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Intangible Capital: Culture of Innovation and its Impact on the Cash Flow Multiple

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Intangible Capital:

Culture of Innovation and its Impact on the Cash Flow Multiple

by

James Russell Gregory

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Business Administration
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DEDICATION

I dedicate this work to two colleagues from the Marketing Accountability Standards Board who recently passed away: Meg Blair and Roger Sinclair. Their work inspired much of my thinking about the accountability of intangible assets. Their friendship shall not be forgotten.
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The completion of this dissertation would not have been possible without the assistance of my dissertation committee. Co-chairs of the committee, Dean Moez Limayem and Professor Anand Kumar, provided perspective and patience from the beginning to the end answering every question with alacrity. The committee also included Dr. Steven Oscher, Professor Richard Plank, and Professor Sajeev Varki, who all provided insights along with a storehouse of knowledge that improved the quality of the dissertation.

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ABSTRACT

The definition for a *culture of innovation* (COI) is the perception of a company that prioritizes the advancement of new ideas that create value across all operations. On the face of it that seems a precious attribute for any company to nurture and exploit, but measuring and valuing a culture of innovation has proven elusive for corporations. There is a tendency to break down innovation into R&D, patents granted, and new product development and while these are all significant components of innovation a cultural definition is more encompassing of the entirety of a company and the financial results should be reflected in the financial performance as a whole.

The research for this dissertation utilizes the CoreBrand Index® (CBI) quantitative research database and fields for the first time an inquiry about 160 large public companies among engaged but impartial observers about their perceptions of the culture of innovation. The findings are then correlated to the cash flow multiple (CFM), which is a firm-wide financial variable. Analysis evaluates whether COI is more or less predictive of the CFM than historical attributes in the CBI. This dissertation verifies past research by the author and extends the study into new and expedient pathways to measure, value and manage intangible assets.
A *culture of innovation* is a very desirable attribute to be associated with a company. Such an attribute helps to position the company in the mind of the consumer, whether that person is purchasing a product or acquiring a share of stock ownership in the company. Apple comes to mind as an example of a company that has nurtured their image to create a culture of innovation that applies to both its corporate brand and its product brands. The financial result is that both the products and stock of Apple sell for a premium price over what would be expected of a generically branded company with the same product line.

Culture of innovation (COI) is defined as the perception of a company that prioritizes the advancement of new ideas that create value across all operations. The word perception in this context is important because this dissertation is about the perceptions of an audience of engaged but impartial observers of companies in the study. The perceptions held by these observers may not be the reality of the actual innovation that exists in these companies. However, the perceptions when aggregated across many interviews offer a consistent snapshot of companies from the public perspective, and when examined longitudinally they become a reliable tool to evaluate the effectiveness of business strategy and the resulting financial impact on a firm-wide outcome measure known as the *cash flow multiple* (CFM).

CoreBrand Index® (CBI) is a quantitative research survey that examines intangible attributes of 800 companies in a study that has been fielded consistently every year since 1990.
In 2016, the survey added a new intangible attribute culture of innovation to the study. The primary purpose of this dissertation is to examine the role of a culture of innovation in predicting whether a firm has a high or low cash flow multiple. This dissertation is about exploring the potential impact of COI on CFM as a potentially new gateway by which all intangibles can potentially be measured, valued and managed.

**Why Culture of Innovation is Relevant**

The senior executives of companies that measure innovation do so because they are investing in research and development (R&D) with the ultimate purpose of new product development. They want to understand that investments in R&D have a positive financial return and therefore they tend to look at hard measures such as new patents registered or revenue generated from new products. These types of measures only tell part of the story because as scientists and engineers will argue new product development is an asymmetrical process and often takes much longer to incubate ideas than the timeline being measured. Further, the most successful innovations may be incremental improvements to products, processes, or services that will not show up on a list of patents but provide significant improvements in revenue (Cordero, 1989).

Management may desire to better understand the culture of innovation within their own company by quantifying the attitudes toward invention among their employees. While these efforts will provide some insights they are hard to quantify as innovation can mean many things to different people depending on their perspective. Further, the development of a culture of innovation is not limited to new product development but can evolve from anywhere in the company (Morris and Langdon, 2008, Hansen and Birkinshaw, 2007).
The process of conducting internal research is in itself disruptive and difficult because finding the innovators may not be as apparent as interviewing the engineers and scientists if all incremental innovations such as improvements in customer service are taken into consideration. Then tying all the innovations within a corporate value is again problematic due to need to evaluate the before and after of all measured innovations (Dulkeith and Schepurek, 2012).

It is logical to understand how the development of an entirely new product would lead to identifiable revenue and that in turn may lead to a higher cash flow multiple. However, as previously stated not all significant innovations in a corporation result in new products, so it is desirable to know what factors allow a culture of innovation to thrive within a firm. Leadership, as demonstrated by the CEO, is most often associated with promoting a culture of innovation, but that seems more akin to a philosophical attitude toward conducting business. This emergence of a new way to think holistically about innovation in the culture of a corporation is described as pro-innovation, which is a culture that is open to both new thinking and business processes. This kind of corporation is also called ambidextrous because of its ability to consider that innovations can be found and exploited anywhere in the organization (Lee, Woo, and Joshi, 2017).

**Internal vs. external measurement**

The development of a consistent measurement system for evaluating a culture of innovation from within a company has not found acceptance across businesses, and an industry-wide solution has been unattainable. However, an external measure of softer attributes has existed for decades in the form of the CoreBrand Index (see Methodology, Chapter Three). The advantage of using an external audience of impartial observers for a survey is significant because it is less disruptive to the organization. When impartial observers offer their subjective opinions
about a company, those opinions are usually formed by their experiences with the company its products and services. The techniques utilized in the CBI examine the company holistically rather than by product lines, or divisions. The opinions of this audience are unencumbered with the question of whether the company is in reality an innovative company, but provide their perceptions based on the culture of innovation of the company. Surowiecki’s (2004) theory of the wisdom of crowds supports the CoreBrand Index research method (Surowiecki, 2004).

The Link Between Culture of Innovation and the Cash Flow Multiple

A firm’s willingness to explore and try new ideas is likely to have a measurable impact on the financial performance of the company. The definition of a culture of innovation is the perception of a company that prioritizes the advancement of new ideas that create value across all operations. A company-wide examination of the culture of innovation should lend itself to a company-wide financial calculation vs. evaluating each unique innovation. A company-wide calculation such as the cash flow multiple (CFM) of financial performance is preferred because it is a measure that examines the premium that can potentially be achieved by improving operations or perceptions of the company. The CFM is calculated by merely dividing the stock price per share by the cash flow per share, which provides a calculation that reflects the value of both the cash flow and the market capitalization. The CFM also has the advantage of being able to project expected returns into the future, which will help a company to evaluate the potential return on investment (ROI) for capital spending required for improving, for example, a culture of innovation. Again, the purpose of this dissertation is to examine the role of a culture of innovation in predicting whether a firm will have a higher or lower cash flow multiple.
Organization of the Chapters

The chapters are organized in the following manner: Chapter 1, the introduction, frames the study and identifies the research question and related hypotheses. The chapter provides an overview and background of the complex landscape surrounding the issue of intangible assets including the significant tax implications, legal and financial standards, as well as vested interests by third parties. Chapter 2, a review of the literature, examines the work by academics and practitioners on intangible assets such as a culture of innovation and how those assets create value. The chapter offers a roadmap of the historical context and the trended direction of brand equity. Chapter 3, the methodology, reveals the research behind the study including the demographic profile of the impartial observers, the rationale of the research method, and the impact of the findings in the context of their influence on the cash flow multiple, which is stock price divided by cash flow per share. The cash flow multiple is the premium effect on the stock market price, which the author labels intangible capital. The chapter also includes an examination of the data review process called CHRISP-DM as well as the actual method of analysis known as exhaustive CHAID. Chapter 4 presents the results of the analysis and provides observations and evaluations with supporting illustrations and graphics. The chapter addresses the research question and each of the hypotheses. Chapter 5, a summary and discussion, concerns the implications of the findings and contributions to the study. The chapter also identifies strengths and weaknesses of the examination and outlines future research opportunities. The appendix includes the MASB Validation and Audit Report of the CoreBrand Index, as well as a recent article by the author relevant to the subject matter.
Background of the Problem

A culture of innovation is an attribute that helps to explain the corporate brand. A company’s brand is currency because it is traded every day on the stock exchange and plays a role in every purchase decision made by a consumer. Despite their material importance internally grown intangible assets, such as brands, are not included in financial statements due to the U.S. accounting rules known as generally accepted accounting principles (GAAP), which has resulted in a lack of accountability for managers and deficiency in transparency for investors. Even acquired intangible assets that appear on balance sheets are evaluated annually for impairment but not for accretion. In other words, intangibles can decline, but not grow in value, which runs counter to the evidence of their explosive growth. To be clear, the author is not recommending new accounting standards or arguing for existing ones to be changed in the immediate future. Rather, the author is seeking to make the return on investments in intangible assets more transparent with supplemental financial reporting and to provide useful insights for the key stakeholders who require this information.

The material value of intangible assets is evident in their growth. According to the consulting firm Ocean Tomo (2017), intangible assets as a portion of total enterprise value have grown from an average of 17% of market cap in 1975 to 84% of the value of a company in the stock market in 2015 (see Figure 1.1).

A managed corporate brand can have a significant impact on a firm’s financial performance, but demonstrating its strength requires quantitative market research and a transparent financial model. Corporate brand measurement is a function of identifying the appropriate audience and determining the level of familiarity with and favorability toward a specific company and a set of peers. Once familiarity and favorability levels are established, then
the process of linking those factors to market capitalization is determined by the cash flow multiple. The research stems from a body of knowledge that has been gained from nearly three decades of the author’s quantitative research on the CoreBrand Index® (CBI). The group that I managed from 1990 through 2013, which included Brad Puckey and Jack Frey, discovered the link between corporate brands and market capitalization through multiple regression analysis and codified the results by performing the protocol consistently for 800 companies and across 50 industries (Gregory, 2015b). As a practitioner-scholar, I have often utilized the CBI to help CEOs leverage their corporate brands to meet their strategic goals, thereby yielding material value for public and private companies.

**Figure 1.1.** Components of S&P 500 market value demonstrating growth of intangible assets.*

*Adapted From “Intangible Asset Market Value Study, 2017,” by Ocean Tomo, LLC, 2017. Reprinted with permission. © Copyright by Ocean Tomo, LLC.

The premium value branding activities bring to product (Aaker, 1991; Keller, 1993, 2001, etc.) and corporate brands (Mizik and Jacobson, 2004) have been the focus of numerous
academic studies. This dissertation will duplicate and confirm past findings from the author’s CBI research on corporate brands and will extend it by adding a new attribute.

**Statement of the Problem**

While there is overwhelming evidence of intangible asset value when a company is sold, this integral value is essentially unaccounted when the company is running at pace. It is from this need that a theory of intangible capital is evolving (Monga, 2016). This dissertation utilizes a reliable and demonstrated CBI model that when extended with additional attribute of a culture of innovation may possibly resolve both accountability issues for managers and provide transparency for investors while maintaining current accounting rules. The research fills a vacuum created by unaccounted assets by affirming that internally grown intangible assets can be measured, valued, and managed without changing current accounting standards.

**Purpose**

This dissertation is based on the author’s observed need for senior managers, bankers, and investors to begin assessing the financial performance of a company’s intangible assets separate from the GAAP approved methods of accounting in which internally grown intangible assets are not reported on financials. The purpose of the dissertation is to produce a discrete window into the performance of intangible assets to determine whether a company’s investment in internally grown intangible assets yields measurable results and a return on investment (ROI). This dissertation expands empirical knowledge about how corporate brands create value and provides a construct for measuring, valuing, and managing an extended set of intangible assets.
The CoreBrand Index utilizes quantitative research among a set of impartial observers who are conversant in corporate brands. The research measures the impartial observer’s familiarity with corporate brands and favorability toward the attributes of corporations to devise historical brand power ratings. The CBI measures have been utilized historically to identify the strength of the corporate brand and ultimately its financial impact on the company. For this dissertation, the author verified the role of each of the existing attributes in influencing market capitalization. Specifically examined are the effects of three historical attributes of the company (a) overall reputation, (b) perceptions of management, and (c) investment potential on the cash flow multiple, which is a surrogate for market capitalization. The predictive impact of a new CBI attribute was subsequently: (d) culture of innovation on the dependent variable cash flow multiple. Finally, the aggregate effect of the attributes on market capitalization was examined as identified by the cash flow multiple.

Research Question

- Q1. What are the effects of (a) overall reputation, (b) perceptions of management, and (c) investment potential on the cash flow multiple (verification and replication of prior research)?
- Q2. What are the effects of (d) culture of innovation on the cash flow multiple?

Hypotheses

H1a: An impartial observer’s perception of a brand’s overall reputation will have a positive effect on the firm’s market value.
H1b: An impartial observer’s perception of a brand’s perceptions of management will have a positive effect on the firm’s market value.

H1c: An impartial observer’s perception of a brand’s investment potential will have a positive effect on the firm’s market value.

H2: An impartial observer’s perception of a brand’s culture of innovation will have a positive effect on the firm’s market value.

**Overview of the Methodology**

The CoreBrand Index was developed to help researchers understand whether intangible assets, specifically corporate brands, could be measured, valued, and managed for value accretion (Gregory, 1997a). The quantitative study was launched in 1990, and the research has been conducted continuously throughout the subsequent years among a target of 8,000 impartial observers of highly engaged opinion elites/business decision-makers (for detailed demographics see Chapter 3). Based on observed experience, these research methods have been utilized in corporate brand, strategic decision-making by major corporations including but not limited to Cisco Systems, Dell, Ford Motor Company, and Union Pacific. Today, CBI tracks over 800 companies, stands as the oldest and largest measure of corporate reputation in the United States, and has been fielded continuously over multiple decades (Fischer & Hornig, 2014). It remains the only corporate brand research and valuation model to be audited and validated (see Appendix A; Kuse, 2011).

The CBI research study and the related models are a set of tools developed to help executives manage the potential future impact of strategic decisions on their corporate brands.
and ultimately on enterprise value. Extensive study of the CBI research database finds that corporate brands have two primary financial effects on a company:

1. *Revenue premium:* Consumers prefer to do business with companies they know and like, which impacts revenues. It was difficult, however, for the research organization (Gregory, Frey, & Puckey) to build a generalizable cross-database revenue model because every company requires an individualized, custom metric based on their manufacturing, distribution, sales, and management systems (Puckey, 2012).

2. *Stock premium:* Investors prefer to buy the shares of businesses they know and favor. Through regression analysis of the factors that drive stock performance, evidence indicates that cash flow, expected cash flow, earnings growth, dividends, as well as corporate brands all played a role in stock valuation. Thus, the corporate brand of a company performed a measurable function in providing a premium on the company’s stock price to varying degrees across all the companies and industries tracked (Gregory, 2010).

Academics and industry managers who have examined CBI’s methods find the market-based method and consistency of the longitudinal survey offers key advantages. For example, Fischer and Hornig (2014) found in one academic study, which compares various competing brand valuation methodologies, that:

The idea of a market-based approach, such as the CoreBrand model or the model by Simon and Sullivan (1993), is to separate the brand value from the observed market capitalization of the firm. The major advantage of this approach is its consistency with capital asset pricing theory and fair valuation principles (Fischer & Hornig, 2014, p. 5).
Most interestingly, the CoreBrand model further demonstrates a strong predictive ability for future returns with respect to 5 and 11 months after new brand estimates are available (Fischer & Hornig, 2014, p. 23).

Fischer and Hornig’s (2014) study of all major brand valuation models also supported the market-based approach of the research and its connection to market capitalization when they wrote:

It appears that the market-based methods generally perform best along the various criteria. Specifically, the CoreBrand model turns out to be reliable and to converge with the results across different valuation categories. Most importantly, it has an impact on both immediate and future stock returns (Fischer & Hornig, 2014, p. 27).

*Intangible capital,* as envisioned by the author, ultimately comprises non-binding, non-GAAP, non-financial guidelines that provide the estimated percentage of a company’s total market capitalization, which is based on its intangible assets. The intent of the research is to provide this estimate without disrupting current accounting standards. Ideally, the results would be used by managers in a similar fashion to earnings before interest, taxes, depreciation, and amortization, commonly known as EBITDA.

**Variable Selection**

Intangible assets are difficult to describe and measure, which is why it is important to identify and place parameters on the intangibles being evaluated. The attributes measured historically in the CBI comprise (a) overall reputation, (b) perceptions of management, (c)
investment potential, which were selected to help explain the corporate brand, but a component of this developing theory of intangible capital is that these same variables can apply or be expanded to include a larger set of intangible assets. That is why we added a fourth attribute, (d) culture of innovation, to the study in 2016. Marr (2008), who has written numerous white papers on how to measure and value intellectual capital, tackled the question of which intangibles should be measured. Marr (2008) argued that not all intangibles are valuable and only those that drive value or organizational goals should be measured through surveys or other research. According to Marr (2008), all intangible resources (intellectual, human, structural, and relational) that contribute to an organization’s goals should be identified and assessed for value.

The primary goal of identifying intangible capital is to provide useful and valuable insights to a company. Usefulness can be defined as having the desired effect of being able to manage the intangible for the creation of value (or at least for evaluating the effectiveness of a corporate expense). Most intangibles can be identified as key performance indicators (KPI), which managers often use to assess intangibles assets. KPIs and intangible assets can be viewed as two sides of the same coin. They must be useful to the corporation in order to be meaningful. Marr (2008) also discussed the notion that once intellectual capital is identified, it can be measured, valued, and managed. Performance levels of intangibles can be assessed for improvement or deterioration, and specific activities can be evaluated for their impact on performance. This analysis can be used to develop new insights, evaluate risks, and adjust the strategic goals of a firm (Marr, 2008). Traditional financial reporting has not included any objective view or insights about intangible assets (Marr, 2008). The object of reporting them in this manner is to inform all stakeholders about the performance of investments made in
intangible assets. Marr (2008) supported the concept of creating standardized reports for intangible assets.

As Marr (2008) indicated, one of the primary hurdles that intangible capital must overcome is the issue of inconsistent reporting. Intangible capital theory is a market-research-based estimate of the entirety of the intangible asset universe. Some companies have their own way of measuring and reporting the value of intangibles such as voluntary reports. Marr noted that the contents in such reports vary widely both in terms of what is measured and reported, which makes it difficult to perform a key aspect of financial reporting—comparing companies and industries (Marr, 2008). A consistent measurement and reporting mechanism would allow for the consistent evaluation of results. A consistent measuring and reporting system, such as that posited in this dissertation, would not overcome all detailed measurement issues but it would narrow the arguments, such as whether investing in intangible assets has a return on the investment.

The question remains about the size and scope of the intangible asset universe. The International Financial Reporting Standards (IFRS 3, 2005) included five categories and 60 items in the definition of intangible assets (see Table 1.1). Problems arise when trying to explain the difference between the net tangible value of an enterprise and the total value of the company if the differences are invented (Sinclair & Keller, 2015).

Roger Sinclair served as a fellow on the Marketing Accountability Standards Board and we often debated the issue of intangible assets. The following is an excerpt of a draft of a paper Sinclair co-wrote in 2015 entitled, “A 21st Century Definition of Intangible Assets.”

In this document, Sinclair and Keller (2015) described how the quest for identifying the margin between the cost of production and the price realized in businesses has been identified
using terms such as goodwill, economic profit, and market premium, Tobin’s q, market-to-book ratio, and intangible assets were all developed to explain the difference between what is on the books and what value was created by intangibles and realized by the total value of the enterprise. Margin only describes the consequence of supply and demand, while beholders produce value based on their perspectives. An equity investor, for example, examines the cumulative value of the individual brands of a company, but the government might look at the tax base of the company, and a consumer might examine whether the company is being socially responsible (Sinclair & Keller, 2015).
<table>
<thead>
<tr>
<th>Marketing-Related Intangible Assets</th>
<th>Customer-Related Intangible Assets</th>
<th>Artistic-Related Intangible Assets</th>
<th>Technology-Based Intangible Assets</th>
<th>Contract-Based Intangible Assets</th>
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<tbody>
<tr>
<td>Trademarks, Trade Names, Service Marks, Collective Marks, Certification Marks (Brands)</td>
<td>Customer Lists</td>
<td>Plays, Operas, Ballets</td>
<td>Patented Technology</td>
<td>Licensing, Royalty, Standstill Agreements</td>
</tr>
<tr>
<td>Trade Dress</td>
<td>Order or Production Backlogs</td>
<td>Books, Magazines, Newspapers, Other Literary Works</td>
<td>Computer Software, Mask Works</td>
<td>Advertising, Construction, Management, Service, Supply Contracts</td>
</tr>
<tr>
<td>Newspaper Mastheads</td>
<td>Customer Contracts, Related Customer Relationships</td>
<td>Musical Works (Compositions, Song Lyrics, Advertising Jingles)</td>
<td>Unpatented Technology</td>
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</tr>
<tr>
<td>Internet Domain Names</td>
<td>Non-Contractual Customer Relationships</td>
<td>Pictures, Photographs</td>
<td>Databases Including Title Plants</td>
<td>Construction Permits</td>
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<tr>
<td>Non-Competition Agreements</td>
<td>Video and Audiovisual Material (Motion Pictures or Films, Music Videos, TV)</td>
<td>Trade Secrets, (Secret Formulas, Processes, Recipes)</td>
<td>Franchise Agreements</td>
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<td>Operating and Broadcast Rights</td>
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<td>Service Contracts (Mortgages, Servicing Contracts)</td>
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<td>Employment Contracts</td>
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<td>Use Rights (Drilling, Water, Air, Timber, Routes)</td>
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Sinclair and Keller (2015) explained the difficulty of complex measurement systems and valuation models. Scholars have known since Adam Smith that, in the economic exchange processes, buyers and sellers create equilibrium when they trade. An agreed price implies an acceptable result by both the buyer and the seller (Sinclair & Keller, 2015).

