



Marketing Science Institute Working Paper Series 2022

Report No. 22-127

Reconciling the Customer Equity and the Brand Equity Perspectives on the Financial Value of Marketing

Bobby J. Calder, Edward C. Malthouse and Joe Omatoi

“Reconciling the Customer Equity and the Brand Equity Perspectives on the Financial Value of Marketing” © 2022

Bobby J. Calder, Edward C. Malthouse and Joe Omatoi

MSI Working Papers are Distributed for the benefit of MSI corporate and academic members and the general public. Reports are not to be reproduced or published in any form or by any means, electronic or mechanical, without written permission.

Reconciling the Customer Equity and the Brand Equity Perspectives on the Financial Value of
Marketing

Bobby J. Calder^a, Edward C. Malthouse^a, Joe Omatoⁱ^a

Northwestern University, Evanston, IL USA

November 2022

1. Introduction

In many organizations there is often a disconnect between marketing and finance. Marketing deals with customers and brands; finance deals with balance sheet monetary value. This creates a natural tension around marketing budgets (Calder, 2019a, 2020; Gupta and Zeithaml, 2006; Kumar and Shah, 2009; Srivastava, Shervani, and Fahey 1998). Take for example a digital news service. Marketing wants to produce an email newsletter to promote its content to consumers. It focuses on marketing metrics such as opening and click-through rates. Finance wants to maximize revenue and control costs. It focuses on the overall financial performance of the firm. The solution to the potential disconnect is to find better ways of showing the financial value of marketing to the firm. The question is *how*?

Conventional financial accounting standards treat marketing expenditures as expenses, often reported under General, Sales, and Administrative (GS&A) costs. In accounting terms, an expense is any resource used up in generating revenue during some period. Marketers, however, have long contended that some expenditures should be treated as investments rather than expenses. However, in financial terms, an investment creates a resource controlled by the firm from which *future* economic benefits are expected to flow. A resource of this type is considered a "financial asset" by standard setting bodies such as the Financial Accounting Standards Board (FASB). The financial community has been reluctant to accept marketing expenditures as investments since the resource created by marketing would be intangible and its value could not ordinarily be determined by market transactions, in contrast with things such as equipment that appear on financial statements at their market value.

Against this background, two perspectives have evolved as ways to justify marketing expenditures as investments that create financial assets: Customer Equity (CE) and Brand Equity

(BE). The two perspectives have developed independently as two different streams of research. In fact, some researchers within the CE perspective have contended that it as a preferred alternative to BE, although others have allowed for brands to be one source of customer equity. All too often, the larger field views the difference between the two perspectives as simply a debate over whether customers or brands are more important for marketing. One contends that brands come and go, but customers are essential, the other that customers come and go but brands are essential.

Although there have been calls for reconciliation, as discussed later, these have focused on the notion that a company can use both perspectives as they are. And there have been very limited empirical attempts to show that some firms use one more than the other. Using M&A accounting data, Binder and Hanssens (2015) reported that customer assets, as of around 2009, exceeded brand assets as a proportion of the purchase price of acquired firms. As Sinclair and Keller (2017) contend, however, this shift could simply reflect shifts in accounting practices. Moreover, M&A data hardly reflect the activities of all firms. Either CE oriented firms or BE firms could be overrepresented as acquisition targets. More importantly, any empirical resolution must be based on a greater recognition of how divergent the two perspectives really are and the need for greater conceptual clarity before they can be empirically compared.

Accordingly, our purpose is first to highlight the differences between CE and BE to show that reconciliation requires deeper consideration. We then consider the question of making CE and BE more compatible. Ultimately, the goal is moving beyond customer-versus-brand toward a solution to the marketing-finance problem. Reconciling CE and BE can greatly contribute to enhancing the role of marketing in firms

A high-level overview of the difference between CE and BE suggests how divergent they are. The CE perspective focuses on the lifetime value of customers (CLV), predicated on strong customer relationships. The BE perspective focuses on the financial value of brands (FVB), predicated on strong brands. CE research typically employs objective variables such as customer retention rate that are used to model the lifetime value of customers (CLV). This CE for the firm is conceptually, if loosely, attributed to the strength of the relationship between customers and the firm. BE research typically uses subjective, diagnostic measures of brand strength for consumers. Although there have been attempts to show the "value relevance" of these diagnostic measures (e.g., Ailawadi, Lehmann, and Neslin, 2003; Keller and Lehmann, 2006; Krishnamurthi and Raj, 1991), work on determining FVB has been only loosely connected to the diagnostic measures (Calder, 2020). Figure 1 after References summarizes the problem—CE and BE have very different core concerns leading to distinctly different approaches in terms of CLV and FLB is determining the financial value of marketing.

Our goal is to identify two possible paths toward reconciling CE and BE. One path is to integrate diagnostic measures of brand strength into modeling CLV. A second path is to employ BE and CE as alternatives, each applying to distinct marketing settings. BE would apply to firms building strong brands, CE with firms building strong customer relationships. The latter path requires further refinement of the concept of customer relationships, and we review the marketing literature to propose the concept of calculative customer relationships as the basis for customer equity. Finally, we address the relationship of CLV to FVB. Again, accomplishing a reconciliation of CE and BE would help overcome a major obstacle to linking marketing to financial outcomes and facilitating firms fully recognizing the contribution of marketing.

Our review of the CE and BE literatures reveals that they differ in fundamental ways. To pinpoint these differences, each perspective is considered in turn.

2. The customer equity (CE) perspective

CE has its origins in the direct mail industry. Well over a hundred years ago companies such as Sears, Roebuck, and Company began mailing catalogues and tracking individual-level consumer data (Peterson et al., 1993). Eventually, this evolved into the use of large databases and statistical analysis aimed at modeling customer responses to marketing investments and the financial value of customers (Oblander et al., 2020). Early on (e.g., Blattberg, Glazer, and Little, 1994), proponents of CE began to argue that it provided a way of treating marketing expenditures on customer acquisition and retention as financial assets. If expenditures created a relationship with customers, this relationship constituted a resource generating value over time. From this perspective, models of Customer Lifetime Value (CLV) emerged for forecasting the value of customers. We emphasize that CLV modeling has been part of the larger overall CE perspective but is not synonymous with it. Forecasting returns can be done independently of the CE perspective.

From a CE perspective, Pfeifer et al. (2005, p. 17) define CLV as “the present value of the future cash flows attributed to the customer relationship.” Blattberg et al. (2009) express this as

$$CLV = \sum_{t=1}^{\infty} \frac{E(V_t)}{(1 + d)^{t-1}}$$

where V_t is a random variable giving the customer’s net contribution in period t , and d is the period discount rate. The expected value emphasizes that CLV is the sum of an estimated quantity, which must come from some model and cannot be observed. The $1/(1 + d)^{t-1}$ expression is the discounted cash flow (DCF), which is generic to financial analysis. DCF

discounts the future monetization back to a present value because future returns, considering the discount rate, are worth less in the present.

Numerous statistical models have been proposed for CLV (Jain and Singh, 2002). All models make certain assumptions and involve various parameters that must be estimated from historical data. We discuss one model in detail, to give a sense for what is involved, and mention some extensions. The simple retention model (SRM) (e.g., Berger and Nasr, 1998; Gupta et al., 2006; Gupta and Lehmann, 2003; Gupta, Lehmann, and Stuart, 2004; Gupta and Lehmann, 2006; Reinartz and Kumar, 2003) makes the “gone-for-good” assumption: after acquisition, each customer generates net contribution m each period until the customer cancels the relationship and never returns. For example, a Netflix customer may pay \$10 each month until canceling. A similar situation exists for cell phone, YouTube, cable TV subscribers, etc. The probability that a customer is retained in any period is the *retention rate* parameter r , which is assumed to be constant over time (the life of the customer) and over customers. The event of canceling in some period is assumed to be independent of canceling in other periods. Under these assumptions, the time until cancelation has a geometric distribution, the expected cash flows in period t are $E(V_t) = r^{t-1}m$, and CLV is simply a geometric series:

$$CLV = \sum_{t=1}^{\infty} \frac{E(V_t)}{(1+d)^{t-1}} = \sum_{t=1}^{\infty} \frac{mr^{t-1}}{(1+d)^{t-1}} = m \sum_{t=0}^{\infty} \left(\frac{r}{1+d}\right)^t = m \frac{(1+d)}{1+d-r}$$

Thus, CLV is a future forecast from a statistical model that involves some set of parameters (e.g., m and r) that can be estimated from historical data or known from other information (e.g., for m , Netflix charges some amount, less relevant costs to provide the service).

