



# Food Safety 2018

An independent brand impact analysis report

July 2018

In collaboration with:

**SMART SENSE**

BY DIGI

# Executive Summary.

## Quantifying Brand Risk from a Food Safety Incident

- Restaurants and food service operators are exposed to significant risk emanating from a food safety incident.
- This study provides a research-based approach to measuring the impact of a food safety incident on businesses in the **Restaurant and Food Services industry**.
- Drawing on Brand Finance's annual research study into the world's most valuable and strongest brands, the analysis includes brands from the 2018 iterations of the Brand Finance Restaurants 25 and food services brands from the Brand Finance Commercial Services 50 league tables.
- The analysis hypothesizes the **potential impact on the brand's Forecast Revenues and Brand Strength Index (BSI)**. These reflect two key elements that affect the value of the brand.

## Business Value at Risk

- **The value at risk in the industry is \$104 billion** – equivalent to the GDP of Ukraine, Morocco, or Ecuador – which represents 19% of the total value of the industry.
- Taking a single case: **Darden Group would have up to \$2.4 billion business value at risk if a food incident happened**, which equals to about 22% of its total Enterprise Value.
- Darden's BSI score would drop significantly, and its **revenue would face an immediate decrease of over 50%**, with a recovery period of at least 3 years.



### 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 exclude all liability to any body, government or organisation.

Financial support for the report was provided by SmartSense by Digi with Brand Finance retaining complete responsibility for its analysis, findings, and conclusions.

# 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 organizations of all types to connect their brands to the bottom line.

We pride ourselves on four key strengths:

- Independence
- Technical Credibility
- Transparency
- Expertise

Brand Finance puts thousands of the world's biggest brands to the test every year, evaluating which are the strongest and most valuable.

For more information, please visit:

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# About SmartSense.

**SmartSense solutions drive operational excellence in organizations by improving regulatory compliance, increasing quality, and optimizing efficiency through wireless sensors and digital checklists.**

SmartSense automates monitoring for food safety, pharmacy safety, product quality, and preventative equipment maintenance. Today, SmartSense has earned the trust of the most critical government, commercial, and non-profit institutions in the world. Our systems enable real-time sensor-driven decisions at over 2,000 organizations in 75 countries.

For more information, please visit:

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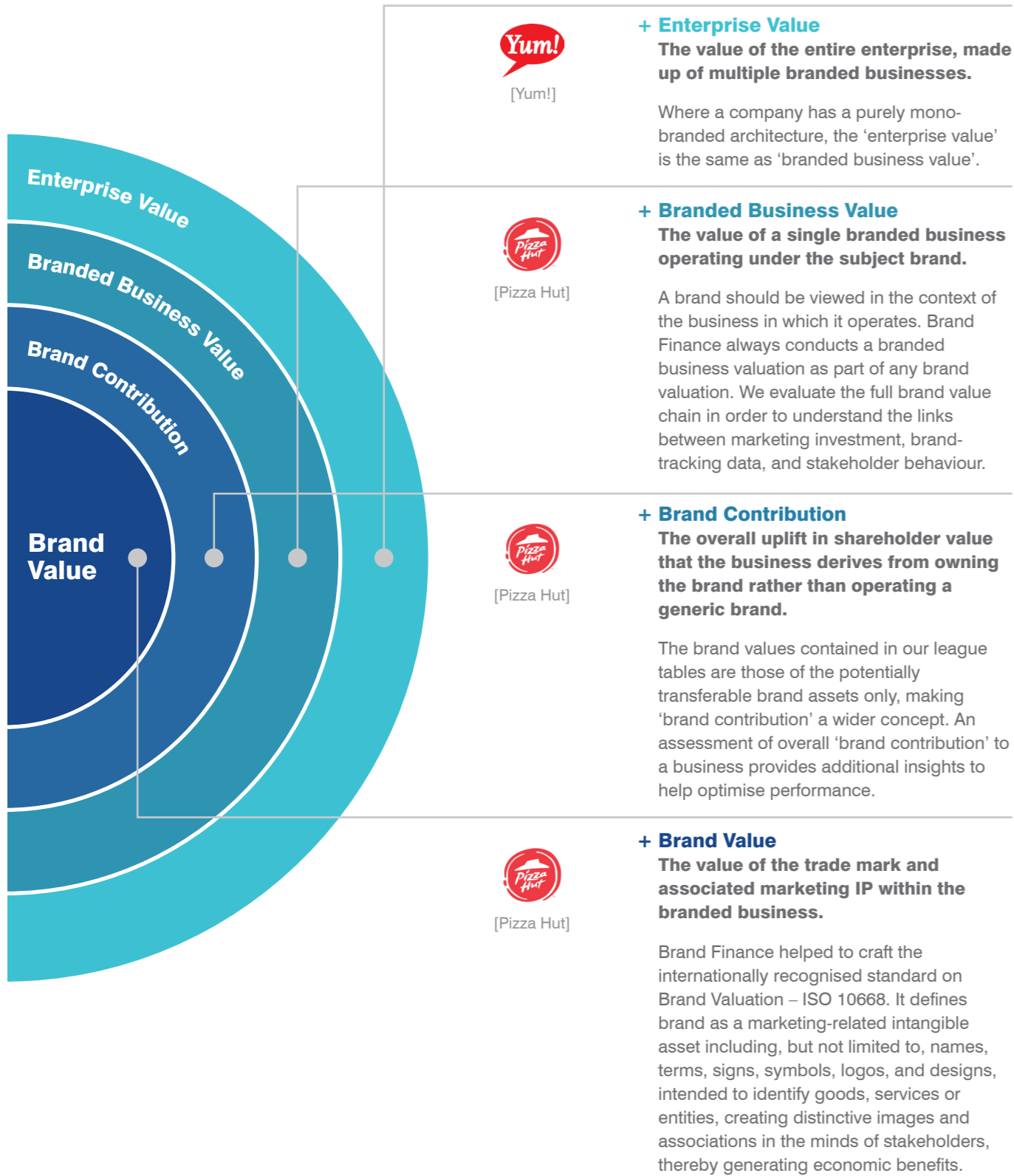