A near perfect model of an established equilibrium between buyers and sellers is the stock market. The stock market already factors brands and intangibles into prices as much as possible, based on the limited data about intangible assets offered in the financial statements of corporations. Yet the standard setters, such as FASB and IASB, make it more difficult to ascertain meaningful insights of intangibles by establishing valuation silos that have rigid rules and processes for examiners to attain an estimated valuation. While this process of valuation by silos may be required during a merger or acquisition (see Table 1.1) it is far too unyielding to serve other functions. In contrast, the research method in this dissertation provides an alternative, consistent, reliable, inexpensive, research-based approach that managers can use to measure, value, and manage their intangible assets.

**The Derivation of the CoreBrand Index®**

In 1990, Costello and Smith were members of the corporate communications and advertising committee of the Association of National Advertisers (ANA), with Costello serving as the chair of the committee at that time. Costello and Smith asked me whether there could be a link between corporate advertising and corporate financial performance, enabling management to recognize a return on investment. We began exploring this assignment through the auspices of ANA with representatives of General Electric (GE) and GTE Corporation (GTE) in support. We were introduced to the Marketing Science Institute (MSI), which in turn led us to Jack Frey. Frey
was an engineer working for DuPont and had developed a marketing model that addressed the need for more advertising dollars to promote products he had developed and were being test marketed. After meeting, we committed to working together on this project.

The phenomenon of corporate advertising impacting stock market value is well known but had lacked rigorous research. When a corporate campaign would launch and the stock of the company would often rise in the following weeks, Bernie Flanagan, former Executive Vice President, Dow Jones called the phenomenon a “happy coincidence.” There is a natural reluctance to discuss the phenomenon lest the advertising could possibly be considered stock manipulation. Nevertheless, enough anecdotal evidence caused the publishers and advertisers to express interest in better understanding how and why this phenomenon happened. For instance, The Wall Street Journal (WSJ) helped me to explore this potential opportunity for building a better understanding of how corporate branding impacts corporate financial growth.

In addition to Bernie Flanagan, we also worked closely with Tom Glass, director of agency relations, at the WSJ. Glass and Flanagan had created a research study called the Corporate Report Card (CRC). The CRC was used as a sales tool to contact various clients who had advertised in the newspaper. The WSJ asked me to review and critique the research survey of their subscribers. I identified diagnostic flaws that could be fixed to make it significantly better, such as the issue of vertical industry survey bias. Subscribers in an industry were surveyed about companies in that industry. Such a question would immediately skew the responses to reference the largest companies in the industry.

When I presented my findings and recommendations to Glass and Flanagan, it was announced that our champion, Flanagan, was retiring from the company. Further bad news came
when his replacement did not see the value of the CRC and, under budgetary pressure, discontinued the study.

It was then when I decided to launch the Corporate Branding Index, which eventually became known as the CoreBrand Index®. I developed a new survey with a horizontal audience (not industry specific) to correct the vertical bias, which would focus on a cross section of business decision-makers without being media specific.

Assumptions

The target audience of impartial observers, which are surveyed in the CoreBrand Index, is described in the methodology section of this dissertation as business decision-makers. The independence of the target audience is assured by its size and the method of acquisition the research firm utilizes (the acquisition details are proprietary). The assumption is that the method of research, including the targeted audience of business decision-makers for a corporate brand research study, is unbiased and independent. The author has confirmed the consistency of the research method and the neutrality of the business decision maker audience, which has proven reliable over decades of utilization and deployment.

Limitations/Delimitations

The CoreBrand Index research study is U.S.-based while many of the companies studied are large multinational firms. Therefore, a limitation of the study is that it does not represent a global view but rather one that is limited to the U.S. perspective. Yet the researcher’s own empirical observations and testing of international clients utilizing the CoreBrand Index methodology have revealed only minimal differences between observations by business
decision-makers in the United States and the specific corporation’s home country. Instead, findings indicate that both U.S.-based and overseas research studies were directionally similar. There was no such comparison made with the companies in this dissertation.

**Theoretical Framework**

Current tax practices have designated that expenses in advertising and marketing are deductible as a necessary business expense. Advertising is treated this way because it is assumed that its benefits do not extend beyond the current tax year (Moore & Stewart, 2016). Conversely, it is the author’s view that expenditures on the corporate brand are disbursements with the expectation of future returns and should be regarded as investments in intangible assets and not necessarily as expenses. Intangible asset measurement, valuation, and management for value accretion comprise the essence of my theory of intangible capital.

Intangible capital has been a growing area of interest for academics, economists, and practitioners for over three decades. Corrado, Hulten, and Sichel (2006) described the tremendous, unmanaged, and unaccounted value of intangible assets in countries and corporations. Corrado et al. (2009) examined the macroeconomic dynamics and gross underreporting of value when excluding intangibles. The authors estimated that, in 2003, as much as $800 billion was excluded from U.S. publishable data, leading to the elimination of more than $3 trillion of business intangible capital stock (Corrado et al., 2006, 2009). Corrado et al. (2009) wrote that the differentiating factor for intangible capital is whether or not the purpose of the investment is intended to make a return at some future point. They revealed that many intangible assets fall into that category and, therefore, must be treated as capital (Corrado et al., 2009).
The reason accounting practices identify expenditures on advertising as immediate expenses are based on the notion that once an advertisement appears, it quickly loses its impact (Moore & Stewart, 2016). That may be true of brand advertising for a product that is on sale for one week but that observation does not reflect the impact of corporate advertising. This dissertation demonstrates that this is not the case for corporate brands (see Chapter 4).

**Materiality of Corporate Brand Equity**

There are two types of brands: product brands and corporate brands. There are also two types of brand equity, *product brand equity* and *corporate brand equity*. Product brand equity is short term and transactional in nature, which is the kind that most brand valuation adherents (e.g., Aaker, 1991; Keller, 1993) and brand valuation firms assess. Corporate brand equity is long term in nature and builds the long-term value of the company (e.g. Gregory & Wiechmann, 1991). Ideally, the two types of brand strategy can and should but seldom do work together to create both long- and short-term value. Identifying how and when brands create value is the subject of many debates both within companies and with outside stakeholders. Yet ignoring corporate brand equity in favor of product brand equity is leaving money on the table. Both corporate and product brands should be measured, valued, and managed for accretion of value.

Corporate brands can and should be treated as the most important asset in the company not only because of the inherent value they possess but also because they influence the entire strategy of a company (Gregory & Wiechmann, 1991). In discussing the value creation source of corporate brands, Kitchen and Schultz (2003) theorized that corporate brand value is created from quality, authority, capability, price, and loyalty. They also presented the holistic view that corporate brands impact multiple stakeholders, such as customers, employees, and channels of
distribution (Kitchen & Schultz, 2003). Kossovsky (2012) explained the rationale for using objective measures and reputation metrics as well as the multifaceted role such metrics play on numerous stakeholders inside and outside the company. Kossovsky (2012) argued that the reputation of a company is material and therefore should be of concern at the board level of every corporation. Further, Kossovsky (2012) sought a solution, which would provide objective measures that would satisfy all key constituencies, from the financial markets assessing corporate performance to insurance actuaries concerned about reputation risk. Kossovsky (2012) rightly asserted that without consistent and objective reputation reporting metrics, the management of a company may second-guess business decisions based upon subjective ideas and input.

Kitchen and Schultz (2003) argued that the value of corporate brands stems from attributes such as quality, authority, capability, etc. These concepts run parallel to the CoreBrand Index attributes of reputation, perceptions of management, investment potential, and culture of innovation. Kossovsky (2012) focused on the materiality of reputation risk, which is the weakening of the measured attributes. The materiality of corporate brands is without question. The more pressing idea is that corporate brands can be measured, valued, and managed for value creation, which is the theory of intangible capital.

**Multiple Stakeholders of Corporate Brands**

Unlike product branding, which targets one consumer demographic with one marketing message designed to move that consumer to purchase a product, corporate branding addresses many differing stakeholders with a multitude of demographics (Gregory & Wiechmann, 1997). As Roper and Davies (2007) indicated, the emotional responses of various constituencies to a
corporate campaign are distinct from product campaigns. That is why the processes of measuring product brand and corporate brand audiences need to be different. The process of valuing and managing a product brand is singularly specific to that brand. It is differentiated from the process of valuing and managing corporate brands, which involves the company as a whole (Gregory, 2001).

To complicate matters, there is often confusion between corporate branding and corporate reputation. Corporate reputation is the sum of all the impressions a corporation makes on key constituencies (Gregory & McNaughton, 2004). Corporate branding is a strategy that attempts to craft and manage major messages to multiple key constituencies (see Figure 1.7; Gregory, 2015a). Therefore, it is highly important to know who those constituencies are and to measure them consistently through benchmark tracking research if the plan is to manage them to improve company performance. CoreBrand Index research does not follow the specific constituencies of each company it tracks, rather the audience of impartial observers serves as a surrogate for these varied audiences that may be otherwise difficult to track efficiently and consistently.

**Figure 1.2.** A corporate brand strategy. The strategy sends signals and messages to all key audiences through a filter of business processes, culture, and communications.*
Every company has key audiences that are vital for their survival. Typically, these audiences include customers, owners (shareholders), employees, prospects, community, media, partners, and the financial community (Gregory, 2015a).

### How Corporate Brand Building Works

When companies launch corporate advertising campaigns, most are designed to explain a new or evolving strategic corporate position. Campaigns might help to position a company for a new initiative such as a possible acquisition, merger, product launch, or an initial public offering. These campaigns help to clarify a company’s position to generate employee support and customer loyalty (Gregory & Wiechmann, 1997).

From an investor’s perspective, a company communicating a vision is a company that has a clear strategy in the marketplace. Companies that are actively managing their corporate brands might have a better chance of stock appreciation due to expected improvements in future cash flow. Therefore, the connection between advertising and upward stock momentum seems logical and uncomplicated.

Damodaran (2006) simplified and explained the complex problem of how different models are used to evaluate cash-flow generating intangible asset value. While the models do not generate cash flows independently, they enable a company to charge a premium price for its products, which generates more cash flow overall for the company. Damodaran (2006) suggested that the following are three ways to estimate the value of these intangible assets with a proposed fourth method offered by the author:
**Capital invested:** We can estimate the book value of an asset by looking at what a firm has invested in that asset over time. With brand name, for instance, this would require looking at advertising expenditures over time, capitalizing these expenses and looking at the balance that remains unamortized of these expenses today. While this approach is the least subjective, it may not match or even be close to the market value of the asset. It is, however, consistent with how accountants measure the value of other tangible assets on the books.

**Discounted cash flow valuation:** We can discount the expected incremental cash flows generated by the intangible asset in question to the firm. This will require separating out the portion of the aggregate cash flows of a firm that can be attributed to brand name or technological expertise and discounting back these cash flows at a reasonable discount rate.

**Relative valuation:** One way to isolate the effect of an intangible asset such as brand name is compare how the market values the firm (with the brand name) with how it values otherwise similar companies without a brand name. The difference can be attributed to the intangible asset. (Damodaran, 2006)

In addition to the models Damodaran (2006) described, I propose a fourth *CoreBrand valuation* method, which is compatible with the list of Damodaran’s valuation methods:

**CoreBrand valuation:** A quantitative market-research-based survey conducted with a neutral but engaged audience of impartial observers. Utilizing research data and financial performance data, the survey utilizes a regression model to identify the drivers of the company’s cash flow multiple. CoreBrand Equity is the percent of the explainable value of the company above what would be expected for a company of equal size in the same
industry. The brand equity value is extrapolated by multiplying the market capitalization by the brand equity percentage. (Gregory, 2015b)

The Significance of the Culture of Innovation

This dissertation takes a corporate brand metric that has an explanatory value of the cash flow multiple and is evolving it for the first time in 28 years by adding the new attribute culture of innovation. What this evolution represents is an expansion in measuring intangible assets and how they can create value and improves the predictability of the premium effect on the stock price as represented by the cash flow multiple.

This dissertation expands on what we know by doing something that hasn’t been done before and to ultimately support an emerging theory of intangible capital (see Figure 1.3) with the purpose of achieving:

- A consistent method for measuring intangible assets from an outside perspective;
- A model for estimating the value of intangible assets based on the cash flow multiple;
- A supplemental report of intangible equity value complimentary to but independent of current financial reporting standards.

The construct map displays the concept that market-based quantitative research can approximate a reliable and consistent estimate of the total intangible capital of a company, which can be calculated and utilized for making intangible assets more accountable.
The theory of intangible capital provides a framework for measuring, managing, and valuing internally grown intangible assets as potentially accretive or impaired components of the enterprise. It embraces those portions of financial standards that retain investments in intangible assets as expenses. Such a system, if implemented, can help marketers, business leaders, accountants, and investors to address the material gap involving intangible asset value in corporations.

This dissertation could also help leaders to think beyond product brand equity and begin to introduce the significant power and value available to them by measuring, valuing, and managing corporate brands. The theory of intangible capital does not explain every need for measuring or valuing each aspect of a business nor is it intended to do so. However, it provides a fair value measurement tool to consistently approximate the financial performance of intangible assets especially corporate brands.
Summary & Organization

This introduction provides an overview of the problem facing those responsible for managing intangible assets and the dilemma of being accountable for their stewardship. The complexities of changing GAAP to account for intangible assets would be overwhelming; therefore, the research does not test the standards of accounting. Instead, this dissertation introduces an alternative way of measuring, valuing, and managing intangible assets, such as the corporate brand. The system is known as the CoreBrand Index and consists of a long-term quantitative research study of impartial observers that has been fielded since 1990 along with models to measure, value, and manage corporate brands.

The research question under examination is based on CBI’s longitudinal quantitative, market-research survey and its connection to the cash-flow multiple. This dissertation duplicates and confirms the impact of the CBI historical attributes including (a) overall reputation, (b) perceptions of management, (c) investment potential on the cash flow multiple. The new attribute (d) culture of innovation is then examined by itself and together with the other attributes to determine if extending the variables to include additional attributes will improve the model’s ability to project the cash flow multiple.
CHAPTER TWO: 
LITERATURE REVIEW

What is Culture of Innovation and Why Measure it?

The definition of innovation is contingent upon whom you ask. Company leadership, as this literature review shows, often associates innovation with new product development, but it can also be seen as incremental steps to improve processes and create efficiencies within a company. Inside the company, a culture of innovation is one that expedites the process of ideation, development, execution, and delivery of new concepts that create value. As several articles point out, identifying that value and connecting it to stock performance is problematic. This literature review supports the notion that there is a need to better understand and measure how innovation fits into the culture and business processes of a corporation. However, the literature also identifies the disruption caused by attempts to measure innovation within a company. For the purpose of this dissertation a culture of innovation is defined as the perception of a company that prioritizes the advancement of new ideas that create value across all operations.

A Radically Different Approach

This dissertation offers a radically different theory of valuation measurement by identifying culture of innovation as an influential component of intangible assets that do not appear on a company’s balance sheet but are critical to its growth and market value. Rather than
research inside of a company, this work quantitatively measures perceptions of a firm’s culture of innovation from the outside among an audience of attentive but impartial observers. The method of research used for the ongoing study is known as the CoreBrand Index, which has been used to quantitatively research sets of intangible assets in the field since 1990; however, culture of innovation was only included in the study for the first time in 2016.

This dissertation examines and expands on the empirical knowledge about how a subset of intangibles, known collectively as the corporate brand, create value and provide a construct for potentially measuring, valuing, and managing a larger set of intangible assets. This literature review explores the research on the role of measuring and valuing brands in alignment with the following research question: What are the effects of (a) overall reputation, (b) perceptions of management, (c) investment potential, and (d) culture of innovation on market capitalization?

**Literature Search Strategy**

For this literature review, I utilized the University of South Florida (USF) Library online system and my personal library on topics relating to valuation methods especially as it relates to corporate branding. For specific searches of literature or particular authors, I used the online search mode of the site. For a broader view of the concepts, I utilized Google Scholar. Search terms included brand equity, brand value, corporate brand, culture of innovation, intangible assets, marketing measurement, measuring intangible assets, valuing intangible assets, intangible assets as loan collateral, theory of brand equity, reporting intangible assets, SEC intangible assets, FASB intangible assets, and IASB intangible assets. I found a significant amount of research on the importance of the value of innovation and culture, but very little relating to managing perceptions of culture to improve valuation. Innovation is recognized as important to
management to improve productivity and profits, on the other hand culture of innovation isn’t something that managers recognize as part of a valuable set of intangible assets.

**Cultural of Innovation Measurement and Metrics**

It isn’t easy for a company that is spending significant sums on R&D to manage those investments. Cordero (1989) identifies the need for accountability of investments in innovation, but also identifies the problems associated with both qualitative and quantitative research in measuring innovation performance within a firm, such as identifying exactly what to measure and at what levels to measure it. Cordero (1989) believes innovation measures are more helpful if used in a combination with marketable outputs to evaluate performance and to add discipline to the decision-making process of where and how much to invest (Cordero, 1989).

Morris and Langdon (2008) concur that accountability for innovation is both important and necessary. Morris and Langdon (2008) developed a systematic innovation measurement method called Innovation Metrics, which examines the process of new product development and identify how innovation contributes to the overall success rate throughout the process (Morris and Langdon, 2008).

**Innovation Value Chain**

It is difficult to examine a corporate wide view of innovation because there is a tendency to examine the effect of a specific innovation, such as a new product introduction, at an individual product level. Hansen and Birkinshaw (2007) identified that executives who want to improve innovation in their companies are usually focused on developing innovation around new product development, product lines, or services. They are usually concentrating on which ideas or products would have the largest impact on the business. Hansen & Birkinshaw (2007) point to a multi-faceted process for idea generation, development, and distribution, advancing a larger
start-to-finish view of the innovation process. They describe the cross-unit innovation value chain process as more effective than product development by department involving many individual steps based on vertical disciplines (Hansen & Birkinshaw, 2007).

Connecting measurement of innovation to accountability has also proven to be problematic. According to Dulkeith and Schepurek (2012) in an opinion paper for consulting firm Detecon, there is no shortage of innovation measuring techniques, but traditional measures such as ROI are not well suited for innovation where the return is hard to identify. Even the measuring process itself can be disruptive to the execution, motivation, and creativity actions of innovation. Instead, Dulkeith and Schepurek (2012) recommend that measurement among experts may yield the best results without disrupting the process of innovation. They identify that an ambidextrous organization that both explores and exploits innovation will offer the ultimate proof of performance (Dulkeith and Schepurek, 2012).

**Ambidexterity as a Characteristic of Culture**

The concept of an ambidextrous organization appeared repeatedly in my literature review and I wanted to understand the importance of the word to my research. Lee, Woo, and Joshi (2017) explore the construct of ambidexterity, which they describe a pro-innovation culture as a firm that encourages both exploration and exploitation while pursuing new product development. Lee, Woo, and Joshi (2017) explain that an ambidextrous, pro-innovation culture is one that is open to both new thinking and business processes. Defining pro-innovation in relation to the adoption of new thinking, Lee, Woo, and Joshi (2017) state that the definition of pro-innovation depends on whether the thinking is new and radical or represents only incremental improvements in processes. They point out that even pro-innovation organizations can appear to be underachievers when the new product development is the ultimate measure of success, which is
compatible with the CoreBrand Index research by examining corporations from a holistic perspective (Lee, Woo, & Joshi, 2017).

**Innovation and Performance**

The word innovation is widely used in annual reports and in titles of books but finding consistent measures of innovations are rare. Dobni and Nelson (2012) conducted a survey among Fortune 1000 executives that found that innovation levels are highly correlated with optimism in companies. While Dobni and Nelson (2012) found that U.S. companies were in the middle of the pack of global innovation, it was the lack of performance metrics for innovation that was the cause of this underachievement. Yet, as Dobni and Nelson (2012) point out, it is problematic to identify an exact correlation between innovation and performance. This is because innovation can mean many different things depending on who you are asking and the context of the question. For example if you ask a product manager about innovation they will respond based on a specific new product, but if you ask the same question of a CEO the question may be seen as relating to R&D in the pipeline. Dobni and Nelson (2012) conclude that a culture of innovation and performance are correlated because the study found that companies that are highly innovative perform better financially (Dobni and Nelson, 2012).

**CEO Leadership and Culture**

It is intuitive that a CEO sets the tone for the company’s culture but does that extend so far as innovation? According to Sattayaraska and Boon-it (2015), CEO transformational leadership logically leads to an adaptive organizational culture. Their study examines the mediating factors between the CEO, innovative culture, organizational learning, and new product
development. Sattayaraska and Boon-itt (2015) suggest that organizational culture is derived from practices, symbols, and beliefs about behavior. The CEO’s leadership style becomes a role model for employees and facilitates organizational learning. Sattayaraska and Boon-itt (2015) indicate that organizational culture is an important intangible asset that can differentiate a firm and make it more competitive (Sattayaraska and Boon-itt, 2015).