Other considerations have been added and different assumptions of the SRM have been relaxed by numerous models. For example, some authors deduct acquisition costs for prospective customers who have not yet been acquired (e.g., Gupta et al., 2006). The beta-geometric model

(Fader et al., 2010) allows for the retention rates to vary across customers (heterogeneity). The general retention model (Malthouse, 2013) allows for retention rates to be functions of covariates and vary over time with discrete-time survival analysis. Markov chain models (e.g., Pfeifer and Carraway, 2000) relax the gone-for-good assumption and allow lapsed customers to rejoin with some probability, and have segments (states) defined by, for example, recency, frequency, or cash flow levels.

With CLV defined at the individual level, customer equity (CE) aggregates over customers (Gupta et al., 2004):

$$CE = \sum_{i=1}^n CLV_i$$

where CLV_i is the lifetime value of customer i and n is the number of customers. By implication, CE is more than the sum of forecasted quantities. It is conceptualized as the future cash flow attributable to customer relationships. Thus, the CE perspective represents the totality of CLVs as the financial value of the customer base to the firm as a resource from which future economic benefits will flow, which is, by definition, a financial asset. The CE perspective, as modeled, thus results directly in a quantitative monetary value.

Basic to the CE perspective is the concept of *relationship*. The firm and the customer form a relationship of mutual obligation. The relationship can be formal, even contractual (e.g., Netflix), or more informal and open to change (e.g., Uber). But the important point for CE is that the customer-firm interaction is not transactional, with both parties assumed to be more-or-less committed to interact over some period of time. Although models have been developed for noncontractual cases (e.g., McCarthy and Fader, 2018, 2020; Pfeifer and Carraway, 2000), a relationship is still assumed in that customers can be "acquired" and "lost."

"Relationship marketing" can be viewed as a general rubric that forms the basis for CE in that it approaches marketing exchange in terms of on-going relationships rather than transactions, as do business and services marketing as well (Ballantyne, Christopher, and Payne, 2003; Möller and Halinen, 2000). For CE, what produces either formal or informal relationship commitment is typically identified as Customer Relationship Management (CRM), which is "the practice of analyzing and utilizing marketing databases and leveraging communication technologies to determine corporate practices and methods that will maximize the lifetime value of each individual customer" (Verhoef et al. 2010, p. 122). In essence, the firm engages in activities that add value to the product or service by making the customer-provider interaction better. A well-trained call center, for example, could lead customers to trust that any problems with their account can be easily rectified, thereby increasing retention. In theory concepts such as trust, transaction costs, relational contracting, and resource dependence could guide the use of CRM to improve relationships (Eiriz and Wilson, 2006; Morgan and Hunt, 1994).

As part of its core relationship focus, several specific characteristics of CE are important:

- A salient CE characteristic is *objectivity*. The parameters in CLV models are objective quantities, e.g., cash flow, retention rate, and discount rate. Reflecting the CE perspective, Gupta and Zeithaml (2006) contrast "unobservable or perceptual customer metrics" such as intentions to purchase with "observable or behavioral customer metrics." They question the need for hard-to-distinguish perceptual metrics (p. 733). In a similar vein, Rust, Lemon, & Zeithaml (2004) present a return on marketing investment model that refers to "drivers" (e.g., advertising awareness) that affect customer attraction and retention and subsequently CLV, but the clear emphasis is on how marketing activities translate into concrete customer behaviors and how CLV is a tangible success measure of

the firm's marketing investments. Also indicative is an approach to extending the basic CLV model discussed by Hogan et al. (2002). Rather than using perceptual measures, individual differences among customers are treated as financial risk that can either be accounted for through an overall discount rate or separate discount rates for retention and other risk factors. Consistent with objectivity, CE is also considered more *tangible*. To some extent, accounting standards presently recognize assets that can be categorized tangibly as customer related. These include customer lists and contractual or demonstrable non-contractual relationships (Sinclair, 2016, p. 173).

- A second characteristic is that CE is primarily *predictive* in its treatment of financial value, although there have been efforts to move beyond prediction and optimize it (e.g., Blattberg and Deighton, 1996; Berger and Bechwati, 2001; Memarpour et al., 2019; Rust, Lemon and Zeithaml, 2001; Venkatesan and Kumar, 2004; Reinartz et al., 2005). CE forecasts the expected value of future returns from customers. For instance, in a 2008 article, Borle, Singh, and Jain develop a model by highlighting the future orientation of CLV: "For a firm, it is of interest to know how much net benefit it can expect from a customer *today* (p. 100)." In other words, "the firm would like to form some expectation regarding the lifetime value of that customer." Although Borle et al. (2008, p.101) acknowledge that "different models for measuring CLV arrive differently at" what they try to estimate, the underlying motivation for each model is the same: "estimates of the expectations of future customer purchase behavior."
- A third CE characteristic is its directional focus on the *firm*. Although CE is customer centric, its primary focus is what customers contribute to the firm. Its strength is that it is couched in financial terms, which is the language of business. CE is about how the firm

can think about marketing as a business activity. Often including a variable for marketing costs, CE focuses on cash flows from the customer to the firm. CE takes an outside-in view of how the firm can affect cash flows to the firm. Even allowing that marketers must create perceived value for customers (e.g., Kumar and Reinartz, 2016) the focus is on how customers in return will create value for the firm. In this vein, Rust, et al. (2004) propose that firms create “improved customer perceptions” to motivate customers to provide the firm with actual value through concrete actions. The importance of the customer is acknowledged, but CE focuses on the financial return to the firm from the customer. Moreover, it focuses on the financial value of the firm as a whole. “Customer metrics, especially CLV and CE, provide a good basis to assess the market value of a firm” (Gupta and Zeithaml, 2006, p. 733). Beyond this, Wiesel, Skiera & Villanueva (2008) recommend that CLV and CE should be reported on financial statements such as the US mandated Management, Discussion and Analysis (MD&A) section of company annual reports. They illustrate the feasibility of such reporting using Netflix as an example.

- A fourth CE characteristic is *effects-oriented*. CE is more concerned with the effects of marketing activities, not the activities themselves. For instance, Gupta et al. (2004) examine retention as an important effect of marketing. They report that a one percent increase in retention improves CE by about five percent, whereas a one percent increase in margin yields only improves CE by one percent. And a decrease in acquisition cost has an even smaller effect. More recently, Matsuoka (2021) found retention to be a major source of variance in controlling CE over time. Further, Blattberg and Deighton (1996)

emphasized the key issue of balancing both retention and acquisition effects to maximize CE and offered specific guidelines for doing this.

- A fifth CE characteristic is its *narrowed scope*. As Leone, et al. (2006) point out, CE takes customers as the ultimate source of value to the firm. Other stakeholders such as suppliers, retailers, or employees are outside the scope of analysis. Financial value is identified with the actions of customers. The core customer relationship notion stands apart from taking other stakeholders into account.

To summarize, CE derives from the existence of customer relationships, manifested in objective variables, that allow forecasts of expected future returns from the customer to the firm. These returns reflect the effects of marketing activities on the objective variables that characterize the customer relationship. Next, we discuss how BE takes a different perspective on marketing and financial value. We then attempt to reconcile the two views.

3. The brand equity (BE) perspective

BE has its origins in the early days of widely-sold consumer products that relied on brand names and symbols to distinguish themselves from "commodity" versions of other products in a category. From brand as the physical presentation of products, marketing evolved to treat brands as concepts in the minds of consumers (Oh, et al., 2020). According to the BE perspective, the goal of marketing is to influence how consumers perceive the functional and even social and emotional benefits of a product or service (Calder, 2010, 2019b; Keller, Sternthal, and Tybout, 2002). More recently, marketers have focused on making the consumer experience of the brand more experientially engaging (e. g., Calder, Isaac, and Malthouse, 2016). All the myriad of ways

that marketers talk about brands have in common the idea that brands exist in the minds of consumers and are defined by how consumers *think* about the product.