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# Definitions.



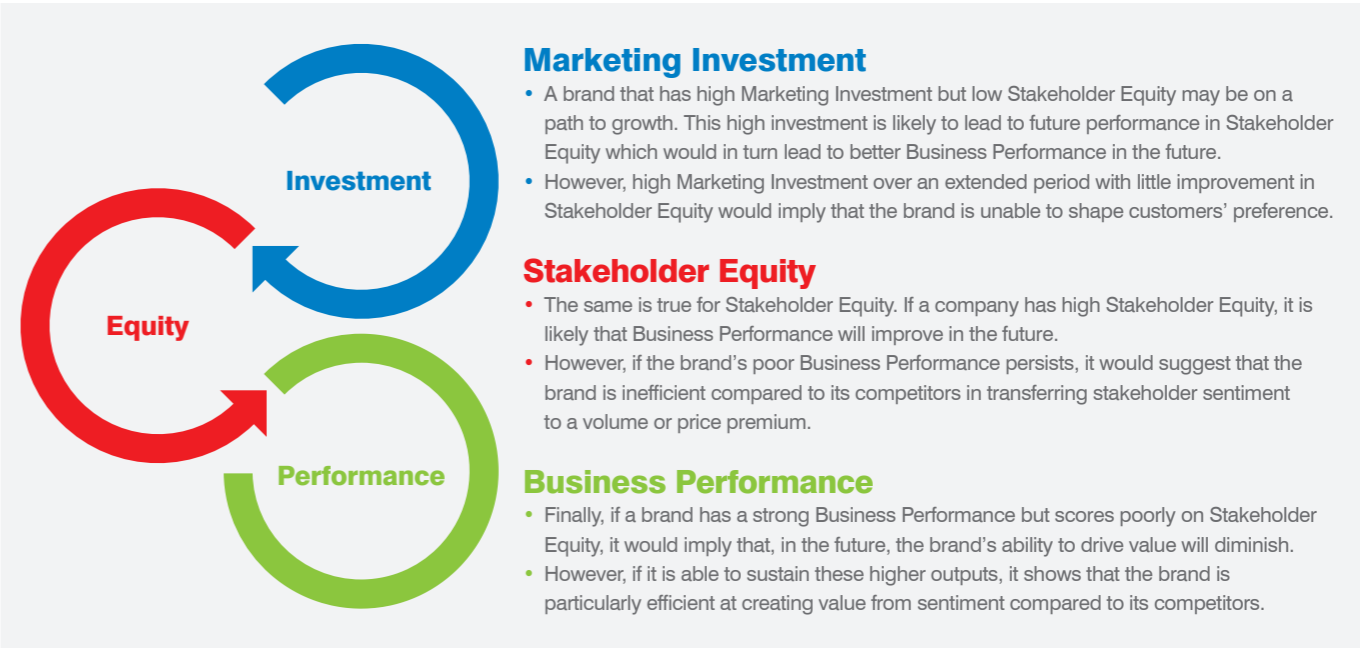
## Brand Strength

**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.





# 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.

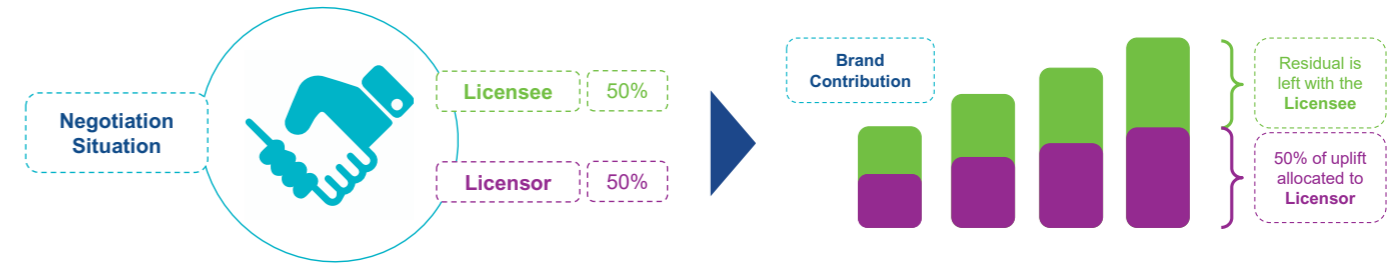