**Innovation and Shareholder Value**

Quantitative research connected to financial metrics is of significant interest as it runs parallel to the CoreBrand Index research model, but the findings of the McKinsey (2008) research is only of limited utility due to its point in time analysis in which case longitudinal studies are preferred. Nevertheless, McKinsey (2008) conducted a large survey of senior level executives on the subject of innovation metrics during the peak of the financial crisis. The respondents in the McKinsey (2008) survey stress the importance of innovation as a strategic priority, but nearly half do not track how innovation relates to or impacts shareholder value. When companies do track the relationship between innovation and shareholder value, the metrics that matter are growth of revenue, customer satisfaction, and sales generated from new product development (McKinsey, 2008).

Gregory, Satterfield, and Puckey (2018) identify a culture of innovation metric as an attitude toward cultivating growth opportunities and support that point of view with quantitative research that examines the company from outside the company among impartial observers. Gregory, Satterfield, and Puckey (2018) suggest that observers offer a subjective perspective on the company and form that perspective by some interchange or connection with the company. When taken in aggregate, these perceptions do not necessarily reflect the actual culture of
innovation at a company but rather the perceived culture from the outside. These perceptions can be a very convincing mirror when considered an influential component of the intangible assets of a company that do not appear on a balance sheet but are invaluable to a company’s growth and profitability (Gregory, Satterfield, and Puckey, 2018). (See Appendix B).

**Theoretical Valuation Framework**

Debate over the potential development of a unified brand theory has lingered for over three decades. While brand equity is a widely accepted paradigm, the ways of achieving a consistently measured result vary extensively (Davcik, da Silva, & Hair, 2015). The CoreBrand Index approach to measuring brand equity differs from most practitioners and academics’ approaches, which are focused primarily on consumer-based brand equity. In contrast, the CBI method has focused on measuring the attributes of the corporate brand and modeling those attributes against the cash flow multiple, thereby tying the performance of the brand directly to the stock market (Gregory, 2015b). This approach has solved many of problems such as inconsistency of data and lack of comparability that Davcik et al. (2015) identified as standing in the way of a theory of brand equity. As Sexton (2008) indicated, there is room to argue the methods and estimates of brand values among the top brand consultancies but there is a level of consistency to those values (Sexton 2008).

While corporate brands have often been ignored in favor of product brands, the CoreBrand Index, which has focused on the corporate brands of 800 companies, has addressed the issues of consistency, comparability, and reliability that plague the measurement of brand equity (Gregory, 2015b). Building trust for a methodology among the various stakeholders can best be achieved through the transparency of the research methods and the valuation model being
utilized. The CoreBrand Index model has utilized consistent and transparent methods and models since its inception as evidenced by MASB’s audit and validation examination of the CoreBrand Index (see Appendix A).

**Brand Equity**

Brand equity is a concept that rose to prominence in the early 1990s when the ability to manage the value of intangible assets became realizable. The concept stems from the necessity to explain value creation when intangible assets are unaccounted for on financial reports. Few leaders of brand equity measurement have had more impact than David Aaker and Kevin Keller. In *Managing Brand Equity: Capitalizing on the Value of a Brand Name*, a seminal book on branding and brand equity, Aaker (1991) defined the terms of branding and brand equity. Aaker (1991) broached the subject of intangibles as valuable and manageable. He then used historical examples to explain his principles with meaningful case studies. Aaker’s (1991) definition of brand equity has become widely accepted theory:

> Brand equity is a set of brand assets and liabilities linked to a brand, its name, and symbol that add to or subtract from the value provided by a product or service to a firm and/or to that firm’s customers. (p. 15)

While Aaker’s definition relates to product or service brands, his use of the word “firm” in the definition can and should, in this author’s opinion, also apply to corporate brand equity since the corporate brand and product brand have the ability to create premium value that accumulates for the benefit of the cash flow multiple (stock price per share divided by cash flow per share).
Common Techniques for Valuing Brand Equity

Most brand equity methods are based on the customer’s experience with the product and examined in the context of the competitive marketplace. Trent and Mohr (2017) identified four of the more common valuation techniques based on consumer demand for product brands: (a) the price premium is the willingness of consumers to pay a premium for a brand over a generic version of the same product; (b) customer lifetime value is the net present value of expected future cash flows of customers; (c) brand consultancies have proprietary models usually based on expert opinions; and (d) company experts identify the source of its profitability then weight the drivers to assess the percentage of profit attributable to the brand (Trent & Mohr, 2017).

Measuring Brands

Measuring brands is a critical first step to managing and valuing them. Without consistent measurement, there is no way to identify the changes that take place as a result of brand stimulation. Gregory and Wiechmann (1991) supported the idea that consistent measures of key attributes would yield reliable and statistically significant results. Gregory and Wiechmann (1991) established a consistent quantitative measure of familiarity with and favorability toward the corporate brand that became known as the CoreBrand Index®.

Keller (1993), a pioneer in understanding that the consumer has the power to make or break brands, advocated for measuring familiarity of and favorability toward consumer brands as an identifier of trust and brand equity. Gregory and Wiechmann (1997) reported on the scope of the favorability attribute, which included three sub-attributes appropriate for the corporate brand: overall reputation, perception of management, and investment potential.
**Categorization of Intangible Assets**

Diefenbach (2006) attempted to create a categorical system of intangibles, which is more of a theoretical concept that categorizing intangible assets drives the valuation solution rather than an overall theory of intangibles. Still, the paper puts forward a logical and practical argument for categorizing intangibles in the everyday business world. Diefenbach (2006) asserted that different perspectives call for different definitions but argued that it would be helpful if there was one overall construct that fit appropriately for each category. Yet, to Diefenbach (2006), it was unclear whether it was possible to create a system of measuring and managing intangible asset resources. Conceptually, Diefenbach’s (2006) ideas fit well with the CoreBrand Index concept that it is theoretically possible to create a system that works for measuring, valuing, and managing the corporate brand but it may not be appropriate for all requirements such as financial reporting (Diefenbach, 2006).

**Brands as Intangible Capital**

Linking brands to financial value management is the catalyst for both corporate and product branding. Fischer and Hornig (2014) developed the first apples-to-apples study comparing measurement methods and models of brand equity. Fischer and Hornig (2014) stated that:

> It appears that the market-based methods generally perform best along the various criteria. Specifically, the CoreBrand model turns out to be reliable and to converge with the results across different valuation categories. Most importantly, it has an impact on both immediate and future stock returns. (p. 26)
There are different ways to conceptualize and measure brand equity. Even among leading marketing academics, the contrast is apparent. The guiding tests should be: Do the measure and model make sense; are they useful for the purpose they are serving; and will they stand the test of time?

Aaker (1991) characterized intangible assets as valuable and manageable. Aaker (2004) used a master brand strategy and case studies to focus on helping managers to build a brand portfolio strategy. In *Building Strong Brands*, Aaker (1996) used case studies to describe how to create and manage brands. Brand relevance was an emerging trend and theme being used by consulting competitors (Aaker, 2012). Schultz and Schultz (2004a) discussed the importance of measuring and reporting brands so that everyone in a company could understand and benefit from the results. Schultz and Schultz (2004b) included a step-by-step approach for each major principle they recommended and tied their principles to brand equity measures. Similarly, Gregory, Levick, and Reibstein (2012) assessed brand damage to restore brand strength during a crisis and used the CoreBrand Index as the key component in the assessment.

New measures of brands have led to better and more predictable brand equity value. For instance, Gregory (2001) identified the bottom-line impact of corporate brand investment. Subsequently, Gregory and McNaughton (2004) outlined the connection between communications and financial performance as a new way of measuring ROI. Corrado, Hulten, and Sichel (2006) were at the forefront of intangible capital as a valuation measurement and made it more practical for researchers to evaluate its application for businesses.

Young and Rubicam (2018) defined the health of a brand as a combination of measuring four primary attributes: (a) differentiation as the distinctiveness of the brand, (b) relevance as to the meaningfulness of the brand, (c) esteem as an evaluation of the brand reputation in its
category, and (d) knowledge as a measure of how the audience understands the brand. In their model, consumers were surveyed and asked to rate the key attributes (Young & Rubicam, 2018). Brand health is evaluated based on brand strength, which examines the potential of the brand and brand stature, or the current status of the brand (Young & Rubicam, 2018).

Schultz and Schultz (2000) offered evidence of brand value as a percentage of market capitalization, which is based on Interbrand’s model. Fischer (2007) posited a new measure of financial valuation on a *fair value* basis even though FASB does not recognize fair value. Fischer’s (2007) model tested three consumer industries. Aaker (1991) recommended assessing brands because a value must be established between buyers and sellers. A rationale for an investment in a brand is required as a component of budgetary requests. After all, a bottom-line assessment helps a brand when it comes to validating the investment. Estimating the value of the brand and the potential impact of the investment justifies anticipated expenses and provides further support for the value of brands (Aaker, 1991).

Anticipating the decrease in value if a brand name is lost is one way that Aaker (1991) was able to estimate a brand’s worth. Another method for estimating brand value is to estimate the value of rebuilding the brand if the value were lost (Aaker, 1991). This assessment has been proven valid and foundational to the core idea that it is essential to have a continuous measurement benchmark in place for tracking corporate brands. As such, the consumer is represented as the retail purchaser of stock, and the stock market itself provides the financial assessment (Gregory, 2015b).
Parallel Tracks of Measurement

The CoreBrand Index has utilizes different terminology from Keller (1993) but both have an equivalent and parallel meaning. Familiarity with and favorability toward the corporation impact a corporate brand. The CoreBrand hypothesis is that everything the company says and does (consciously or unconsciously) through its culture, business process, and communications has a measurable impact on both the revenue and market cap value of the company. These parallels with existing theory recur throughout my dissertation. One outcome of this dissertation is a better understanding of the role of innovation within a corporation and how a company can benefit from and manage the recognition of having a culture of innovation.

Innovation in Business

Business leaders are likely to rank innovation high on the list of attributes they envision for their companies. However, the definition, management, and measurement of innovation in relation to how a company runs remain a topic of debate. Drucker’s (2014) foundational book, *Innovation and Entrepreneurship*, was first published in 1985 and revealed that business performance links business leadership and innovation. Drucker (2014) identified the historic beginning of innovation in business and how it is still the wellspring of entrepreneurship in today’s business world. While businesses have recognized the importance of innovation for survival, companies around the world spent 4–15% on innovations, depending on the industry (Hage, 1999). Dance (2008) offered over 30 definitions that led to one fresh summary: Innovation is fresh thinking that creates value.

Certain conditions allow a culture of innovation to thrive in a company. Kanter (2000) identified the conditions that lend themselves to an innovative business environment and
explored the many micro activities that are part of the inventive process in contrast to the demands of users of innovation. Kanter (2000) explained that the organizational, structural connections between the innovators and users are integral to the success of the innovation process. In an examination of how innovation is encouraged and implemented in the U.S. Armed Forces, Whittinghill, Berkowitz, and Farrington (2015) outlined specific ideas for managing and promoting innovation within an organization including communicating about the purpose of innovation, giving members time to think about innovation, encouraging collaboration, and not micromanaging the process of innovation. Yet Polley, Raghu, and Sankaran (1999) acknowledged that the innovative process is dynamic and not easy or linear but rather a journey of trial and error.

Again, the issue of measuring intangible assets, such as innovation, has become a pivotal topic for those who are required to manage those assets. Kaplan (2014) suggested several potential measurement tools to evaluate the effectiveness of innovation within an organization such as new patents and new innovations that come from employees and customers. Kaplan (2014) identified the goals for measurement of innovation as a process that targets leadership, employees, and customers. According to Davis and Rosenzweig (2015), pervasive innovation has driven new experiences, channels, value propositions, content, and communications, which are all part of the process of building what the authors called a “relentlessly relevant brand.” Gregory and Bridwell (2016) offered a counterpoint to Harvard’s Clayton Christensen’s notion of disruptive innovation, which identified innovative brand tools such as continuous quantitative measurement that the incumbent corporation can utilize as intelligence to counteract disruptive forces. Innovation by itself is not a differentiating factor for creating a culture of innovation. It is
only when intangible assets, such as innovation, are measured, valued, and managed that they become inextricably linked through a company’s culture to the corporate brand.

**Culture of Innovation Trends and Influences**

In a competitive environment, the culture of innovation and the dynamics of change are constant. Nelson (1993) edited a volume that offers an examination of how 15 countries defined and promoted innovation, which provides insights and historical context, such as how Japan developed and nurtured a culture of innovation and how that innovation became a component of national pride. Unger, Rank, and Gemunden (2014) examined national influence on the culture of innovation and identified two key dimensions of innovation including a process-oriented and a people-oriented perspective. Nonaka and Takeuchi (1995) examined the Japanese business model of continuous innovation that has built the automotive and electronics industries. Nonaka and Takeuchi (1995) also acknowledged that Japan has incorporated sustainability and renewability into their success model, which indicates that, rather than following a rigid process, they are adjusting to social pressures and trends. Gregory (2013) also discussed how sustainability can be identified as a component of the corporate brand and, as such, may have a measurable impact on corporate value. Capozzi, Gregg, and Howe (2010) discussed the results of McKinsey’s Global Survey that business executives from around the world answered and which quantified innovation as a factor of corporate growth strategy. They identified consistent individual and organizational factors such as recruitment of talent; collaboration between employees, and risk-taking that can either foster or block innovation (Capozzi et al., 2010). Companies that set high priorities for innovation usually outperform those that do not, which verifies the need for setting and measuring goals to determine if a company is meeting its
intended outcomes (Capozzi et al., 2010). Setting clear strategic goals, building a plan to achieve those goals, and then measuring progress is not new, but tying those measurements to valuation and the management of the company’s performance contributes to the literature on intangible capital.

**Measuring Brand Innovation in Business**

While innovation has been recognized as an economic driver, that observation has not often been measured quantitatively (Sidhu, 2016). An interesting experiment is taking place at the Sutardja Center for Entrepreneurship and Technology at UC Berkley, which has developed a continuous measurement system for assessing innovation among individuals and businesses. The Berkley Innovation Index (BII) is a new attempt to measure innovation in a holistic sense (Sidhu, 2016) in contrast to traditional methods of measuring the number of patents filed. Sidhu (2016) identified the innovation premium, which is the difference between the expected value from the innovations a company develops and the actual market cap. Sidhu (2016) also made the connection between innovation, corporate reputation, and ultimately valuation. BII is still in the development mode, but Sidhu (2016) has indicated that the index will ultimately act as a baseline for individuals and organizations that utilize its research modules to evaluate improvements over time.

Corporate valuation firms have often used a model called Tobin’s q equations to establish a ratio estimate for various components of innovation in a company such as R&D to assets, patents to R&D, and citations to patents. Trajtenberg (1990) found that improving the citations-to-patents ratio would have as much as a 3% impact on market cap. R&D is an intangible asset that is considered an investment with the potential to improve these ratios and that is utilized as
an indicator of the value of innovations thereby overcoming the limitations of financial accounting’s reportage of intangible assets (Trajtenberg, 1990). Trajtenberg (1990) labeled this evaluation as knowledge stock and connected it to boosting market cap.

Beyond Name Awareness

Name awareness and perceived quality are familiarity and the favorability attributes, which run parallel but are more attuned to the corporate brand. The favorability attributes are overall reputation, perception of management, and investment potential. CoreBrand’s company brand associations are based on the 800 companies across 50 industries measured.

Building trust for a methodology among the various stakeholders can best be achieved through the transparency of the research methods and the valuation model being utilized. The CoreBrand Index model has utilized consistent and transparent methods and models since its inception as evidenced by MASB’s audit and validation examination of the CoreBrand Index (see Appendix A).

Theoretical Framework

Debate over the potential development of a unified brand theory has lingered for over three decades. While brand equity is a widely accepted paradigm, the ways of achieving a consistently measured result vary extensively (Davcik, da Silva, & Hair, 2015). The CoreBrand Index approach to measuring brand equity differs from most practitioners and academics’ approaches, which are focused primarily on consumer-based brand equity. In contrast, the CBI method has focused on measuring the attributes of the corporate brand and modeling those attributes against the cash flow multiple, thereby tying the performance of the brand directly to
the stock market (Gregory, 2015b). This approach has solved many of problems such as inconsistency of data and lack of comparability that Davcik et al. (2015) identified as standing in the way of a theory of brand equity. While corporate brands have often been ignored in favor of product brands, the CoreBrand Index, which has focused on the corporate brands of 800 companies, has addressed the issues of consistency, comparability, and reliability that plague the measurement of brand equity (Gregory, 2015b).

**Brand Equity**

Brand equity is a concept that rose to prominence in the early 1990s when the ability to manage the value of intangible assets became realizable. The concept stems from the necessity to explain value creation when intangible assets are unaccounted for on financial reports. Few leaders of brand equity measurement have had more impact than David Aaker and Kevin Keller. In *Managing Brand Equity: Capitalizing on the Value of a Brand Name*, a seminal book on branding and brand equity, Aaker (1991) defined the terms of branding and brand equity. Aaker (1991) broached the subject of intangibles as valuable and manageable. He then used historical examples to explain his principles with meaningful case studies. Aaker’s (1991) definition of brand equity has become widely accepted theory:

> Brand equity is a set of brand assets and liabilities linked to a brand, its name, and symbol that add to or subtract from the value provided by a product or service to a firm and/or to that firm’s customers. (p. 15)

While Aaker’s definition relates to product or service brands, his use of the word “firm” in the definition can and should, in the author’s opinion, also apply to corporate brand equity since the
corporate brand and product brand have the ability to create premium value that accumulates for the benefit of the cash flow multiple (stock price divided by cash flow).

Common Techniques for Valuing Brand Equity

Most brand equity methods are based on the customer’s experience with the product and examined in the context of the competitive marketplace. Trent and Mohr (2017) identified four of the more common valuation techniques based on consumer demand for product brands: (a) the price premium is the willingness of consumers to pay a premium for a brand over a generic version of the same product; (b) customer lifetime value is the net present value of expected future cash flows of customers; (c) brand consultancies have proprietary models usually based on expert opinions; and (d) company experts identify the source of its profitability then weight the drivers to assess the percentage of profit attributable to the brand (Trent & Mohr, 2017).

Measuring Brands

Measuring brands is a critical first step to managing and valuing them. Without consistent measurement, there is no way to identify the changes that take place as a result of brand stimulation. Gregory and Wiechmann (1991) supported the idea that consistent measures of key attributes would yield reliable and statistically significant results. Gregory and Wiechmann (1991) established a consistent quantitative measure of familiarity with and favorability toward the corporate brand that became known as the CoreBrand Index®. Keller (1993), a pioneer in understanding that the consumer has the power to make or break brands, advocated for measuring familiarity of and favorability toward consumer brands as an identifier of trust and brand equity. Gregory and Wiechmann (1997) reported on the scope of the favorability attribute,
which included three sub-attributes appropriate for the corporate brand: overall reputation, perception of management, and investment potential.

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Aaker (1991) also presented intangibles as valuable and manageable. Aaker (2004) used a master brand strategy and case studies to focus on helping managers to build a brand portfolio strategy. In Building Strong Brands, Aaker (1996) used case studies to describe how to create and manage brands. Brand relevance was an emerging trend and theme being used by consulting competitors (Aaker, 2012). Schultz and Schultz (2004a) discussed the importance of measuring and reporting brands so that everyone in a company could understand and benefit from the results. Schultz and Schultz (2004b) included a step-by-step approach for each major principle they recommended and tied their principles to brand equity measures. Similarly, Gregory, Levick, and Reibstein (2012) assessed brand damage to restore brand strength during a crisis and used the CoreBrand Index as the key component in the assessment.

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Young and Rubicam (2018) defined the health of a brand as a combination of measuring four primary attributes: (a) differentiation as the distinctiveness of the brand, (b) relevance as to the meaningfulness of the brand, (c) esteem as an evaluation of the brand reputation in its category, and (d) knowledge as a measure of how the audience understands the brand. In their model, consumers were surveyed and asked to rate the key attributes (Young & Rubicam, 2018). Brand health is evaluated based on brand strength, which examines the potential of the brand and brand stature, or the current status of the brand (Young & Rubicam, 2018).

Schultz and Schultz (2000) offered evidence of brand value as a percentage of market cap, which is based on Interbrand’s model. Fischer (2007) posited a new measure of financial valuation on a fair value basis even though FASB does not recognize fair value. Fischer’s (2007) model tested three consumer industries. Aaker (1991) recommended assessing brands because a value must be established between buyers and sellers. A rationale for an investment in a brand is required as a component of budgetary requests. After all, a bottom-line assessment helps a brand when it comes to validating the investment. Estimating the value of the brand and the potential impact of the investment justifies anticipated expenses and provides further support for the value of brands (Aaker, 1991).

Anticipating the decrease in value if a brand name is lost is one way that Aaker (1991) was able to estimate a brand’s worth. Another method for estimating brand value is to estimate the value of rebuilding the brand if the value were lost (Aaker, 1991). This assessment has been proven valid and foundational to the core idea that it is essential to have a continuous measurement benchmark in place for tracking corporate brands. As such, the consumer is represented as the retail purchaser of stock, and the stock market itself provides the financial assessment (Gregory, 2015b).
**Integrated Marketing Communications (IMC)**

Schultz (1992) presented a breakthrough idea that changed the way advertising and corporate communications, including public relations, were conducted. Instead of building silos for communications disciplines within the corporation, the concept was that marketing would work more efficiently if it were integrated to achieve mutually identified goals and needs (Schultz, 1992). Don Schultz was one of the founders of integrated marketing communications (IMC) as a conceptual model, which Schultz, Tannenbaum, and Lauterborn (1993) introduced. Schultz and Schultz (2004a) argued for why communicating about brands is about communicating clearly and succinctly. Since helping to develop and build integrated marketing communications (IMC) as a new way to build cohesive marketing strategies, critics have tried to evolve the model into a newer form than what was intended. Lauterborn (2003) evaluated the progress of IMC to date and called for a reexamination of the basics of the model. Lauterborn (2003) developed a new concept called integrated customer behavior management (ICBM).

