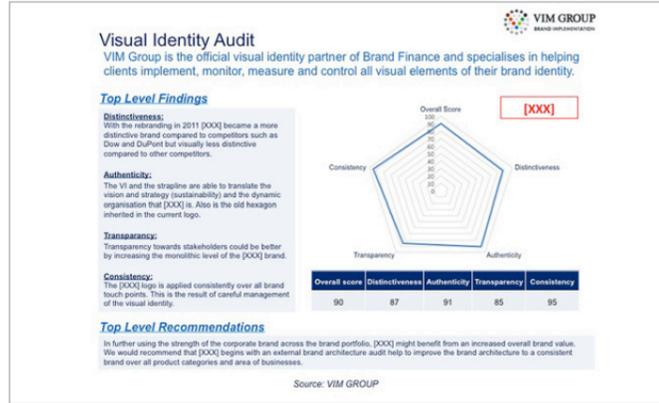
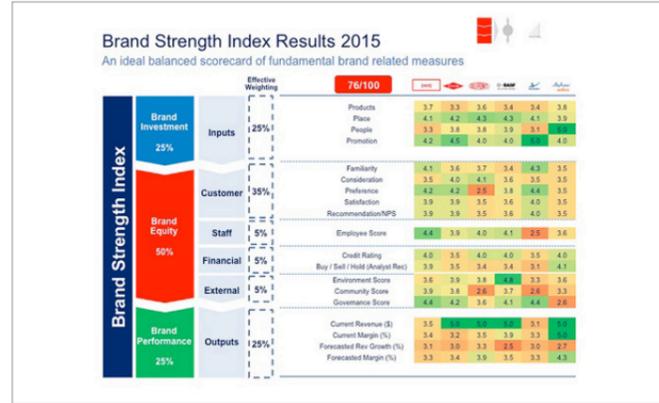
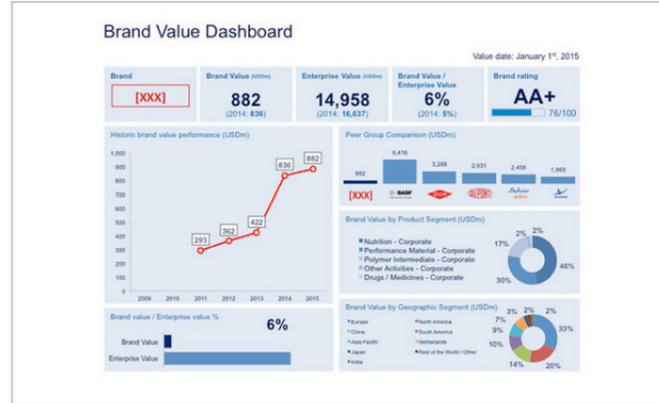
Lockheed Martin also managed to secure important contracts in the face of declining defence spend including a US\$78 million deal with the US Army and US\$1 billion contract with General DynamicsUK. This helped grow brand value by 63% this year to US\$6.3 billion, the top performance in the sector.

Bombardier has failed to keep up with the high-fliers Boeing and Airbus as it has experienced a turbulent year. Two years late to the market and about US\$2 billion over budget, its C Series has cast uncertainty over the brand. As rivals Boeing and Airbus continue to grow, Bombardier has an uphill struggle to persuade customers that it can deliver its product with the same efficiency of its rivals. Bombardier has suffered the most significant brand value fall in the sector, dropping 24% in a year to US\$3 billion.

	1	Rank 2015: 1 2014: 2 ↑ BV 2015: \$15,199m +39% BV 2014: \$10,943m Brand Rating: AAA
	2	Rank 2015: 2 2014: 1 ↓ BV 2015: \$12,744m -12% BV 2014: \$14,559m Brand Rating: AAA-
	3	Rank 2015: 3 2014: 5 ↑ BV 2015: \$6,307m +63% BV 2014: \$3,864m Brand Rating: AAA-
	4	Rank 2015: 4 2014: 8 ↑ BV 2015: \$4,671m +42% BV 2014: \$3,268m Brand Rating: AAA-
	5	Rank 2015: 5 2014: 3 ↓ BV 2015: \$4,594m +3% BV 2014: \$4,478m Brand Rating: AAA-
	6	Rank 2015: 6 2014: 7 ↑ BV 2015: \$3,868m +11% BV 2014: \$3,470m Brand Rating: AA+
	7	Rank 2015: 7 2014: 10 ↑ BV 2015: \$3,661m +17% BV 2014: \$3,116m Brand Rating: AAA-
	8	Rank 2015: 8 2014: 6 ↓ BV 2015: \$3,515m 0% BV 2014: \$3,505m Brand Rating: AA+
	9	Rank 2015: 9 2014: 9 → BV 2015: \$3,268m +2% BV 2014: \$3,215m Brand Rating: AA+
	10	Rank 2015: 10 2014: 4 ↓ BV 2015: \$3,090m -24% BV 2014: \$4,090m Brand Rating: AA