## The steps in this process are as follows:

- 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.



# Brand Impact Analysis.

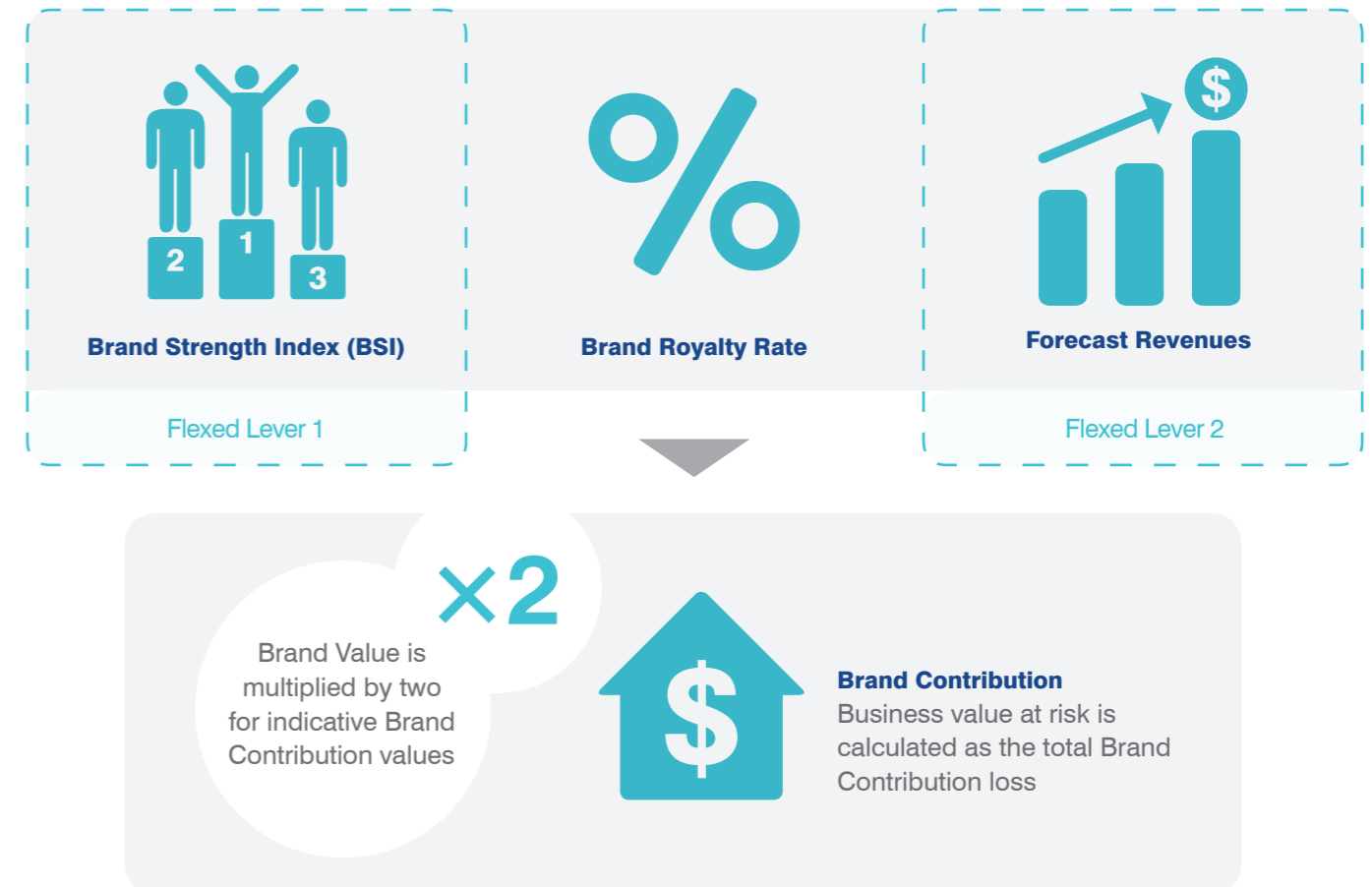
## Calculation of the overall Brand Contribution