**Customer-Based Brand Equity**

focused on international consumer brands, and though less relevant to this research, that study revealed how the basic tenets of brand research connect to brand performance, which has universal applications.

On providing value to the customer, Aaker (1991) acknowledged that brand equity either bolsters or diminishes value for customers. Brands enable consumers to understand and process information about the products of interest. Additionally, brands help customers to compartmentalize and store large amounts of information such as quality and associations about the brands, which supports their satisfaction and improves their user experience. The example given is that jewelry branded as Tiffany can impact the experience of wearing it—the user feels the difference (Aaker, 1991). On customer-based brand equity, Keller (1993) defined the unique marketing effects attributable to the brand as the essence of brand equity when the effect is purposely managed as a result of marketing intent. For example, the same effect would not have taken place without the associated product brand name (Keller, 1993).

**Price Premiums for Brands**

If creating a differentiated effect is the goal of branding then the financial purpose of the differentiation is to create a price premium. Aaker (1991) said of the price premiums that the brand name and awareness along with associations, such as quality and loyalty, could build a price premium. Indeed, the notion that brand creates value is the essence of brand equity (Aaker, 1991).

According to Keller (1993), there are two reasons to account for brand equity. The first is the financial accounting required during a merger or acquisition. There is also the strategy-based marketing and productivity reason. Considering high costs and increasing competition,
marketing can be the great differentiator when the consumer makes a purchasing decision of one product over another. It only makes sense, then, that marketers need to better understand both the consumer’s perception of the brand and the costs associated with the marketing efforts undertaken to reach that consumer (Keller, 1993).

Keller (1993) expanded on the concept of brand equity by saying that brand equity occurs when both familiarity and favorability occur. Again, familiarity with and favorability towards a brand are the key components of measuring both product brands and corporate brands (Keller, 1993). As Keller (1993) noted about the attributes for consumer measurement, brand equity can be deciphered in several different ways depending on the need and purpose of the target goal. While the brand effect on a specific consumer is the most common measure, the goal is focused on analyzing marketing strategies and tactics associated with promoting product brands. Customer-based brand equity is the difference created by the influence on consumers and their response to the marketing of the brand. Therefore, identifying the value created informs the manager how effective marketing strategies were in meeting company goals (Keller, 1993).

Keller (1993) found that marketing could have either a positive or negative effect on the favorability of the product (or corporate) brand. Testing the product, price, and promotion against a fictitious or generic brand can help to identify the optimum marketing mix to achieve the most favorable outcome. Financially, a favorable response can lead to higher revenue, lower costs, and improved profits (Keller, 1993).

Keller (1993) was primarily interested in codifying the ways in which brands build loyalty. A loyal customer base is likely to create a firm financial base for any corporation, but there are many other aspects of finance that affect future financial performance, such as growth of the industry, market size, etc. Stock prices also reflect on the future financial expectations of a
corporation. Brand knowledge (i.e. brand power) is a combination of familiarity with the brand and favorability toward its attributes (Keller, 1993).

**Corporate Brand Equity**

While consumer product branding guidelines are well established in the literature, there has not been as much attention paid to the financial impact or measurement of corporate branding. Yet because corporate brand equity is measured by the premium effect it adds to stock price, it must be conceptualized differently than product brand equity, which is measured by the premium effect it adds to product pricing. Product brand equity is easier to understand and, as a result, has been the focus of most of the literature on brand equity. Corporate brand equity, on the other hand, requires a more holistic examination of its drivers and its ability to create value. For example, there is corporate brand equity achieved by product brands because they generate stock value through revenue and cash flow. Conversely, consumers like to purchase products from companies they know so the difference between product brands and corporate brands can be somewhat elusive. This requires clear, concise, and consistent measurement and models to help establish norms of how corporate brands are valued (Gregory & Wiechmann, 1997).

Corporate branding as a marketing trend began the early 1980s when pioneers such as Thomas F. Garbett wrote and spoke extensively about the connection between advertising and corporate value. Garbett’s (1981) book established a philosophical view of corporate branding and Garbett (1982) identified the connection between corporate advertising, corporate reputation, and enterprise value, initiating research on brand equity measurement. Garbett (1981, 1982, 1983) codified the research methods of corporate advertising and corporate brands.
In the book, *Leveraging the Corporate Brand*, Gregory and Wiechmann (1997) wrote about how changes in corporate reputation over a 7-year examination were associated with both earnings growth and improvements in stock performance. Gregory (1997) and Gregory and Wiechmann (1997) established links of causation and the impact of advertising, separating the corporate-brand impact into measurable attributes. Aaker (2004) addressed the corporate brand by categorizing it according to organizational associations. According to this view, the corporate brand is comprised of people, values, citizenship, and consistency of performance (Aaker, 2004). These organizational descriptors run parallel to the attributes measured in the CoreBrand Index including, overall reputation, perception of management, and investment potential (Gregory, 1997a).

Aaker (2004) posited an inextricable link between product brands and corporate brands: the corporate brand is the organization standing behind the offering. The associations it maintains, whether they are relevant and managed or unmanaged, define the corporate brand. Some associations stem from the product brand (as Chevrolet is to GM), but it is more powerful for the corporation to manage the associations that give it credibility. Corporations with a strong reputation engage their employee workforce, have high values, and cultivate a vision for the future, which can leverage their corporate brands (Aaker, 2004).

Aaker (2004) found that communicating a robust corporate brand has more resonance with key stakeholders, such as investors, potential employees, regulators, and the media. In Aaker’s (2004) estimate, as much as 35% of an institutional investor’s judgment is based on intangible assets, such as management quality, research and development (R&D), and strength of marketing. It takes a strong corporate brand to communicate these messages in order to connect with the investment community (Aaker, 2004).
According to Aaker (2004), leveraging the corporate brand is essential because it clearly represents both an organization as well as a product. A corporate brand promotes the quality and characteristics of the company that help to build the product brands. The corporate brand differentiates the company while providing credibility to the product brands of the company. Corporate brands support internal brand-building efforts and provide a platform to augment product branding. The ultimate corporate brand strategy is that of a branded house such as General Electric where most of the product brands carry the GE name and logo (Aaker, 2004).

In making those points, Aaker (2004) argued the case for the corporate brand. On providing value to the firm, Aaker (1991) further asserted that customer branding also produces the ability to create brand equity value for the firm, which can be identified as marginal cash flow. It is easier to sell new products to those customers who know a company than it is to identify new customers and sell them on the product and the company behind the brand.

This assessment has been applied to the concept of investors considering the purchase of a corporation’s stock. Taking this concept a step further, while the product brands and corporate brands both create value, they need to be measured and valued separately to better understand and manage them for maximum leverage of the whole and total return on investment.

Another way to think about the corporate brand is as the company’s most valuable asset that can be measured, valued, and managed for value accretion. Gregory and Wiechmann (1991) introduced the concept that it was possible to measure and manage the image of the corporation to increase its enterprise value. Gregory and Wiechmann (1997) brought the subject of measuring corporate and brand valuation reporting to a wider audience while Gregory (2001) and Gregory and Wiechmann (2002) offered a detailed explanation of research methods and examples of why branding matters. Gregory and Sexton (2007) examined the brand equity of
B2B brands, which were often ignored because of the popularity of examining consumer brands. Gregory and Sexton (2007) analyzed two aspects of brand value creation: revenue generation and stock performance. Gregory (2010) and Gelb and Gregory (2011) argued further for putting brands on the balance sheet. Gregory (2012) placed responsibility for the corporate brand on the board because the brand transcends the CEO’s role, as the brand affects both current and future stock performance. Gregory (2015a) compiled these findings and addressed personal experiences, providing the perspective that the corporate brand represents a ubiquitous component of the corporation as a whole.

Gregory (2013) claimed that if corporate branding is everything a company says and does, then the way it acts through corporate citizenship is also integral to its brand. According to Biraghi, Gambetti, and Schultz (2017), corporate branding has included the utilization of all the communications tools within a company to reach all audiences that are important to the company’s existence, including corporate citizenship, which they identified as a two-way street. Being a good corporate citizen improves the company in many ways including its favorability scores (Biraghi et al., 2017). Biraghi et al. (2017) found that corporate communications could also inform citizens and employees of the beneficial work the company performs to support its stature as a corporate citizen. Imparato and Harari (1994) also advocated for corporate responsibility as a component of a corporate strategy to link the success of the corporation to corporate values and ideals. Imparato and Harari (1994) noted that an improved experience could be considered an additional benefit of a corporate brand since consumers purchase product brands from companies they know and like. Furthermore, Imparato (2002) connected trust-building activities to measuring trust in business.
Gregory (2013) linked corporate social responsibility and financial performance especially as it relates to stock market capitalization. While most corporations inherently want to be corporate citizens and give back to their communities, it also makes business sense to do so (Gregory, 2013). The financial impact of developing a holistic corporate brand by being a good corporate citizen can have a bearing on everything from improving recruitment and retention of employees, bolstering revenue growth through consumer loyalty, and increasing the value of the company’s stock price (Gregory, 2013).

**Previous Measurement Constructs**

To understand how the CoreBrand Index offers an alternate and more efficient management tool, it is helpful to examine previous models for measuring intangible assets. Kaplan and Norton (2004) discussed measuring and valuing intangible assets when they explained that organizations create sustainable value from their intangible assets. They assert the significant value of intangible assets can easily exceed 75% of the valuation of a firm. Kaplan and Norton (2004) indicated that intangible assets are the ultimate basis of value accretion. With such value going unreported in a company, it is imperative that a strategy of organizational alignment be in place to maintain and grow that value (see Figure 2.1). Moreover, employee knowledge within a company creates a differentiated advantage that provides the basis for customer satisfaction (Kaplan & Norton, 2004). To determine a level of impact of intangible assets that would be acceptable to accountants, for example at a time of a merger, a more thorough accounting of intangibles must include but are not limited to expert valuations of patents, copyrights, and values that are difficult to measure, such as workforce knowledge and leadership (Kaplan & Norton, 2004).
Kaplan and Norton’s (2004) conceptual path to measurement closely matches the question that motivated this dissertation: If a company cannot place internally grown intangible assets on a balance sheet, but they have significant value, how should leadership organize and value these assets for everyday management? Kaplan and Norton (2004) suggested that intangibles should be reported much the same way accountants organize the assets on a balance sheet. That is to say, they should be organized by categories of importance based hierarchically on liquidity (Kaplan & Norton, 2004). Cash comes first because it is liquid (Kaplan & Norton, 2004). Assets that can be converted to cash such as accounts receivable, inventory, and property come next. It is then possible to evaluate the successful execution of strategy as growth of both revenue and shareholder value (Kaplan & Norton, 2004).

The idea that intangible assets connect directly to strategy and that the successful execution of that strategy financially impacts both revenue growth and shareholder value forms the essence of the author’s conceptual model used in this project (see Figure 2.2). After all, companies develop a corporate brand to improve the image of the company and its products because consumers prefer to purchase products from companies they know and favor. The same is true for investors who buy the stock of companies they know and trust. For this research, we made that connection between the corporate brand and stock market capitalization through the cash flow multiple, which is stock price divided by cash flow. The cash flow multiple, of course, is driven by both tangible and intangible assets that are at work to create the premium value of both the revenue and stock side of value creation. Our model examines the factors that drive the cash flow multiple including financial factors as well as the attributes that are measured in the CoreBrand Index to explain the impact on the CFM (see Methodology Chapter 3).
Measuring intangible assets.

Confusion over how to measure intangible assets is evident in the wide variability of intangible constructs by various authors in explaining how the constructs work or should be accounted. Marr compiled several constructs as presented in Figures 2.3 and 2.4.

If intangibles were simplified, categorized into those that can be measured and compiled as well as and those that resist any kind of measurement, it might be possible to simplify the evaluation of those assets (see Figure 2.5).

To date there is no evidence for appraising all individual intangible assets as a group. During a merger, every intangible asset is evaluated in a separate silo, which is expensive and produces inconsistent results. Prior quantitative research has found that impartial observers can provide a consistent subjective perspective on intangible aspects relating to the corporate brand of the company that, when taken in aggregate, can be modeled utilizing the cash flow multiple as the dependent variable to provide an approximate value of the intangible assets being considered.

As an example of the complexity of consistently measuring intangible silos (see Figure 2.5), patents can be compiled from the legal records of a company. Also, the history of revenue from patented products can be recorded. But, complexities arise when companies begin to consider the life of a patent and where a patent subsists in its life cycle, as a patent could be pending, expiring, or generating royalties and licensing fees. To estimate the fair value of patents, all those possibilities must be considered, measured, and estimated for their value.
Figure 2.1. Illustration of the Kaplan and Norton strategy map. As the one-strategy approach moves upward in an organization, culture, processes, and training align to improve the customer-value proposition and ultimately create long-term shareholder value.*

Figure 1.1. Components of S&P 500 market value demonstrating growth of intangible assets.*

Figure 2.2. Illustration of the market-based construct utilized by Gregory in the CoreBrand Index model described in this dissertation.*

*Information provided by the researcher for this dissertation.
Figure 2.3. Various constructs and value maps to explain how intangible assets create value.*

*From Marr, 2008.

Figure 2.4. Additional constructs to explain intangible assets.*

*From Marr, 2008.
Figure 2.5. The complexity of consistently measuring intangible assets.*

*Information provided by the student for the purposes of this dissertation.

Research and development (R&D), can be even more obscure to evaluate. There are elements of R&D that can be compiled, such as dollars invested, but the expected outcome of R&D is immeasurable because there is neither standardized criteria for the quality of research nor any guarantee of results. The same can be said of innovation, corporate brands, training, culture, and many other aspects of intangible assets. Some portions of these assets can be measured to support them, which are identified as expenses in annual reports. What is less obvious is the fair value of those intangibles.

Srivastava, Shervani, and Fahey (1998) stated that marketing lacked and needed a single integrated theory tied into shareholder value (Srivastava, Shervani and Fahey, 1998).
Research by Gregory (2015b) conducted utilizing the CoreBrand Index confirms that corporate brands can be measured through quantitative surveys of impartial observers, which can provide a solid basis for evaluating the financial performance of corporate brands. It further allows for the consistent comparison of the subject company versus peer companies and the industry in which the business competes. Gregory (2015b) identified that linking quantitative measurement to the market cap through the cash flow multiple is a utilitarian way to tie into shareholder value. Research surveys, such as the CBI, conducted with rigor and consistency among a knowledgeable audience, provide insights into the strength of the corporate brand as a component of intangible assets (Gregory, 2015b). The approach taken in this dissertation is consistent with the development of a theory of marketing (Srivastava, Shervani, and Fahey, 1998).

**Materiality Requires Transparency**

Observers have noticed that something fundamental and material has recently changed in how intangible assets are reported on 10Qs and 10Ks. Edgar Baum, one such observer, is the co-founder and CEO of Strata Insights Inc. and an expert on brand valuations. We recently had an in-depth discussion about the changing nature of 10Qs and 10Ks. What is happening originates from a source that will be far more sustainable in achieving the permanent transformation in how intangible assets will be treated in the future. It comes from management’s basic instinct to reduce corporate tax exposure, and thus, it has a far more likely chance to succeed than previous efforts to change intangible asset reporting.

Baum found material changes in the language of select financial reports between 2016 and 2017. The language in the more recent reports became more brand-equity oriented, more
explicit, and clearer about the potential negative impact of brand impairment. Fair value and impairment testing are being discussed as well as the potential for brand risk (Baum, personal communication, June 25, 2017).

Baum (personal communication, June 25, 2017) discussed the importance and context of brand image for corporate leadership. The narrative represents an effort to explain more about the potential negative impact of adverse attention and stricter regulations. Baum (personal communication, June 25, 2017) suggested that investors and portfolio analysts have a problem because they do not have comparability between companies that have had to go through the intangible disclosure process as a result of acquisitions or mergers in comparison to the ones that have grown their brands internally. Baum (personal communication, June 25, 2017) asked the question of whether the investing public is able to understand the breakdown of the value of components of companies. Are investors able to look at financial reports and understand the true value of the company? That conversation is just getting started (Baum personal communication, June 25, 2017).

Baum (personal communication, June 25, 2017) remarked that goodwill has gone from being an appendage to corporate value 30–40 years ago to frequently comprising the bulk of transaction value in the past 10–15 years. It is time for product brands and corporate brands to be recognized as intangible assets that need to be managed for value creation and strategic leverage with the consumer as well as with the financial community.

Materiality requires more transparency and a connection of activities to cash flows, just as with the evolution of managerial accounting practices that began nearly a century ago for plants, equipment, and labor forces. The Financial Accounting Standards Board (FASB) has recognized that there is a gap in understanding this value. Consequently, Baum (2017) argued
that similar guidance is becoming an expectation for brand-driven companies with measurable customer bases and related intangibles that are recognizable by the market.

**Intangible-Based Lending**

Bandukwala (2005) discussed lending based on intangible assets as a potentially practical idea that is not as ethereal as a banker might think. Conceptually, Bandukwala (2005) helped bankers to cross the barrier to understand that, without intangibles, banks would be lending based solely on buildings and equipment, which would not account for a vast portion of the value of a company. The problem for lenders is the ability to collect on intangibles because, if a company is going through a bankruptcy, those valuable intangible assets dissipate quickly (Bandukwala, 2015). Nevertheless, it is logical for lenders to consider the value of those intangibles, which can be converted to liquidity if a loan is called (Bandukwala, 2015). Bandukwala (2005) identified the assets that are most likely to be considered in lending, which include patents, copyrights, trademarks, brands, customer lists, contracts, license agreement, rights, and databases (Bandukwala, 2015).

One gap in Bandukwala’s model is that he ignores the value of intangibles such as management skills, which are captured in the CoreBrand Index research and model.

On September 25, 2017, I discussed intangible assets with Bandukwala. He provided some interesting insights that valuing brands are usually considered but mostly calculated on Excel spreadsheets. However, there is a trend toward market-based research to better understand the value of brands at the retail level. Bandukwala reflected on intangibles assets and specifically the corporate brand in the following conversation:
Certain intangibles are tangible and understandable for bankers, but you can’t get too far afield. If you get complicated or esoteric, then it becomes theoretical and impractical to implement. I think companies with larger retail ownership would have more interest in the corporate brand and measuring it as an intangible asset. In theory, those companies with higher retail ownership and bigger corporate brands could trade at higher stock market values. You can argue that a company such as Tesla, which doesn’t have much cash flow but consumers think is very sexy would get a higher valuation. The way I look at the corporate brand is that it is an accumulation of all the separate brands and product lines within the company. If I were a business owner the next step would be to how to increase the overall value of the corporate brand. (personal communication, September 25, 2017)

Toward a Simple Solution

Intangible assets are a topic that many leaders still avoid despite the growing evidence of them as a valuable component of enterprise value. Aswath Damodaran (2006) outlined both the history of intangible assets and the need to change the methods of accounting in the book Dealing with Intangibles: Valuing Brand Names, Flexibility, and Patents. Damodaran (2006) explained that the firms that arose in the industrial age were associated with physical assets. The titans of industry such as GM and Standard Oil owned land, buildings, and factories that were easily valued using existing accounting measures (Damodaran, 2006). In the mid-1900s, new giants emerged that followed a different valuation formula (Damodaran, 2006). Coca-Cola, for example, had valuable patents and brands, and Microsoft had technological expertise, but they shared key concerns (Damodaran, 2006). First, traditional accounting rules ignored internally
grown intangible assets and balance sheets showed no evidence of them (Damodaran, 2006). Second, a significant portion of the total market value of these companies came from their intangible assets (Damodaran, 2006). Yet Damodaran (2006) argued that more than half the value of consumer product companies could be explained by their brand names alone. Damodaran (2006) concluded that the failure to value intangible assets distorts all key financial measures including profitability, return on equity, and capital market measures such as price earnings (PE) ratios and EBITDA multiples (Damodaran, 2006).

**Concept Maps**

The next section offers the three concept maps comparing the work of Aaker (Figure 2.6; 1991) and Keller (1993; see Figure 2.7) to that of Gregory and Wiechmann’s (1997; see Figure 2.8). Each of these concept maps offers the architect’s perspective on how brands create value. Yet all three identify the manageable, measurable, and valuable nature of brands.

Aaker’s (1991) brand equity map identifies the factors that influence brand equity and the two resulting outputs from the perspective of providing value to the customer through satisfaction with the purchase decision and value to the firm through price margins and brand loyalty.

