International Journal of Information Management 36 (2016) 245–257

Contents lists available at ScienceDirect

International Journal of Information Management

journal homepage: www.elsevier.com/locate/ijinfomgt

Predicting smartphone brand loyalty: Consumer value and consumer-brand identification perspectives

Ching-Hsuan Yeh[a], Yi-Shun Wang[a,*], Kaili Yieh[b]

[a] Department of Information Management, National Changhua University of Education, Taiwan
[b] Department of Business Administration, National Changhua University of Education, Taiwan

ARTICLE INFO

Article history:
Received 1 June 2015
Received in revised form
24 November 2015
Accepted 25 November 2015
Available online 4 January 2016

Keywords:
Mobile computing
Consumer value
Consumer-brand identification
Brand loyalty
Smartphone

ABSTRACT

With the growth and competition of the smartphone industry, developing a better understanding of what drives consumers' loyalty to smartphone brands has become an important issue for academics and practitioners. This study hypothesizes four determinants of smartphone brand loyalty based on the perspectives of consumer value and consumer-brand identification. Furthermore, this study also explores the moderating effects of age and gender differences on the determination process of smartphone brand loyalty. Data collected from 157 respondents was tested against the research model using a partial least squares (PLS) approach. The results indicate that functional value, emotional value, social value, and brand identification have a positive influence on smartphone brand loyalty. Of the two moderators, results show that age enhances the emotional value-brand loyalty and social value-brand loyalty linkages but weakens the brand identification-brand loyalty relationship. However, gender does not play a moderating role in the determination of smartphone brand loyalty. The results of this study provide several important theoretical and practical implications for smartphone brand management.

1. Introduction

With the proliferation of the competing brands in the marketplace, keeping consumers loyal is an imperative for marketing managers (Jones & Sasser, 1995). Researchers have devoted a considerable amount of effort investigating this issue. They have advocated that the notion of brand loyalty should be extended from patronage behavior to psychological commitment (Oliver, 1999), and both attitudinal loyalty and behavioral loyalty contribute to pro-brand consequences. Attitudinal loyalty may be positively associated with patronage intention, word-of-mouth, acceptance of premium price, and resistance to counter-persuasion, while behavioral loyalty may lead to greater market share and increased profitability (Chaudhuri & Holbrook, 2001; Shankar, Smith, & Rangaswamy, 2003).

Standing on various theoretical grounds, researchers have investigated the reasons for brand loyalty, but two viewpoints have received greater amount of attention. The first is consumer value theory, which claims that value perception is the pivotal predictor of brand loyalty (Kim, Gupta, & Koh, 2011; Sweeney & Soutar, 2001). Consumers remain loyal if they perceive superior value from a given brand (Hansen, Beitelspacher, & Deitz, 2013). The second viewpoint is the identification approach, which puts consumer-brand identification (hereafter referred to as brand identification) as the antecedent of brand loyalty (Bhattacharya & Sen, 2003; Tuškej, Golob, & Podnar, 2013). Consumers stick with a given brand once they identify themselves with the attributes of the brand (Stokburger-Sauer, Ratneshwar, & Sen, 2012). Some studies have further contended that both viewpoints may positively result in brand trust and then brand loyalty (He, Li, & Harris, 2012), supporting claims that these are the foundations of brand loyalty.

Although researchers generally recognize the predictive power of consumer value and brand identification, managers may face a dilemma about resource allocation because the two viewpoints offer different guidelines for business practice. Strategies derived from consumer value theory encourage managers to emphasize product development and to communicate the advantages of the product attributes to consumers (Karjaluoto, Jayawardhena, Leppäniemi, & Pihlström, 2012), whereas strategies derived from the identification approach may drive managers to create an attractive brand identity and to organize a community for intimate consumer-brand and consumer–consumer interactions (Stokburger-Sauer et al., 2012). As managers may have to reconcile these marketing campaigns to generate synergies, it is crucial to differentiate the effects of consumer value and consumer-brand identification on brand loyalty. Therefore, an integrated analysis

* Corresponding author.
E-mail address: yswang@cc.ncue.edu.tw (Y.-S. Wang).

http://dx.doi.org/10.1016/j.ijinfomgt.2015.11.013
0268-4012/

with loyalty determinants should aid in understanding the determinant priority and the allocation of marketing resources.

In addition, studies on brand loyalty have argued for the necessity of taking individual heterogeneity into consideration (Floh, Zauner, Koller, & Rusch, 2014). Model validation and/or hypotheses testing with entire samples may suffer from aggregation bias, and the effectiveness of marketing campaigns may not be realized as expected. Compared with mass marketing, targeted marketing might generate revenues and profits more efficiently. As such, individual heterogeneity needs to be considered in the analyses of brand loyalty. A moderation specification of individual heterogeneity can help managers tailor better loyalty programs and enrich existing knowledge. A review of prior studies reveals that age and gender are two typical variables of individual heterogeneity (Venkatesh & Morris, 2000), and this study investigates *whether* and *how* the effects of loyalty determinants differ across age and gender categories.

To sum up, this study has two main objectives:

1. To understand the relative influence of determinants (i.e., value and identification) on brand loyalty.
2. To understand the moderating effects of individual heterogeneity (i.e., age and gender) on the relationships between value/identification and loyalty.