- Brand Contribution assessment is based on the calculated Brand Value.
- Brand Value only captures the value of the brand to the Licensor, therefore, this is multiplied by two to account for the equivalent Brand Contribution to the licensee.
- Our experience shows that the starting point in licensing negotiations is to split the benefit 50:50 meaning an implied multiple of two is a reasonable assumption for calculating the total Brand Contribution.

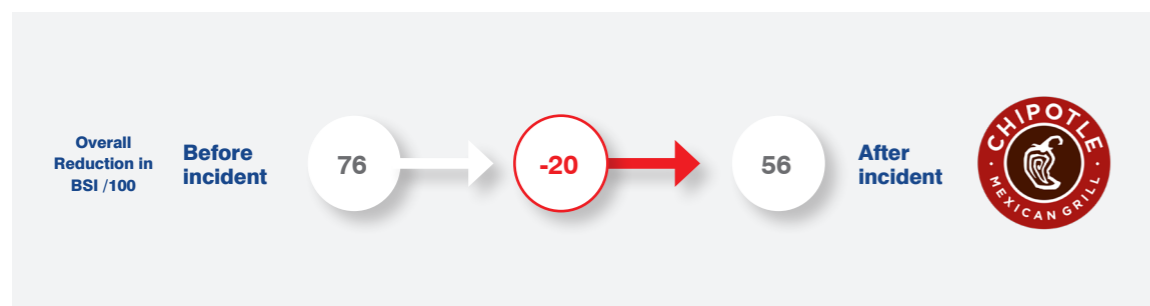
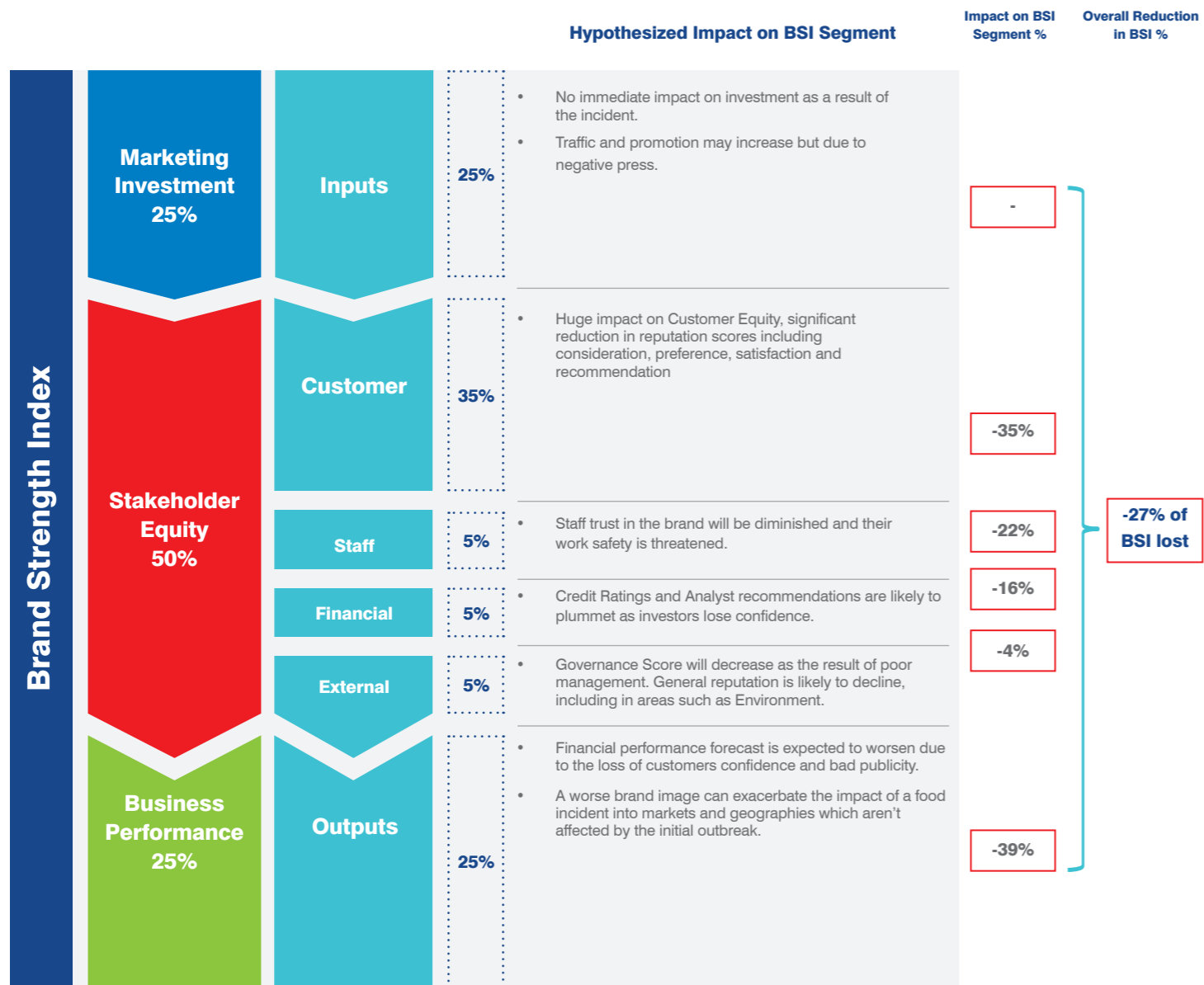
## Levers flexed to reflect the impact of a food safety incident

Our analysis models the potential impact of a food safety incident on a brand's Brand Strength and Forecast Revenues.



