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Comparison and Estimation of Brand Value for the Operation Strategies

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Abstract: Creating a brand is a competitive strategy. In order to prevent other products from replacing their own products, companies will find ways to establish their own brands in order to better control the market since the production of brands is generally considered to be the result of market competition. In recent years, some corporate management consulting companies and brand evaluation agencies have released various brand value lists. However, there is still no unified consensus on the quantitative assessment of brand value. This study introduces key global brand valuation authorities and the methods they applied for brand valuation. The impacts of profits, revenue and asset on brand evaluation are investigated as the regressors to estimate the brand value of Fortune Global 500 in 2021 and to propose diverse operation strategies for improving the brand value and sustaining the life of brand. The results suggest that profits and total revenues outperform assets in brand value evaluation, and BrandZ is the highest among the brand multipliers estimation, Interbrand is in the second, GYbrand is slightly lower than Interbrand, and Brand Finance is the lowest. The results also suggest that brand value innovation can enhance the extensive and lasting trust relationship of customers on related products, and increase the frequency and type of repeated purchases. It can promote the value spillover of brand reputation and promote the expansion of brand equity to establish an effective barrier for competitors to enter.

Keywords: Brand Value; Operation Strategies; Financial Performance; Brand Multiplier; Brand Innovation

1. Introduction

Brand has never been more important, but its role has changed dramatically. What used to be about creating differentiation in an age of abundance is now about staying relevant in a context of turbulence. Strong brands influence customer choice and create loyalty, attract, retain, and motivate talent, and lower the cost of financing. Business today is incredibly dynamic, challenging some of the most widely accepted constructs in branding. Creating a brand is a competitive strategy, in order to prevent other products from replacing their own products, companies will find ways to establish their own brands in order to better control the market, and the production of brands is in fact the result of competition (Aaker, 1992).

Brand value is the most core part of brand management elements, and it is also an important symbol that distinguishes brands from similar competing brands. The assets of the brand are mainly reflected in the core value of the brand, or the core value of the brand is also the essence of the brand. Matsumura *et al*. (2019) have shown the correlations among brand value by Brand Valuation (Interbrand Japan, Inc. Tokyo, Japan), market capitalization, and the consolidated overseas sales ratios of Japanese companies. Brand value evaluation can quantify the value of specific brands and intuitively understand the status of brand-name enterprises through the comparison of the value of each brand, reveal the market position and changes of each brand from some aspects, reveal the connotation and law of brand value, and create a good public opinion foundation and social foundation for enterprises to achieve corporate restructuring and expansion with brand as capital. Consumers are also determined to be loyal to certain brands through the influence of brand value. Investors can also decide their investment direction through the reference of brand value. Rahman *et al*. (2018) have applied brand management efficiency to provide an integrated view of the link between brand management inputs (advertising, research and development activity, and customer relationship effort) and outputs (brand value) using data envelopment analysis (DEA). Their results demonstrate that firms with a higher level of brand management efficiency have a higher firm value.

Current SBVC literature has neglected to take into account the dyadic approach (firm-customer) in understanding value creation and more specifically service brand value creation (SBVC). Sok and O'Cass (2011) tried to extend the existing literature on value creation by specifically focusing on SBVC and the role of brand marketing. They developed a model of SBVC and simultaneously investigated SBVC from the firm perspective (service brand value offering (SBVO)) and from the customer perspective (service brand perceive value-in use (SBPVI)). Subsequently, the effects of SBVO on SBPVI are investigated and the moderation role of service brand marketing capability (SBMC) on the relationship between SBVO-SBPVI outcomes are integrated. Their results indicate that SBVO is positively related to SBPVI and SBPVI is positively related to customer-based performance. Noticeably, the results reveal that SBMC enhances the positive relationship between the firm SBVO and the customers SBPVI. Merrilees (2016) also confirmed that different facets of brand experience and different facets of interactivity are entailed for each brand type. The different interactive experience pathways between functional and hedonic brands imply different engagement and co-creation strategies by firms. A richer set of engagement options are considered relevant to the hedonic brand and functional brands can extend their repertoire of engagement tools by borrowing inspiration from the hedonic brands.

1.1. Classification of Brand Value Assessments

Existing studies on the determinants of brand equity can be divided into two categories. One category adopted a customer-based approach, investigating the impact of individual variables which form the building blocks of brand equity. These studies investigated the impact of a multitude of individual factors such as perceived brand differentiation or uniqueness, brand relevance, brand knowledge, liking and esteem (Datta *et al*., 2017; Mizik and Jacobson, 2008; Stahl *et al*., 2012), customer-employee perceptions and rapport (Biedenbach *et al*., 2011), and quality of after sales service (Leek and Christodoulides, 2012), brand trust, length, and quality of brand relationship (Marquardt, 2013; Nyadzayo *et al*., 2016). In sum, these studies explored how the presence or absence, or positivity of these variables enhance or detract from brand equity. The second group of studies took a supplier-based approach, exploring how management of brand building initiatives affects brand equity. These studies investigate how a company's financial resources are used for various brand building initiatives and the impact of this resource utilization on brand equity. (Datta *et al*., 2017; Herremans *et al*., 2000; Peterson and Jeong, 2010). This group of studies investigated the impact of building blocks of brand equity such as advertising expenditure, R&D expenditure (Peterson and Jeong, 2010); marketing, innovation, and network capability (Zhang *et al*., 2015). For instance, Gürhan-Canli *et al*. (2016) demonstrated how firm innovativeness (R&D investment), responsiveness and investment in socially responsible activities can be exploited to build brand equity.