Farquhar (1989) used the term brand equity (BE) to refer to the "added value" that a brand gives a product, recognizing that, depending on the perspective, the brand can have added value to the firm, the trade, or the consumer (p. 25)." Leone et al. (2006) echo this: "The power of a brand lies in the minds of consumers and what they have experienced, learned, and felt about the brand over time; brand equity can be thought of as the 'added value' endowed to a product in the thoughts, words, and actions of consumers (p. 126)." Brand equity is clearly distinct from value added *for the firm*. Value depends on the strength of the customer's perception of the product. The firm certainly influences brand equity, but it belongs to the consumer. An influential definition by Keller (1993, p. 2) states: "Customer-based brand equity occurs when the consumer is familiar with the brand and holds some favorable, strong, and unique brand associations in memory." Marketers developed many BE indicators for measuring the strength of a brand, such as awareness, message recall, attitude, purchase intention, satisfaction, engagement, and the like.

The BE perspective has generally stopped short of directly considering the impact of a brand on a firm's financial performance. Typically, BE focuses on measures of brand strength and either presumes that this produces financial value for the firm or attempts to attribute financial returns to specific branding activities. There has been some effort, however, aimed at showing the overall *financial value of brands*, which we will abbreviate by FVB. Several companies such as Interbrand, Brand Z, and Brand Finance have developed financial *valuation* approaches to FVB. Their approaches vary but typically subtract tangible assets from a firm's market value to estimate the value of its intangible assets and then use empirical or judgmental indicators of

brand strength to net out the proportion of intangible assets attributable to brand; FVB is the discounted value over some period (Paugam, Andre, Philippe and Harfouch, 2016).

By contrast, a brand *evaluation* approaches FVB as a direct comparison of financial cashflows with a brand versus another entity with no brand or a weak brand, but one that is otherwise similar (He and Calder, 2020; Calder, 2020). The difference in cashflow discounted over some time period is FVB. Exemplifying this logic, Ailawadi, Lehmann, and Nislin (2002; 2003) conducted a cross-sectional study comparing a large sample of brands with a matched sample of unbranded products. They looked for a revenue premium for the brands over the corresponding private label products, where the difference could reflect either a higher price for the brand, greater volume, or both. There was a price premium in the case of 93 percent of the brands. Related work finds that the extent to which the stocks of companies with strong brands perform better than other companies, where high brand strength is indicated by a brand valuation (Madden, Fehle, and Fournier, 2016) or satisfaction as a brand diagnostic (Fornell, Morgeson, and Hult, 2016a, b). These findings suggest measuring FVB in terms of comparative stock market performance. Recently the Marketing Accountability Standards Board has called for the use of FVB in practice (MASB, 2021) and the International Standardization Organization (ISO) has begun developing standards for measuring FVB (ISO 20671 Parts 1 and 2).

As discussed later, CE sometimes refers to brands as drivers of CLV, but BE and CE are best understood as contrasting, high-level perspectives. Basic to the BE perspective is that brands are subjective added value in the mind of the consumer. CE stresses the relationship firms have with customers as manifested in objective retention rates and the like. CE thus emphasizes forecasted CLV as a valuable financial asset for the firm. BE has devoted some effort to specifying FBV but this has not traditionally been a focal concern. Moreover, CLV is a more

micro perspective based on individual customer data; FVB is a more macro perspective based on comparing the presence to a brand to its absence in the form of a benchmark weaker brand (or as an inference from brand diagnostics).

As part of its core focus on added value for the consumer, several specific characteristics of BE are important to note:

- An important characteristic of BE is *subjectivity and intangibility*. Customers are of course relevant in that BE exists in the mind of the customer. The key issue, however, is not the existence of customers but the existence of brand equity—brands are essentially psychological states. They have a physical representation via trademarks and the like but at their core brands have no physical substance. Brands are very much like other intangibles such as intellectual property. The many metrics that marketers use to track the strength of brands reflect the subjective quality of brands. By contrast, CE attempts to treat customers as a tangible asset, or at least as more tangible than brands. And, from a financial accounting standpoint, this seemingly greater tangibility may, in fact, make treating marketing expenditures for customer lists, etc., as an investment less difficult. But any advantage of tangibility should be weighed against the fact that there is a growing realization that intangible assets are real and now account for more economic value in developed countries than tangible assets (Haskel and Westlake, 2018).
- A second characteristic is that BE is explicitly causal in its treatment of financial value. Measures of brand strength are, at least in theory, related directly to consumer behaviors that drive financial outcomes. Moreover, branding is linked to FVB through the quasi-experimental comparison of a brand with an unbranded product that is otherwise similar. In contrast, CE projects current metrics such as retention into the future without reference

to causality. Typically, it loosely assumes that metrics must be driven by a "customer relationship" (and sometimes that these metrics are at least partially related to brand), but overall CLV is predicated on predictive forecasting.

- A third characteristic of BE is its directional focus on the *consumer* and the firm's creation of value for the consumer. The perspective is inside-out from the firm to the consumer. An important consequence of this is that BE is separable from the firm in a way that CE is not. BE can be separated from the operations of the firm. Brands are routinely bought, sold, and licensed through business-to-business market transactions. Not all contributions to firm value equate to brand value. FVB consists of the cash flows attributable to the brand, which is not the same as the overall value of the firm. Acquired brands can even be readily recognized on the balance sheet or otherwise reported based on transaction price (Mizik and Nissim, 2011; Sinclair and Keller, 2014; 2017). CE is more bound up in all the firm's operations (a firm could sell access to its customers but could not sell the customer relationship without selling the entire firm). BE is a discrete, fungible component of firm value.
- A fourth characteristic of BE is that it is *diagnostic-oriented* with respect to marketing activities. BE has traditionally emphasized brand diagnosis as an input to marketing activities. If a brand has low awareness, for example, the decision to use advertising media with high reach would be indicated, and the effectiveness of the advertising would be assessed according to whether brand awareness scores increased. This orientation underlies the brand management system of coordinating as many firm decisions as possible around the goal of increasing brand strength. Brand management has a history of

being remarkably adaptable over many years to changes in marketing practices (Low and Fullerton, 1994).

- A fifth characteristic of BE is a *broad scope*. BE can be applied to any activity of the firm. Do employees, for instance, understand and embrace the brand? Whereas CE could be construed to concern how employees affect customer relationships, more commonly CE narrows the firm's focus to customers. BE recognizes that although revenue comes from customers, many stakeholder activities contribute to the brand.

To summarize, BE is based on the concept of added value to the consumer as reflected by subjective measures of brand strength assumed to cause cash flows to be higher than for a comparable unbranded product. The focus is on the consumer; the brand resides with the consumer and can be separated from the firm. BE seeks to diagnose brand strength to guide marketing activities directed at the consumer but recognizes that other stakeholders are relevant.

Thus both BE and CE each represent a distinct way of viewing marketing's financial contribution to the firm. Table 1 after the References summarizes the characteristic differences we have discussed. On each characteristic the two perspectives entail very different points of view. Given the two different perspectives, the obvious question going forward is whether they can be reconciled? We discuss two possible paths to reconciliation, *Integrated* and *Selective*. The goal of the Integrative Path is to integrate them into a common approach to marketing's financial contribution. The goal of the *Selective Path* is to develop them into alternative approaches, each with its own clearly different application setting.

4. The Integrative Path: Integrating the BE and CE Perspectives into a Common Approach to Financial Value

Although CE and BE remain largely independent streams of research, the question of reconciling them has not entirely escaped notice. Gupta et al., 2004; Leone et al., 2006 and Luo, Lehmann, and Neslin, 2015) have proposed that, from a company's perspective, one way of reconciling them is to think of a matrix in which the rows are brands and the columns are customers. Leone et al. (2006) contend that "Effective brand and customer management would necessarily take into account both the rows and the columns to arrive at optimal marketing decisions (Leone et al., p. 132)." They suggest that such a comparison would reveal many common themes (such as value being created by having as many customers as possible pay the highest price). They acknowledge, however, that the "two perspectives emphasize different aspects (p. 133)." More questionably, they conclude that both CE and BE "matter" in that brands "serve as 'bait'" and customers "serve as the profit engine for brands (p. 134)"—a conclusion that clearly seems at odds with the BE view that brands represent added value. More generally, our discussion of CE and BE as distinct ways of viewing marketing and its contribution to the firm underscores the difficulty of "taking both into account." As our review indicates, CE and BE diverge in too many basic ways to simply merge them. This earlier work, however, does suggest a path forward by way of linking BE to customer-level profit drivers. The research objective would be to model the mechanisms that translate BE into CLV via variables such as retention.