# Impact on Brand Strength.

Case study: impact of the 2015 food safety incident on the Brand Strength Index (BSI) score of Chipotle



# Impact on Forecast Revenues.

The modeled assumptions are based on two major food safety incidents: Chipotle (2015) and Jack in the Box (1993)

## Chipotle



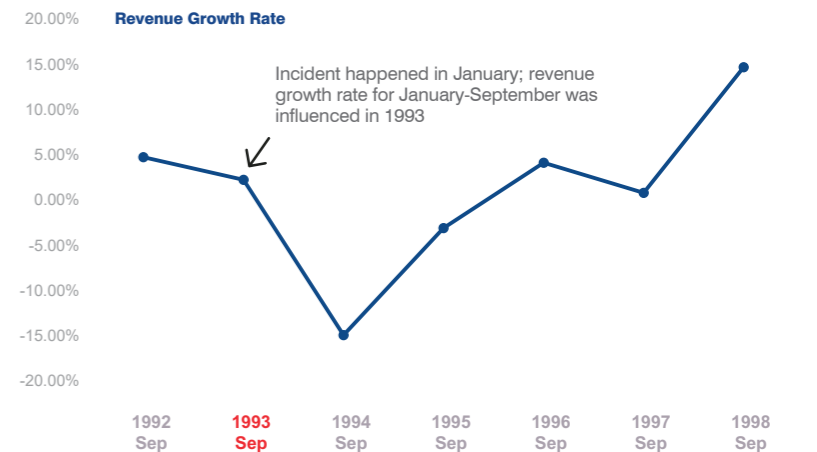
- In October 2015, at least 22 people were reported to have gotten sick after eating at several different Chipotle locations.
- By December 2015, 177 cases across 10 states were confirmed, but the company was unable to locate the source of the outbreak.
- Chipotle is used as a case study to analyze the impact of a food incident on Brand Strength and Forecast Revenues.



