Journal of Business Research xxx (2016) xxx–xxx

Contents lists available at ScienceDirect

Journal of Business Research

Customer equity and CLV in Spanish telecommunication services

Jose Ramón Segarra-Moliner *, Miguel Ángel Moliner-Tena

Business Administration and Marketing Department, Universitat Jaume I, Avenida Sos Baynat s/n 12701, Castellón, Spain

ARTICLE INFO

Article history:
Received 1 September 2015
Received in revised form 1 February 2016
Accepted 1 March 2016
Available online xxxx

Keywords:
Customer equity
Customer lifetime value
Partial least squares
Marketing productivity

ABSTRACT

Recent studies in various economic sectors in the U.S.A., Brazil, China, South Korea, and Australia provide evidence of the precursors of customer equity (value, brand, and relationship equity) and their influence on behavior intentions and customer lifetime value (CLV). The aim of this study is to measure customer equity through CLV, design a model for CLV drivers and establish its predictive capacity in two samples obtained at different points in time. The sample comprises customers who have contracts with telecommunications operators in Spain, and the study uses a holdout sample to cross-validate the final sample. A predictive model, developed with partial least squares, analyzes the sector, and assesses the comparability of the four main competing companies. The findings support the importance of customer perceived value in building relationship quality and in brand equity, and reveal intentional loyalty as a precursor of future economic results.

1. Introduction

Managers are constantly faced with the problem of how to trade off competing strategic marketing initiatives. For example, should the firm invest in a loyalty program, increase advertising or improve service quality? Customer equity literature suggests that this kind of decision should be made on the basis of projected financial impact. Along the same direction, the Marketing Science Institute establishes that one of the priorities for research for the 2014–16 two-year period is measuring and communicating the value of marketing activities and investments, where the first topic of interest is what metrics should be used to evaluate long-term brand-building effects. Two important issues are mixed in this research priority: first, how to measure the long-term productivity of marketing, and second how long-term productivity can be predicted and optimized.

This study deals with these two issues. On one hand, the emerging concept of customer equity is defined as the sum of lifetime values of all customers (Rust, Lemon & Zeithaml, 2004) and customer lifetime value (CLV) is used as the appropriate variable for measuring customer equity. Meanwhile, a model for CLV drivers is established in order to identify these key variables making it possible to optimize CLV and predict its future value. Recent research in the field of marketing aims to examine how customers' perceptions can help with the prediction of future economic incomes, the value of a firm, and consequently, analyze the productivity of marketing (Gupta, Lehmann, & Stuart, 2004; Persson & Ryals, 2010; Rust, Ambler, et al., 2004; Zhang, Dixit, & Friedmann, 2010). Firms need measures focusing on the individual customer in order to achieve the best desired performance. In recent years, marketing managers have been understandably concerned about measuring the performance of marketing activity (Mizit, 2014).

From the prediction methodology point of view, Gigerenzer and Brighton (2009) provide an extensive review of compelling evidence showing that using limited amounts of information outperforms the symmetric-based statistical models using all available information, when applying holdout samples to test for predictive validity. For example, Persson and Ryals (2014) suggest that, through practical and informal procedures (heuristics), the banking sector determines the allocation decisions related to managing marketing resource activities with active and inactive customers in order to implement strategy acquisition and customer selection.

The aim of this study is to measure customer equity through CLV, design a model for CLV drivers and establish its predictive capacity in two samples obtained at different times. The following section presents the hypotheses of the proposed model which incorporates precursors in the customer's perceptions: customer perceived value, customer-based brand equity, relationship quality and loyalty (Rust, Ambler, et al., 2004). This study uses the partial least squares (PLS) technique, frequently applied in causal-predictive research, to analyze the empirical results for the sector and the results between companies, considering a holdout sample to cross-validate the final sample. The two samples are from telecommunications sector customers. This study also examines the significant paths for the outcome variables from the SEM result by using fuzzy-set qualitative comparative analysis (fsQCA) due to the importance of testing for causal asymmetry (Woodside, 2013).