There is also another way to classify brand value from a functional point of view. The first type is the value assessment related to shareholders' equity, that is, the quantification of the value that the enterprise needs to carry out for the change of its own property rights or the expansion of the right to use, which must be carried out on a case-by-case basis according to the purpose of the assessment and in accordance with the evaluation standards and methods promulgated by the state. It is dedicated to entrusting enterprises and provides a reference for the reserve price of corporate transactions. The second category is the evaluation of the nature of research published in society and serving society, that is, the quantification of value for brand value comparison. This assessment must be a unified group assessment that selects the same standard, method, and benchmark date. It is not for a specific enterprise, but for all sectors of society to provide consulting reference. The former emphasizes transactionality while the latter emphasizes comparability. No matter how many trademarks the former evaluates, it is not comparable. The former assessment is limited by the purpose of the transaction or assessment, the scale of the transaction to be completed, and the degree of acceptance of both parties to the transaction. The comparative evaluation is not affected by any external subjective factors, and the intrinsic value is estimated entirely based on the objective indicators used under the system standards.

1.2. Brand Value Appraisal Procedure

The process of brand valuation for most global brand value evaluation institutes in general begins with the establishment of a team of senior managers and analysts who combine marketing and finance. The commander-in-chief may be entrusted to a more neutral third party or entrusted to a professional outside the company. Second, re-examine the way finance and marketing departments assess brand value, preferably by identifying relevant past literature and examining international evaluation standards. This must then be followed by a financial and consumer survey-oriented approach to assessment, and consensus must be reached before the assessment can proceed smoothly and the mandate can be achieved. The fourth step is to conduct a financial assessment and to conduct the necessary market research, and the results of the two must be reasonable and compatible results. The fifth step is to identify the viable methods for evaluating the brand and identify the differences between each method so that the most reasonable and uncontroversial brand value can be tried. The final step is to set campaign goals based on the agreed asset value so that the marketing strategy becomes a measurable strategy.

1.3. Most Valuable Brand Evaluation Methodology

The evaluation formula of the world's most valuable brand can be simply expressed as:

(operating profits - capital assets×5%) × brand multiplier

or (operating profits - operating profits×3%) × brand multiplier

or (operating profits - revenues×5%) × brand multiplier

where operating profits is an important base (Majerova and Kliestik, 2015). The determination of the brand multiplier is very important in determining the size of the value. This multiplier generally ranges from 6 to 20 and is estimated by experts based on certain information or impressions. For example, for the $1 billion net profit, the brand multiplier is 6 and the brand value is $6 billion; and the brand multiplier is 20, the brand value is $20 billion. Subtracting a 5% is considering that businesses without a brand can also reap a 5% capital gain. Usually, the gain of one dollar comes from 60 cents of capital assets or revenues, so that about 3% of the profit from sales comes from the average profit of society. It is therefore necessary to subtract 3% of the profit from sales or 5% of the total capital assets or 5% of the revenues, that is, even if the general product does not have a brand, it will receive 3% of the sales profits, or 5% of the capital assets gain or 5% of the revenues. Dutordoir *et al*. (2015) demonstrated that stock price reactions to brand value changes are more positive for firms with high cash flow vulnerability, valuable growth opportunities, and high potential for further product or service price increases. They obtained evidence of significant abnormal stock returns on brand value announcement dates, with a brand to firm value conversion rate of approximately 4%. Chehab *et al*. (2016) showed that the companies' brand values and capitalization are significant contributors to cumulative abnormal returns (CARS), and the annually rebalanced portfolio outperformed the industry average by 3.45% and the S&P 500 by 8.99%.

This study introduces key global brand valuation authorities and the methods they applied for brand valuation. The impacts of profits, assets and revenues on brand evaluation are investigated as the regressors separately to estimate the brand value of Fortune Global 500 in 2021 and to propose diverse operation strategies for improving the brand value and for sustaining the life of brand. Five global brand valuation authorities and the methods they applied for brand valuation are briefed followed by the data description for later analysis. Results of cross-section regression are applied to Fortune Global 500 in 2021 for estimated brand value and brand innovation strategies are proposed last for the improvement of their brand values.