## Jack in the Box

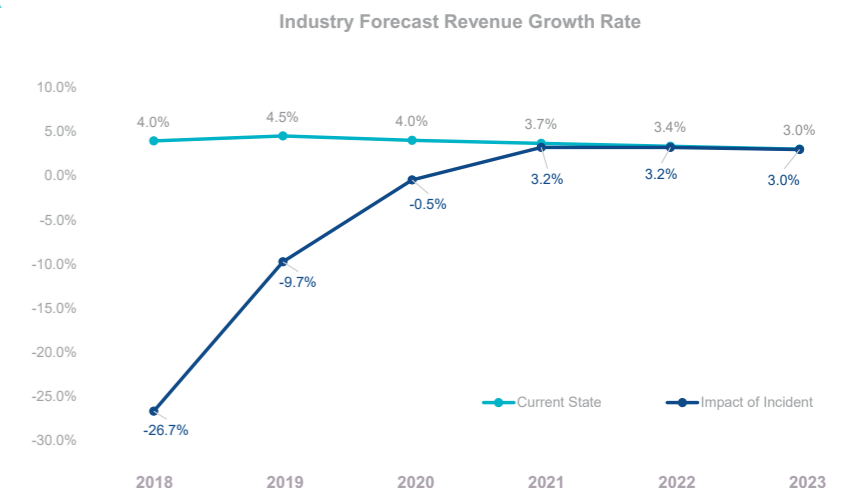


- In January 1993, Jack in the Box outbreak occurred; 73 restaurants across America were affected.
- 732 people were infected. 4 children died and 179 other victims were left with permanent injury.
- The company lost an estimated \$160 million in the following 18 months.
- Jack in the Box is used as a case study to analyze the impact of a food incident on Forecast Revenues only.



**Modeled Assumptions for the Industry**  
A food safety incident will immediately shrink the company's revenue forecasts, however, with mitigating actions, these can be recovered over time.

- Revenue forecast growth rate has been modeled based on the case study of Chipotle's food safety incident in October 2015 and Jack in the Box in January 1993.
- Revenue forecast reduction in growth rate is defined by comparing the average 5 years revenue growth rate before the incident and the revenue growth rate after the Incident. All data is sourced from Bloomberg.
- The immediate damage to a branded business is immense – revenue growth rates are predicted to fall from 4% to about -27%.
- This impact can be minimized over the years through mitigating actions, the success of which is however uncertain.



# Case Study – Darden Restaurants Group.

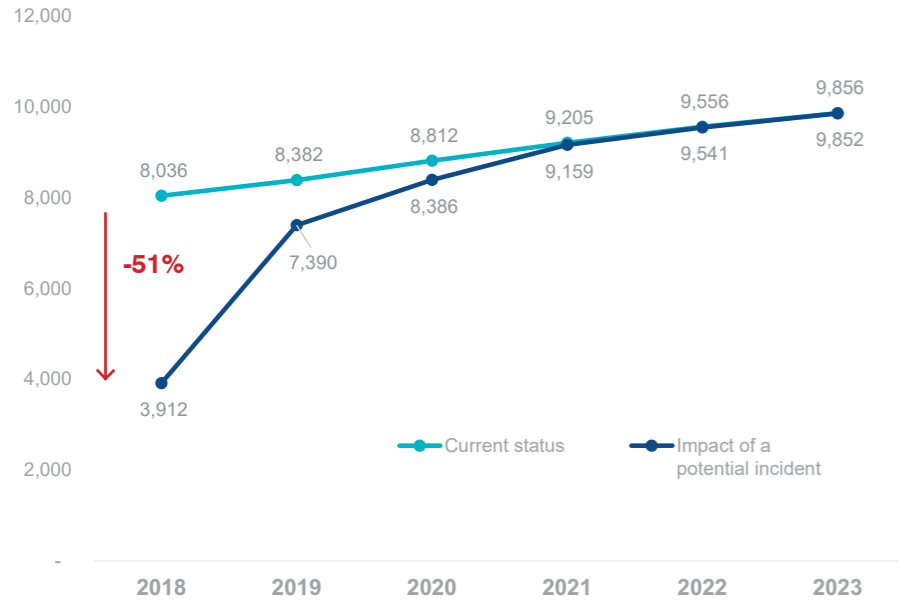
## World’s largest full-service restaurant group