Luo et al. (2015) further developed the matrix along these lines. BE is taken as the residual preference for the product not accounted for by objectively measured functional attributes. Essentially, the idea is that brand and attribute equity (value derived from unbranded attributes) both affect objective retention and acquisition variables for customers. After considering costs, these variables jointly determine CLV. One can thus examine both CE and BE, where BE is one determinant of CLV but not the sole determinant.

As noted earlier, some have in fact looked at the relationship between BE and CLV. Kumar (2006) suggested including brand as part of a CE process entailing sequential steps: "Measuring Individual Brand Value (IBV)," "Linking IBV to CLV," and "Optimizing IBV to Maximize CLV." Stahl, et al. (2012) tested a CE model incorporating brand. They use a Markov chain model in which customers are acquired, lost (switch), and then sometimes return (switch back). CLV thus depends on three components, a reacquisition rate as well as the retention rate and cash flow. Included in the model was a well-known BE metric developed by an advertising agency, the Brand Asset Valuator (BAV) measure. BAV consist of four subscales: Knowledge, perceived familiarity with the brand; Relevance, perceived personal connection; Esteem, perceived quality and leadership; and Differentiation, perceived uniqueness. The model was tested with data for 39 automotive brands over a ten-year period.

Stahl et al.'s analysis focused on whether the BAV scales were related to the three components of CLV and whether marketing variables such as advertising, price promotions, and market presence (product line breadth and extent of distribution) were related to the components of CLV, and whether BAV partially mediated this relationship. The findings supported links between marketing activities and the BAV scales and between the BAV scales and components of CLV. For instance, advertising and market presence affected the components of BAV; Knowledge was related to acquisition; esteem was related only to retention; and Relevance was weakly related only to acquisition. In addition to the effects mediated by BE, there were also direct effects of marketing activities on CLV, such as advertising and market presence both affecting acquisition and retention. Further indicating the value of including brand, Differentiation was positively related to cash flows but negatively related acquisition and

retention, due possibly to the role of uniqueness in automobile branding (customers might pay more for a distinctive car but be less certain about buying it).

Stahl et al.'s work shows empirically the value of including brand in a CLV model. BE provides diagnostic measures that can be related to objective CE variables. The forecasting model yields CLV as a financial valuation. Clearly this adds diagnostic value to the forecasting model and offers valuable information to support managerial decisions. The various subjective measures in use offer greater diagnostic capabilities than the objective components such as retention rates and period cash flows that enter the CLV forecasting model. Many BE measures are already used as leading indicators of financial outcomes including brand associations (Henderson et al., 1998), brand experience (e.g., Brakus et al., 2009), brand engagement (e.g., Hollebeek et al., 2014; Sprott et al., 2009; Calder et al., 2016), brand personality (Aaker 1997), brand trust and commitment (Choudhui & Holbrook, 2002; Keiningham et al., 2017), satisfaction (e.g., Hallowell, 1996; Anderson & Mittal, 2000), service quality (Zeithaml, 2000; Chang & Chen, 1998), etc. But objective measures have a clear advantage for forecasting. For example, the elegance and parsimony of the geometric series used by the SRM and the Markov chain model (Pfeifer and Caroway, 2000) to forecast, in closed form, cash flows in perpetuity is unmatched by the present use of subjective BE measures.

In terms of future work on the BE diagnostic-CE forecast solution, we suggest combining models to take the form of a composition of functions to leverage the respective strengths of the two components. Such a composition easily relates brand measures to extended forecasts enabling optimization as discussed below. As an example, consider the SRM, which neatly forecasts future value as a function of retention rate r and period cash flows m : $CLV = f(r, m) = m(1+d)/(1+d-r)$. The retention rates, in turn, can be the dependent variable in survival analysis

models to study how subjective measures such as satisfaction affect retention. Thus, we have a composition of functions $CLV = f(g(\text{subjective, behaviors}), m)$. Similarly, period cash flows (m) can be modeled as a function of covariates. Much research has been done on this under the heading of churn modeling (e.g., Neslin et al., 2006), where churn is opposite of retention. Malthouse's (2007) study of trigger events with survival models, shows how disengagement with an educational service increases the likelihood of churn. More recently, Zhou et al. (2022) use survival models to show how engagement with a media service affects churn/retention.

Having estimated CLV as a function f of retention and retention as a function g of subjective behaviors, the effects of subjective behaviors on CLV can be studied and optimized. For example, if x_j is the subjective behavior, the chain rule allows us to evaluate the derivatives in terms of the component parts:

$$\frac{\partial CLV}{\partial x_j} = \frac{\partial CLV}{\partial r} \cdot \frac{\partial r}{\partial x_j}.$$

In this way a manager can know the sensitivities of CLV to different subjective behaviors and thereby prioritize which actions to take.

The Selective Path potentially reconciles CE and BE in terms of the characteristics of CE and BE summarized in Table 1 except for the core customer relationship concept characteristic of CE. The second path discussed next focuses on the relationship concept.

5. The Selective Path: BE and CE as Alternative Approaches with Different Applications

The Integrative Path combines BE and CE by treating CE as a forecasting model in which brand equity can be incorporated. This BE diagnostic-CE forecast solution reconciles the BE and CE perspectives by focusing on the forecasting model, which, as discussed earlier, is characteristic of the CE perspective. Accordingly, CE can be simply viewed as a forecasting

model based on objective variables that yield CLV as a financial valuation. This, however, ignores the CE perspective's emphasis on "relationship" as the rationale for the forecast. In other words, the forecasting model and resulting valuation is justified on the basis of a customer relationship. Adding BE to the model may have diagnostic value but it does not necessarily replace the customer relationship justification. Demonstrating a correlation as in the Stahl et al. study between a measure such as Brand Knowledge and retention rate may be informative, but here CE is developed from a different perspective, that of relationship marketing.

In fact, some proponents of CE have expressly argued that CE is superior precisely because it can avoid the concept of brand. Blattberg and Deighton (1996) state unequivocally: "The customer-equity perspective favors customer management over product or brand management as an organizing principle (p. 141)," and "Brands don't create wealth; customers do (p. 143)." Considering the assumptions of CE, Shah et al. (2006) conclude that "Brand equity, a fundamentally product-centric concept, has been *challenged* by the customer-centered concept of customer equity" (p. 118, italics added). More typically perhaps, CE simply subordinates BE to CLV. Referring to a Venn diagram showing BE as largely intersecting with CE, Fader and Toms (2018) contend that "the majority of BE can arise from (and be measured through) CLV, and thus can be attributed as a component under CE (p. 78)." Noting that BE has been "challenged" by CE, Rust et al. (2004) present a model in which CLV results from the frequency of category purchases, average quantity of purchase, and brand-switching driven, conceptually, by drivers that improve customer perceptions. This implies a role for brand but downplays it to be less central.

From the more adversarial to the more accommodating, such views point up the need to consider whether CE and BE can be reconciled at the level of their underlying core concept

rationales, which the Integrative Path does not do. That the two perspectives emerged from different marketing application settings, BE from consumer marketing and CE from direct marketing, suggests a Selective Path to reconciliation based on the core concepts being relevant to different marketing settings.

Taken as a whole, the CE perspective justifies the CLV forecasting model in terms of the core customer relationship concept and how this relationship is manifested in the variables that drive CLV as a flow from the customer to the firm. The Integrative Path seeks resolution by including brand measures that bypass the relationship part of the larger CE perspective. The Selective Path to reconciliation admits both brand and customer relationship as alternative core concepts. However, this path requires a better conceptualization of "relationship." Relationship needs to be conceptualized on a par with brand. To date, CE research tends to be vague about what the concept of customer relationship means outside of contractual or subscription settings. More fully specifying the relationship concept would allow a reconciliation based on when CE applies and when it does not.

Our review of the broader marketing literature indicates that there are two main conceptualizations of relationship as an explanatory concept. Hence the following two sections discuss two distinct ways of conceptualizing relationship on par with brand.

5.1 Anthropomorphic Customer Relationships

Among others, Fournier (1998) has pointed out that consumers can think about products or services in human and animated ways. In short, a product can be conceived of as a person. Consumers can thus relate to products in the same way as with interpersonal relationships, including attributing human characteristics to a product and making attributions about the type of

persons who use a product (Calder & Burnkrant, 1977). In this way, CE could be regarded as applying to settings in which the consumer anthropomorphizes the product, relating to it as if it were a person. For example, Kwak, Puzakova, and Rocereto (2015) studied price sensitivity as a form of interaction with a brand. Using household panel data, they found that humanized brands had higher price elasticities across six product categories than non-humanized brands. This was attributed to a greater concern with fairness with the humanized brands.