To achieve the two objectives, this study uses the smartphone industry in Taiwan as the research context. In Taiwan, smartphones have overwhelmed feature phones in use, and hold 71% of the mobile phone market in terms of supply in the third quarter of 2012 (Information Data Center, 2012). A recent survey from Google (2013) reported that the penetration rate of smartphones was 51% in the first quarter of 2013, an increase of 19% over the same period in 2012. Given that smartphones have growth potential in Taiwan and brands are a crucial factor in smartphone marketing (Arruda-Filho, Cabusas, & Dholakia, 2010), the research context is appropriate. The results of this study may provide strategic suggestions for smartphone marketing.

The rest of this article proceeds as follows. Firstly, the literature review describes the two theoretical viewpoints and illuminates their underlying concepts. Then, Section 3 introduces the research model and proposes the hypotheses regarding the direct and moderating effects on brand loyalty. The research method is described in Section 4, including sampling, measurement development, and the examination of common method variance. Section 5 reports the empirical results. Lastly, the discussion of results, theoretical and managerial implications, limitations, and directions for further research are presented in Section 6 and the conclusions are in Section 7.

2. Literature review

2.1. Consumer value theory

Consumer value is the cornerstone of a successful transaction, and it motivates consumers to purchase repeatedly (Holbrook, 1994). The expectation disconfirmation paradigm suggests that once consumers have satisfactory experience with a product, they have better value expectations and tend to repurchase the same product in the future instead of switching (Anderson & Srinivasan, 2003). Yang and Petersson (2004) indicated that value is a superordinate goal and positively regulates loyalty behavior, which is at the subordinate level.

In Zeithaml (1988)'s exploratory study, the notion of consumer value was found to be evolutionary and may originate from utility theory in economics, which assumes consumers' purchase decisions are based on product evaluations. According to the principle of utility maximization, a product/brand that has superior attributes than other alternatives is chosen because product performance is expected to better satisfy consumers' needs. Needs gratification is viewed as consumer value. Thus, product quality, which refers to "consumers' judgment about a product's overall excellence or superiority" (Zeithaml, 1988:3), is conceptually close to product benefits (i.e., what consumers *get* from the product) and consumer value. Products with high quality evaluations are believed to deliver more benefits to consumers, and consumers perceive great value (Zeithaml, Berry, & Parasuraman, 1996). In this vein, notions of product quality, product benefit, and consumer value were initially seen as equivalent (Zeithaml, 1988).

However, as research on consumer value increases, researchers have recognized that there are nuanced differences between these three constructs. Zeithaml (1988) proposed and elaborated a new definition of consumer value; it essentially involves a give-get tradeoff. Consumers evaluate value according to the product's benefits, which are derived from the perceived quality of product attributes, and the mental, physical, and financial sacrifices generated from product acquisition and usage (Cronin, Brady, & Hult, 2000). Both benefits and sacrifices are indispensable pillars of consumer value and contribute to consumer value with positive and negative effects respectively (Lin, Sher, & Shih, 2005). If perceived benefits outweigh perceived sacrifices, consumers view a potential transaction as being valuable (Yang and Petersson, 2004). Based on equity theory, the positive trade-off between benefits and sacrifices creates a feeling of fairness for consumers, who are then more willing to repurchase the product. Thus, high perceived value is accompanied by loyalty behaviors (Cronin et al., 2000).

In addition, many researchers have examined whether or not there are product benefits other than functional and economic ones. Hirschman and Holbrook's (1982) well-known study found that consumers may receive symbolic, hedonic, or esthetic value from shopping processes and/or product usage. Their narrative illustration expanded consumer value beyond the functional benefits and inspired a whole new stream of research. Next, Sheth, Newman, and Gross (1991) suggested a detailed typology including functional, emotional, social, conditional, and epistemic value by synthesizing theories of economics, sociology, psychology, and marketing. Extending Sheth et al.'s (1991) work, Pihlström and Brush (2008) demonstrated that conditional and epistemic values were the antecedents of monetary, convenience, emotional, and social value. Babin, Darden, and Griffin (1994) developed a simplified but generalized value structure with two dimensions consisting of utilitarian and hedonic components. Similarly, Sweeney and Soutar (2001) decomposed consumer value into functional (i.e., quality and value for money), emotional, and social value in the retailing context. Based on Sweeney and Soutar (2001)'s value classification, Kim et al. (2011) argued that there are six types of consumer value. Price utility and functional quality are related to functional value, aesthetics and playfulness are related to emotional value, and social self-image expression and social relationship support are related to social value.

Two interesting findings may be summarized from the studies just described. First, consumer value is generally specified with these three types of value (i.e., functional, emotional, and social) despite an increasing number of studies that have attempted to tap into the nature of each value type (Karjaluoto et al., 2012; Pihlström & Brush, 2008). Second, the definition of functional value has expanded from physical performance/quality (Sheth et al., 1991) to physical performance/quality and value for money (Kim et al., 2011; Sweeney & Soutar, 2001). Since value for money is concerned with monetary sacrifice, the newly-defined functional value may be conceptually equivalent to Zeithaml (1988)'s *give-get* definition. The result is that consumer value, which contains functional,