- Darden is a restaurant company featuring a portfolio of differentiated brands that include Olive Garden, LongHorn Steakhouse, Cheddar’s Scratch Kitchen, Yard House, The Capital Grille, Seasons 52, Bahama Breeze and Eddie V’s.
- As the world’s largest full-service restaurant group, Darden has more than 1,700 restaurants and over 175,000 employees (Annual Report, 2017).
- Darden cites food safety as its top priority with a commitment to best-in-class food safety and total quality programs.



If a food safety incident happened, over a half of current annual revenue and a third of Darden Restaurants Group’s Brand Strength would be at risk.

## Forecast Revenue (USD m)



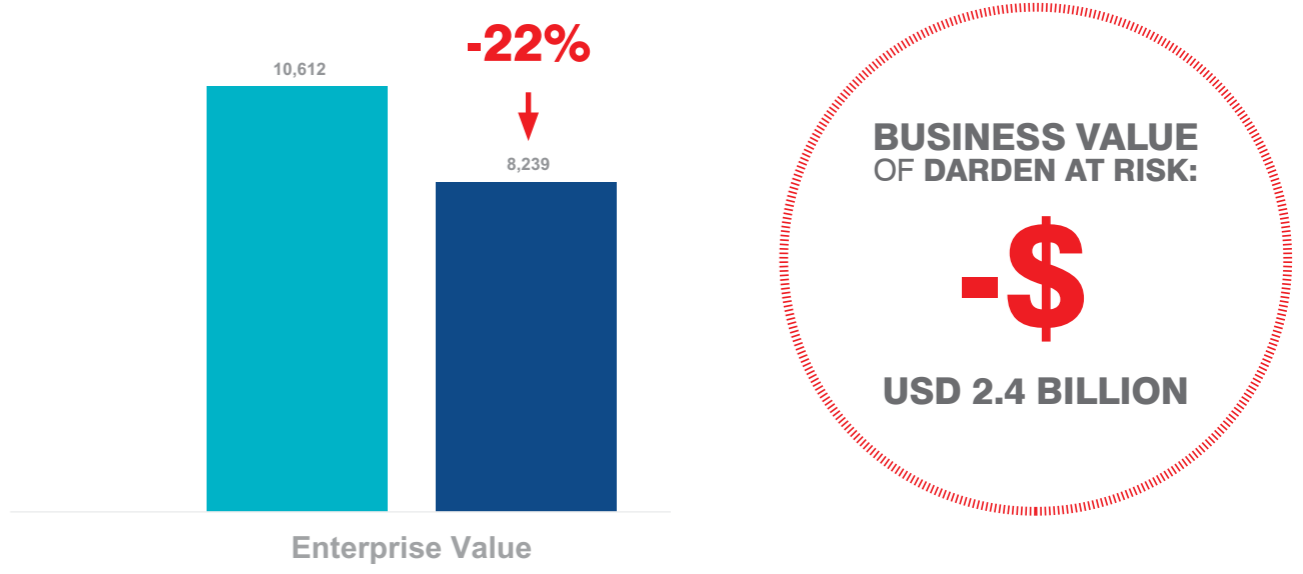
## Overall Reduction in BSI /100



# Business Value at Risk.

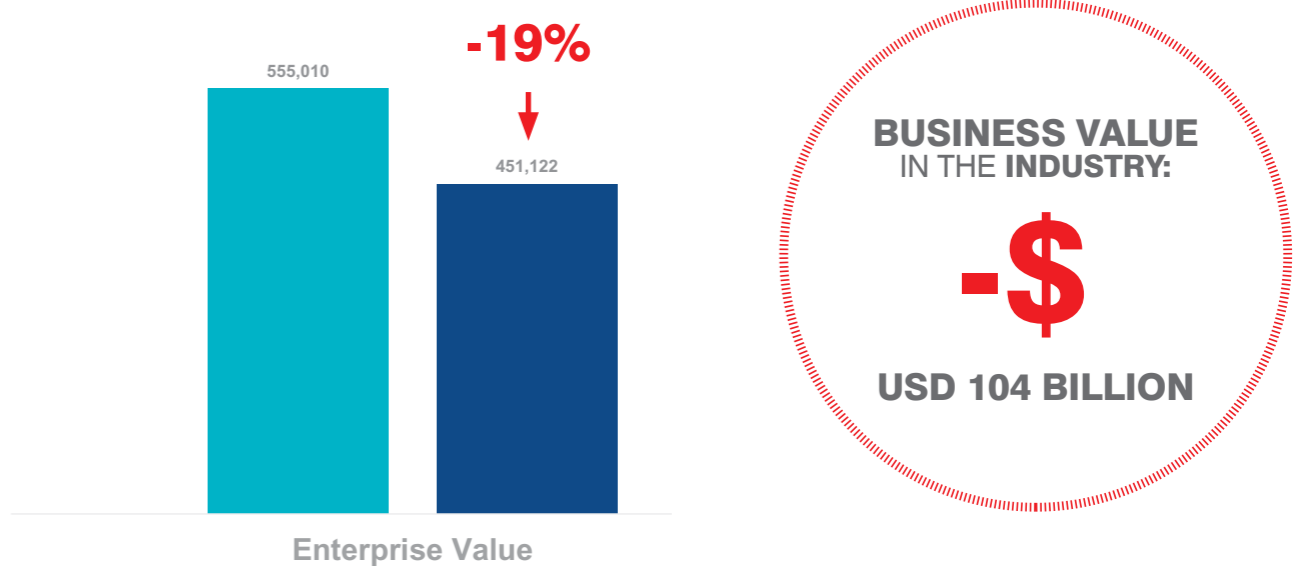
## Business Value at Risk - Darden Restaurants Group

Potential losses of Darden Restaurants Group would amount to 22% of their Enterprise Value if a food safety incident happened.



## Business Value at Risk in the Industry

Businesses in the Restaurant & Food Services industry face a risk of losing up to 19% of their Enterprise Value as a result of a food safety incident.



## Brand Finance Services.

### 1. Valuation: What are my intangible assets worth?

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

- + Branded Business Valuation
- + Trademark Valuation
- + Intangible Asset Valuation
- + Brand Contribution

### 2. Analytics: How can I improve marketing effectiveness?

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

- Market Research Analytics +
- Return on Marketing Investment +