Customer relationships of this sort could range from very strong to weak or nonexistent. In the case of a strongly anthropomorphized relationship, consumers are more likely to conform in their own behavior based on the personal traits attributed to the product. For instance, priming participants with "Kellogg's" via an unrelated task and then giving them a scenario of taking an elevator or stairs led them to choose the healthier stairs alternative more often (Aggarwal and McGill, 2012). The presence of the anthropomorphized relationship led to normative conformity.

Highly relevant to the present discussion, Aggarwal (2004) proposed that a strong relationship is governed by communal norms as opposed to exchange norms (i.e., paying for services received). Communal norms dictate that "partners" share concerns about each other's welfare. As evidence for this, Aggarwal found in one study that under a communal norm, a bank charging a fee for a service request was evaluated more negatively than under an exchange norm. In a similar vein, Aggarwal and Larrick (2012) demonstrated that with a communal norm, but not with an exchange norm, a service was evaluated more positively if it exhibited greater interactional fairness. Participants rated an auto service center with which they had either a communal or exchange relationship. Their interaction with the center regarding a service problem entailed either high interactional fairness in terms of expectations about the respect and dignity accorded them or low interactional fairness. High interactional fairness led to a more

positive service evaluation if the relationship was communal rather than exchange. Also, Kwak et al. (2015) found that communal customer relationships resulted in a positive effect on price fairness compared to non-humanized brands. This research clearly indicates that customer relationships based on communal norms are value relevant. What is not clear is whether communal normative relationships are distinct from the core concept of brand. Brand itself has been widely linked to notions such as brand personality and identity (e.g., Aaker 1997).

Other research has sought to extend the concept of anthropomorphic customer relationships to include affective attachment. Brand "love" is what the name implies, a consuming, passionate relationship with a product. Batra et al. (2012) identified 14 different characteristics of brand love, including life meaning, desired self-identity, anticipated separation stress, and frequent thoughts about the brand, and developed a scale to measure it as a single higher-order factor. Going even further, other research has characterized brand relationships as form of "attachment." Park et al. (2010) define attachment, as opposed to brand attitude strength, as an expansion of the self: "By categorizing the brand as part of the self, a consumer develops a sense of oneness with the brand, establishing cognitive links that connect the brand with the self" (p. 2). In other words, the brand becomes part of the consumer's psychological makeup. Consumers devote themselves to the brand relationship (Park, Eisingerich, & Park, 2013). Interestingly, attachment can also refer to parent-child relationship styles. Although this idea has not been well-developed (Bagozzi et al., 2021), it could be useful. As with children and play, a strong but loose attachment could allow for variety seeking even with a strong relationship.

As the term brand love implies, however, extending the concept of anthropomorphic customer relationship to affective attachment makes it more, not less, difficult to distinguish CE from BE. In the brand literature, there is already evidence for engagement with brands based on

shared beliefs about how a brand connects to the personal goals and social values of consumers (Calder et al., 2016; Mersey et al., 2010; Zhou et al., 2021). Brand engagement of this sort is conceptually very close to affective attachment.

In any case, there is thus considerable research to support the hypothesis that customer relationships can be viewed as the strength of the anthropomorphized relationship between a consumer and a product and the communal norms this implies. Although not the same as formal relationships, relationships eliciting such norms of behavior can exert powerful holds on consumers. Before considering the implications of this way of conceptualizing customer relationships for reconciling the CE and BE perspectives, we introduce the second possible conceptualization that emerges from the literature.

5.2 Calculative Customer Relationships

As Gupta and Lehmann (2006, p. 107) note, it may be that CE "is most suitable for customer or subscriber-based businesses (e.g., telecoms, magazine subscriptions, cable, internet firms, financial services such as credit card, etc.)." At some point a formal relationship develops between the customer and the firm. This relationship defines an exchange process over some period. The roles of the customer and firm are defined by the contractual relationship. The customer and firm have obligations to each other by mutual agreement based on each's calculation of the value of the relationship.

This kind of calculative relationship is clear in the case of contractual agreements. But even contracts or subscriptions need to be periodically renewed. The key question is whether relationships based on mutually beneficial exchange can exist apart from formal agreements in situations in which BE is low (e.g., a relationship with a bank without any strong brand

associations to it). The literature suggests that this is the case. Rust et al., 2004) refer to relationship equity as the reluctance of the customer to go elsewhere because of the costs involved, such as lost learning, lost user-community, and lost personal contacts. They also allow for BE (while advocating the superiority of CE). Studies of product switching similarly implicate factors such as cost, time and effort in constraining switching (e. g., Bansal, Taylor, & St. James, 2005; Bolton, Kannan, & Bramlett, 2000; Jones, Mothersbaugh, & Beatty, 2000). Customer relationships can thus be characterized in economic terms. Both the consumer and the firm are incentivized to maintain the relationship.

Based on the extensive organizational behavior work on a three-component model of commitment (Meyer, Becker, & Vandenberghe, 2004; Klein, Becker, & Meyer, 2009), an empirical example of this conceptualization of customer relationships is provided by Lariviere et al. (2014). The three components are calculative, affective and normative. Calculative commitment is measured by items such as "It pays off economically to be a customer of Company X." Affective commitment by "I take pleasure in being a customer of Company X." Normative commitment by "Our attachment to Company X is mainly based on the similarity of values." Calculative commitment refers to customer relationships based on economic incentives whereas as noted above affective and normative commitment are typically attributed to brand equity. As Keiningham et al. (2014) put it, "calculative commitment pertains to 'having' to maintain the relationship" (p. 71) and they show that it is related to share of wallet.

The psychological literature provides another valuable insight relevant to calculative relationships. Critical to understanding such a relationship is *interaction* (Thibaut and Kelley, 1959). In a marketing context, consumers and firms interact to jointly determine their outcomes. As a result of interaction, suppose a relationship is formed around some joint outcome. Thibaut

and Kelley point out that any relationship will be evaluated based not only on the outcomes *in* the relationship but also on alternatives *outside* the relationship. They introduced the construct of comparison level (CL) to reflect this. CL is the average outcome from other possible comparable relationships. Hence, if a consumer's outcome value is 10 and his/her CL is 5, a positive relationship exists. If the outcome value is 10 and CL is 15, however, there will be dissatisfaction with the relationship, even though the outcome value is the same.

Thibaut and Kelley further introduced the construct of CL_{alt} , the comparison level at which the consumer would leave the relationship. Conceptually, CL_{alt} encompasses a wide variety of switching related costs. If the outcome value is 10 and CL is 15, but CL_{alt} is 9, the relationship is one of dependence. The consumer is dissatisfied but the value of CL_{alt} dictates that the consumer stays in the relationship. This analysis further shows how relationship considerations can affect the perception of outcomes in a purely calculative way.

Tybout and Kelly's theory provides insight into how calculative relationships develop if they do not take a contractual form and how they are renewed over time if they do. The economics literature is also instructive in this regard. It has focused on trust and reputation as informal mechanisms apart from contracts. Relationships arise from repeated transactions that create reputational expectations. Macchiavello and Morjaria (2015), for example, develop a model in which a seller establishes a reputation for reliability that creates an incentive to avoid any disruption in the relationship, thereby increasing the value of the relationship to the buyer. With sufficiently old relationships, reputational expectations are established and dependence on the history of transactions lessens. The relationship relies on calculating over time the incentive value of repeated transactions. Such models are consistent with psychological calculations such as with CL_{alt} .

Conceptualized in terms of calculative customer relationships, CE become clearly different from BE. Whereas BE depends on affective and normative beliefs that transcend functional attributes of a product, CE requires only economic considerations that arise from repeated transactions. This does not resolve any of the differences between CE and BE in terms of the characteristics summarized in Table 1, but it does imply that neither one is inherently superior to the other and that the Selective Path to reconciliation is viable.

5.3 CE as Anthropomorphic or Calculative Customer Relationships?

The key issue for the Selective Path lies in penning down the difference between brand and relationship as drivers of behavior. When behavior is brand driven, the BE perspective applies. When behavior is relationship driven, the CE perspective applies. As noted by Gupta and Lehmann (2006), in the case of contractual or subscriber type marketing settings, it seems natural to apply the CE perspective. However, outside of these settings the application of CE is less clear. Viewing CE in terms of either anthropomorphic or calculative customer relationships potentially extends the application of CE to these more informal settings.