2. Literature review and hypotheses

Customer equity is the total of the discounted lifetime values summed over all of the firm's current and potential customers (Rust,

* Corresponding author.
E-mail addresses: jsegarra@uji.es (J.R. Segarra-Moliner), amoliner@uji.es (M.Á. Moliner-Tena).

http://dx.doi.org/10.1016/j.jbusres.2016.04.017
0148-2963/© 2016 Published by Elsevier Inc.

Lemon & Zeithaml, 2004). This definition suggests that customers and customer equity are central to many firms, though current management practices and metrics do not yet fully reflect this shift. Customer equity can be measured with different metrics, but in the literature of customer lifetime value (CLV) is becoming predominant (Nikkhahan, Badrabadi, & Tarokh, 2011; Qi, Zhou, Chen, & Qu, 2012; Rust, Ambler, et al., 2004). CLV is generally defined as the present value of all future profits obtained from a customer during the life of his or her relationship with a firm (Nikkhahan et al., 2011; Rust, Ambler, et al., 2004; Rust, Zeithaml, & Lemon, 2000). Customer lifetime value (CLV) is affected by revenue and cost considerations related to customer acquisition, retention, and cross-selling (Leone et al., 2006).

To evaluate and optimize CLV, a business not only must calculate the economic value, it must also identify the key variables whose balanced management will lead to the maximization of CLV. Identifying the drivers of CLV is the first step in enhancing it. Value equity, brand equity and retention equity have been suggested as drivers of customer equity (Holehonnur, Raymond, Hopkins, & Fine, 2009). This three-equity approach has been criticized for its purely economic view as it does not take into account the importance of consumer perception and behavior when it comes to explaining customer equity (Persson & Ryals, 2010). Recent studies in several countries analyze the drivers of customer equity from the point of view of customer perception and suggest expanded drivers based on the three equities: customer perceived value, customer-based brand equity, relationship quality and loyalty (Dwivedi, Merrilees, Miller, & Herington, 2012; Kim & Ko, 2012; Lemon, Rust, & Zeithaml, 2001; Leone et al., 2006; Rust, Ambler, et al., 2004; Rust et al., 2000; Vogel, Evanschitzky, & Ramaseshan, 2008). This approach is broader and integrates the multidimensionality of customer perceived value (Dorai & Varshney, 2012), dimensions of the productivity model based on the customer brand (Keller & Lehmann, 2006) and dimensions of relationship quality considered in the relationship marketing productivity model (Bush, Underwood III, & Sherrell, 2007), while customer equity literature on economic evaluation has rarely considered it.

2.1. Drivers of customer equity

Customer value creation is a primary element constituting the basis for any competitive strategy. Customer perceived value is a customer's overall assessment of the utility of a product or service based on perceptions of what is received (benefits as utility, image or quality) and what is given (sacrifices like price, time, or effort) (Sánchez, Callarisa, Rodríguez, & Moliner, 2006; Zeithaml, 1988). Customer perceived value is a subjective variable, as two consumers can evaluate the same product/service differently, and this subjectivity has led to the suggestion of the existence of emotional and social dimensions that could affect customer choices (Havlena & Holbrook, 1986; Sánchez et al., 2006). The customer value creation paradigm holds that generating and retaining competitive advantage must go beyond a simple focus on service quality or customer satisfaction (Woodruff, 1997). Without a perception of a certain minimum value of the product or the service, there is no basis on which to form perceptions about the brand and the relationship (Rust et al., 2000).

Customer-based brand equity is defined as the customers' subjective and intangible assessment of the brand (Keller, 1993, 2001; Rust et al., 2000). Customer-based brand equity is the different effect that customer knowledge about a brand has on their response to marketing activities and programs for that brand (Keller, 2003). The importance of customer-based brand equity has been emphasized in that brand creates specific associations in consumers' minds and indicates a general market signal about the credibility of a particular brand.