- Brand Audits +
- Brand Scorecard Tracking +

### 4. Transactions: Is it a good deal? Can I leverage my intangible assets?

Transaction services help buyers, sellers, and owners of branded businesses get a better deal by leveraging the value of their intangibles.

- + M&A Due Diligence
- + Franchising & Licensing
- + Tax & Transfer Pricing
- + Expert Witness



### 3. Strategy: How can I increase the value of my branded business?

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.

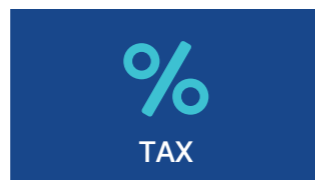
- Brand Governance +
- Brand Architecture & Portfolio Management +
- Brand Transition +
- Brand Positioning & Extension +



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.

## Digital Food Safety



### Drive operational excellence with wireless sensors and digital checklists



#### Simple Risk Mitigation

Gain real-time insights into safety checklist compliance and easily compare site performance to quickly identify at-risk sites for immediate remediation. Real-time monitoring provides instant alerts for temperature excursions.



#### Effortless Compliance Management

SmartSense's digital food safety solution enables you to gain real-time visibility into all your locations. Take control over regulations for efficient management of compliance logging and incident management workflow.



#### Improved Productivity Optimization

Replace paper processes with an intuitive task management system that provides visibility across your enterprise. Remotely publish and manage operational checklists to improve efficiency.





## Contact us.

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