In our view, however, calculative customer relationships are a better fit with CE than anthropomorphic. Much of the literature on the latter is actually couched in terms of brands. Although conformity to relationship norms could be viewed as separate from brands, it is commonly conceptualized as part of branding (Fournier, 1998) and more generally as the normative component of attitudes (e.g., Fishbein and Ajzen, 1977). Although this issue is certainly open to further research, conceptualizing CE in terms of calculative customer relationships seems the better path to reconciling CE and BE by delineating when each applies.

Marketers could then make an informed decision about whether a particular setting is better viewed as brand driven or as customer relationship driven.

6. Conclusions

Both paths to reconciling BE and CE appear viable and worthy of future research. The Integrative Path incorporates BE as a diagnostic component of CLV forecasting models. The Selective Path identifies CE with any setting in which a calculative customer relationship drives consumption as distinct from brand-driven consumption. Both paths supply a justification for using the CLV forecasting model, the first in terms of brand and the second in terms of a calculative customer relationship. As such both address objections (McCarthy and Fader, 2018; McCarthy and Pereda, 2020) that CLV modeling with tangible variables such as acquisition and retention should only be used as a way of forecasting revenues over time to value firms, not as a way of financially valuing the contribution of marketing. Both paths link the forecasting model to the contribution of marketing through either brands or customer relationships.

6.1 Research Implications

Consideration of the Integrative Path raises interesting research questions around how to conceptualize customer relationships. Our review indicated two candidates relevant to resolving CE and BE. We suggested that the anthropomorphic relationship account might best be viewed as a normative component of brand. In this regard further research on conceptually and empirically establishing the discriminate validity of a normative relationship component from an affective brand component would add to the BE perspective. Such research could explain why brand equity sometimes has a relationship quality.

The concept of calculative relationships operating independently from branding also raises intriguing research questions. Studies have long looked for correlates of brand loyalty (e.g., Carman, 1970), assuming that consumption is not always brand driven. Research, for instance, has found that younger consumers are more likely to switch between product choices over time than older consumers (Lambert-Pandraud & Laurent, 2010). The distinction between brand-driven and calculative-relationship-driven consumption leads to the hypothesis that younger consumers may be more calculative and therefore more likely to switch based on changes in their CL_{alt} . Older consumers may display more consumer inertia due to brand loyalty. Research on hypotheses such as this could increase understanding of when customer relationships hold versus brand loyalty. Along these lines, Bornstein (2021) relates the consumer inertia of older consumers to the share of young firms versus older firms, where the share of young firms has declined over decades in the U.S. as the population ages. Although CE is historically tied to data-rich subscription businesses and BE to mass market businesses, research may reveal deeper connections to consumer behavior.

At the firm level of research, with business marketing sales-oriented firms are considered to be different from marketing-oriented firms in emphasizing close customer contacts with customers via personal selling over brand building activities. But are such firms actually not marketing oriented? From a CE perspective, one might hypothesize that such firms may be building calculative customer relationships and ask if personal selling is critical to this (Wang et al., 2019). In this way CE and BE may have strategic as well as financial value implications.

6.2 Managerial Implications

The Selective Path provides an immediate way of reconciling CE and BE in a way that guides application. BE should be used in marketing settings with strong brands; CE should be used in settings with strong calculative customer relationships. Depending on further research, the Selective and the Integrative Paths might ultimately merge in that diagnostic measures of calculative relationship strength could be added to brand strength measures, and their relative weight determined, in an integrative model. Importantly, an integrative model would provide a way of testing whether a given marketing setting was characterized more by brand strength, more by customer relationship strength, neither, or both. This would both justify (or not justify) a CLV forecast and allow even greater diagnostic interpretation.

Both paths could thus support the use of CLV forecasting models to value brands and/or customer relationships. In both cases CLV would be a more micro, bottom-up, individual level approach. In contrast with CLV, as discussed in the characterization of BE, FVB is a more macro, top-down approach. How might the FVB approach to financial value fit in? First, reconciliation of CE and BE is consistent with using the FVB approach to evaluate customer relationships as well as brands. So the FVB approach to value and CLV approach can be treated as independent ways of measuring value, one at the macro level, one at the micro level. Just as surveyors and navigators take multiple bearings to establish a fix of their position, using the two measures could be used to triangulate estimates of value. Second, the micro estimates could be used to add more granular detail. For instance, the micro level would allow consideration of how value might be different across customer segments.

For example, the value generated for the firm by upper funnel customers might be related to tactics aimed at increasing awareness and trial while value for lower funnel customers might be related to increasing repeat purchases and increased share of wallet. The micro level could

draw on sophisticated models relevant to marketing investments. For example, Pfeiffer and Carroway (2000) propose a Markov chain model for CLV and derive closed-form expressions for the geometric series. Central to their model is a value vector that gives the value to the firm of a customer in each segment/state, which is expected revenues less marketing costs for the period and segment. Such models can be used for investment decisions and to forecast additional value into the future, which could be compared with macro projections. In short, the existing dichotomy of CLV versus FVB could become a unified approach to the financial value of marketing, one linking both the macro results level and the micro investment decision level.

This article began by posing the question of how to account for the financial value of marketing. A major obstacle to progress in this area has been the rhetorical and conceptual debate over customers versus brands. Both sides have fixated on their particular perspective. But CE is limited in failing to develop a robust underlying concept of customer relationships. BE is limited in ignoring settings in which brands might not drive consumption and focusing on consumer brand diagnostics with less attention to financial metrics. Efforts to reconcile BE and CE can go a long way to overcoming this obstacle and increasing the C-level importance of marketing in companies.

References

- Aaker, J. L. (1997). Dimensions of brand personality. *Journal of marketing research*, 34(3), 347-356.
- Aggarwal, P. (2004). The effects of brand relationship norms on consumer attitudes and behavior. *Journal of Consumer Research*, 31(1), 87–101.
- Aggarwal P. & Larrick, R. P. (2012). When consumers care about being treated fairly: The interaction of relationship norms and fairness norms. *Journal of Consumer Psychology*, 22(1), 114–27.
- Aggarwal, P. & McGill, A. L. (2012). When brands seem human, Do humans act like brands? Automatic behavioral priming effects of brand anthropomorphism. *Journal of Consumer Research*, 39(2), 307–23
- Ailawadi, K. L., Lehmann, D. R., & Neslin, S. A. (2002). A product-market-based measure of brand equity. Marketing Science Foundation Report, 02-102.
- Ailawadi, K. L., Lehmann, D. R., & Neslin, S. A. (2003). Revenue premium as an outcome measure of brand equity. *Journal of Marketing*, 67(4), 1-17.
- Ajzen, I. & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84(5), 888-918.
- Anderson, E. W., & Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, 3(2), 107-120.
- Ballantyne, D., Christopher, M. & Payne, A. (2003). Relationship marketing: Looking back, looking forward. *Marketing Theory*, 3 (1), 159-166.
- Batra, R., Ahuvia, A., & Bagozzi, R.P. (2012). Brand Love. *Journal of Marketing*, 76(2), 1–16.

- Bagozzi, R. P., Romani, S., Grappi, S. & Zarantonello, L. (2021). Psychological underpinnings of brands. *Annual Review of Psychology*, 72(1), 585-607.
- Bansal, H.S., Taylor, S.F. & St James, Y. (2005). Migrating' to new service providers: Toward a unifying framework of consumers' switching behaviors, *Journal of the Academy of Marketing Science*, 33(1), 96-115.
- Berger, P. D., & Bechwati, N. N. (2001). The allocation of promotion budget to maximize customer equity. *Omega*, 29(1), 49-61.
- Berger, P. D., & Nasr, N. I. (1998). Customer lifetime value: Marketing models and applications. *Journal of Interactive Marketing*, 12(1), 17-30.
- Binder, C. & Hanssens, D. M. (2015), Why strong customer relationships trump powerful brands. *Harvard Business Review Online*, April 14.
- Blattberg, R.C. & Deighton, J. (1996), Manage marketing by the customer equity test. *Harvard Business Review*, 74 (4),136-144.
- Blattberg, R.C., Glazer, R., & Little, J.D. (1994). *The Marketing Information Revolution*. Boston: Harvard Business School Press.
- Blattberg, R. C., Malthouse, E. C., & Neslin, S. A. (2009). Customer lifetime value: Empirical generalizations and some conceptual questions. *Journal of Interactive Marketing*, 23(2), 157-168.
- Bolton, R.N., Kannan, P.K. & Bramlett, M.D. (2000). Implications of loyalty program membership and service experiences for consumer retention and value. Journal of the Academy of Marketing Science, 28(1), 95-101.
- Borle, S., Singh, S. S., & Jain, D. C. (2008). Customer lifetime value measurement. *Management science*, 54(1), 100-112.