2. Evaluation of Brand Values

Brand is the most valuable intangible asset of the enterprise, and a well-known brand will win a broader space for development. When enterprises continue to attach importance to brand development and strengthen soft power construction, they begin to seek professional institutions to value and endorse brands. In recent years, some corporate management consulting companies and brand evaluation agencies have released various brand value lists. However, there is still no unified consensus on the quantitative assessment of brand value. When an enterprise is faced with investment and mergers and acquisitions, capital raising, brand licensing, franchise, and other issues, assessing the brand value of a company will be essential. Table 1 lists the history of key global brand valuation authorities and the methods of brand valuation.

Table 1 shows that there are some differences in the definition of brand value and its evaluation indicators among the five global brand value evaluators. From the perspective of institutional history, BrandZ was established at the earliest and GYbrand was established relatively late. From the perspective of the first release of the global brand value ranking, Interbrand is 20 years earlier than GYbrand. Of course, the release time is not everything, and the quality of the list is more worthy of attention. From the perspective of institutional headquarters, there are three in London, England (BrandZ, Brand Finance, Interbrand), one in New York (World Brand Lab), one in Guangzhou, China (GYbrand). It is worth mentioning that in the field of brand value research, it is rare to have a Chinese institution. Because the establishment is relatively late, it is normal that the influence at this stage is relatively low.

Interbrand has strict standards for overseas revenue scale and sustained profitability, and pays more attention to the global strategic layout of enterprises. As a result, only Huawei was selected in 2021. The other four institutions did not have this requirement, so more Chinese brands were selected. World Brand Lab judges the brand based on its world presence, rating the brand but not counting the specific value. The remaining four companies calculate and publish the specific value of their brands through their respective evaluation methods. From the perspective of the number of brands on the list, BrandZ and Interbrand are only 100, while Brand Finance, GYbrand, and World Brand Lab are all 500. Apple, Amazon, Google, and Microsoft are all in the top 4 of the five lists, and Facebook, Samsung, Walmart, McDonald's, Toyota, Tencent, Mercedes-Benz and ICBC also appear in the top 10 in two or three lists. In the five lists, the number of American brands selected is far ahead, and the number of Chinese brands selected ranks second, but there is a huge gap with the United States. Compared with developed countries, Chinese enterprises are still in the stage of "large rather than strong". The development of Chinese brands is relatively late and the global visibility, influence, discourse power, brand value and overall reputation are relatively low. The road to global brand building is still a long way to go for Chinese enterprises.

Table 1. Key global brand valuation authorities and the methods of brand valuation.

	BrandZ	Interbrand	Brand Finance	World Brand Lab	GYbrand
Establishment	1973	1974	1996	2003	2017
Headquarter	London	London	London	New York	Guangzhou
First Issue	2006	2000	2007	2004	2020
Number Listed	TOP 100	TOP 100	TOP 500	TOP 500	TOP 500
Oversea Revenue	×	√	×	×	×
Long-term Profit	×	√	×	×	×
Financial Performance	√	√	√	×	√
Brand Value	√	√	√	×	√
Major Index	● Financial Value ● Brand Contribution	● Brand Performance ● Brand Force ● Brand Strength	● Brand Strength Index ● Brand Franchise Rate ● Brand Revenue	● Brand Share ● Brand Loyalty ● Global Leadership	● Brand Strength ● Brand Contribution ● Financial Performance
Top 10 Brand in 2021 ($m)	Amazon 683.85 Apple 612.00 Google 458.00 Microsoft 410.27 Tencent 240.93 Facebook 226.74 Alibaba 196.91 VISA 191.29 McDonald's 154.92 MasterCard 112.88	Apple 408.25 Amazon 249.25 Microsoft 210.19 Google 196.81 Samsung 74.64 Coca-Cola 57.49 Toyota 54.11 BENZ 50.87 McDonald's 45.87 Disney 44.18	Apple 263.38 Amazon 254.19 Google 191.22 Microsoft 140.44 Samsung 102.62 Walmart 93.19 Facebook 81.48 ICBC 72.79 Verizon 68.89 WeChat 67.90	Google Amazon Microsoft Apple Walmart AT&T McDonald's BENZ Toyota NIKE	Apple 310.54 Amazon 294.45 Google 236.61 Microsoft 184.89 Samsung 110.09 Facebook 104.14 Walmart 98.37 ICBC 76.91 Tencent 69.77 Toyota 67.23
Impact	****	****	****	***	***
Quality	****	*****	****	***	****

Sources: iCBO 2022

2.1. BrandZ

BrandZ's Top 100 Most Valuable Brands in the World is a list released by Kantar, a research firm owned by (Wire & Plastic Products Group, WPP Group), the world's largest communications group. Since the list was first published in 2006, BrandZ has studied brands that have been integrated into consumers' daily lives, using a unique brand value assessment method in the industry, combining consumer survey results with corporate financial performance analysis, and comprehensively considering the financial performance of brands (source

Bloomberg data) and brand contribution value obtained based on consumer research. BrandZ Brand Valuation is processed as: The first step, calculate financial value (Financial value = Corporate earnings attributable to a particular brand × Brand multiplier) that is like the P/E ratio multiple of the stock market. The second step, calculate brand contribution Brand power is a BrandZ brand equity indicator, representing the consumer's tendency to choose a particular brand. BrandZ believes that meaningfulness, differentiation, and prominence are the drivers that drive purchases or get consumers to pay a premium. The third step, calculate brand value (Brand value = financial value × brand contribution) that is presented as a percentage of financial value. BrandZ has strict criteria for the financial performance of the enterprise, and all the brands on the list must be listed companies. In addition, BrandZ is the only brand value list that incorporates consumer opinion into the evaluation indicators, and consumers' daily purchase decisions affect the brand's position in the list.