Keller’s (1993) brand equity map is based on what he calls brand knowledge, which is made up of two branches: brand awareness and brand image. This runs parallel to the Gregory (1997) constructs of familiarity and favorability. Keller’s (1993) map details various brand associations, such as price, product, and packaging, which roll up into the brand knowledge by the consumer.
Figure 2.6. Aaker’s brand equity model.*

*From Managing Brand Equity: Capitalizing on the Value of a Brand Name, by D. A. Aaker, Copyright (c) 1991 by David A. Aaker. Reprinted with the permission The Free Press, a Division of Simon & Schuster, Inc. All rights reserved.
Figure 2.7. Keller’s customer-based brand equity—Dimensions of brand knowledge.*


Gregory and Wiechmann’s (1997) concept map (see Figure 2.8) on the following page displays the brand experience and the elements of a controlled experiment. Business processes are the identifiable elements going into product manufacturing or services offered at the corporation. Culture and behavior are how the company acts throughout the organization and manifest themselves in product quality and innovation. Communications is the voice of the company from advertising and media relations to customer service. Familiarity and favorability are the measures that create brand power, which in turn creates the premium effect of the brand on both the product’s revenue and stock performance. Experimentation takes place when elements of the brand experience are changed and evaluated for impact and value improvement.
Product Branding (revenue) can be evaluated through discounted cash flow analysis

Corporate Branding (stock) quantitative research and regression models evaluating stock performance

**Figure 2.8.** Gregory’s CoreBrand equity.*

*Adapted from *Leveraging the Corporate Brand, by J. R. Gregory and J. G. Wiechmann, 1997, p. 27.*

**Summary**

The possibility of measuring a culture of innovation and thinking of innovation as an intangible asset that can be measured and managed for value accretion has been discussed throughout this chapter. In the next chapter, I outline the ways in which the CoreBrand Index is a dependable measurement tool that provides reliable, comparable, and projectable output of brand equity valuation.
CHAPTER THREE:

METHODOLOGY

Purpose

The purpose of the research in this dissertation was to determine if adding a new attribute to the historical attributes in the CoreBrand Index would make the model more significantly predictive of the cash flow multiple than with the historical attributes alone. The research question being examined was: What are the effects of (a) overall reputation, (b) perceptions of management, (c) investment potential, and (d) culture of innovation on market capitalization. The variables of (a), (b), and (c) were the historical attributes; (d) was being examined for the first time. Each of the attributes was examined separately and in aggregate to evaluate their strength and impact on the dependent variable of the cash flow multiple as well as the order of magnitude of their contribution.

Cash Flow Multiple Explained

In examining any dependent variable, the process begins with the objective outcome. In this case, the dependent variable was the cash flow multiple (CFM). The CFM is simply stock price divided by cash flow per share. In relation to the stock price, if the stock price is $20 and the cash flow per share is $10, $20 \div 10 = 2 \text{ CFM}$. With an estimate of the projected stock price and the future cash flow, it is possible to predict the projected CFM (projected stock price, future cash flow per share = projected CFM).
My goal was to improve the predictability of projected CFM. This was accomplished through a sensitivity analysis to determine how sensitive the CFM was to the many financial and non-financial independent variables (see Figure 4.1), including familiarity and favorability. An order of magnitude evaluation of the attributes determines their impact on the projected CFM.

**Practical Business Application of the Model**

The practical application of this model in the workplace is to look for optimized results relative to the level of effort. Examining the costs of improving familiarity and favorability (costs include money, labor, time, etc.) involves comparing those costs with the potential outcome, which is the expected improvement in the cash flow multiple. The economic theory is profit maximization and the process is diminishing marginal return. An S-shaped statistical curve is created to evaluate the maximization point or the optimal investment level. The projections are as much as 6 years into the future, but they are recalibrated every quarter to examine and recalculate the progress being made toward projected goals (Gregory, 2015b).

**Research Design and Data Collection**

The CoreBrand Index (CBI) quantitative research database contains a benchmark tracking system that examines over 800 companies across 50 industries. For this dissertation, I examined a subset of the database consisting of 160 companies in 2016. The 160 companies were selected based on their longevity in the CBI study, which goes back to 1990. This has implications due to the fact that companies established after 1990, but considered by many as highly innovative companies such as Google and Uber are not in this study. Therefore, the research will not skew the findings to those companies that are already thought of as highly
innovative. Participants were asked one additional question on the benchmark tracking survey. The question focused on the perceived culture of innovation of the corporation being examined. Over 1600 interviews were completed (400 interviews annually per company -- 100 interviews per quarter per company) of the subset being examined. Only the annual 2016 survey data was examined in this subset.

Financial Market Model

The financial market was the model utilized in this research. According to Keller and Lehmann (2001), brand equity measures fall into three categories. The first is customer mindset, which focuses on the customer as the source of brand equity (Keller & Lehmann, 2001). The second is product market, and the third is financial market, both of which focus on the benefits that derive from brands (Ailawadi, Lehmann, & Neslin, 2003). Ailawadi et al. (2003) discussed the advantages and disadvantages of all three categories. The definition of financial market modeling is developing measuring, valuing, and managing brand equity by modeling it in relation to the stock market. Financial market encompasses the entire company while a product market model is more contained and focused on a single product brand and, therefore, is theoretically more readily measured, valued, and managed. Ailawadi et al. (2003) dismissed the financial market aspect of brand equity by stating that there is too much subjectivity in the model because it is based on future stock value. Ailawadi et al. (2003) also indicated that there is a vast amount of volatility in stock markets, which could make the results less responsive to marketing because there are so many factors that influence stock prices.

The disadvantages that Ailawadi et al. (2003) identified are addressed in the CoreBrand model. Subjectivity is also mitigated in the CoreBrand model through the utilization of
quantitative research conducted with impartial observers throughout the year. The volatility issue is resolved by using quantitative, brand-based research among an audience of impartial observers and modeling the results with the cash flow multiple. Instead of attempting to identify the precise stock price on a specific date at a specific time, the index examines the cash flow multiple as a stock market surrogate. The estimated brand equity dollar value (BEV) can be readily calculated based on brand equity as a percentage of market capitalization (BE%).

CoreBrand’s utilization of quantitative research modeled with the cash flow multiple of the stock market valuation is further supported in the following passage in the book *How to Measure Anything* in which Douglas Hubbard (2014) wrote:

> It is hard for any individual investor to outguess the stock market at any given point in time. The stock market is called efficient because it is the aggregate opinion of investors that are better at forecasting the market. It is the collective wisdom and judgment of many that moves the market. (Hubbard, 2014)

Hubbard (2014) supported the theory that consistent quantitative research of a neutral and attuned audience, described in this dissertation as impartial observers, can provide a perspective on companies that, when taken in aggregate, offer a powerful prediction of the future financial market potential of the company.

Among the advantages of using impartial observers as the respondents of the CoreBrand Index quantitative research is that they provide neutrality and diversity of opinion about the companies being studied. This is a large independent audience randomly selected and not influenced by the opinions of other respondents. Rather, it is a decentralized audience relying on their own knowledge that is not subject to central control. As supported by Surowiecki’s (2004)
theory on the wisdom of crowds, the CoreBrand Index is the aggregation of opinions, which forms the observation and which becomes a collective, fair evaluation of the company.

**Method of Research**

The CoreBrand Index (CBI) is a quantitative research study conducted annually amongst a geographically representative sampling of the U.S. population. There are 8,000 completed interviews per year taken from impartial observers that are randomly selected from a universe of qualified potential participants. The research audience list is acquired through a proprietary process. The audience is refreshed annually, which helps to prevent vertical industry bias or contamination. These impartial observers can be defined as both influential consumers and business executives that work in the top 20% by revenue of U.S. businesses who are then asked about their familiarity with and favorability toward 40 corporate brands. CBI interviews are conducted continuously throughout the year to evaluate 800 companies each year. For this dissertation, 160 companies were in the subset for the research wave that was conducted in 2016 with 1600 interviews completed. Financial data was purchased from sources such as Value Line, Bloomberg, and others, which covers both financial fundamentals and analyst rankings. Advertising spending data was purchased from Kantar Advertising Spending to track brand investments.

**Survey Method**

The survey audience is an independent third party comprised of impartial observers providing subjective opinions of the companies in the survey. The results of the survey are made up of subjective opinions and have no bearing on whether a company has a high or low culture of
innovation. A company that is perceived as having a high culture of innovation may or may not actually have a high culture of innovation.

The randomized audience of 1600 impartial observers’ (the acquisition resource is confidential) is surveyed by telephone with the company and purpose of the call described. The respondent is assured that the survey will only take a few minutes of their time and that it is not a sales call. The average interview is 14-20 minutes in length. Once consent is obtained, the survey participants are asked to rate their familiarity with 40 companies on a Likert scale of 1-5 (1 = unfamiliar, 2 = know the name only, 3 = somewhat familiar, 4 = familiar, 5 = very well known). The list of companies, which is randomized with every participant is read and they respond with a number for each company. This portion of the interview averages 8-10 minutes in length.

Only those respondents who rate the companies with a 3 or higher on the familiarity question are then asked to rate those companies on the following attribute questions based on a 1-4 Likert scale (1 = Poor, 2 = Fair, 3 = Good, 4 = Excellent):

• Overall Reputation
• Perception of Management
• Investment Potential
• Culture of Innovation (new attribute added in 2016 for a subset of 160 companies)

Typically, this attribute query examines a reduced subset of the 40 companies due to their attrition, where the respondent only rated their familiarity as either a 1 (unfamiliar) or 2 (know the name only). This portion of the interview averages 6-10 minutes in length.

Weighted familiarity and favorability scores are calculated based on the strength of the responses. For example, if a company is very well known to a respondent then their score counts
more than a respondent that is only somewhat familiar with the company. The favorability score is a combination of all three attributes.

Brand power is then calculated by multiplying familiarity with the favorability score. This calculation provides a single measure of the company’s audience and their disposition towards the company. In this dissertation, the brand power scores are utilized as a dependent variable to examine and compare the favorability attributes in the current wave of research with the historical attributes for the purpose of checking the accuracy and consistency of the current research against the historical database.

The companies are continuously randomized by software in the survey questionnaire system. This prevents ordering bias and respondent fatigue and insures that 400 interviews are completed per company per year. Four waves of research are conducted during the year, one wave for each quarter. Every company had at least 100 completed interviews per quarter and 400 completed interviews by the end of the year. A total of 1600 interviews were completed for this subset of companies.

**CoreBrand Index – COI Subset**

- 160 Companies in the subset ÷ 860 Companies = 18.6%
- 8600 Interviewees x 18.6% = 1600 Interviewees for subset
- 40 Number of companies examined per interviewee
- 64,000 Familiarity data points (Favorability examined based on Familiarity)
- Each company has 100 completed interviews each quarter
- Each company has 400 completed interviews each year
- 1600 interviews were conducted for this study

**How the 160 companies were selected**
In 2016, a 160-company subset of the 800-company CBI database was identified to examine the new research attribute. These companies were selected based on having complete longitudinal data going back to 1990. This decision is material in that the companies selected tend to be large, long-standing drivers of the economy that do not represent an overabundance of fast-riser technology companies (see Table 3.1).
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*Information provided by the researcher for this dissertation.*
**Outside Subjective Opinions**

The purpose of this dissertation is two-fold: to examine the aggregate subjective perceptions of the survey audience of impartial observers on the culture of innovation attribute involving the subset of 160 companies studied in the CoreBrand Index and to understand the potential impact of that new attribute on the cash flow multiple.

The culture of innovation is being examined as both an independent variable and in aggregate with the other attributes to understand the relative strength of each attribute individually and in aggregate on the dependent variable, which is the cash flow multiple. In the case where brand power is the dependent variable, the attributes are evaluated as independent variables to determine if they are behaving consistently with previous empirical research and observations. This study identified that the results were consistent, which gives additional confidence in the overall findings (see Figure 4.7).

In prior research familiarity and favorability were combined to create brand power (Fam x Fav x 0.01 = BP), which is one dependent variable utilized in this dissertation. The purpose of using of brand power in this dissertation is to evaluate the consistency of the new wave of research with historical research to insure that the new culture of innovation attribute is consistent with the historical attributes. The reason we multiply this score by 0.01 is to make it a 100-point scale. For example if Fam is 60 and Fav is 50 this would be 60 x 50 = 3000. By multiplying it by 0.01 the answer becomes 30 on a scale of 1-100. Otherwise, it would need to be a 10,000-point scale.
Impartial Observers

CoreBrand’s image ratings (familiarity, favorability, and brand power) derive from an annual survey of more than 8,000 impartial observers. Impartial observers are senior business leaders (VP level and above) from the top 20% (based on revenue) of U.S. businesses. The leaders represent the investment community, potential business partners, and business customers from over 50 key industries. As consumers, the audience offers attractive demographics, which are detailed in the following sections. The survey audience is refreshed every year from a proprietary list of influential consumers and qualified business decision-makers, meeting the criteria outlined next. Respondents to the CoreBrand Index (2016) are impartial observers, meaning that they are both knowledgeable consumers and business decision-makers. The survey audience is selected on a randomized basis and everyone in the target audience has an equal chance of being selected to participate, which eliminates sampling bias.

Influential Consumers

As influential consumers, the participants are a highly sought-after demographic with the following characteristics:

- 84% were aged 35 or older.
- 75% had at least a bachelor’s degree; 10% had postgraduate degrees.
- 72% regularly read business publications to stay well informed.
- 67% earned $100,000 or more in household income per year.
- 38% had children under the age of 18 living at home.

The participants indicated that corporate brand played an important role in decision-making:

- 94% said a company’s corporate brand influenced their purchasing decisions.
• 91% were more willing to work for a company with a positive brand image.

• 90% were more willing to invest in a company with a favorable brand image.

The participants were actively engaged:

• 89% shared their opinions with friends and colleagues.

• 79% were involved in service to their community.

• 76% were knowledgeable about government and politics.

The participants were financially savvy:

• 89% made investment decisions with 76% investing in stocks or funds.

• 33% influenced investment portfolios other than their own.

When viewed as influential consumers the primary research audience of the CoreBrand Index survey offers impressive consumer credentials. The utilized list, however, identifies them primarily as business decision-makers, and the rationale for selecting that particular audience is detailed below.

**Business Decision-Makers**

The rationale for utilizing business decision-makers in the CoreBrand Index survey is that business decision-makers (a) are excellent consumers, (b) are savvy about the corporate brands in the study, (c) are a well-defined and finite audience, (d) are a consistently identifiable audience over time, (e) are knowledgeable and inquisitive about businesses, (f) have demographics associated with financial and career success, and (g) are interested in world and economic developments.

The CoreBrand Index does not use a consumer-only focused survey because:

• Consumers consume product brands of interest to them.
• Consumer audiences need delineation to be measured consistently.
• Consumers are less attentive and articulate about the corporations behind product brands.
• Consumer audiences change and evolve their interests based on trends.
• Consumer demographics change over time based on education, income, and responsibilities.
• Consumers are interested in trends and lifestyles but not business practices.
• Consumers of steel products and consumers of fashion are generally very different people if viewed through the consumer lens. If viewed through the business decision-maker lens, they could be one person.

Even so, business decision-makers are not the exclusive research participants. CBI also examines consumer audiences when the specific customer set it known. The CBI method philosophically adheres to measuring, valuing, and managing both sides of the value equation: product branding and corporate branding.

As business decision-makers, the participants were executives at companies with sales revenue of $50 million to several billion. Of the participants in the study:

• 90% determined purchase needs.
• 72% selected specific companies to work with.

The business decision-makers operated in both the business-to-consumer (B2C) and business-to-business (B2B) markets:

• 43% operated in markets selling both B2C and B2B products and services.
• 40% primarily operated in B2C markets.
• 17% primarily operated in B2B markets.
The CoreBrand Index identifies incremental value both in product and corporate branding. The following list is an abbreviated construct of CoreBrand’s two-brand valuation models. Product branding includes:

- market-share analysis of consumers of the product brand;
- business analysis of the brand;
- projecting market share at different levels of spending;
- discounted cash flow analysis resulting from a change of market share;
- evaluating ROI based on improving market share.

Corporate branding includes:

- consistent quantitative research of business leaders and influencers over time;
- a model against industry peers and the stock market;
- project ROI based on improving a position and increasing the cash flow multiple;
- evaluating ROI performance based on improving brand equity and value.

The target audience of the CoreBrand Index research model has been in place since 1990, and the research method has been employed consistently and longitudinally since that time. Consistency by itself is an important component of the construct because it can be examined and tested for accuracy and assessment at any given point in time for specific companies and industries or for the economy.

**Validation and Audit**

In 2011, the CoreBrand Index became the first corporate brand research and valuation model to be audited and validated by the Marketing Accountability Standards Board (MASB). MASB’s is a non-profit organization with the objective of establishing accountability standards.
across industries for continuous improvement of financial performance and to educate business
decision-makers on best practices in accountability of intangible assets such as brands. The
group is made up of both marketing and accounting academics as well as business practitioners
from those disciplines from around the world (MASB, 2018). See Appendix A for the MASB
audit and validation report on the CoreBrand Index.

Valuation Methods

Table 3.2 illustrates the common criticisms of current brand equity valuation methods.
Through its methodology, listed in the table, the CoreBrand Index resolves most of the concerns.

<table>
<thead>
<tr>
<th>Common Problems with Valuation Methods</th>
<th>CoreBrand Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inconsistent data availability</td>
<td>Consistent method and data since 1990</td>
</tr>
<tr>
<td>Too much subjectivity by a select few</td>
<td>Aggregate subjective opinion of many</td>
</tr>
<tr>
<td>Discretionary audiences</td>
<td>Specific and consistent targeted audience</td>
</tr>
<tr>
<td>Seldom comparable over time</td>
<td>Consistently comparable over time</td>
</tr>
<tr>
<td>Lacking comparability outside study</td>
<td>Comparable to industry, and economy</td>
</tr>
<tr>
<td>Methodology is suspect</td>
<td>Method validated and audited by MASB</td>
</tr>
<tr>
<td>Product brand not consistently defined with some claiming corporate brand value</td>
<td>Corporate brand specific with no credit taken of spillover effect on product brands</td>
</tr>
</tbody>
</table>

*Information provided by the researcher for this dissertation.*

Data Analysis

This dissertation focuses on CBI historical research attributes as well as culture of
innovation, which CBI added in 2016 to the other three attributes that represent elements of the
corporate brand: overall reputation, perception of management, and investment potential.
Through the *CRISP-DM* data mining process, the researchers examined and reported on the impact of the new attribute and how it affects financial performance such as market capitalization. The analysis may include refinements to the CoreBrand model to show how the culture of innovation attribute corresponds to business results.

**Data Mining Process**

The CRISP-DM method involves six steps that are cyclical and lead to documented results. The six steps are business understanding, data understanding, data preparation, modeling, evaluation, and deployment (CRISP-DM; see Figure 3.1). For this dissertation, I modified the process slightly to model understanding, data preparation, modeling, evaluation, iterations, and findings documentation.

*Figure 3.1. CRISP-DM shown in a step-by-step process for mining research data.*

*https://en.wikipedia.org/wiki/Cross-industry_standard_process_for_dataMining*
The six steps involved the following internal stages:

*Model understanding:* An overview of what CBI has learned in previous years of research. This involved a topline discussion, not an in-depth analysis.

*Data preparation:* This step largely involved placing the current CBI data in a format that can be readily ingested into many advanced modeling algorithms. CBI has the historical data for the survey going back several decades but the culture of innovation attribute was only researched in 2016.

*Modeling:* In the modeling phase, the research leverages the most advanced machine learning algorithms available to create prescriptive and predictive models to understand the relationships between the cash flow multiple as the primary dependent variable with financial and measured (by survey) independent variables. The second dependent variable is brand power and it was also examined against financial independent variables as well as those measured in the survey research. A full list of all variables studied is shown in Figure 4.1.

*Evaluation:* A large portion of these efforts involved assessing the impact of the culture of innovation attribute to gain a better understanding of how it predicts intangible asset value and, primarily, brand power.

*Iterations:* After model building and evaluation, the process takes a step further by looking for additional sources of data that could further add explanatory power to a company’s intangible assets. These potential attributes include customer satisfaction, net promoter score (NPS), voice of the associate (employee satisfaction), etc. Exploratory consideration will also be given to the potential of adding additional attributes to the CoreBrand Index to help answer the question: How big is the intangible asset universe?
Findings documentation: The researcher described the process undertaken, the insights found, and evidence proving/disproving the hypothesis. In this stage, the researcher identified next steps to expand the research. The step appears in the dissertation as the summary and recommendations.

CHAID Model Overview

A chi-squared automatic interaction detector (CHAID) analyzes large and complex databases to create decision trees that are non-binary, meaning that the trees have more than two branches, thus creating a wider tree than binary methods. CHAID is a particularly useful tool in marketing, where finding the best technique involves sorting through multiple potential answers. Based on $F$ tests, CHAID merges statistically similar (homogeneous) values with the target variable and maintains all other dissimilar (heterogeneous) values. CHAID algorithms are based on finding the best predictor at each branch of the decision tree (IBM, 2013).

Exhaustive CHAID is conducted throughout the research process to identify the best split for each predictor based on adjusted $p$ values. Exhaustive CHAID is used for the analysis in this dissertation because a continuous dependent variable such as the cash flow multiple requires that the analyses provide the clearest answers to the research question and the hypotheses posed.

Continuous predictor fields are binned into a set of ranking categories. The process of binning is repeated for each scale-level predictor in the model as a first step in the exhaustive CHAID process (IBM, 2013).

There are several significant advantages of CHAID over multiple regression analysis. Multicollinearity is significant when using regression models, but it is not a factor with CHAID.
In the examination, multivariate regression offers less explanatory power than CHAID analysis, which adds to the predictive relationships.