- Bornstein, G. Entry and profits in an aging economy: The role of consumer inertia, Working paper, Wharton.
- Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: what is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73(3), 52-68.
- Calder, B. J. (2010). Writing a brand positioning statement and translating it into brand design. In: *Kellogg on Marketing*. Ed. by A. Tybout and B. Calder. 2nd edition. New York: Wiley, 92–111.
- Calder, B. J. (2019a). Connecting marketing and finance via brand value. In: *Kellogg on Branding in a Hyper-Connected World*. Ed. by T. Calkins and A. Tybout. New York: Wiley, 234–246.
- Calder, B. J. (2019b). Brand design and design thinking. In: *Kellogg on Branding in a Hyper-Connected World*. Ed. by A. Tybout and T. Calkins. New York: Wiley, 93–109.
- Calder, B. J. (2020), *Brands: An Integrated Marketing, Finance, and Societal Perspective*. Foundations and Trends in Marketing: Vol. 14 (4), 237–316.
- Calder, B. J. & Burnkrant, R. (1977). Interpersonal influence on consumer behavior: An attribution theory approach. *Journal of Consumer Research*, 4, 29-38.
- Calder B. J., Isaac, M. S., & Malthouse, E. C. (2016). How To Capture Consumer Experiences: A Context-Specific Approach To Measuring Engagement. *Journal of Advertising Research*, March, 1-14.
- Carman, J.M. (1970). Correlates of brand loyalty: Some positive results, *Journal of Marketing Research*, 7(1), 67-76.

- Chang, T. Z., & Chen, S. J. (1998). Market orientation, service quality and business profitability: a conceptual model and empirical evidence. *Journal of Services Marketing*, 12(4), 246-264.
- Chaudhuri, A., & Holbrook, M. B. (2002). Product-class effects on brand commitment and brand outcomes: The role of brand trust and brand affect. *Journal of Brand Management*, 10(1), 33-58.
- Eiroz, V. & Wilson, D. (2006). Research in relationship marketing: Antecedents, Traditions and integration. *European Journal of Marketing*, 40 (34), 275-291.
- Fader, P. & Toms, S. *The Customer Centricity Playbook*. Philadelphia: Wharton Digital Press.
- Fader, P. S., Hardie, B. G., & Shang, J. (2010). Customer-base analysis in a discrete-time noncontractual setting. *Marketing Science*, 29(6), 1086-1108.
- Farquhar, P. H. (1989). Managing brand equity. *Marketing research*, 1(3), 24-33.
- Fornell, C., F. Morgeson, & G. Hult (2016a). “Stock returns on customer satisfaction do beat the market: Gauging the effect of a marketing intangible, *Journal of Marketing*, 80, 92–107.
- Fornell, C., F. Morgeson, & G. Hult (2016b). An abnormally abnormal intangible: Stock returns of customer satisfaction. *Journal of Marketing*, 80, 122–125.
- Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Behavior*, 24 (March), 343-373.
- Gupta, S. & Lehmann, D. R. (2003). Customers as assets. *Journal of Interactive Marketing*, 17 (1), 9-24.
- Gupta, S. & Lehmann, D. R. (2006). Customer lifetime value and firm valuation. *Journal of Relationship Marketing*, 5 (2-3), 87-110.

- Gupta, S., Lehmann, D.R., & Stuart, J.A. (2004). Valuing customers. *Journal of Marketing Research*, 41(1), 7–18.
- Gupta, S., Hanssens, D., Hardie, B., Kahn, W., V. Kumar, V., Lin, N., Ravishanker, N., & Sriram, S. (2006). Modeling customer lifetime value. *Journal of Service Research*, 9(November), 139-155.
- Gupta, S. & Zeithaml, V. (2006). Customer metrics and their impact on financial performance. *Marketing Science*, 25 (6), 718-739.
- Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty, and profitability: an empirical study. *International Journal of Service Industry Management*, 7(4), 27-42.
- Haskel, J., & Westlake, S. (2018). *The Rise of the Intangible Economy*, Princeton: Princeton University Press.
- He, J. & Calder, B. J. (2020). The experimental evaluation of brand strength and brand value. *Journal of Business Research*. 115: 194–202.
- Henderson, G. R., Iacobucci, D., & Calder, B. J. (1998). Brand diagnostics: Mapping branding effects using consumer associative networks. *European Journal of Operational Research*, 111(2), 306-327.
- Hibbard, J., Brunel, F., Dant, R & Iacobucci, D. (2001). Does relationship marketing age well? *Business Strategy Review*, 12 (4), 29-36.
- Hogan, J. E., Lehmann, D. R., Merino, M. Srivastava, R. K., Thomas, J., & Verhoef, P. C. (2002). Linking customer assets to financial performance. *Journal of Service Research*, 5 (1), 26-38.

- Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing*, 28(2), 149-165.
- Jain, D.C. & Singh, S.S. (2002). Customer lifetime value research in marketing: A review and future directions. *Journal of Interactive Marketing*, 16 (2), 34–46.
- Jones, M.A., Mothersbaugh, D.L. & Beatty, S.E. (2000). Switching barriers and repurchase Intentions in services, *Journal of Retailing*, 76(Summer), 259-274.
- Keiningham, T. L., Frennea, C. M., Aksoy, L., Buoye, A., & Mittal, V. (2015). A five-component customer commitment model: implications for repurchase intentions in goods and services industries. *Journal of Service Research*, 18(4), 433-450.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1-22.
- Keller, K. & D. Lehmann (2006). Brands and branding: Research findings and future priorities, *Marketing Science*, 25(6), 740–759.
- Keller, K. L., Sternthal, B., & Tybout, A. (2002). Three questions you need to ask about your brand, *Harvard Business Review*, September, 80-86.
- Klein, H.J., Becker, T.E. & Meyer, J.P. (2009). *Commitment in Organizations: Accumulated Wisdom and New Directions*, New York: Taylor Francis Group.
- Krishnamurthi, L. & S. Raj (1991). An empirical analysis of the relationship between brand loyalty and consumer price sensitivity, *Marketing Science*, 10(2), 172–183.
- Kumar, V. (2006). CLV: The Databased Approach. *Journal of Relationship Marketing*, 5 (2/3), 7-35.

- Kumar, V. & Reinartz, W. (2016). Creating Enduring Customer Value. *Journal of Marketing Research*, 80 (November), 36-68.
- Kumar, V. & Shah, D. (2009). Expanding the role of marketing: From customer equity to market capitalization. *Journal of Marketing*, 73 (6), 119-136.
- Kwak, H., Puzakova, M., Rocereto, & J. F. (2015). Better not smile at the price: The differential role of brand anthropomorphizing on perceived price fairness. *Journal of Marketing*, 79(4), 56–76.
- Lambert-Pandraud, R. & Laurent, G. (2010). Why do older consumers buy brands? The role of attachment and declining innovativeness, *Journal of Marketing*, 74(July), 104-121.
- Lariviere, B., Keiningham, T. L., Cooil, B., Aksoy, L., & Malthouse, E. M. (2014). A longitudinal examination of customer commitment and loyalty. *Journal of Service Management*, 25 (1), 75-100.
- Leone, R. P., Fao, V. R., Keller, K. L., Lao, A. M., McAlister, L. & Srivastava, R. (2006). Linking brand equity to customer equity. *Journal of Service Research*, 9 (2), 125-138.
- Luo, A., Lehmann, D. R., & Neslin, S. A. (2015). Co-managing brand equity and customer equity. In: *Handbook of Research on Customer Equity in Marketing*, ED by V. Kumar and D. Shah, New York: Elgar, 363-381.
- Low, G. S. & Fullerton, R. A. (1994). Brands, brand management, and the brand manager system: A critical-historical evaluation. *Journal of Marketing Research*, XXXI (May), 173-190.
- Machavello, R. & Morjaria A. (2015). The value of relationships: Evidence from a supply shock to Kenyan rose exports, *American Economic Review*, 105(9), 291-2945.