2.2. Interbrand

Headquartered in London, UK, Interbrand is one of the world's largest integrated brand consultancies, part of Omnicom Group and a pioneer in brand value research. As the first brand value appraisal system to pass ISO10668 international certification (outlining the requirements for brand currency valuation), Interbrand has published the list of the world's top 100 brands for 22 years, and the entire analytical methodology is recognized by the industry as a tool with special strategic management value.

Interbrand defines "the way in which the ball brand: (1) more than 30% of the revenue must come from outside the country; (2) must occupy a key position in Asia, Europe, North America and is widely involved in emerging developing countries and regions; (3) must have sufficiently public financial information; (4) must be profitable for a long time; and (5) must have a high brand image and visibility in major global economies."

The direct-to-consumer requirement excludes many B2B companies that do not have a direct relationship with consumers. For example, China State Construction Group Co., Ltd. ranked 21st on the 2019 Fortune Global 500 list, with very high revenue and profit, but it is difficult to assess the brand value of this company. Interbrand brand valuation is processed as: (1) Calculate the financial performance of branded products and services. Financial performance is a measure of the original financial benefits that a brand brings to its investors, using the concept of economic added value to analyze, and forecasting future financial performance based on publicly available financial information; (2) Calculate the brand force in the consumer's purchase decision-making process. The brand force is an indicator that measures how the brand affects the consumer's purchase demand, which reflects the pulling force of the branded product or service to the consumer, and reflects the percentage of the brand directly contributing to the purchase decision when the customer makes the purchase decision; (3) Calculate the brand strength of the contribution owned by the brand to the future revenue. Brand strength is to measure the long-term profitability of the brand to its owners, and determines the most powerful aspects of a brand through the analysis of ten key internal and external indicators. In summary, the Interbrand method of evaluation mainly involves three levels of analysis, namely financial level analysis, market level analysis and brand level analysis.

Over the past 22 years, more than 170 companies have appeared on Interbrand's list of the world's best brands. On average, fewer than 4 brands have added or disappeared in a year and the evaluation results are quite stable. Among them, the number of American companies on the list has long occupied about half. In contrast, Chinese companies appear to be "big but not strong", and there have never been more than 2 companies on the list.

2.3. Brand Finance

Headquartered in London, Brand Finance is a world-renowned corporate brand evaluation and strategy consultancy published annually since it began compiling the Global Brand Value Ranking in 2007, and is widely recognized by major listed companies for its professionalism and independence. Brand Finance estimates future revenue attributable to patent use by calculating a brand's concession rate to achieve "brand value," the net economic benefit that a licensor can receive through a brand license in the open market.

The brand valuation of Brand Finance is processed as: (1) Calculate brand strength using a balanced scorecard that evaluates marketing investments, stakeholder assets and performance. Brand strength is expressed as a brand strength index (BSI) score, which ranges from 0 to 100; (2) Determine the range of concession rates for each industry, reflecting the importance of the brand to the purchase decision. For example, the rates are higher in the luxury industry and lower in the mining industry; (3) Calculate the franchise rate. By combining the brand strength index and the franchise rate range, the franchise rate for the brand is obtained.

For example, if the brand royalty rate ranges from 0.5% in an industry and a brand strength index is 80, the brand's usage rate in an industry is 4%; (4) Brand-specific revenue is determined by estimating the proportion of parent company revenue attributable to the brand; (5) Using historical revenue, market analyst forecasts and economic growth rates as a function to determine the specific revenue of the predicted brand; (6) Patent tax rates and forecast revenues are used to derive brand revenue; (7) Brand income is discounted to net present value after tax, which is equal to brand value.

Brand Finance has an independent brand value appraisal system, the rigor of its computing technology and the implementation process of complying with ISO standards, which is trusted by investors, financial institutions and enterprises that require to enhance their brand value in the global capital markets.

2.4. World Brand Lab

Headquartered in New York, World Brand Lab is the world's leading brand consulting, research, and evaluation organization. Founded by the 1999 Nobel Laureate in Economics Robert Mundell as its first chairman, World Brand Lab is wholly owned by the World Managers Group, whose research results have become an important basis for the valuation of intangible assets in the process of mergers and acquisitions of many enterprises. World Brand Lab released the "World's 100 Most Influential Brands" as early as 2004. Since 2005, it has released the "World Top 500 Brands" every year, and its judgment is based on the world influence of the brand. The so-called brand influence refers to the ability of the brand to expand the market, occupy the market and obtain profits. Based on three key indicators of brand influence (namely market share, brand loyalty and global leadership), 20,000 well-known brands around the world were scored, resulting in the launch of the world's 500 most influential brands.