Rank 2015	Rank 2014	Brand name	Domicile	Brand value (\$m) 2015	% change	Brand value (\$m) 2014	Brand rating 2015	Brand rating 2014
1	2	Boeing	United States	15,199	39%	10,943	AAA	AA+
2	1	Airbus	Netherlands	12,744	-12%	14,559	AAA-	AAA-
3	5	Lockheed Martin	United States	6,307	63%	3,864	AAA-	AA
4	8	General Dynamics	United States	4,671	42%	3,286	AAA-	AA-
5	3	Rolls-Royce	Uk	4,594	3%	4,478	AAA-	AAA-
6	7	BAE Systems	UK	3,868	11%	3,470	AA+	A+
7	10	Safran	France	3,661	17%	3,116	AAA-	AA
8	6	Raytheon	United States	3,515	0%	3,505	AA+	AA
9	9	United Technologies	United States	3,268	2%	3,215	AA+	AA
10	4	Bombardier	Canada	3,090	-24%	4,090	AA	AA-
11	12	Northrop Grumman	United States	█	█	█	█	█
12	11	Thales	France	█	█	█	█	█
13	13	Pratt & Whitney	United States	█	█	█	█	█
14		IHI	Japan	█	█	█	█	█
15	14	L-3 Communications	United States	█	█	█	█	█
16	15	Embraer	Brazil	█	█	█	█	█
17	16	Rockwell Collins	United States	█	█	█	█	█
18	18	Sikorsky	United States	█	█	█	█	█
19	17	Spirit Aerosystems	United States	█	█	█	█	█
20		Textron	United States	█	█	█	█	█
21		Bell	United States	█	█	█	█	█
22		Zodiac Aerospace	France	█	█	█	█	█
23		Mtu Aero Engines	Germany	█	█	█	█	█
24		Dassault Aviatio	France	█	█	█	█	█
25		Be Aerospace	United States	█	█	█	█	█

Understand Your Brand's Value



A League Table 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.

A full report includes the following sections which can also be purchased individually.

Brand Valuation Summary

Overview of the brand valuation including executive summary, explanation of changes in brand value and historic and peer group comparisons.

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

Brand Strength Index

A breakdown of how the brand performed on various metrics of brand strength, benchmarked against competitor brands in a balanced scorecard framework.

- + Brand strength tracking
- + Brand strength analysis
- + Management KPI's
- + Competitor benchmarking

Royalty Rates

Analysis of competitor royalty rates, industry royalty rate ranges and margin analysis used to determine brand specific royalty rate.

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

Cost of Capital

A breakdown of the cost of capital calculation, including risk free rates, brand debt risk premiums and the cost of equity through CAPM.

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

Trademark Audit

Analysis of the current level of protection for the brands word marks and trademark iconography highlighting areas where the marks are in need of protection.

- + Highlight unprotected marks
- + Spot potential infringement
- + Trademark registration strategy

For more information regarding our League Table Reports, please contact:

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How we can help.



We help marketers to connect their brands to business performance by evaluating the financial impact of brand based decisions and strategies.

- + Brand Valuation
- + Brand Due Diligence
- + Profit Levers Analysis
- + Scenario Modelling
- + Market Research
- + Brand Identity & Customer Experience Audit
- + Brand Strength Analysis
- + Brand Equity Analysis
- + Perception Mapping
- + Conjoint & Brand/Price Trade-off Analysis
- + Return on Investment
- + Sponsorship Evaluation
- + Budget Setting
- + Brand Architecture & Portfolio Evaluation
- + Brand Positioning & Extension Evaluation
- + Brand Migration
- + Franchising & Licensing
- + BrandCo Strategy
- + Brand Governance Process
- + Brand Tracking
- + Management KPIs
- + Competitor Benchmarking



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

- + Brand & Branded Business Valuation
- + Intangible Asset Valuation
- + Fair Value Exercise (IFRS 3 / FAS 141)
- + Intangible Asset Impairment Reviews (IAS 36 / FAS 142)
- + Brand Due Diligence
- + Information Memoranda
- + Finance Raising
- + Insolvency & Administration
- + Market Research Design and Management
- + Return on Investment
- + Franchising & Licensing
- + BrandCo & IPCo Strategy
- + Scenario Modelling & Planning
- + Transfer Pricing Analysis
- + Management KPIs and Target-setting
- + Competitor Benchmarking



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

- + Brand & Branded Business Valuation
- + Intangible Asset Valuation
- + Patent Valuation
- + Asset Transfer Valuations
- + Business & Share Valuations
- + Transfer Pricing Analysis
- + Royalty Rate Setting
- + Brand Franchising & Licensing
- + BrandCo & IPCo Strategy
- + Market Research Design and Management
- + Brand Tracking
- + Expert Witness Opinion



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

- + Brand & Branded Business Valuation
- + Intangible Asset Valuation
- + Patent Valuation
- + Business & Share Valuations
- + Loss of Profits Calculations
- + Account of Profits Calculations
- + Damages Assessment
- + Forensic Accounting
- + Royalty Rate Setting
- + Brand Franchising & Licensing
- + BrandCo & IPCo Strategy
- + Market Research Design and Management
- + Trademark Registration
- + Trademark watching service

Brand Valuation

Valuations may be conducted for technical purposes and to set a baseline against which potential strategic brand scenarios can be evaluated.

Brand Monitoring

Improve reporting and brand performance management by integrating market research, investment, market and financial metrics into a single insightful scorecard model to track performance and inform strategic decisions.



Brand Analytics

Analytical services help to uncover drivers of demand and insights. Identifying the factors which drive consumer behaviour allow an understanding of how brands create bottom-line impact.

Brand Strategy

Strategic marketing services enable brands to be leveraged to grow businesses. Scenario modelling will identify the best opportunities, ensuring resources are allocated to those activities which have the most impact on brand and business value.

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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.

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