- Madden, T., Fehle, F., & Fournier, S. (2006). Brands matter: An empirical demonstration of the creation of shareholder value through branding, *Journal of the Academy of Marketing Science*, 34(2), 224–235.
- Malthouse, E. C. (2013). *Segmentation and Lifetime Value Models Using SAS®*. SAS Institute.
- Malthouse, E. C. (2007). Mining for trigger events with survival analysis. *Data Mining and Knowledge Discovery*, 15(3), 383-402.
- Marketing Accountability Standards Board (2021). *The financial value of brands imperative*. Evansville, IN: themasb.org.
- Matsuoka, K. (2021). A framework for variance analysis of customer equity based on a Markov chain model. *Journal of Business Research*, 129, 57-69.
- McCarthy, D. M. & Fader, P. S. (2018). Customer-based corporate valuation for publicly traded noncontractual firms. *Journal of Marketing Research*, 55, 617-635.
- McCarthy, D. M. & Fader, P. S. (2020). How to value a company by analyzing its customers. *Harvard Business Review*, January-February, 98 (1), 51-55.
- McCarthy, D. M. & Pereda, F. (2020) Assessing the role of customer equity in corporate valuation: A review and a path forward Available at SSRN: <https://ssrn.com/abstract=3518772> (<https://ssrn.com/abstract=3518772>) or <http://dx.doi.org/10.2139/ssrn.3518772> (<https://dx.doi.org/10.2139/ssrn.3518772>)
- Memarpour, M., Hassannayebi, E., Fattahi Miab, N., & Farjad, A. (2021). Dynamic allocation of promotional budgets based on maximizing customer equity. *Operational Research*, 21(4), 2365-2389.
- Mersey, R. D., Malthouse, E.C., & Calder, B. J. (2010). Engagement with online media. *Journal of Media Business Studies*, 7(2), 39-56.

- Meyer, J.P., Becker, T.E. & Vandenberghe, C. (2004). Employee commitment and motivation: A conceptual analysis and integrative model, *The Journal of Applied Psychology*, 89(6), 991-1007.
- Mizik, N. & Nissim, D. (2011). Accounting for marketing activities: Implications for marketing research and practice. *Marketing Science Institute Report*, 11-103. Available at SSRN url: <https://ssrn.com/abstract=1768382>. August 1, 2020.
- Möller, K. & A. Halinen (2000). Relationship marketing theory: Its roots and directions, *Journal of Marketing Management*, 16, 29-54.
- Morgan, R.M. & Hunt, S.D. (1994) The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58 (July), 20–38.
- Neslin, S. A., Gupta, S., Kamakura, W., Lu, J., & Mason, C. H. (2006). Defection detection: Measuring and understanding the predictive accuracy of customer churn models. *Journal of Marketing Research*, 43(2), 204-211.
- Oblander, E. S., Gupta, S., & Mela, C. F. (2020). The past, present, and future of customer management, *Marketing Letters*, 31 (1), 125-136.
- Oh, T. T., Leller, K. L., Neslin, S.A., Reibstein, D. J., & Lehmann, D. R. (2020). The past, present, and future of brand research. *Marketing Letters*, 31 (1), 151-162.
- Park, C. W., Eisingerich, A. B., & Park, J. W. (). Attachment–aversion (AA) model of customer–brand relationships. *Journal of Consumer Psychology*, 23(2), 229–48.
- Park, C, W., MacInnis, D.J., Priester, J., Eisingerich, A. B., & Iacobucci D. 2010. Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of Marking*, 74(6), 1–17.

- Paugam, L., Andre, P., Philippe, H., & Harfouche, R. (2016). *Brand Valuation*, New York: Routledge.
- Peterson, L.A., Blattberg, R.C., & Wang, P. (1993). Database Marketing: Past, present, and future. *Journal of Direct Marketing*, 7(3), 27–43.
- Pfeifer, P. E., & Carraway, R. L. (2000). Modeling customer relationships as Markov chains. *Journal of Interactive Marketing*, 14(2), 43-55.
- Pfeifer, P. E., Haskins, M. E., & Conroy, R. M. (2005). Customer lifetime value, customer profitability, and the treatment of acquisition spending. *Journal of Managerial Issues*, 11-25.
- Reinartz, W. J. & Kumar, V. (2003). The impact of customer relationship characteristics on profitable lifetime duration. *Journal of Marketing*, 67 (January), 77-79.
- Rust, R. T., Lemon, K. N., & Zeithaml, V. A. (2001). *Driving Customer Equity: Linking Customer Lifetime Value to Strategic Marketing Decisions*, Cambridge, MA: Marketing Science Institute.
- Rust, R. T., Lemon, K. N., & Zeithaml, V. A. (2004). Return on marketing: Using customer equity to focus marketing strategy. *Journal of Marketing*, 68 (1), 109-127.
- Rust, R. T., Zeithaml, V. A., & Lemon, K. N. (2004). Customer-centered brand management. *Harvard Business Review*, 82 (9), 110-118.
- Sinclair, R. (2016). Reporting on brands. In: *Accountable Marketing: Linking Marketing Actions to Financial Performance*. Ed. by D. Stewart and C. Gugel. New York: Routledge. 168–181.
- Sinclair, R. & Keller, K. L. (2014). A case for brands as assets: Acquired and internally developed. *Journal of Brand Management*, 21 (4), 286–302.

- Sinclair, R. & Keller, K. L. (2017). Brand value, accounting standards, and mergers and acquisitions: The moribund effect. *Journal of Brand Management*, 24 (2), 171–192.
- Srivastava, R. K., Shervani, T. A., & Fahey, L. (1998) Market-based assets and shareholder value: A framework for analysis, *Journal of Marketing*, 62 (1), 2-18.
- Shah, D., Rust, R. T., Parasuraman, A., Staelin, R., & Day, G. S. (2006). The path to customer centricity. *Journal of Service Research*, 9, 113-124.
- Sprott, D., Czellar, S., & Spangenberg, E. (2009). The importance of a general measure of brand engagement on market behavior: Development and validation of a scale. *Journal of Marketing research*, 46(1), 92-104.
- Stahl, F., Heitmann, M., Lehmann, D. R., & Neslin, S. A. (2012). The impact of brand equity on customer acquisition, retention, and profit margin, *Journal of Marketing*, 76, 44-63.
- Thibaut, J. W. & Kelley, H. H. (1959). *The Social Psychology of Groups*. New York: Wiley.
- Wiesel, T., Skiera, B., & Villanueva, J. (2008), Customer equity: An integral part of financial reporting. *Journal of Marketing*. 72(3), 1–14.
- Venkatesan, R., & Kumar, V. (2004). A customer lifetime value framework for customer selection and resource allocation strategy, *Journal of Marketing*, 68(4), 106-125.
- Verhoef, P. C., Venkatesan, R., McAlister, L., Malthouse, E. C., Krafft, M., & Ganesan, S. (2010). CRM in data-rich multichannel retailing environments: a review and future research directions. *Journal of Interactive Marketing*, 24(2), 121-137.
- Wang, W., Malthouse, E.C., Calder, B.J., & Uzunoglu, E. (2019). B2B content marketing for professional services: In-person versus digital contacts, *Industrial Marketing Management*, 81(August), 160-168.

- Zeithaml, V. A. (2000). Service quality, profitability, and the economic worth of customers: what we know and what we need to learn. *Journal of the Academy of Marketing Science*, 28(1), 67-85.
- Zhou, Y., Calder, B. J., Malthouse, E. C., & Hessary, Y. K. (2022). Not All Clicks Are Equal: Detecting Engagement with Digital Content. *Journal of Media and Business Studies*, 19(2), 90-107.

Table 1. Summary Comparison of CE and BE Characteristics

Characteristics	CE Perspective	BE Perspective
Core Concept	Customer Relationship Driven	Brand Driven
Variables	Objective Manifestations of Relationship	Subjective Measures of Brand Strength
Financial Value	Predictive forecast of expected future returns	Quasi-experimental comparison of difference in cash flow caused by brand compared to an unbranded product
Focal Direction	Customer to the firm	Firm to the consumer
Marketing Activities	Effects of activities on objective variables	Diagnosis of brand strength to guide activities
Scope	Customer	All Stakeholders

Figure 1: Overview of the Need for Reconciling the Brand Equity (BE) and Customer Equity (CE) perspectives on the financial value of marketing (FVB is a macro value indirectly based on BE, CLV is a micro value modeled on CE)