2.5. GYbrand

Headquartered in Guangzhou, China, GYbrand is the only brand research institution born in China, affiliated to the 10guoying.com, and the first third-party brand evaluation and consulting institution in China to continuously publish the list of the world's top 500 brands, the top 500 Asian brands and the top 500 Chinese brands. Its research results have become one of the vanes for the evaluation of intangible assets of the most valuable brands in China and even in the world.

The brand valuation of GYbrand is processed as: (1) Calculate brand performance. Calculate earnings attributable to a specific brand based on open and transparent financial information (revenue, net profit, assets, and liabilities, etc.); (2) Calculate brand contribution. From several indicators such as relevance, differentiation, and force, the customer's tendency to choose a particular brand is estimated, reflecting the influence of the brand on the customer's purchase decision; (3) Calculate brand strength. Estimate the long-term profitability of a brand from several metrics such as awareness, reputation, loyalty, and more; (4) Calculate brand value. By weighting the brand performance, brand contribution, and brand strength index, the brand value is calculated. GYbrand has an independent and objective brand value evaluation system, adhering to rigorous research methods and meticulous investigation and analysis. Because of its professionalism and independence, it is widely recognized and trusted by global capital market investors, financial service institutions, industry associations and enterprises that want to enhance their brand value.

3. Brand Value Estimation

Since World Brand Lab judges the brand based on its world presence, rating the brand but not counting the specific value, the remaining four companies calculate and publish the specific value of their brands through their respective evaluation methods. Table 2 presents the descriptive statistics with different sample size considering the data availability from Fortune Global 500 in 2021.

Table 2 shows that the mean of brand value of our sample firms for GYbrand, BrandZ, Brand Finance, and Interbrand are 146,265.56, 84,976.16, 42,392.92, and 36,715.20 respectively, according to the rank order. The large coefficient of variance (CV) of BrandZ suggests that there is a large dispersion in mean of brand value across the brand value from BrandZ.

The values of revenues, profits and assets for these corresponding firms are all from Fortune Global 500 in 2021 with highest mean of GYbrand and lowest mean of Interbrand. A negative minimum profit indicates that even if it is included in the Fortune Global 500 list, there is still no guarantee of an inevitable profit.

Table 2. Descriptive statistics of sample data from global brand valuation authorities. (in million US$)

	Interbrand	BrandZ	Brand Finance	GYbrand
Brand Value				
Mean	36,715.20	84,976.16	42,392.92	146,265.56
S.D.	70,289.45	137,011.62	42,890.36	95,342.91
Minimum	5,832.00	19,468.00	17,750.00	67,230.00
Maximum	408,251.00	683,852.00	263,374.70	310,540.00
CV	134,566	220,911	43,394	62,149
Revenues				
Mean	92,070.79	111,245.47	129,526.18	239,869.41
S.D.	72,574.61	99,899.07	95,135.35	154,740.16
Minimum	24,996.10	24,362.00	24,996.10	69,864.20
Maximum	386,064.00	559,151.00	559,151.00	559,151.00
CV	57,207	89,710	69,876	99,823
Profits				
Mean	9,023.57	12,485.23	10,564.36	30,880.57
S.D.	11,630.59	13,614.32	14,027.83	14,713.47
Minimum	-4,232.70	-5,944.00	-20,305.00	13,510.00
Maximum	57,411.00	57,411.00	57,411.00	57,411.00
CV	14,991	14,846	18,627	7,010
Assets				
Mean	407,054.10	598,020.85	626,183.24	842,655.76
S.D.	713,119.96	1,122,318.27	1,105,857.51	1,604,404.57
Minimum	31,342.00	31,181.50	31,342.00	159,316.00
Maximum	3,386,071.00	5,110,353.70	5,110,353.70	5,110,353.70
CV	1,249,318	2,106,278	1,952,976	3,054,763
Number of Sample	49	49	74	9

Sources: Interbrand, BrandZ, Brand Finance, GYbrand, iCBO 2022, Fortune Global 500

Table 3 presents the main findings of the study where multipliers are estimated by:

Model 1: brand multiplier = brand value / (operating profits - capital assets×5%)

Model 2: brand multiplier = brand value / (operating profits - operating profits×3%)

Model 3: brand multiplier = brand value / (operating profits - revenues×5%)

Regarding the model fit, Model 1 shows that the R^2 values in all the four model are relatively low, demonstrating that capital assets cannot well measured the brand multipliers. The estimated brand multipliers range from 0.2413 (Interbrand) to -0.2422 (Brand Finance) are also far from that suggested by literatures.