With CHAID, there is no assumption of parameters of frequency distribution. CHAID techniques provide a high level of confidence that the best predictors will be identified utilizing this evidence-based analytical method, which is common in quantitative market research. In this case, CHAID is the best analytical method for discovering and interpreting the connections between a response variable and a predictor variable. To answer the research question posed in this dissertation, CHAID is the preferred analytical tool.

Definition of Terms

The author has provided the following CoreBrand definitions:

*Brand equity as a percentage of market capital (BE%):* Brand equity is identified from a proprietary statistical model of the CoreBrand Index. It examines financial and brand factors as independent variables against the cash flow multiple as the dependent variable. The model’s statistical analysis determines the percentage of market cap that can be attributed to the brand.

*Brand equity dollar value (BEV):* Another result of the model; this is a calculation that uses brand equity as a percentage of market cap to assign a portion of the company’s market capital as the brand’s value. When the brand’s contribution to market cap is known, it is possible to multiply it by the total market cap to determine the brand’s value.

*Brand power (BP):* A single measure of a corporate brand’s health and vitality. It is a combination of the size of the brand’s audience (familiarity) and the quality of its perceptions (favorability) \((\text{Fam} \times \text{Fav} \times 0.01 = \text{BP})\).

*Cash flow multiple (CFM):* The stock price divided by cash flow per share.
CoreBrand Index® (CBI): A quantitative research study of business decision-makers that has been active continuously since 1990. The study examines an impartial observer audience attitudes of over 800 corporations based on key attributes.

Culture of innovation (COI): Culture of innovation is defined as the perception of a company that prioritizes the advancement of new ideas that create value across all operations.

Familiarity (FAM): A measure of the respondent’s level of familiarity with the corporate brand. More than awareness, familiarity is based on knowing more than the name of the company. The scores are weighted with those who know the companies well having more impact than those who are only somewhat familiar with the company.

Favorability (FAV): A measure of the perception of a company’s corporate brand. The measure is a simple average of scores of the company’s performance with overall reputation, perception of management, and investment potential (REP x MGT x INV ÷ 3 = FAV).

Intangible asset: An intangible asset is a business asset that lacks physical substance and structure (differentiated from buildings and equipment) and is thought to be difficult to measure and evaluate. Intangible assets include patents, copyrights, franchises, goodwill, trademarks, trade names, brands, and technology such as software and computer-based assets.

Intangible capital: The value created by intentionally managing intangible assets to grow the cash flow multiple.

Intangible value: The amount by which the consideration paid exceeds the fair market value of the company’s operating assets (goodwill).

Investment potential (INV): A measure of an impartial observers’ faith in the company and whether respondents are disposed to purchase from or to invest their money in the company.
Overall reputation (REP): An impartial observers’ subjective opinion of the general perception of the corporate image of the company.

Perception of management (MGT): An impartial observers’ subjective perception of the company’s corporate brand that covers leadership and how the company is managed as a specific dimension of favorability.

Expected Contribution

Intangible capital is a conceptual framework for measuring, valuing, and managing internally grown intangible assets as potentially accretive or impaired components of an enterprise. The concept of intangible capital is built upon a foundation of literature, as well as empirical research and analysis from decades of work using the CoreBrand Index. Developing the concept of intangible capital involves knowledge derived from the study of the corporate brand as a significant and valuable intangible asset that can be measured through quantitative research, valued through multiple regression analysis, and managed through controlled experimentation.

The main focus of this dissertation is how culture of innovation impacts the cash flow multiple. By adding the culture of innovation attribute to the CoreBrand Index research survey, an opportunity arises to examine and evaluate this new attribute in several ways. The examination covers the ways in which culture of innovation performs when combined with and separated from the historical database attribute known as brand power. The goal of the examination is to answer the question: Does combining this new attribute with the historical attributes improve the predictability of the cash flow multiple? Also explored is the predictive
magnitude of each individual attribute on the cash flow multiple. This dissertation will enable the researchers to identify the relative strength of each attribute.

Developing the concept of intangible capital will further the work of pioneers such as David Aaker, Meg Blair, Carol Corrado, Jack Frey, Janet Hao, Kevin Keller, Baruch Lev, Roger Sinclair, David Stewart, and many others who have attempted to advance the logical argument that intangible assets have a value that can be measured and managed for value creation.

Summary & Conclusion

Intangible capital is a complex issue with many different domains, industry standards, and protected interests. Acceptance by the various stakeholders will be essential to the success of the model. Resistance to something new is always a challenge even among those who have the most to gain from the change.

To achieve acceptance, this dissertation embraces those portions of GAAP that retain investments in intangible assets as expenses. While this research demonstrates that long-term value derives from investments made in corporate brands, the larger budgets associated with consumer marketing and advertising tend to be short-term value creators. This explanation should minimize the resistance of those constituencies who currently benefit from the favorable tax treatment (e.g., advertising spent on intangible assets, which are currently expensed costs on financial statements).

The implementation of intangible capital as a discipline for measuring, valuing, and managing intangible assets can potentially provide significant benefits for marketers, business leaders, investors, and accountants. Ideally, there will be no need to change existing financial standards, but there will be a fair value measurement tool to evaluate the financial performance
of intangible assets. If embraced by business leaders and implemented by managers responsible for intangible assets, the utilization of intangible capital could be revolutionary because it could lead to the measurement, valuation, and management of significant assets that are unaccounted for in current financial reports.

This chapter explains the research method behind the CoreBrand Index, the research design, and data collection, as well as examines the demographics of the impartial observer survey participant from both an influential-consumer and a business-decision-maker perspective. The chapter also lists the common concerns associated with brand valuation methods and identifies how the CoreBrand Index research has addressed each of those concerns. Finally, the chapter explains the CHAID method of analysis as the most logical approach to answering the research question. Chapter 4 covers the results of the study and analysis.
CHAPTER FOUR:
RESULTS OF THE STUDY

Overview of the Process

Connecting the Cash Flow Multiple to Market Value

Cash flow multiple (CFM) is a stock price premium measure. The CFM allowed for apples-to-apples comparisons between different sized companies and identified the premium that an investor would pay for a specific stock given its level of cash flow. CFM was a better measurement instrument than, for example, PE ratio because cash flow is often more indicative of business performance while earnings can frequently be negative based on accounting adjustments.

CFM was the dependent variable in the models shown on the following pages:

1. Favorability and the financial variables;
2. Enhanced favorability and the financial variables;
3. Individual attributes: Overall reputation, perception of management, investment potential and culture of innovation excluding the financial variables.

For a full list of the variables see Figure 4.1.
**Table:** CoreBrand dependent and independent variables. Attributes and data examined in this dissertation and analysis (author).*

*Information provided by the researcher for this dissertation.*
Favorability is the average of overall reputation, perception of management, and investment potential. Enhanced favorability is an average of the previous variables and includes culture of innovation in the calculation. Financial variables included but were not limited to: revenue, cash flow, expected cash flow, dividends, earnings, expected earnings (see Figure 4.1 for a full list of variables) all examined at a point in time and over a continuum of time from 2010 to the forecasted results in 2019.

The objective of the analysis was to identify whether favorability is more or less predictive of CFM in the models in Figures 4.2 and 4.3. Then, in Figure 4.4, the objective was to identify the order of magnitude of the components of the measured attributes in predicting CFM. This method of analysis answered the research question and the hypotheses.

![Diagram](figure4.2.png)

**Figure 4.2.** Model 1: Favorability with the financial variables.*

*Information provided by the researcher for this dissertation.*
Figure 4.3. Model 2: Enhanced favorability with the financial variables.*

*Information provided by the researcher for this dissertation.

Figure 4.4. Model 3: Individual attributes excluding the financial variables.*

*Information provided by the researcher for this dissertation.

CFM as a Continuous Variable

Because CFM is a continuous variable—there were an infinite number of possible values of the 160 companies being studied—it was necessary in CHAID analysis to break the data into
balanced bins with either a high CFM or low CFM as the dependent variables. A classification model on a continuous variable does not reveal many insights because the data cannot be balanced on a continuous variable. This model was built with an equal number of highs and lows. The purpose was to find the driver of a high or low CFM. By balancing both the brand power and the CFM datasets, the predictors surfaced and made the signal stronger. If the data were not balanced into bins, the results would be more biased toward the low CFM.

- CFM high: 34.5%;
- CFM low: 65.5%.

Running the data based on the 160 companies without any balancing resulted in sector as the most important predictor of the CFM. The highest CFM sector is Consumer Staples + Healthcare. The key driver of that sector is Kantar Advertising Spend, which means higher levels of advertising spending on these categories. These findings were expected for the consumer staples and healthcare categories, which were based on experiential learning and provided no new insights into the research. Balancing to a 50-50 distribution allowed the CHAID algorithms to make the connections better and to provide clearer, more concise answers to the research question and hypotheses (see Figure 4.5).

Figure 4.5. Balancing to obtain a 50-50 distribution. Balancing removed the bias of more low predictive observations as shown in the figure above.*

*Information provided by the researcher for this dissertation.
For both of the brand power and cash flow multiple models, the researcher took several steps to make the data more usable and clean for the exhaustive CHAID (Chi-Square Automatic Interaction Detection) algorithms. The first step was to organize the target variable (either CFM or BP) into logical bins. These bins were then used to create two new variables that would be used as the dependent variables \((CFM_{Target} \text{ and } BP_{Target})\) for both models (see Figures 4.6 & 4.7). The top two bins were classified as high, and the lower two bins were labelled low. Next, a distribution on the target variable was run to create a balance boost to an even 50-50 distribution between high and low records.

![Figure 4.6](image1.png)

**Figure 4.6.** Bands of cash flow multiple. Sorting bins for cash flow multiple (CFM is stock price divided by cash flow). Any CFM under 10 was designated low. Any CFM above 10 was designated high.*

*Information provided by the researcher for this dissertation.

![Figure 4.7](image2.png)

**Figure 4.7.** Bands of brand power. Sorting bins for Brand Power (BP is familiarity x favorability). Any BP under 41.37 was designated low. Any BP above 41.37 was designated high.*

*Information provided by the researcher for this dissertation.
CHAID Non-Binary Decision Tree

CHAID utilizes Pearson’s Chi-square tests of independence to examine relationships between categorical variables. CHAID builds non-binary decision trees, which means trees with more than two answers (branches) can apply (see Figures 4.8 and 4.9).

Figure 4.8. Sample of the decision tree relating to the cash flow multiple.*

\*n = refers to the number of variables tested

*Information provided by the researcher for this dissertation.
Figure 4.9. A CHAID analytics work-flow process. From the dataset of 160 companies, we created two separate key models.*

*Information provided by the researcher for this dissertation.

The first model was created to leverage advanced algorithms to understand the relationship between the input variables and brand power BP. The second was created to understand the relationship between the input variables and the CFM.

Major Findings

A goal of this research was to evaluate the strength of a new attribute, culture of innovation, which was added to the CoreBrand Index historical database. The researchers found that culture of innovation contributed 13% more predictive strength toward the cash flow
multiple than historical favorability, which included overall reputation, perception of management, and investment potential.

Culture of innovation was the leading attribute predictor of the CoreBrand attributes. Culture of innovation combined with the historical attributes, known collectively as brand power, correctly predicted the cash flow multiple 77% of the time.

This dissertation reaffirmed empirical knowledge about the historical attributes and their relative predictive strengths and introduced a new strong predictor. The study found that:

- Overall reputation was a long-term predictor of a company’s CFM.
- Investment potential was an important short-term predictor of CFM.
- Perception of management was a weaker but still positive predictor of CFM.
- Culture of innovation was the strongest predictor of CFM.
- Favorability, after adding culture of innovation, improved predictability from 64% to 77%.

Each of the attributes CoreBrand tracked played a role in measuring and managing the corporate brand. Examining them over time explained how perceptions and drivers of the corporate brand changed depending on economic, business, and societal conditions. The historical attributes combined with favorability (without culture of innovation) predicted CFM at 64%. When the culture of innovation attribute was combined with favorability (enhanced favorability), the predictive power increased to 77%.

**An Unanticipated Finding**

As Gregory (2012) described, advertising offers a competitive advantage in a recession or a financial crisis. This dissertation revealed yet another example of the lasting impact of
advertising (when other peer companies are not advertising), which sends out multiple signals (e.g., strength, confidence, vision) about the company. These signals are hard to effectively replicate with any other form of communication. I found that one of the most significant drivers of brand power was advertising in 2010, which is unexpected when the bulk of the study was based on data from 2016 (see Figure 4.10). This is based on empirical observations made in previous studies that advertising in a recession (or the global economic crisis as experienced in 2007-2011) creates a durable competitive advantage for years to come.

**Research Question & Hypotheses**

What is the effect of a) overall reputation (b) perceptions of management (c) investment potential, and (d) culture of innovation on the cash flow multiple? There was a significant effect of all four measured attributes on the predictability of the cash flow model. By adding culture of innovation to the historical attributes measured by CoreBrand, we improved the predictability of the cash flow multiple from 64% to 77%.

H1a: An impartial observer’s perception of a brand’s overall reputation will have a positive effect on the firm’s market value. Yes. Overall reputation was the most predictive of the historical attributes before culture of innovation was introduced. Reputation also had a long-term influence on market value. For example, without COI the reputation attributes measured in 2011 (REP 11) had the greatest impact on the 2016 cash flow multiple.

H1b: An impartial observer’s perception of a brand’s perception of management will have a positive effect on the firm’s market value. Yes. Perception of management was a consistent contributor but not at a high level. In other words, it was a requirement but not a major driver of the cash flow multiple. However, the analysis also indicates that perception of
management was a predictor of companies with high level of culture of innovation scores, indicating the importance of management’s vision for companies perceived to have a high culture of innovative (see Figure 4.8)

H1c: Impartial observer’s perception of a brand’s investment potential will have a positive effect on the firm’s market value. Yes. The current investment potential (INV 16) research was effective in predicting a positive effect on the firm’s cash flow multiple.

H2: Impartial observer’s perception of a brand’s culture of innovation will have a positive effect on the firm’s market value. Yes. Culture of innovation increased the predictability of the cash flow multiple by 13% versus the CoreBrand Index historical attributes.

Predictor Importance Charts

Utilizing the CHAID algorithms the predictor importance charts in this dissertation revealed the relationship and relative importance of significant variables to BP and the best predictors of the CFM. Since the values were relative, the sum of the values for all predictors on display is 1.0.
Brand Power Modeling

The financial input variable with the highest predictive power was advertising as indicated by the 2010 DOLS (advertising expenditures) followed closely by the 2014 DOLS. This speaks to the long-term result of brand investment to overall brand power. Based on empirical observation, companies exhibiting a long-term strategic path of brand building have the best chance of maintaining durable and resilient brand power (see Figure 4.10).

![Bar chart showing predictor importance](chart.png)

**Figure 4.10.** Advertising spending was the highest predictor of brand power. Predictor importance – Target: BP_Target.*

*Information provided by the researcher for this dissertation.*
Cash Flow Multiple Modeling

When looking at the input variables that were most predictive of the CFM, the 1-year change in favorability was the most predictive. Predictive power was then followed by 2016 culture of innovation and then 2010 advertising spending (see Figure 4.11). Once again, this revealed the importance of a long-term brand strategy and the fact that companies with executive teams devoted to innovation and reinvestment in brands will be more likely to have a high cash flow multiple.

Figure 4.11. Favorability change (Fav 1-Yr) was the key driver of the CFM. Predictor importance target: CFM_Target.*

*Information provided by the researcher for this dissertation.
Favorability with Financials CFM_Target

Looking at the relationships between the CFM_Target dependent variable and favorability/financials, the researcher quickly saw that the change in favorability was again a strong predictor of CFM, followed by 2010 investment spending continuing this trend (see Figure 4.12).

![Figure 4.12](image)

**Figure 4.12.** Change in favorability was a strong predictor of the cash flow multiple. Predictor importance – Target CFM_Target.*

*Information provided by the researcher for this dissertation.
Enhanced Favorability & Financials CFM_Target

Enhanced favorability only differed from the previous model by adding the *culture of innovation* input variable to the model (see Figure 4.13). Although *culture of innovation* did not appear as a predictor, it helped to explain the unexplained variance. This additional variable increased the predictive power of the model by over one percentage point.

*Figure 4.13. Culture of innovation made favorability more predictive. Predictor importance – Target CFM_Target.*

*Information provided by the researcher for this dissertation.*
Key Hypothesis Attributes

The models added context and insight to the main hypothesis, which concerns the examination of the predictive power of this historical attributes overall reputation, perceptions of management, and investment potential relating to CFM. The model again reinforced the importance of a long-term strategy. The most predictive was 2011 reputation score, followed by 2016 investment potential, and 2015 perception of management (see Figure 4.14).

Figure 4.14. Predictor importance of CFM. This example is the predictor importance of the historical attributes but without the culture of innovation.*

*Information provided by the researcher for this dissertation.
Predictability of Historical Attributes

The previous predictor importance graphic (Figure 4.15), which included the historical attributes of overall reputation, perception of management, and investment potential were 64% accurate in predicting the proper classification of a company (high vs. low CFM).

![Figure 4.15. Predictive power of historical attributes.](image)

*Information provided by the researcher for this dissertation.

Predictability of Culture of Innovation

Adding the culture of innovation attributes to the historical attributes that comprised enhanced favorability improved the predictability of the CFM from 64% to 77% (see Figure 4.16).

![Figure 4.16. Predictive power when culture of innovation was combined with favorability.](image)

*Information provided by the researcher for this dissertation.
**Key Hypothesis Attribute: Innovation 16**

The addition of the culture of innovation attribute added a 13%-point increase in predictive power to the model (see Figure 4.17). This helped to explain the impact that culture of innovation can have in predicting the performance of a company’s stock market capitalization.

*Information provided by the researcher for this dissertation.*
CHAPTER FIVE:

SUMMARY & DISCUSSION

The ideas offered in this dissertation are non-traditional, non-GAAP, and may seem apocryphal to accountants and financial analysts. Yet, the solutions offered are based on common sense research that has been fielded for decades. The results from previous research derived from a multiple regression analysis provided the approximate value of the corporate brand portion of intangible assets. The previous research produced part of the solution: the amount of value that the corporate brand contributes to the market cap of any tracked company. Adding a new attribute to the research improved the predictability of the estimate as well as confirmed the viability of expanding the set measured attributes in the CoreBrand Index. There is more work to be done, but the conceptual framework of intangible capital is a solution that can be readily implemented on a larger scale.

CoreBrand Index research offers a strong methodology and the audience of impartial observers has provided consistent and reliable results. The need for a solution is overwhelming. With intangible assets growing exponentially as a component of enterprise value, it is unproductive to let intangible assets go unmanaged. The alternative to moving forward is for intangible assets to remain unmanaged and unaccounted for except at the time the company is sold. Intangible capital is a framework that can help senior executives to better measure, value, and manage their intangible assets.
Summary of the Problem

There is overwhelming evidence of the significant and growing value of intangible assets when a company is sold (Ocean Tomo, 2017), but the value is unaccounted and unreported when the company is running at pace. This is because accounting standards do not report the financial value of internally grown intangible assets. This creates a dilemma for investors who want to understand if leadership is properly managing these assets and generating a return on the investments spent on them. It also creates a management dilemma for executives who want to build the total value of the enterprise but fear the financing of projects for which the returns cannot be readily reported.

This dissertation offers a potential solution that is built upon the CoreBrand Index research database of continuous quantitative research conducted longitudinally since the 1990s. The CBI model was originally built to better understand the corporate brand’s contribution to market capitalization. The number of attributes studied was recently expanded, and the purpose of this examination is to determine if the new attribute creates additional predictive power in aggregate with as well as independent from the other attributes.

Research Question

Q1. What are the effects of (a) overall reputation, (b) perceptions of management, and (c) investment potential on the cash flow multiple (verification and replication of prior research)?

Q2. What are the effects of (d) culture of innovation on the cash flow multiple?
Hypotheses

H1a: An impartial observer’s perception of a brand’s overall reputation will have a positive effect on the firm’s market value.

H1b: An impartial observer’s perception of a brand’s perceptions of management will have a positive effect on the firm’s market value.

H1c: An impartial observer’s perception of a brand’s investment potential will have a positive effect on the firm’s market value.

H2: An impartial observer’s perception of a brand’s culture of innovation will have a positive effect on the firm’s market value.

Summary of the Methodology

Consistent quantitative research removes the subjective bias that often muddies other valuation models. The CoreBrand Index removes the vertical industry bias by creating a horizontal study, which measures the perceptions of impartial observers across industries. CBI research has been conducted longitudinally and consistently over several decades. This way, a company can compare its performance year-over-year, and the research methodology will be the same (Gregory & Wiechmann, 1997).

CoreBrand Index is distinct, effective, and arguably more accurate and desirable than other methods of brand valuation. The CBI research method and financial models have remained constant despite changing circumstances. The consistent measurement and reporting of a portion of a company’s intangible assets that relate to the corporate brand are reliable and foundational to the total intangible assets of the corporation. Among the corporate brands studied in the CoreBrand Index, the value contribution to the total market cap ranges from 0% to a high of 21%
(Gregory, 2015b). When examined side-by-side with other brand valuation models, the results appear more intuitive and are therefore more useful for making real-time decisions about investments or taking corrective action (Gregory, 2015b).

**Corporate Brand as an Intangible Asset Model**

The CoreBrand Index model is a non-GAAP approach to valuing corporate brands as an intangible asset. Valuing a brand requires an explicit, quantitative measure of intangible assets if the brand is included as a variable. A quantitative market-based approach is a reliable basis for determining the equivalent value of brands. The CoreBrand Index provides the tools to measure value creation without the need to change accounting standards (Gregory, 2015b).