Keller and Lehmann (2006) state that customer-based brand equity can largely be captured by five aspects: (a) awareness (ranging from recognition to recall); (b) associations (encompassing tangible and intangible product or service considerations); (c) attitude (ranging from acceptability to attraction); (d) attachment (ranging from loyalty to addiction); and (e) activity (including purchase and consumption frequency and involvement with the marketing program, other customers through word of mouth, etc., or the company).

There are two basic premises about customer-based brand equity (Leone et al., 2006): firstly that the power of a brand lies in the minds of consumers and what they have experienced, learned, and felt about the brand over time, and secondly that brand equity can be thought of as the added value a product is endowed with in the thoughts, words, and actions of consumers. Zinkhan (2006) categorize patronage-driving characteristics into product-relevant factors, such as product quality and price; market-relevant factors, such as the service provided by a store, and personal factors. Gomez, McLaughlin, and Wittink (2004) identify a range of items associated with customer service, quality, and value that drive customer satisfaction in the supermarket sector. All these drivers of customer-based brand equity are related to customer perceived value: in other words, the benefits and sacrifices associated with purchasing the product and the emotions deriving from purchase and consumption. Then, when the customer perceived value of a product or service increases, customer-based brand equity increases (Holehonnur et al., 2009). Because of this, it can be concluded that:

H_1. *Customer perceived value directly and positively influences customer-based brand equity.*

Relationship quality is the degree of appropriateness of a relationship to fulfill the needs of the customer associated with the relationship (Hennig-Thurau & Klee, 1997). Relationship quality is a construct formed by three variables: satisfaction, trust (honesty and benevolence) and commitment (Hennig-Thurau, Gwinner, & Gremler, 2002; Sánchez et al., 2006).

Customer perceived value directly influences relationship quality, as relationship quality is considered to be the accumulated perceived value throughout a relationship (Gummesson, 1987; Sánchez et al., 2006). While customer perceived value concerns a transaction, relationship quality evaluates the relationship over time. Ravald and Grönroos (1996) consider that during the first stages of a relationship the value of each transaction is of great importance, while in more mature stages of the relationship it is relationship quality that counts. It is therefore accepted that the perceived value of a product is a precursor of the relationship quality of a supplier (Moliner, Sánchez, Rodríguez, & Callarisa, 2007). Empirical studies support the impact of customer perceived value on relationship quality (Sirdeshmukh, Singh, & Sabol, 2002; Yang & Peterson, 2004). However, when a consumer perceives greater value in the offer of a product or service, his/her satisfaction, trust and commitment to the company increases, leading to improved relationship quality (Moliner, 2009; Sánchez et al., 2006).

H_2. *Customer perceived value directly and positively influences relationship quality.*

With respect to the relationship between customer-based brand equity and relationship quality, the literature establishes a direct, positive relationship. Relationship marketing literature provides theoretical background concerning the direct relationship between customer-based brand equity and relationship quality (Ambler et al., 2002; Bolton, Lemon, & Verhoef, 2004; Delgado-Ballester & Munuera-Aleman, 2001; Martenson, 2007; Tepeci, 1999).

Ambler et al. (2002) derived a theoretical statement that customer-based brand equity influences the customer mindset, thus enhancing relationship quality. Bolton et al. (2004) postulated that brand influences commitment (one of the key indicators of relationship quality). Similarly, Martenson (2007) stated that a brand consists of perceptions about a specific company, representing the company's credibility (trustworthiness) (another key indicator of relationship quality). Tepeci (1999) mentioned that brand is a prerequisite of relationship building in the sense that, in many cases, customers tend to buy, recommend, and stick with the same model because of the brand.

Please cite this article as: Segarra-Moliner, J.R., & Moliner-Tena, M.Á., Customer equity and CLV in Spanish telecommunication services, *Journal of Business Research* (2016), http://dx.doi.org/10.1016/j.jbusres.2016.04.017