As can be seen in Table 3, Model 2 estimation of brand multipliers shows that the R^2 values in all the four model are plausible, ranging from 6.3055 (BrandZ) to 2.6545 (Brand Finance) with relatively better model fit and significance. It means that net profits will better measure the brand multiplier and the BrandZ measurement will create 6.3 times the annual net profits. Interbrand and GYbrand have a similar brand multiplier, approximately 4.6 times the annual net profits. Brand Finance's brand multiplier estimate is the smallest, at only about 2.65 times the annual net profits.

Model 3, which is based on revenues, has moderate performance between Model 1 and Model 2, but is higher than Model 2 in terms of brand multiplier valuation, with BrandZ having the highest valuation (close to 7 times). Brand Finance's brand multiplier estimate is still the smallest, at only about 2.08 times the annual revenues.

The results therefore support our central hypothesis. That is, firms with a higher level of operating profits also have a higher level of brand value as measured by brand multipliers. Our results demonstrate that firms' operation management positively impacts their brand value. In other words, the brand value reacts positively to the level of operation management because a higher level of operating management (either measured by assets, profits, or revenues) signifies brand image to achieve the optimal level of brand value.

Table 3. Brand multipliers estimation of global brand valuation authorities for different models.

	Interbrand	BrandZ	Brand Finance	GYbrand
Model 1	0.2413	0.1847	-0.2422	0.1454
(t-statistics)	(0.7800)	(0.4219)	(-1.8853)	(0.1739)
R^2	0.0125	0.0037	0.0464	0.0038
Adj. R^2	-0.0083	-0.0171	0.0327	-0.1212
Model 2	4.5864	6.3055	2.6545	4.5634
	(10.1993)**	(6.8308)**	(9.6622)**	(5.0594)**
R^2	0.6843	0.4929	0.5612	0.7619
Adj. R^2	0.6634	0.4721	0.5475	0.6369
Model 3	5.3189	6.9097	2.0778	4.6640
	(7.4093)**	(5.1595)**	(4.7467)**	(2.8124)**
R^2	0.5335	0.3567	0.2359	0.4972
Adj. R^2	0.5127	0.3359	0.2222	0.3722

* denotes significant at 5% level, ** denotes significant at 1% level

To further enhance our understanding of the brand multiplier to brand value, the estimated coefficients in Table 3 are applied to all 500 firms in Fortune Global 500 in 2021 and the results are described in Table 4.

The estimated mean brand value of Fortune Global 500 in 2021 using brand multipliers estimated from Interbrand in Model 2 is 14,669.69 million dollar, 21.5 times compared to Model 3 with 0.038 times in the CV. The result demonstrates Model 2 outperforms Model 3 in the reliability. This is true for BrandZ, Brand Finance, and GYbrand that net profits is a better measurement for brand multiplier as well as brand value compared to operating revenues and assets.

Table 4. Descriptive statistics of brand value estimation of Fortune Global 500 in 2021 using brand multipliers.

	Interbrand			BrandZ		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Mean	-2,986.61	14,669.69	682.36	-2,285.93	20,168.44	886.44
S.D.	7,135.55	34,550.30	38,312.66	5,461.50	47,501.05	49,771.28
Minimum	-50,604.09	-105,361.34	-167,625.79	-38,731.99	-144,854.71	-217,759.63
Maximum	9,944.62	255,407.81	235,318.53	7,611.54	351,144.22	305,698.04
CV	-17,048	81,373	2,151,165	-13,049	111,875	2,794,540

	Brand Finance			GYbrand		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Mean	2,998.33	8,490.54	266.56	-1,799.37	14,596.39	598.34
S.D.	7,163.56	19,997.07	14,966.49	4,299.01	34,377.68	33,595.41
Minimum	-9,983.67	-60,981.17	-65,481.49	-30,487.87	-104,834.91	-146,986.85
Maximum	50,802.77	147,825.27	91,925.04	5,991.42	254,131.68	206,344.91
CV	17,115	47,097	840,333	-10,271	80,967	1,886,303

4. Strategies to Enhance Brand Value

4.1. Buying Is Better than Creating

In generally, the media investment alone costs at least $200 million to create a brand. If a company tries to enter a new market or an oversea market, it will undoubtedly invest more financial resources and energy in brand expansion, and it will also encounter the exclusion of various forces in the original market. At this time, using the power of capital to expand the brand and enhance the value of the brand has become the preferred strategy for some enterprises. One way to successfully operate as a multinational brand is to be good at acquiring local brands and promoting them to international brands. This brand strategy not only pays off globally, but allows it to build a stronger bond between local brands and consumers as well.

4.2. Strong Alliance

The promotion of brand value can also be achieved by joining forces with other brands to quickly expand their brand image, thereby creating more added value. Well-known international large enterprises are often good at using their strong brand appeal and market advantages in their respective industries to join hands with leaders in other industries to strengthen their brand image by expanding in greater market depth and breadth. Since this kind of cooperation is often based on the win-win situation of the two or more parties of the cooperation, it is easier to get positive feedback from partners and the market. Expanding new business areas will help their products to cover a wider market space, it is precisely because of this advantage of cooperation so that their brand value in their respective fields has been truly improved. The joint efforts of large enterprises can help them quickly establish brand value in new markets. Small and medium-sized enterprises can also use this method to rely on the advantages of others to enhance their brand value by forming alliances with enterprises with strong brand awareness. The most critical of which is to find the point of convergence of cooperation and play their own comparative advantages.