Because the CoreBrand Index financial models are non-GAAP, they are not built like other valuation models such as Brand Finance, Interbrand, or Millward Brown. CoreBrand’s model derives from an outside market-based perspective examining a corporation. The model is reliable because of its consistent longitudinal quantitative examination of impartial observers and is intended as a management tool for evaluating strategies to improve the value of intangible assets (Gregory, 2015b).

Corporate brands contribute a premium that makes a purchaser willing to pay for a company’s stock or its products. CoreBrand metrics are business intelligence models that operate on the observation that the brand contributes a premium that a purchaser is willing to pay based on brand affinity and loyalty. The Association of National Advertisers published white papers based on CoreBrand’s measurements, metrics on stock price premiums (Gregory, 2010), and the premium on product pricing (Puckey, 2012).
Meeting the Requirements of the Standard Setters

The CoreBrand Index measurement system meets the criteria that the Financial Accounting Standards Board (FASB) has identified regarding critical intangible asset categories (see Table 5.1). According to FASB any new standards must be:

- accurately and consistently measured;
- managed and budgeted like other business assets;
- predictive and accountable;
- evaluated on an ROI basis;
- easily replicated;
- reliable and stable enough to appear in financial reports.

There are 10 characteristics of an ideal metric for evaluating intangible assets as described by the Marketing Accountability Standards Board (MASB). The ideal metric must be:

- relevant: address specific (pending) action;
- predictive: accurately predict the outcome of (pending) action;
- objective: not be subject to personal interpretation;
- calibrated: be the same across conditions and cultures;
- reliable: be dependable and stable over time;
- sensitive: identify meaningful differences in outcomes;
- simple: have uncomplicated meanings and clear implications;
- causal: lead to improvements;
- transparent: be subject to independent audit;
- quality assured: engage in a formal/on-going process to assure quality. (MASB, 2017)
MASB (2011) has audited and validated the CoreBrand Index model (see Appendix A). The point is that the development of CoreBrand Index is to follow the basic tenets of the standard setters. The CoreBrand Index can act as a foundation upon which broader intangible attributes can be measured and reported in the future should accounting standards ever accommodate intangible asset reporting (Gregory & McNaughton, 2004).

**Table 5.1. FASB Intangibles vs. CBI Intangible Attributes Measured.**

<table>
<thead>
<tr>
<th>FASB Intangible Assets</th>
<th>CBI Overall Reputation</th>
<th>CBI Perception of Management</th>
<th>CBI Investment Potential</th>
<th>CBI Culture of Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Communication</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Competencies</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Human Capital</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Patents &amp; IP</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Efficiency</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

*Note.* Achieving an approximate value of FASB identified intangible value currently requires brand valuation experts to conduct detailed research and provide educated guesses of the strengths and weaknesses of each category from which a valuation is estimated. The CBI solution is for a large audience of impartial observers who are conversant in corporate brands to provide an educated guess as to the strength of each of the variables listed at the top of the table. The CBI solution is far less expensive while providing a reliable, consistent, and replicable answer.*

*Information provided by the researcher for the purposes of this dissertation. FASB Intangible Assets list adapted from FAS142, http://www.fasb.org/resources/ccurl/731/820/fas142.pdf*

**Acknowledgement of Critiques**

Valuing intangible assets is a complex subject with many diverse and entrenched points of view along with varied potential solutions. It is not surprising, then, that an unconventional approach such as the CoreBrand Index would be subject of intense scrutiny. A case in point, Bayer, Tuli, and Skiera (2017) evaluated the financial consequences of disclosing select intangible assets on financial reports. Bayer et al.’s (2017) study examined both the telecommunications and airline industry and evaluated numerous backward-looking and
forward-looking disclosures. This dissertation was developed to evaluate the demands of the standard setters such as the Financial Accounting Standards Board (FASB, 2001) to disclose information about intangible assets that are not present on the balance sheet. Bayer et al. (2017) examined 34 customer metrics that were disclosed in the annual reports of 365 telecom companies and 146 airline companies. The metrics disclosed by Bayer (2017) included many that the corporations considered potentially damaging to their competitiveness. The companies protested the requirement to make the disclosures, arguing that the cost of providing the information was prohibitive and that the potential damage of releasing proprietary insights would have an adverse impact on their corporations. Bayer (2017) included disclosures such as marketing spending, customer acquisition costs, customers acquired, customer retention rates, average revenue per customer, customer lifetime value, and customer equity, which most company managers would keep secret (Bayer et al., 2017). Indeed, the disclosures identified in the Bayer et al. (2017) report provide insights that most companies guard closely and that competitors would covet. This form of disclosure is untenable for the future of reporting of intangible assets.

Yet Bayer et al.’s (2017) article inaccurately attributed to Gregory (2013) the recommendation that companies release more information about marketing activities and outcomes. Bayer et al.’s (2017) article incorrectly indicates that Gregory (2013) was encouraging the release of proprietary insights by corporations, as Gregory (2013) recommended only that the value of corporate brand equity be disclosed along with the method of calculation. The following passage derives from Gregory and Moore (2013), which Bayer et al. (2017) cited, and serves as an example of reporting that would be recommended for the management discussion and analysis (MD&A) notes section of an annual report:
We, the senior management of Alpha Corporation, believe the value of our corporate brand, as of December 31, 2011, is $26.4 billion, up 2.7% from a year ago, and down 3.8% over the past three years. We estimate this brand value using the methodology provided by Brand-Top, LLC, a MASB qualified Brand Valuator. (Gregory, 2013, p. 44)

In contrast to Bayer et al.’s (2017) article, the direction Gregory (2013) recommended provided both backward-looking and forward-looking financial evaluation without disclosing deeply held corporate secrets. Thus, the cost for obtaining market-based research and the financial disclosures would be relatively minimal. Gregory’s (2013) disclosures would benefit investors, managers, and the media about the overall performance of the company’s intangible assets. The reporting would be consistent and reliable over time because the methodology and disclosures would remain unchanged. This notion further supports the rationale for the continued development of a theory of intangible capital as outlined in this dissertation.

Summary of Results

The research question examined in this analysis is: Q1. What is the effect of a) overall reputation (b) perceptions of management (c) investment potential, and (d) culture of innovation on market capitalization?

In response to this question, there was a significant effect of all four measured attributes on the predictability of market capitalization. By adding culture of innovation to the historical attributes measured by CoreBrand, the researcher was able to improve the predictability of the cash flow multiple from 64% to 77%.

This dissertation also confirmed that each of the individual attributes in the CoreBrand Index contributes a positive effect to the firm’s market value. The study supported the conceptual
framework that adding the additional attributes to the intangible assets of a company could explain more of the unexplained variable associated with stock market value, which is paramount to the development of a theory of intangible capital. The study also supported the use of CFM as a dependent variable.

**Contribution to Knowledge**

This dissertation broadens and deepens the subject of brand asset measurement and valuation as outlined by Aaker (1991) and Keller (1993, 2001) who proposed a consumer-based approach to measuring brand value. While a consumer-based approach is an important component of the equation to understand the premium drivers of product brands, a broader examination of brands from both a product brand and a corporate brand perspective yields significant additional benefits and helps management and investors to begin to understand the hidden value of intangible assets.

The CoreBrand Index measurement approach contributes pivotal arguments to the issue of measuring, valuing, and managing intangible assets, such as the corporate brand. Among the contributions is the logic of continuous quantitative research of an impartial observer audience that is conversant in the subject of best practices in business. The specific research target audience of business decision-makers instead of consumer-specific audiences has benefits that should change the discussion of the brand equity. The benefits of surveying business decision-makers include gaining:

- audience specifications that remain constant over time;
- active conversant opinions about business practices;
- desirable consumer demographics;
- the perspectives of super consumers of both products and corporate brands;
• the perspectives of retail investors;
• research that is bias-free (there is no vertical industry bias);
• an audience that is neutral (no “expert opinion” has a super vote);
• a perspective that is consistent over time in contrast to consumers who change radically from product category to product category.

The benefit of conducting consistent quantitative research longitudinally is apparent for any company that is interested in improving its financial performance and beating the competition. However, many companies that conduct quantitative research change the methodology periodically, which renders the longitudinal analysis moot. In contrast, the CoreBrand Index has been fielded continuously since the early 1990s with a consistent research vehicle. This method offers a significant benefit for companies that are interested in independent third-party views of their performance. The applications for using this data for performance analysis, including valuation, are extensive and include but are not limited to:

• crisis diagnostics;
• activist investor evaluation and impact;
• executive compensation and performance evaluation;
• media spending ROI analysis;
• communications effectiveness and ROI;
• training effectiveness and value;
• strategic evaluation of partners;
• evaluating acquisition and merger prospective partnerships;
• sustainability effectiveness and value;
• valuing stadium and venue naming rights.
Thus, the CoreBrand Index is an effective tool for controlled experimentation. Both the consistency of the research methodology and the logic of the reporting make it a reliable control bench for analyzing strategic corporate initiatives (see Figure 5.1).

![Diagram](image.png)

**Figure 5.1.** The CoreBrand Index provides a laboratory environment for controlled experimentation. Controlled stimulus such as a change in advertising spending can be evaluated in changes to familiarity and favorability scores. A deeper examination of the changes can be identified in the specific attributes being measured (e.g. an improvement in the investment score could indicate an effective message that resonates with investors). The combination of attributes can then be evaluated against the cash flow multiple for evaluating ROI of the controlled stimulus employed.*

*Information provided by the researcher for the purposes of this dissertation.*

The cash flow multiple is the financial element for identifying the premium value of stock market capitalization. Cash flow multiple is an evaluative gauge indicative of business performance. Utilizing the corporate brand as a tool to impact the cash flow multiple has proven effective through decades of usage and as reported by executive management (Fischer, 2014; Gregory, 2001).
The CoreBrand Index is an adaptive measurement vehicle. Ideally, the full-scale usage of the CBI tool incorporates other critical audiences in continuous quantitative, parallel research. The most common audiences include the customers and employees of the company (see Figure 5.2). Experience has also included audiences that are critical of a company’s strategic plans such as government officials, regulators, media, influencers, and competitors in some circumstances.

**Figure 5.2.** A full value construct including customers and employees as well as the core base of impartial observers. CoreBrand Index research of impartial observers when joined with parallel research of employees and customers provides robust insights into the core of the value engine of the corporation.*

*Information provided by the researcher for the purposes of this dissertation.

**Recommendations for Future Research**

One of the most desirable features of the current CBI model is the simplicity of the data collection and the single-number reporting mechanism, which is brand equity as a percentage of market capitalization. Utilizing an audience of impartial observers provides a foundation that is consistent and neutral, which make the findings reliable and unbiased. It is reasonable, however,
that future researchers might consider both internal and external audiences that are most impacted by the corporation’s brand and other intangible assets. For example, future researchers developing a theory of intangible capital would likely want to consider external audiences such as customers, financial and industry media reports, financial analysts, as well as internal audiences such as managers and employees.

The attributes measured can extend beyond the current ones that comprise overall reputation, perception of management, investment potential, and now culture of innovation. Other potential attributes could include sustainability, digital adaptation, research savviness, customer satisfaction, and willingness to recommend. Further exploration into product quality, workplace environment, corporate citizenship, governance, clarity, and transparency of communication could all yield additional insights into how to expand a theory of intangible capital to maximize the value of the reported findings.

Indeed, the list for expanding the scope of measurable intangible assets needs to be explored more fully. This dissertation substantiates the concept that intangible capital reporting can be readily accomplished through market research. The findings, then, tie into financial performance through the cash flow multiple of the corporation and are reported in a form analogous to corporate brand equity as a percent of market capitalization (see Table 5.2).
### Table 5.2. CoreBrand Index: Thinking about the Future.

<table>
<thead>
<tr>
<th>Audiences</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXTERNAL IMPARTIAL OBSERVERS</strong></td>
<td><strong>COREBRAND INDEX (Current)</strong></td>
</tr>
<tr>
<td>CoreBrand Index</td>
<td>Overall Reputation</td>
</tr>
<tr>
<td>o Business Leaders</td>
<td>Perception of Management</td>
</tr>
<tr>
<td>o Influencers</td>
<td>Investment Potential</td>
</tr>
<tr>
<td>o <strong>COREBRAND INDEX (Future potential attributes)</strong></td>
<td>Culture of Innovation</td>
</tr>
<tr>
<td><strong>EXTERNAL CRITICAL</strong></td>
<td></td>
</tr>
<tr>
<td>Wall Street</td>
<td></td>
</tr>
<tr>
<td>o Analysts (Buy side/Sell side)</td>
<td>Digital Orientation</td>
</tr>
<tr>
<td>o Investors</td>
<td>Environmentally Sustainable Practices</td>
</tr>
<tr>
<td>Customers</td>
<td>Networked and Connected</td>
</tr>
<tr>
<td>o High-Profile Customers</td>
<td>Research and Development Savvy</td>
</tr>
<tr>
<td>o Average Customers</td>
<td>Customer Experience and Satisfaction</td>
</tr>
<tr>
<td>Media</td>
<td>Customer Willingness to Recommend</td>
</tr>
<tr>
<td>o Social Media Influencers</td>
<td></td>
</tr>
<tr>
<td>o Reporting Journalists</td>
<td></td>
</tr>
<tr>
<td><strong>INTERNAL</strong></td>
<td><strong>COREBRAND INDEX (Internal Future)</strong></td>
</tr>
<tr>
<td>Managers</td>
<td></td>
</tr>
<tr>
<td>o Senior Management</td>
<td>Employee Satisfaction</td>
</tr>
<tr>
<td>o Line Management</td>
<td>Employee Loyalty</td>
</tr>
<tr>
<td>o Sales Management</td>
<td>Employee Longevity</td>
</tr>
<tr>
<td>o HR Management</td>
<td>Employee Training</td>
</tr>
<tr>
<td>Employees</td>
<td>Employee Willingness to Recommend</td>
</tr>
<tr>
<td>o Frontline Facing</td>
<td></td>
</tr>
<tr>
<td>o Back Office</td>
<td></td>
</tr>
</tbody>
</table>

*Note. This is the conceptual framework for future research that would expand the scope of the CoreBrand Index quantitative research study.*

*Information provided by the researcher for the purposes of this dissertation.*

### Conclusion

The theory of intangible capital does not entirely solve the issues with intangible assets since it does not create a set of new standards for valuation that will overthrow the old ones. The theory embraces the accounting standards of today as well as recognizes how and why they were created. What the theory does provide is a construct for fairly valuing the accretion or depreciation of intangible assets. The theory of intangible capital provides the framework for a management tool for leaders who want to better understand the total enterprise value of the
company, which includes all the intangible assets that are not accounted today. Executives who want and need to measure their true progress toward growth goals or to develop higher-level strategies to grow their companies need to measure, value, and manage the intangible assets of their companies reliably and consistently. The tools to begin implementing accountability for intangible assets are available today.
REFERENCES


*Research policy: policy and management studies of science, technology and innovation, 19*(2), 185-192.


CoreBrand Equity Construct (Familiarity & Favorability Metrics)

Provider Definition

- Source Data
- How Derived
- How Used/Activities
- Strengths
- Limitations
- Relationship to Financial Metrics
- How Does It Meet the MMAP Characteristics of an Ideal Metric?
- Does It Fit Guidelines for Measures of Marketing Productivity?
- Source Documents
- Other References

**Provider:** CoreBrand, LLC

**Definition:** CoreBrand Equity is a modeled construct composed of CoreBrand Familiarity and Favorability metrics and financial information obtained from external sources.[1]

**Reviewer:** Allan Kuse, Ph.D., MMAP Center, Marketing Accountability Standards Board
Core Brand Familiarity & Favorability: Marketing Activity, Metrics & Financial Links

Marketing Accountability Standards Board
Validation and Audit of the CoreBrand Index
Source Data

- CoreBrand Equity is calculated from 3 data sets:
- Using a sample of 8000 interviews among senior business executives (400 per company per calendar year) Familiarity and Favorability measures are collected for over 800 companies across 49 industries to create an on-going database of image and reputation data. The Corporate Branding Index is derived from this database. [6]
- Financial performance data is obtained from public sources – Value Line, Hoovers and Yahoo! Finance
- Communications investment data is obtained from Kantar media or Competitrack

How Derived

- The CoreBrand Equity model was derived from the observed relationship between brand performance measures (Familiarity, Favorability) and financial performance measures (reported financial metrics). The CoreBrand Equity algorithm weights factors that drive financial performance as percentage-contributors to total market capitalization. [4]
How Used/Activities

- CoreBrand Equity estimates the existing and potential contributions the brand can have to total market capitalization which lead to specific activities. [5] These include:

- Increasing/decreasing total communications to optimize brand familiarity

- Changing communication focus or content to optimize favorability

- Evaluating the impact of other activities in relation to brand performance (CSR, partnerships/alliances/M&A, brand stretch, etc)

- Evaluating competitive performance

- Monitoring market conditions to evaluate the necessity for brand change
**Marketing Accountability Standards Board**

**Validation and Audit of the CoreBrand Index**

**Strengths**

- Unbiased – data collected is market view and not adjusted or interpreted
- Company/industry measures are collected on the same respondents with no differential respondent biases
- Time-tested – the same methodology has been used to collect and tabulate data since 1990

**Limitations**

- Syndicated data is limited to the US

**Relationship to Financial Metrics**

- The CoreBrand Equity model is a financial model at its core. Brand elements are added to the financial model and have proven to increase its predictability and improve the accuracy of its forecasts. The model utilizes reported financial data as well as brand measures as its input and predicts expected improvements in stock price from changes in brand communications strategy or investment. [4]
**Marketing Accountability Standards Board**

**Validation and Audit of the CoreBrand Index**

How Does It Meet the MMAP Characteristics of an Ideal Metric?

1. Relevant . . . addresses and informs specific pending action - - - Identifies the percentage of stock price that can be attributed directly to brand (as measured through familiarity and favorability)
   - Evaluates a brand’s strength (Familiarity/Favorability)
   - Provides guidance on how to optimize strength and value [5]

2. Predictive . . . accurately predicts outcome of pending action
   The CoreBrand Equity model accounts for 87% of the variance in share price on average, 5% – 7% of which is the premium due to corporate branding explained by Familiarity and Favorability. [2,4]

3. Objective . . . not subject to personal interpretation
   All model inputs are “market view” metrics, not adjusted by CoreBrand. Familiarity, Favorability scores mean the same across companies and industries. [6]

4. Calibrated . . . means the same across conditions, categories & cultures
   Familiarity, Favorability and Equity value scores are independent of industry bias. The data and its meaning are consistent.[6]

5. Reliable . . . dependable and stable over time
   Split-Sample intra-class correlation coefficients:
   Familiarity = 0.99; Favorability = 0.74; Brand Power = 0.99
   Familiarity and Brand Power are highly correlated (.98), while Favorability is less correlated to Brand Power (.42), likely due in part to its lower reliability. However, Familiarity also has twice the variance of Favorability. Since BrandPower is a function of these two metrics, its reliability is more similar to that of Familiarity. [7]
Marketing Accountability Standards Board
Validation and Audit of the CoreBrand Index

How Does It Meet the MMAP Characteristics of an Ideal Metric? (Continued)

6. Sensitive . . . identifies meaningful differences in outcomes The CoreBrand Equity model accounts for 87% of the variance in share price on average, 5% – 7% of which is explained by Familiarity and Favorability. [2,4]

7. Simple . . . uncomplicated meaning and implications clear
Familiarity leads to Favorability. People who know your company are more likely to feel positively toward your company than toward a lesser-known entity. The more favorable people are toward your company, the more likely they are to buy your stock, resulting in a premium price per share that is driven by brand strength.

8. Causal . . . course of action leads to learning/improvement for decision making in competitive context
Varying media spend levels relative to the current level in this model is used to estimate the potential for further gains from increased spending or a potential reduction in spending without loss of current contribution to stock price.

9. Transparent . . . subject to independent audit
Examined and proprietarily reviewed by practitioners (Cisco Systems, Waste Management, Pitney Bowes and others) and Academics (Columbia University, University of Houston and others) and published (HBR, ANA, others) [2,3]. This is an independent audit performed by the MMAP Center.

10. Quality Assured . . . formal/ongoing processes to assure 1-9 above
No on-going processes documented.
How Does It Fit Overall Guidelines?

MEASURES OF RETURN ON MARKETING INVESTMENT SHOULD:

A. Provide a specific link to financial performance; no measure or measurement system is complete without one. CoreBrand Equity is able to identify brand’s contribution to stock price (market capitalization).

B. Reflect the standard financial concepts of return, risk, the time value of money, and the cost of capital. N/A

C. Provide information for guiding future decisions by predicting future economic outcomes as well as provide retrospective evidence of the impact of marketing actions. Predicts effect on stock price of change in marketing investment. Reflects changes in stock price in marketing actions made in past by changes in CoreBrand Equity estimates.

D. Recognize both the immediate, short-term effects of marketing actions and longer-term outcomes, as well as the fact that short- and long-term effects need not be directionally consistent. N/A

E. Recognize the difference between total return on investment and return on marginal return on investment. Marginal return can be calculated by determining how marginal cost will create marginal Brand Power and in turn how marginal Brand Power will generate marginal market cap.