4.3. Brand Extension

Brand extension strategies include sub-brand strategies and multi-brand strategies. Sub-brand strategy is a brand strategy between one brand of multiple products and one brand of one product, which is to use consumers' trust and loyalty to existing successful brands to promote the sales of sub-brand products. The choice of sub-brand strategy can effectively guide consumers to break through the original consumption stereotype, accept and recognize new products, and quickly transfer the trust and loyalty to the main brand to new products. The use of the difference in functions and personalities between brands can win users with different needs. Since each brand has its own development space, there will be no market overlap so that it has a very high market share in various industries. In addition to accurate market positioning and grasp of demand differences, the most important thing to implement the multi-brand strategy is to always seek and strengthen the line that can string together various brands, the core spirit of the brand that overrides various products, and the consistent consumer experience bring to the users.

4.4. Channel Intensive Penetration

To expand and enhance a brand, it is necessary to let the target users and potential users see the corporate brand quite often. Because the brand value ultimately comes down to the user's purchase behavior, and to make the user complete the purchase behavior, it is necessary to reduce the psychological costs and behavioral costs of implementing this behavior. It is easier for users to think and familiar to buy. To achieve this effect, strong channel support is required, especially to dense the sales terminal and increase the penetration of the regional market. Similarly, effective channel penetration can be adopted for enterprises in a relatively weak position to obtain beneficial results, such as in the rural areas with relatively low awareness rate using rapid laying of channels to effective control this market segment at a lower price.

4.5. Take a Free Ride

Free-riding is to be good at taking advantage of the situation to enhance the brand, to let others do the early development and the most difficult things, and to rely on their own individual advantages to pick up the existing results of others. This strategy is more suitable for small and medium-sized enterprises with the characteristics of flexibility and can quickly cut into new opportunities without overly considering whether the entry of new markets will follow its previous style and whether it will have a negative impact on other products. From another point of view, if the market share and living space of other brands are controlled within a certain limit, they will not be suppressed because the loss of capital costs of suppression is far greater than the loss of market share. Allowing a relatively small enterprise to control this part of the market share is also conducive to the formation of market order and market stability.

4.6. Challenge Industry Leaders

Challenging industry leaders can increase their value since it is easy to be recognized as a master and become a real master in the process of competing with and learning from the master. But challenging industry leaders is also a very dangerous thing. It is important to find a good entry point for the challenge to achieve a win-win situation, otherwise it may face a catastrophe.

5. Brand Value Innovation

Brand value innovation is to continuously improve products and services within a certain cost range, and use new brand values to meet the pursuit of higher value goals of customers for the original products or services. Brand value innovation can be to change the brand value attributes or to give the brand a new value attribute, such as develop the depth and of the existing brand, expand the new field of the brand, and manage and maintain the brand value through new business strategy to achieve the purpose of brand value creation and value appreciation.

Enterprises carry out brand value innovation to improve customer perceived value and reduce their sensitivity to costs. Brand value innovation can help customers to sort out and process information about brand value and simplify the customer purchase process as well as enhance customer confidence in purchasing, improve loyalty, and reduce the risk of purchase. It can increase the image value of the product, improve the psychological and emotional perception value of customers, and reduce the cost sensitivity of customers. On the other hand, brand value innovation can create value for enterprises. Through brand value innovation, it can enhance the extensive and lasting trust relationship of customers on related products, increase the frequency and type of repeated purchases, promote the value spillover of brand reputation, promote the expansion of brand equity, and establish an effective barrier for competitors to enter.

The key to the value of the brand is reflected in the competitive advantage of differentiated value, and is the difference in working performance, durability, reliability, and convenience brought about by the quality, performance specifications, packaging, design, style, etc. of the product. Quality differences are at the heart of brand value differences, and technology is the ultimate determinant of all quality. Enterprises in the brand value innovation must be led by technology because advanced technology can allow enterprises to develop and introduce new products earlier, and the first-mover advantage can make enterprises form a short-term monopoly.

The added value of the brand can also be brought by the service. There are many service problems when customers consume products, and enterprises should be responsive to customers and act quickly, especially for complaints. Responding quickly to customers and solving customer problems in a timely manner is an important guarantee for maintaining customer brand loyalty. Technical accuracy in providing support services must be appropriate, reliable, applicable, and able to solve the problem thoroughly. When providing services, enterprises must provide the whole process and all-round services in accordance with the commitment. It is necessary to ensure that the service personnel have sufficient affinity so the intangible service is formed and is of great significance for customer value perception and satisfaction. Brand association is the result of brand connotation shaping and personality strengthening to form a brand association value difference advantage.