F. Recognize different products & markets produce different rates of return. Models and analysis can identify the brand’s ability to create different rates of valuation based on variations in products and markets. For example, brands in consumer package goods such as Beverages have brand valuation as high as 20 – 21% of their market cap, in Electric Utilities the highest ranked brand is 4.2% [6]
How Does It Fit Overall Guidelines? (Continued)

MEASURES OF RETURN ON MARKETING INVESTMENT SHOULD:

G. Distinguish between measures of outcome and measures of effort. CoreBrand Equity is related to stock price outcome [1]

H. Provide information that is meaningful and comparable across products, markets, and firms. Familiarity and Favorability are calibrated the same across brands, categories, and industries.[6]

I. Clearly identify the purpose, form and scope of measurement. See “Other References”

J. Be documented in sufficient detail to allow a knowledgeable user to understand their utility & make comparisons among alternative measures. See “Other References”

K. Be assessed relative to generally accepted standards of measurement development and validation. MMAP audit

L. Be recognized as necessary investment for assuring sound decision-making, accountability, continuous improvement, and transparency for all stakeholders. Not documented elsewhere
Marketing Accountability Standards Board
Validation and Audit of the CoreBrand Index

Source Documents


5. “Metrics that Matter: An overview of CoreBrand’s measurement tools.”


7. CoreBrand internal reliability document, August 2011.
Other References


APPENDIX B: JOURNAL OF CULTURAL MARKETING STRATEGY
Does a culture of innovation drive business results?

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Abstract The importance and meaning of innovation are a matter of perspective. Improvements in product design and manufacturing efficiency often hinge on innovation being applied as a tactical tool. To develop a company that elevates innovation to an integrated and motivational management tool across the enterprise, innovation must become part of the firm’s culture. A culture of innovation is an attitude toward cultivating growth opportunities no matter where they exist in the company. It is a piece of the vast corporate ecosystem that drives the value of corporations without always being fully understood and seldom managed for value creation. It is part of a class of internally grown intangible assets not accounted for on the balance sheet, but which can yield decisive competitive advantages and enormous value. Innovation comes in many different forms, but a culture of innovation reflects on the company as a whole and can be measured, valued and managed for value creation.

KEYWORDS: innovation, culture, brand, management, valuation, intangible assets, corporate brand, strategy, value creation, value management

INTRODUCTION
When W. Edward Deming said, ‘It is wrong to suppose that if you can’t measure it, you can’t manage it — a costly myth’, he was not dismissing the need for research data, but rather indicating how — in the absence of measurement — business decisions must still be made. Despite their astonishing growth
of value in recent decades, internally grown intangible assets are managed without the benefit of measurement or accountability; this is due to current accounting standards that do not permit them to be on the balance sheet. The systematic measurement of intangible assets and connecting those to valuation and a management system is a task worthy of Deming. It could ultimately have as much impact as his introduction of quality management into the manufacturing process.

**METHODOLOGY AND BACKGROUND**

Measuring the corporate brand as an intangible asset and managing it for value creation have been the focus of a significant quantitative research study known as the CoreBrand Index® (CBI), which has been consistently and continuously fielded since 1990. For 27 years, the researchers at Tenet Partners have conducted 10,000 interviews per year among US business decision makers and opinion elites. Quantitative measures of familiarity are determined along with three favounability attributes of the corporate brand: overall reputation, perception of management and investment potential. When combined these attributes link to a brand power score. This results in a financial metric known as brand equity. Brand equity contributes a premium to the market capitalisation of a company, depending on the industry and company strength, of from 0 to as much as 21 per cent of total enterprise value. This model allows the analytical examination of the impact of internally and externally generated events on the corporate brand, and the resulting impact on the overall financial value of the company. The implication is that if an attribute can be measured, it can be managed.

To better understand innovation metrics at the company-level The Conference Board has been working on a major global study called, 'The Conference Board Signposts of Innovation'. In 2015, The Conference Board initiated the Signposts of Innovation project to identify metrics currently used and/or needed to assess innovation performance.

Working cooperatively with The Conference Board, Brad Puckey, Research Director, Tenet Partners, introducing a fourth attribute to the venerable CoreBrand Index research study: culture of innovation. This work began in 2016 and augments the historical attributes in the CBI. The purpose is to identify how a culture of innovation might impact the corporate brand attributes and business results.

**BRIEF LITERATURE REVIEW**

A literature review focused on a definition of intangible assets for business measurement and accountability was conducted to identify articles on the subject. The following review is a representative sample rather than an exhaustive listing of related articles.

  - This article is focused on how the financial analyst considers intangible assets. The author’s goal is to deliver better predictions because intangibles are not well explained or reported on financial statements.

  - This article points to the difficulties of measuring and reporting on intangible assets. It is written from a Romanian perspective, with application to any business where intangibles impact company performance.

- Levy, B. and Gu, F. (2016) 'The End of Accounting and the Path Forward for

Baruch Lev has long railed against the inequity in accounting for intangibles. He has sharpened his claim to suggest that, financial statements in general no longer reflect the realities of businesses.

  - This article examines the full scope of intangible assets: (1) human capital — employees’ skills, talent and knowledge; (2) information capital — databases, information systems and technology infrastructure; and (3) organisation capital — culture, leadership, employee alignment and knowledge management.

  - This article discusses monetising innovation. While not directly relevant to the present work, it does offer some interesting insights from the authors’ research across 38 countries.

  - This interesting study investigates the role of national culture on innovation in various markets.

**WHY IS THIS TOPIC IMPORTANT?**

A culture of innovation is an intangible asset. According to generally accepted accounting principles (GAAP), internally grown intangible assets are not on the balance sheet unless they have been acquired. Despite being ignored by accounting and finance, intangible assets have grown exponentially in recent decades as a percentage of total corporate value. This disparity between internally grown intangible assets that are not accounted for and acquired intangible assets that are on the balance sheet creates inconsistent accountability for managers responsible for growing the assets and for investors who are getting skewed financial reporting. As intangible assets grow as a part of corporate capital, it has become more difficult to identify the real value of companies. Empirical studies show that intangible assets like brands, sustainability, reputation, etc., can be readily measured, valued and managed like other business assets.

As previously advocated in financial journals, the Securities Exchange Commission (SEC) and the Financial Accounting Standards Board (FASB) should be setting the standards for accounting firms. Companies should be reporting on the value of intangible assets in some manner — even if only in the notes sections of their annual reports, as intangible assets represent a significant share of value for most corporations. Understanding intangible assets is fundamental for measuring, valuing and managing these assets for the maximum return on investment.

**INITIAL FINDINGS**

Tenet Partners examined the impact of a culture of innovation on business results. Three exploratory studies were utilised to examine the available research data sets:

- **quartile analysis** of the culture of innovation attribute vs financial metrics ($n = 143$ companies);
- **historical attribute analysis** — a probability plot comparing the culture of innovation attribute vs historical attributes measured in the CoreBrand Index ($n = 100$ companies); and
- **multiple regression analysis** seeking the business drivers of a culture of innovation ($n = 64$ companies)
Table 1: Culture of innovation with comparative performance data

<table>
<thead>
<tr>
<th></th>
<th>Culture of innovation</th>
<th>Brand power</th>
<th>Favourability</th>
<th>Investment potential</th>
<th>Advertising spend 2016 (US$m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>82.4</td>
<td>48.1</td>
<td>76.2</td>
<td>72.5</td>
<td>321.9</td>
</tr>
<tr>
<td>Tier 2</td>
<td>65.7</td>
<td>37.3</td>
<td>67.0</td>
<td>62.4</td>
<td>68.1</td>
</tr>
<tr>
<td>Tier 3</td>
<td>55.4</td>
<td>26.7</td>
<td>61.5</td>
<td>56.3</td>
<td>70.4</td>
</tr>
<tr>
<td>Tier 4</td>
<td>32.5</td>
<td>14.1</td>
<td>48.2</td>
<td>41.9</td>
<td>12.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2016 Earnings per share</th>
<th>2016 dividend</th>
<th>2016 shares outstanding (mil.)</th>
<th>2016 sales revenue (US$m)</th>
<th>2016 cash flow multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>4.38</td>
<td>1.33</td>
<td>1,564.0</td>
<td>36,567.9</td>
<td>14.27</td>
</tr>
<tr>
<td>Tier 2</td>
<td>4.33</td>
<td>1.92</td>
<td>828.9</td>
<td>20,703.1</td>
<td>13.17</td>
</tr>
<tr>
<td>Tier 3</td>
<td>4.07</td>
<td>1.63</td>
<td>524.4</td>
<td>19,925.8</td>
<td>12.20</td>
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<tr>
<td>Tier 4</td>
<td>3.78</td>
<td>1.27</td>
<td>292.3</td>
<td>20,469.3</td>
<td>12.80</td>
</tr>
</tbody>
</table>

Quartile analysis
The culture of innovation attribute has a strong relationship to the strength of a company’s brand. Having examined 143 companies, the present study sorted them into quartile tiers based on the strength of their culture of innovation score (Table 1). Each tier has 36 companies, except for Tier 4, which has 35 companies. The results suggest a correlation between brand power and culture of innovation, but more work is needed to determine whether a causal relationship exists between them, indicating a value connection. A strong association between them can certainly be inferred.

The study finds that those companies with stronger culture of innovation are also viewed more favourably and seen as having greater investment potential, among other favourable outcomes.

Financial factors also generally follow the same patterns. Companies with the highest culture of innovation also have higher earnings per share, the biggest dividends and higher cash flow multiples.

Why include advertising?
Company size, advertising spending and industry marketing have all been examined closely in the past. The present study shows that companies spending relatively more on advertising (adjusting for size and industry) enjoy higher brand power scores across industries. Furthermore, increased advertising expenditures indicate increased internal communications, external communications, employee training and general transparency. As part of the comparison, advertising spend was used to evaluate external communications levels. Tier 1 spends 26 times more than Tier 4 companies.

Does size matter?
It is interesting to note the size of a company seems to be a significant factor in determining the strength of innovation. Tier 1 companies have five times the shares outstanding of Tier 4 companies. They have nearly double those of Tier 2 and three times those of Tier 3. This might suggest that the bigger the company, the more likely it will be perceived as being innovative. This argument is countered somewhat when sales revenue is considered. Sales revenue in Tier 1 still dominates Tier 2, but Tiers 2, 3 and 4, are virtually equal. These are all large companies, so size is neither a critical nor defining factor in this cohort.

The results indicate that companies with stronger brands are viewed as having a stronger culture of innovation. Nevertheless, there remains the chicken-and-egg question, ‘are stronger brands viewed as more innovative,
or do more innovative companies have stronger brands?’

**Hierarchy of attribution**

Compared with other historical attributes Tenet has measured, *culture of innovation* has different characteristics. The historical attributes present a well-defined hierarchy of attribution. For example, survey respondents almost always see *overall reputation* of a company in the most positive light. *Perception of management* is evaluated more critically, and *investment potential* is evaluated most critically. This comparative analysis shows that culture of innovation is an attribute far more critically evaluated than the traditional historical attributes.

Examining culture of innovation as a probability plot with the historical attributes (Figure 1) highlights the extent to which it is different as well as its potential to create corporate value or to take it away. The culture of innovation attribute is a doubled-edged sword in that low scores will cause further erosion to those companies with lower historical attribute scores (bottom arrow). High culture of innovation scores further enhance those at the top of the list (top arrow). In other words, the historical

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**Figure 1**: Normal probability plot of Rep 3Q16, Mgt 3Q16, Inv 3Q16, Innov 3Q16

Note: Rep, overall reputation; Mgt, perception of management; Inv, investment potential; Innov, culture of innovation.
attributes tend to run in parallel with each other, which makes their behaviour very predictable. Culture of innovation, however, cuts through the historical attributes (the minimum vs maximum scores for Innov 3rd Quarter 2016) are much greater than the other attribute scores), which means companies with a lower innovation score will be viewed less favourably, but companies with a higher innovation score will be viewed more favourably. This makes cultural of innovation a potential key differentiator but one that is less predictable and harder to manage.

**Multiple regression analysis**

What are the business driver(s) of a culture of innovation? Logic would indicate there should be a strong link between research and development (R&D) and innovation. To confirm this, the study examined a broad range of business data.

The Conference Board provided research sources that fit the need in the form of a database called, ‘EU R&D Scoreboard 2016’. In studying the data, 64 companies were found to be compatible across all reporting criteria.

Two multiple regression scenarios were run. First, brand power was examined as the dependent variable with the following independent variables: R&D three-year percentage growth; sales one-year percentage growth; sales three-year percentage growth; R&D percentage intensity; profits three-year percentage growth; employment one-year percentage growth; employment three-year percentage growth; percentage profit and culture of innovation, 3rd Quarter 2016.

The R² is 42.92 per cent, which is fairly reliable for this type of analysis.

The most important drivers of value, shown in order, are:

- sales one-year per cent growth;
- sales three-year per cent growth;
- R&D three-year per cent growth; and
- employee one-year per cent growth.

**Culture of innovation**

Culture of innovation was found to have an interesting role as a value driver to brand power. Value is created when both short and longer-term sales goals are a priority. R&D, employment growth and a culture of innovation are also primary contributors as value drivers.

The most important drivers of culture of innovation are:

- percentage profit;
- employee three-year percentage growth;
  and
- sales one-year percentage growth.

Culture of innovation is most likely to occur in a company that makes a higher percentage profit than its peers. The company will have a strong trend toward growing the employee base and a directive to grow sales in the immediate future.

**Observations**

This preliminary analysis has found the following reasons why a culture of innovation should be considered of strategic importance for leadership:

- culture of innovation is a significant corporate attribute that can be measured and compared with core components of the corporate brand;
- culture of innovation is a double-edged sword that will meaningfully help the image of companies, but will hurt companies that do not measure up;
- culture of innovation is not associated with a single business discipline (eg R&D), but rather is driven by both financial and business factors as fundamental as profit, employee growth and sales growth, indicating that it is a reflection on the health of the company; and
- culture of innovation is a contributor to brand power, which means it contributes to the value of a company.
It is recognised that innovation is good for companies, but innovation alone is not going to lead to measurable business results. The innovation goal of leadership should be to create a culture of innovation that includes continuous measured improvement in all areas of the company. Success is achieved when these goals are tied to specific business results, which will lead to higher enterprise value.

**IMPLICATIONS**

The value of intangible assets and their contribution to enterprise value have grown dramatically in recent decades. In 1975, Ocean Tomo estimated that intangibles amounted to 17 per cent of the total value of a company. In 2015, intangible assets represented 84 per cent of total enterprise value. Therefore, understanding and measuring intangibles such as a culture of innovation should continue to be of growing interest to organisations where intangibles matter (e.g., corporations, accounting firms, investment houses, etc).

**WHERE CAN RESEARCHERS GO IN THE FUTURE?**

The CoreBrand Index provides an excellent laboratory bench upon which controlled experimentation can be developed and tested. The depth of analysis and the consistency of the CIH method over time offer practitioners a rare database that seldom exists in academics or corporations. This database, which tracks over 800 companies, can be accessed through Tenet Partners.

**WHAT DID THE STUDY OMIT?**

The topic of intangible assets is vast, and by its nature somewhat nebulous. It is best to examine one slice of the topic at a time and to evaluate that slice compared with what is known from previous research. This study has not taken on the entire universe of intangible assets, although that would be an excellent examination if time and funding were unlimited commodities. Potential areas of intangible assets research would include the following groups:

- **human capital** — employees' skills, talent and knowledge;
- **information capital** — databases, information systems and technology infrastructure; and
- **organisational capital** — culture, leadership, employee alignment and knowledge management.

**CONCLUSION**

"What's measured improves."

It does not take a Peter Drucker to know that measuring innovation and the culture that drives it should be an important goal for any organisation. Unfortunately, measuring does not always come naturally, especially when it involves intangible assets. For the good of the company, it is important to overcome any resistance to measuring intangibles that create value. When measurement is a continual repetitive process, it will foster both a culture of innovation and accountability for the most successful companies.

"What's measured improves" is a promise that speaks volumes about the vast potential of the measurement and valuation of intangible assets like corporate brands and innovation.

Knowing that innovation is good for companies is useful, but innovation alone is not going to lead to better business results. Leadership should create a culture of innovation that includes continuous measured improvement in all areas of the company. Success is achieved when these goals are tied to specific business results, such as improving customer satisfaction, that lead to increased revenue and stock performance.

**REFERENCES**

APPENDIX C: PERMISSION LETTERS
Mr James Gregory  
7408 Heritage Grand Place  
Bradenton,  
FL 34212-3257  
USA  

March 29th 2018  

Email to: igregory@tenetpartners.com  

Dear Jim  

Re: Does a culture of innovation drive business results?  

I am writing to confirm our permission for you to reprint in the appendix of your doctoral dissertation your article ‘Does a culture of innovation drive business results?’ first published by Henry Stewart Publications in *Journal of Cultural Marketing Strategy*, Volume 3 Number 1.  

Kind regards  
Daryn  

Publisher  
Henry Stewart Publications
April 11, 2018

Frank Findley  
Marketing Accountability Standards Board  
38 East 37th St, Box 5  
New York NY 10016

James Gregory  
7408 Heritage Grand Place  
Bradenton, FL 34212-3257

Dear James,

This is in response to your request to include the 2011 CoreBrand Equity Construct MMAP Assessment in your to be published dissertation entitled Intangible Capital — Hidden Value in Corporate Brands.

Given confirmation of Tenet Partners approval per your email of Monday 3/19/18, permission is granted on condition the following is also included:

- Recognition of the Copyright of the Marketing Accountability Standards Board
- That the assessment year was 2011
- Our website address: www.themasp.org
- The following statement: “MMAP assessed metrics are subject to reassessment when substantive changes in methodology occur and at given time intervals. The latest assessments for a metric are available from the Marketing Accountability Standards Board.”

Thank you for your participation in MASB and congratulations on your academic success!

Sincerely,

[Signature]

Frank Findley  
Executive Director, MASB  
Chief Advisor to the MMAP Center
March 22, 2018

Mr. James Gregory
7408 Heritage Grand Place
Bradenton, FL  34212-3257

Dear Jim,

In follow up to your request, I am writing to provide approval to include in your dissertation the Components of S&P 500 Market Value from Ocean Tomo’s Intangible Asset Market Value Study.

The preferred citation is as follows:

© Ocean Tomo, LLC; Source: Intangible Asset Market Value Study;
http://www.oceantomo.com/intangible-asset-market-value-study

I will send you via email a high-resolution image for your use.

Best regards,

Kristi L. Stathis
Chief Marketing Officer
Ocean Tomo, LLC
Dear James Gregory:

In reply to your request, you have our permission to use excerpts as specified in your request from the book “Managing Brand Equity” by David A. Aaker in your Doctoral degree dissertation. New permission is required for all subsequent uses.

The following acknowledgment is to be reprinted in all copies of your dissertation:

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This permission applies to all copies of your thesis made to meet the Doctoral degree requirements at University of South Florida.

Please re-apply to this department if your dissertation is later accepted for commercial publication and you wish to retain our material.

Best wishes for the successful completion of your work.

Sincerely,

Laura Milunic
Assistant Permissions Manager
October 25, 2017

Mr. James R. Gregory
7408 Heritage Grand Place
Bradenton, FL 34212

Subject: Permission to use CoreBrand Data

Dear Jim,

This letter grants you a limited, non-exclusive, non-transferable right to utilize the research database ("Data") known as the CoreBrand Index® owned by Brandlogic Corp. D/B/A Tenet Partners ("Tenet Partners") solely to use the Data in your doctoral dissertation – Toward a Theory of Intangible Capital with the University of South Florida ("Dissertation").

As consideration, you will give Tenet Partners and CoreBrand Data Science attribution and recognition of its ownership of the Data in the Dissertation. The use of the Data is limited to the Dissertation only and no other rights are conveyed. In addition, you agree to not use the Data or any of Tenet Partner’s trademarks ("Trademarks") or other use beyond the publication of your Dissertation nor for any commercial use, and you shall not grant any rights to use the Data or the Trademarks to any other parties. Tenet Partners reserves all rights in and to the Data and Trademarks not expressly granted to you, as well as the right to terminate the rights granted hereunder in the event you breach or abuse your rights under this agreement or any other agreements between you and Tenet Partners. This agreement does not replace or augment any other agreements currently active between you and Tenet Partners.

We are excited to see the culmination of your doctoral work in what will prove to be a fascinating exploration and demonstration of the CoreBrand Index and its potential link to better understanding intangible assets of corporations.

Sincerely,

[Signature]

Hampton Bridwell
CEO and Managing Partner
Tenet Partners
122 W. 27th Street, 9th Floor
New York, NY 10001
ABOUT THE AUTHOR

James R. Gregory is the chairman of Tenet Partners, a global brand strategy and innovation firm based in New York City. Prior to working with Tenet, Jim founded and ran CoreBrand, a consulting firm focused on corporate brands. He pioneered work in the quantitative measurement research vehicle known as the CoreBrand Index®, which is the source of the data in this dissertation. Jim is a leading expert on measuring the strength of corporate brands and their resulting impact on financial performance.

Jim serves on the board of trustees of the Virginia Commonwealth University Foundation. In 2016, he was appointed to a senior fellowship at The Conference Board. He is also MASB advisor emeritus at the Marketing Accountability Standards Board.

Jim graduated from Virginia Commonwealth University with a Bachelor of Fine Arts in communication, arts, and design. He also earned a certificate in entrepreneurship from Harvard Business School.

He has written five books on corporate branding and is a noted speaker on the subject. His most recent book is *Powerhouse—The Secrets of Corporate Branding.*

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