Brand positioning determines brand characteristics and brand development momentum. Brand differentiation positioning ban be reached by brand performance association that can bring benefits to customers and thus promote the consumption of product characteristics. Brand performance association is related to the reliability, durability and service capabilities of the brand that includes the effectiveness and efficiency of services, and consists of design and style related to price and value to help separate brands from competitors. Brand competitive positioning is to deal with brand characteristics shared with competitors. After the brand is positioned, it must also have a clear and rich brand identity, creating or maintaining things and ideas that are related to the brand. Unlike brand image (an association external to a brand), brand identity is inspiring, hinting at how the brand image needs to be added or changed. Since brand identity is used to drive all brand creation efforts, its content must have depth, breadth, and relevance rather than an advertising slogan or a description of positioning. In the process of brand building, it is necessary to consider the reference system, similarities, differences, brand identification, value scheme, brand positioning, execution, consistency, brand system, brand leverage, tracking brand equity, brand responsibility system, brand investment, etc.

References

1. Aaker, D. A. (1992). Managing Brand Equity: Capitalizing on the Value of a Brand Name. Journal of Marketing, 56(2): 69-71.

2. Biedenbach, G., Bengtsson, M., & Wincent, J. (2011). Brand Equity in the Professional Service Context: Analyzing the Impact of Employee Role Behavior and Customer-employee Rapport. Industrial Marketing Management, 40(7): 1093-1102.
3. Chehab, A, Liu, J., & Xiao, Y. (2016). More on Intangibles: Do Stockholders Benefit from Brand Values? Global Finance Journal, 30: 1-9.
4. Datta, H., Ailawadi, K. L., & van Heerde, H. J. (2017). How Well Does Consumer-based Brand Equity Align with Sales-based Brand Equity and Marketing-mix Response? Journal of Marketing, 81(3): 1-20.
5. Dutordoir, M., Verbeeten, F. H. M., & De Beijer, D. (2015). Stock price reactions to brand value announcements: Magnitude and moderators. International Journal of Research in Marketing, 32: 34-47.
6. Gürhan-Canli, Z., Hayran, C., & Sarial-Abi, G. (2016). Customer-based Brand Equity in a Technologically Fast-paced, Connected, and Constrained Environment. AMS Review, 6(1-2): 23-32.
7. Herremans, I. M., Ryans, J. K., Jr., & Aggarwal, R. (2000). Linking Advertising and Brand Value. Business Horizons, 43(3): 19.
8. Leek, S., & Christodoulides, G. (2012). A Framework of Brand Value in B2B Markets: The Contributing Role of Functional and Emotional Components. Industrial Marketing Management, 41(1): 106-114.
9. Majerova, J., & Kliestik, T. (2015). Brand Valuation as an Immanent Component of Brand Value Building and Managing. Procedia Economics and Finance, 26:546-552.
10. Marquardt, A. J. (2013). Relationship Quality as a Resource to Build Industrial Brand Equity When Products Are Uncertain and Future-based. Industrial Marketing Management, 42(8): 1386-1397.
11. Matsumura, H., Ueda, T., & Sagane, Y. (2019). Data on the Correlations among Brand Value, Market Capitalization, and Consolidated Overseas Sales Ratios of Japanese Companies. Data in Brief, 23: 1-6.
12. Merrilees, B. (2016). Interactive Brand Experience Pathways to Customer-brand Engagement and Value Co-creation. Journal of Product & Brand Management, 25(5): 402-408.
13. Mizik, N., & Jacobson, R. (2008). The Financial Value Impact of Perceptual Brand Attributes. Journal of Marketing Research, 45(1): 15-32.
14. Nyadzayo, M. W., Matanda, M. J., & Ewing, M. T. (2016). Franchisee-based Brand Equity: The Role of Brand Relationship Quality and Brand Citizenship Behavior. Industrial Marketing Management, 52: 163-174.
15. Peterson, R. A., & Jeong, J. (2010). Exploring the Impact of Advertising and R&D Expenditures on Corporate Brand Value and Firm-level Financial Performance. Journal of the Academy of Marketing Science, 38(6): 677-690.
16. Rahman, M., Ángeles Rodríguez-Serrano, M., & Lambkin, M. (2018). Brand Management Efficiency and Firm Value: An Integrated Resource Based and Signalling Theory Perspective. Industrial Marketing Management, 72: 112-126.
17. Stahl, F., Heitmann, M., Lehmann, D. R., & Neslin, S. A. (2012). The Impact of Brand Equity on Customer Acquisition, Retention, and Profit Margin. Journal of Marketing, 76(4): 44-63.
18. Zhang, J., Jiang, Y., Shabbir, R., & Du, M. (2015). Building Industrial Brand Equity by Leveraging Firm Capabilities and Co-creating Value with Customers. Industrial Marketing Management, 51: 47-58.
19. Sok, P., & O'Cass, A. (2011). Understanding Service Firms Brand Value Creation: A Multilevel Perspective Including the Overarching Role of Service Brand Marketing Capability. Journal of Services Marketing, 25(7): 528-539.